NAI Report Release

Report Number: NAI-1180-002

Revision Number: 2

Title: LOCA Direct Shine Doses from the SIRWT for Palisades

Description:

Determines the direct shine doses from the SIRWT for the control room following a LOCA at the Palisades plant. QADMOD-GP is used to determine dose rate at the dose point. Three dimensional shielding is considered.

Revision 1 was generated to correct the headers for Attachments D through O. No models or results have changed due to this typographical correction.

The purpose of Revision 2 is to add a scenario to determine the LOCA direct shine dose from the SIRWT with a reduced backleakage rate to the SIRWT of 4.4 gpm for the first two hours of the event and 0.05 gpm for the remainder of the event.

Author Joe Sinodis	June 8, 2006 Date
Reviewer Jim Harrell	6/8/06 Date
NAI Management Tom George	Jun 8, 2006 Date

NAI Calculation Approval

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June 8, 2006

Author
Joe Sinodis

Date

Scope of Review:

Review included:

- A review of calculation methods was completed for consistency with plant-specific and generic regulatory requirements and guidance.
- Computer codes (RADTRAD-NAI, QADMOD-GP) were checked for appropriate qualification.
- Calculation and code inputs and assumptions were verified against input document(s) and/or checked for reasonableness and conservatism.
- Computations were checked for correctness.
- References were verified as appropriate.
- Outputs from spreadsheets and utility programs were checked.
- Reported Results were verified against computer outputs.
- Results and conclusions were reviewed for reasonableness.
- Cases run were checked against procurement documents.

Design Verification –

See Attachment O for Rev. 0 comments and responses. There are no Rev. 1 comments. There are no Rev. 2 comments.

6/8/06

Reviewer
Jim Harrell

Date

Check items in the following lists to verify that project documentation and engineering calculations are complete. Mark any items that are not applicable with N/A notation.

Project Documentation Checklist:

- ☐ Project QA Plan.
- ☐ Project Organization.
- ☐ Project Work Scope and Design Plan.
- N/A ☐ Project Calculation and Document Index.
- ☐ Project QA Requirements.
- ☐ Project Engineer Training and Qualification Forms.
- ☐ Project QA Training Certification Forms.
- ☐ Project Correspondence.

Engineering Calculations Checklist:

- ☑ Identification by subject, originator, reviewer, date and Project so that the calculation is retrievable.
- ☑ Table of contents.
- ☑ Statement of the objective of the analysis.
- ☑ Analysis inputs and their sources.
- ☑ Assumptions and how they were developed or determined.
- ☑ Hand calculations.
- ☑ Identification of computer calculations, including computer type, computer program name and version, code input and output.
- ☑ Conclusions.
- ☑ Review summary.
- ☑ Responses to review comments.
- ☑ References.
- ☑ Each page of the calculation shall be numbered and the first page shall indicate the total number of pages. The calculation pages may be numbered by sections with the first page of the section indicating the total number of pages in the section.
- ☑ The Calculation Approval Sheet shall be signed and dated by the originator.

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1.0 PURPOSE

The purpose of this calculation is to determine the direct shine doses from the Safety Injection and Refueling Water Tank (SIRWT) for the control room following a LOCA at the Palisades plant. QADMOD-GP is used to determine dose rate at the dose point. Three dimensional shielding is considered.

Revision 1 was generated to correct the headers for Attachments D through O. No models or results have changed due to this typographical correction.

The purpose of Revision 2 is to add a scenario to determine the LOCA direct shine dose from the SIRWT with a reduced backleakage rate to the SIRWT of 4.4 gpm for the first two hours of the event and 0.05 gpm for the remainder of the event.

2.0 RESULTS, CONCLUSIONS AND RECOMMENDATIONS

2.1 Results/Conclusions

The 30 day direct shine dose emanating from the SIRWT to a person in the control room considering occupancy with the current plant configuration is 11.032 rem. The 30 day direct shine dose value with the current plant configuration and reduced backleage is 1.269 rem.

The following table lists the 30 day direct shine dose in the control room from the SIRWT for each scenario analyzed.

Table 1 – Scenario Results

Scenario	Description	30 Day Control Room Shine Dose from SIRWT rem
1	Current configuration	11.032
2	0.5 in lead shielding in bottom of SIRWT	5.493
3	1 in lead shielding in bottom of SIRWT	2.796
4	2 in lead shielding in bottom of SIRWT	0.748
5	0.5 in lead shielding on floor of open cells (638’ el.)	5.550
6	1 in lead shielding on floor of open cells (638’ el.)	2.898
7	2 in lead shielding on floor of open cells (638’ el.)	0.876
8	0.5 in lead shielding on ceiling of roof (637’ el.)	5.492
9	1 in lead shielding on ceiling of roof (637’ el.)	2.796
10	2 in lead shielding on ceiling of roof (637’ el.)	0.749
11	0.5 in lead shielding on floor of open cells (638’ el.); 50% reduction in SIRWT backleakage rate	4.394
12	Current configuration; SIRWT backleakage rates of 4.4 gpm for the first two hours and 0.05 gpm for the remainder of the event	1.269

2.2 Recommendations

It is recommended that the direct shine doses from the SIRWT for the control room presented in the Results/Conclusions section be used with the direct shine doses from other sources for the control room habitability dose analyses for Palisades.

3.0 ASSUMPTIONS AND DESIGN INPUTS

1. The geometry for the cases use a cartesian coordinate system. The origin of the axes is taken to reside at the intersection of lines 28 and M from Reference [7] at the elevation of the control room floor. The x-axis extends in the direction of decreasing line numbers on that reference drawing (i.e., the x-axis points to the plant south). The y-axis extends in the direction of decreasing line numbers on the reference (i.e., the y-axis points to the plant east). Consequently, the z-axis points in the direction of increasing elevation. References [1] and [7] are helpful in vizualizing the shielding geometry. Figures 1 and 2 provide mark ups of plan views of the roof from Reference [7] showing some of the boundaries and regions for the shielding model. Figure 3 shows a sketch of a side view of the shielding geometry.
2. The control room floor elevation is 625 ft from Reference [8].
3. The units for distance in QADMOD-GP are cm.
4. The SIRWT is constructed of aluminum based on Reference [1].
5. The presence of the bottom of the aluminum tank is conservatively neglected.
6. Reference [1] indicates that the SIRWT rests on a total of 12 in. of sand and concrete pad. However, the minimum thickness of each of these materials is conservatively assumed. That is, only 1 in. of sand and 10 in. of concrete are credited for the shielding. Due to this, the tank bottom elevation (and liquid level in the tank) are decreased by 1 in. in the shielding geometry.
7. Although the concrete pad upon which the SIRWT rests extends beyond the diameter of the base of the SIRWT, the pad is conservatively assumed to exists only directly below the SIRWT (i.e., it does not extend beyond the tank outer wall diameter).
8. The SIRWT liquid level is variable across the cases, and is dependent on the time point for each case.
9. The openings in the vertical supports of the cellular slab roof are all assumed to be 3 ft high from Reference [7].
10. The openings in the vertical supports of the cellular slab roof that connect cells D4, D5, and D6 are both assumed to be offset 4 inches from the east-west (plant) running support from Reference [7].
11. The openings in the vertical supports of the cellular slab roof that connect cells A4, B4, C4, and D4 are all assumed to be offset 2'-4'' from the north-south (plant) running support labeled beam 3 on Reference [7].
12. The dose points are assumed to be at an elevation 3 ft above the control room floor. This assumption is based on several factors. One of these is that 3 ft above the floor is a reasonable height for the torso region of an average control room occupant. Also, due to the unique Palisades configuration of the control room roof cellular structure, a higher dose point does not necessarily yield a larger dose due to the competing effects of distance from the source and amount of shielding a ray from the source passes through to the dose point. Moreover, a sensitivity study showed that there is very little difference (less than 0.5%) in the dose across 1 ft increments from the floor to 3 ft above the floor. Additionally, there is no regulatory guidance for this level of detail in shielding analysis for control room habitability, and a dose height of 3 ft above the control room floor has been used previously in other control room habitability submittals.
13. Structures and components in the control room area are conservatively neglected for the shielded dose. That is, the control room area is modeled as an open space with air as the material between the elevations of 625 ft and 637 ft.
14. Rebar in the concrete is neglected for shielding purposes. The effect of rebar on the shielded dose would be small. Moreover, neglecting the presence of the rebar provides a higher shielded dose result, which is conservative.
15. It is conservativley assumed that none of the nuclides that enter the SIRWT during the event leave the SIRWT. Decay is accounted for, but transfer of nuclides from the SIRWT water to the atmosphere and environment is conservatively neglected for the shielding analysis.
16. A control room occupancy factor of 0.6 for 1 to 4 days and 0.4 for 4 to 30 days is applied to the dose for all cases.
17. All other inputs and assumptions are listed in the Computations section of this calculation.

4.0 METHODOLOGY

A modified version of QADMOD-GP is used to determine direct shine exposure to a dose point located in the control room. QADMOD-GP allows for shielding in three dimensions. QADMOD-GP was modified to allow for the cylindircal source to be represented with 99,999 source points rather than the standard 3,000 points.

All QADMOD-GP cases, except for the scenario 12 cases, are run on a machine with an AMD Athlon processor using the Windows 98 operating system. The scenario 12 cases are run on a personal computer with a dual core Pentium D processor running the Windows XP Professional operating system. References [3], [5], and [6] provide information about the qualification of QADMOD-GP for use with this project.

5.0 COMPUTATIONS

5.1 Current Configuration

Direct shine dose was determined from the SIRWT to the control room operator after a postulated LOCA event. The QADMOD-GP cases are set up with the same geometry for the shielding that includes the tank, sand, concrete pad, cellular slab roof, and regions of air. A series of cases is run with each scenario to determine a dose rate from the radiological source at given points in time. These sources are taken from RADTRAD-NAI runs that output the nuclide activity at a given point in time for the event. These nuclide activities are converted in MicroShield to energy groups with photon population for input to QADMOD-GP. In addition to the source, the source liquid level in the tank is altered to reflect the additional tank inventory due to the backleakage.

The output from the series of cases for each source is then entered into a spreadsheet where the steady-state dose rate is averaged over the time periods. The occupancy factor is applied within this spreadsheet. The values for the occupancy factors are from Reference [4]. The cumulative dose is subsequently calculated to yield the total 30-day direct shine dose from the SIRWT.

Computer files used to perform the calculations in this analysis are included in electronic version on the compact disk that accompanies the electronic version of this calculation and are listed as Attachment N.

The values for the QADMOD-GP input are listed below. The parameters correspond to those listed under the heading Program Symbol in Table I of Section 1 of Reference [6]. If a parameter from Table I of Section 1 of Reference [6] is not listed below, then it means that parameter is not used (i.e., left blank) in the input file. The input for the cases in the current configuration scenario are included in Attachment C.

Parameter	Value	Reference/Basis
NSET(1)	Varies by case	This value varies by case. The value is set equal to the number of energy groups present in the appropriate table for the case from Tables 7 through 11. That is, for the cases at 2 and 8 hours the value is 21, for 24 hours the value is 20, and for 96 and 720 hours the value is 19.
NSET(2)	6	There are 6 material types contained in the material compositions in the shielding scenario.

Parameter	Value	Reference/Basis
NSET(3)	7	Set equal to NSET(2) + 1 to use the QADMOD-GP supplied mass attenuation coefficients from file GPMA10.DAT (which is provided with the code).
NSET(4)	5	There are 5 material compositions for the shielding scenario.
NSET(5)	50	This is the number of boundaries used in the shield geometry description.
NSET(6)	114	This is the number of regions used in the shield geometry description.
NSET(7)	1	The source may appear in any of the regions.
NSET(8)	-3	This option instructs the code to internally calculate a set of point sources that represent an 'off-axis' cylindrical volume source parallel to one of the primary axes.
NSET(9)	0	The cylindric source geometry option is used.
NSET(10)	-100	The source cylinder is paritioned into 100 divisions in the radial direction. The product of the radial, vertical, and angular divisions is the number of 'subvolumes' each represented by a point source and must be less than 99,999. 100 divisions were selected based on a source noding sensitivity study to yield the most accurate and conservative solution for the limit of 99,999 total source points. The negative sign indicates that the number of divisions in this direction will be determined automatically by the code.
NSET(11)	-62	The source cylinder is paritioned into 62 divisions in the vertical direction. 62 divisions were selected based on a source noding sensitivity study to yield the most accurate and conservative solution for the limit of 99,999 total source points. The negative sign indicates that the number of divisions in this direction will be determined automatically by the code.

Parameter	Value	Reference/Basis
NSET(12)	-16	The source cylinder is paritioned into 16 divisions in the angular direction. 16 divisions were selected based on a source noding sensitivity study to yield the most accurate and conservative solution for the limit of 99,999 total source points. The negative sign indicates that the number of divisions in this direction will be determined automatically by the code.
NSET(14)	1	This flag is for the extended geometry output.
NSET(25)	4	The input energies are in units of photons/cm^2-sec and are input manually.
NSET(26)	5	Geometric progression buildup factors are read from file GPBU11.DAT (which is provided with the code).
ITYPE	1	The cylindrical source is parallel to the z-axis. A positive value indicates that the source strength for each point is equal to the volume represented by that point.
C1	731.52	Source cylinder x-axis coordinate. Reference [7] gives this value as 24'. 24 ft x 12 in/ft x 2.54 cm/in = 731.52 cm
C2	1249.68	Source cylinder y-axis coordinate. Reference [7] gives this value as 41'. 41 ft x 12 in/ft x 2.54 cm/in = 1249.68 cm
FACT	1	Unity is used as the constant normalization factor for the source strength for each source point.
RB(1)	0.	The source cylinder inner radius bound is set equal to 0.
RB(2)	701.04	The source cylinder outer radius bound is set equal to 701.04 cm. This is equal to the SIRWT inner radius of 23 ft, which is half of the tank inner diameter of 46 ft from Reference [1]. Since NSET(10) is a negative value, the intermediate bounds are determined automatically by the code. 23 ft x 12 in/ft x 2.54 cm/in = 701.04 cm

Parameter	Value	Reference/Basis
ZB(1)	576.58	The source cylinder lower axial (vertical) bound is set equal to the height of the bottom of the tank above the control room floor. The 1 inch adjustment is discussed in Assumption 6. 644' – 1'' – 625' = 18'-11'' = 227'' 227 in x 2.54 cm/in = 576.58 cm
ZB(2)	Table 2	The source cylinder upper axial (vertical) bound is set equal to the height of the top of the liquid in the tank above the control room floor. This value varies by case. Table 2 lists this value by case. Since NSET(11) is a negative value, the intermediate bounds are determined automatically by the code.
PHIB(1)	0	The source cylinder lower anguler bound is set equal to 0. Setting the lower and upper angular bounds both to 0 forces the code to distribute the intermediate bounds between 0 and 2π radians.
PHIB(2)	0	The source cylinder lower anguler bound is set equal to 0. Setting the lower and upper angular bounds both to 0 forces the code to distribute the intermediate bounds between 0 and 2π radians. Since NSET(12) is a negative value, the intermediate bounds are determined automatically by the code.
IDM(1)	Table 3	Table 3 lists the boundary numbers.
IDM(3)	Table 3	Table 3 lists the boundary types.
ADM(1)	Table 3	Table 3 lists the boundary surface parameters.
ADM(2)	Table 3	Table 3 lists the boundary surface parameters.
ADM(3)	Table 3	Table 3 lists the boundary surface parameters.
ADM(4)	Table 3	Table 3 lists the boundary surface parameters.
I	Table 4	Table 4 lists the region index number.
MATREG(I)	Table 4	Table 4 lists the region material composition number for each region.
IDM(4)	Table 4	Table 4 lists the boundary index numbers for each region.
IDM(5)	Table 4	Table 4 lists the boundary index numbers for each region.

Parameter	**Value**	**Reference/Basis**
IDM(6)	Table 4	Table 4 lists the boundary index numbers for each region.
IDM(7)	Table 4	Table 4 lists the boundary index numbers for each region.
IDM(8)	Table 4	Table 4 lists the boundary index numbers for each region.
IDM(9)	Table 4	Table 4 lists the boundary index numbers for each region.
XR(1)	Table 5	Table 5 lists the x coordinates for a point in each region.
XR(2)	Table 5	Table 5 lists the y coordinates for a point in each region.
XR(3)	Table 5	Table 5 lists the z coordinates for a point in each region.
COMP(i,j)	Table 6	Table 6 lists the material compositions.
MATID(1)	24	The reference number for water is 24 from Table I of Section 1 of Reference [6].
MATID(2)	8	The reference number for aluminum is 8 from Table I of Section 1 of Reference [6].
MATID(3)	25	The reference number for concrete is 25 from Table I of Section 1 of Reference [6].
MATID(4)	23	The reference number for air is 23 from Table I of Section 1 of Reference [6].
MATID(5)	9	The reference number for silicon is 9 from Table I of Section 1 of Reference [6].
MATID(6)	5	The reference number for oxygen is 5 from Table I Section 1 of Reference [6].
EG(1) – EG(I)	Tables 7-11	Table 7 through Table 11 list the mean energy for the various photon energy groups for each case. See the description in the text prior to Table F on how the energy groups are determined.
GAMEN(1) – GAMEN(I)	Tables 7-11	Table 7 through Table 11 list the photon population of the energy groups for each case. See the description in the text prior to Table F on how the photon populations for the energy groups are determined.

Parameter	Value	Reference/Basis
MATGP	WATE	Sensitivity cases were run that yielded that using water as the buildup material provided the most conservative (i.e., highest) shine dose.
ICGP	EXP	The buildup factors for the dose determination are selected.
UNITG(1-3)	Photons Per	This is a header text for an output column.
UNITG(4-6)	mrem/hr	This is a header text for an output column.
UNITG(13-15)	cm^2-sec	This is a header text for an output column.
RRC	Table 12	Table 12 presents the x coordinate for each detector.
PHIRC	Table 12	Table 121 presents the y coordinate for each detector.
ZRC	91.44	The dose points are assumed to be 3' above the control floor. 3 ft x 12 in/ft x 2.54 cm/in = 91.44
NRCOPT	1	The cartesian coordinate system is used for the detector points.

The source upper bound is based on the height of water in the tank at the various time periods. This value varies throughout the event as the volume of water in the tank increases with the assumed backleakage. The initial SIRWT volume of 4,144 gal at the beginning of recirculation from Reference [9] converts to 554.0 ft^3. This amount is used as the starting point since it is the minimum possible initial volume, and a smaller water inventory in the tank is conservative for shielding purposes. The initial volume corresponds to a source height in the tank of 4'' ($h = 554.0\ ft^3 / \pi\ (23')^2 = 0.333' = 4''$). The leak rate to the SIRWT used in the radiological analysis is 4.4 gpm starting at 19 minutes.

The table below lists the volume of water in the tank, source tank water height, and the upper bound for the cylindrical source for QADMOD-GP. For example, at 2 hours, the tank volume is 4,588.4 gal (4,144 gal + 4.4 gpm x (2 h – 0.316667 h) = 4,588.4 gal). This converts to 613.4 ft^3 (4,588.4 gal x 0.13368 ft^3/gal). This corresponds to a source height of 0.369 ft, or 4.43 in ($h = 613.4\ ft^3 / \pi\ (23')^2 = 0.369' = 4.43''$). The source upper bound is based on this height, and is equal to the source lower bound value of 576.58 cm plus the height of the source water (576.58 cm + 11.25 cm = 587.83 cm).

Table 2 – SIRWT Source Height & Upper Bound

Time hr	Tank Volume gal	Tank Volume ft^3	Height of Water in	Source Height cm	Source Upper Bound cm
0	4144	554.0	4.00	10.16	586.74
0.316667	4144	554.0	4.00	10.16	586.74
2	4588.4	613.4	4.43	11.25	587.83
8	6172.4	825.1	5.96	15.13	591.71
24	10396.4	1389.8	10.04	25.49	602.07

Time hr	Tank Volume gal	Tank Volume ft^3	Height of Water in	Source Height cm	Source Upper Bound cm
96	29404.4	3930.8	28.38	72.09	648.67
720	194140.4	25952.7	187.40	475.98	1052.56

The table below lists each boundary number, the type of boundary, and the necessary parameters to define the boundary based on the type. The distance variables ADM(1) through ADM(4) are input in units of cm in the code input file. However, the table below lists the values in feet and inches first followed by the value in cm.

Boundary type 12 is for a cylinder parallel to the z axis. For that type variable ADM(1) and ADM(3) are for the x and y axis coordinates, respectively. Variables ADM(2) and ADM(4) are equal to each other for a right circular cylinder and are equal to the cylinder radius. Boundaries 1 and 2 represent the inside and outside of the SIRWT, respectively. The centerline for the cylindrical boundaries is at the same location defined by C1 and C2 at (x,y)=(24',41'). The inside radius is 23 ft as discussed for variable RB(2). The outside radius is equal to 23'-1/4'' which is the inside radius plus the minimum tank wall thickness of ¼'' from Reference [10].

Boundary types 1, 2, and 3 are for planes perpendicular to the x, y, and z axes, respectively. Variables ADM (2) through ADM(4) are not used for this type of boundary. Variable ADM(1) is the coordinate along the perpendicular axis where the plane intersects.

Table 3 – Geometry Boundary Parameters

Boundary Index Number IDM(1)	Boundary Type Option IDM(3)	ADM(1)		ADM(2)		ADM(3)		ADM(4)	
		ft-in	cm	ft-in	cm	ft-in	cm	ft-in	cm
1	12	24'	731.52	23'	701.04	41'	1249.68	23'	701.04
2	12	24'	731.52	23'-1/4''	701.675	41'	1249.68	23'-1/4''	701.675
3	1	-1'	-30.48	-	-	-	-	-	-
4	1	1'	30.48	-	-	-	-	-	-
5	1	12'	365.76	-	-	-	-	-	-
6	1	13'	396.24	-	-	-	-	-	-
7	1	23'-6''	716.28	-	-	-	-	-	-
8	1	24'-6''	746.76	-	-	-	-	-	-
9	1	35'	1066.8	-	-	-	-	-	-
10	1	36'	1097.28	-	-	-	-	-	-
11	1	47'	1432.56	-	-	-	-	-	-
12	1	49'	1493.52	-	-	-	-	-	-
13	2	2'-6''	76.2	-	-	-	-	-	-
14	2	10'	304.8	-	-	-	-	-	-
15	2	12'	365.76	-	-	-	-	-	-
16	2	20'	609.6	-	-	-	-	-	-
17	2	22'	670.56	-	-	-	-	-	-
18	2	30'	914.4	-	-	-	-	-	-
19	2	32'	975.36	-	-	-	-	-	-
20	2	40'	1219.2	-	-	-	-	-	-
21	2	42'	1280.16	-	-	-	-	-	-
22	2	50'	1524	-	-	-	-	-	-
23	2	52'	1584.96	-	-	-	-	-	-
24	2	60'	1828.8	-	-	-	-	-	-

Boundary Index Number IDM(1)	Boundary Type Option IDM(3)	ADM(1)		ADM(2)		ADM(3)		ADM(4)	
		ft-in	cm	ft-in	cm	ft-in	cm	ft-in	cm
25	2	62’	1889.76	-	-	-	-	-	-
26	2	69’-6’’	2118.36	-	-	-	-	-	-
27	3	0’	0	-	-	-	-	-	-
28	3	12’	365.76	-	-	-	-	-	-
29	3	13’	396.24	-	-	-	-	-	-
30	3	17’	518.16	-	-	-	-	-	-
31	3	18’	548.64	-	-	-	-	-	-
32	3	18’-10’’	574.04	-	-	-	-	-	-
33	3	18’-11’’	576.58	-	-	-	-	-	-
34	3	varies[1]	varies[1]	-	-	-	-	-	-
35	1	3’	91.44	-	-	-	-	-	-
36	1	6’	182.88	-	-	-	-	-	-
37	1	36’-4’’	1107.44	-	-	-	-	-	-
38	1	39’-4’’	1198.88	-	-	-	-	-	-
39	2	5’-11’’	180.34	-	-	-	-	-	-
40	2	7’-10’’	238.76	-	-	-	-	-	-
41	2	8’-11’’	271.78	-	-	-	-	-	-
42	2	33’	1005.84	-	-	-	-	-	-
43	2	34’-4’’	1046.48	-	-	-	-	-	-
44	2	37’-4’’	1137.92	-	-	-	-	-	-
45	2	39’	1188.72	-	-	-	-	-	-
46	2	43’	1310.64	-	-	-	-	-	-
47	2	49’	1493.52	-	-	-	-	-	-
48	2	63’-3 ½’’	1929.13	-	-	-	-	-	-
49	2	66’-3 ½’’	2020.57	-	-	-	-	-	-
50	3	16’	487.68	-	-	-	-	-	-

Notes: [1] The value for variable ADM(1) for surface 34 is equal to the upper source bound value for each case presented in Table 2.

The following table lists the region index numbers and the boundary index numbers that bound that region. Generally, the boundary numbers are listed in order of increasing value, which results in first the x coordinate, then y coordinate, then z coordinate boundaries being listed. The x and y coordinates boundaries are generally listed in order of increasing value, while the z coordinates are generally listed in decreasing elevation. The source is listed as region 1, with the tank wall listed as region 2.

Table 4 – Geometry Region Parameters – 1

Region Index Number I	MATREG	IDM (4)	IDM (5)	IDM (6)	IDM (7)	IDM (8)	IDM (9)
1	1	1	33	34	-	-	-
2	2	1	2	33	34	-	-
3	5	2	33	32	-	-	-
4	3	2	32	31	-	-	-
5	3	3	12	13	26	31	30
6	3	3	4	13	26	30	29

Region Index Number I	MATREG	IDM (4)	IDM (5)	IDM (6)	IDM (7)	IDM (8)	IDM (9)
7	4	4	5	13	14	30	29
8	3	4	35	14	15	30	29
9	3	35	36	14	15	30	50
10	4	35	36	14	15	50	29
11	3	36	5	14	15	30	29
12	4	4	5	15	16	30	29
13	3	4	35	16	17	30	29
14	3	35	36	16	17	30	50
15	4	35	36	16	17	50	29
16	3	36	5	16	17	30	29
17	4	4	5	17	18	30	29
18	3	4	35	18	19	30	29
19	3	35	36	18	19	30	50
20	4	35	36	18	19	50	29
21	3	36	5	18	19	30	29
22	4	4	5	19	20	30	29
23	3	4	35	20	21	30	29
24	3	35	36	20	21	30	50
25	4	35	36	20	21	50	29
26	3	36	5	20	21	30	29
27	4	4	5	21	22	30	29
28	3	4	35	22	23	30	29
29	3	35	36	22	23	30	50
30	4	35	36	22	23	50	29
31	3	36	5	22	23	30	29
32	4	4	5	23	24	30	29
33	3	4	35	24	25	30	29
34	3	35	36	24	25	30	50
35	4	35	36	24	25	50	29
36	3	36	5	24	25	30	29
37	4	4	5	25	26	30	29
38	3	5	6	13	39	30	29
39	3	5	6	39	41	30	50
40	4	5	6	39	41	50	29
41	3	5	6	41	43	30	29
42	3	5	6	43	44	30	50
43	4	5	6	43	44	50	29
44	3	5	6	44	48	30	29
45	3	5	6	48	49	30	50
46	4	5	6	48	49	50	29
47	3	5	6	49	26	30	29
48	4	6	7	13	14	30	29
49	3	6	7	14	15	30	29
50	4	6	7	15	16	30	29
51	3	6	7	16	17	30	29
52	4	6	7	17	18	30	29
53	3	6	7	18	19	30	29
54	4	6	7	19	20	30	29
55	3	6	7	20	21	30	29

Region Index Number I	MATREG	IDM (4)	IDM (5)	IDM (6)	IDM (7)	IDM (8)	IDM (9)
56	4	6	7	21	22	30	29
57	3	6	7	22	23	30	29
58	4	6	7	23	24	30	29
59	3	6	7	24	25	30	29
60	4	6	7	25	26	30	29
61	3	7	8	13	40	30	29
62	3	7	8	40	14	30	50
63	4	7	8	40	14	50	29
64	3	7	8	14	43	30	29
65	3	7	8	43	44	30	50
66	4	7	8	43	44	50	29
67	3	7	8	44	26	30	29
68	4	8	9	13	14	30	29
69	3	8	9	14	15	30	29
70	4	8	9	15	16	30	29
71	3	8	9	16	17	30	29
72	4	8	9	17	18	30	29
73	3	8	9	18	19	30	29
74	4	8	9	19	20	30	29
75	3	8	9	20	21	30	29
76	4	8	9	21	22	30	29
77	3	8	9	22	23	30	29
78	4	8	9	23	24	30	29
79	3	8	9	24	25	30	29
80	4	8	9	25	26	30	29
81	3	9	10	13	43	30	29
82	3	9	10	43	44	30	50
83	4	9	10	43	44	50	29
84	3	9	10	44	26	30	29
85	4	10	11	13	14	30	29
86	3	10	11	14	15	30	29
87	4	10	11	15	16	30	29
88	3	10	11	16	17	30	29
89	4	10	11	17	18	30	29
90	3	10	11	18	19	30	29
91	4	10	11	19	20	30	29
92	3	10	37	20	21	30	29
93	3	37	38	20	21	30	50
94	4	37	38	20	21	50	29
95	3	38	11	20	21	30	29
96	4	10	11	21	22	30	29
97	3	10	37	22	23	30	29
98	3	37	38	22	23	30	50
99	4	37	38	22	23	50	29
100	3	38	11	22	23	30	29
101	4	10	11	23	24	30	29
102	3	10	11	24	25	30	29
103	4	10	11	25	26	30	29
104	3	11	12	13	42	30	29

Region Index Number I	MATREG	IDM (4)	IDM (5)	IDM (6)	IDM (7)	IDM (8)	IDM (9)
105	3	11	12	42	45	30	50
106	4	11	12	42	45	50	29
107	3	11	12	45	46	30	29
108	3	11	12	46	47	30	50
109	4	11	12	46	47	50	29
110	3	11	12	47	26	30	29
111	3	3	12	13	26	29	28
112	4	3	12	13	26	28	27
113	4	3	-	-	-	-	-
114	4	3	13	-	-	-	-

The following table lists the region index numbers along with the x, y, and z coordinates for a point within that region. The definition of this point is required for geometry error checking by the code. The corresponding QADMOD-GP variables are XR(1), XR(2), and XR(3). The ft-in and cm values are listed. The material type is also listed in this table for ease of identification of the region.

Table 5 – Geometry Region Parameters – 2

Region Index Number I	Material Type	XR(1)		XR(2)		XR(3)	
		ft-in	cm	ft-in	cm	ft-in	cm
1	water	24’	731.52	41’	1249.68	19’	579.12
2	aluminum	47’-1/8’’	1432.8775	41’	1249.68	19’	579.12
3	sand	24’	731.52	41’	1249.68	18’-10 ½’’	575.31
4	concrete	24’	731.52	41’	1249.68	18’-5’’	561.34
5	concrete	24’	731.52	41’	1249.68	17’-6’’	533.4
6	concrete	0’	0	41’	1249.68	15’	457.2
7	air	6’-6’’	198.12	6’-3’’	190.5	15’	457.2
8	concrete	2’	60.96	11’	335.28	15’	457.2
9	concrete	4’-6’’	137.16	11’	335.28	16’-6’’	502.92
10	air	4’-6’’	137.16	11’	335.28	14’-6’’	441.96
11	concrete	9’	274.32	11’	335.28	15’	457.2
12	air	6’-6’’	198.12	16’	487.68	15’	457.2
13	concrete	2’	60.96	21’	640.08	15’	457.2
14	concrete	4’-6’’	137.16	21’	640.08	16’-6’’	502.92
15	air	4’-6’’	137.16	21’	640.08	14’-6’’	441.96
16	concrete	9’	274.32	21’	640.08	15’	457.2
17	air	6’-6’’	198.12	26’	792.48	15’	457.2
18	concrete	2’	60.96	31’	944.88	15’	457.2
19	concrete	4’-6’’	137.16	31’	944.88	16’-6’’	502.92
20	air	4’-6’’	137.16	31’	944.88	14’-6’’	441.96
21	concrete	9’	274.32	31’	944.88	15’	457.2
22	air	6’-6’’	198.12	36’	1097.28	15’	457.2
23	concrete	2’	60.96	41’	1249.68	15’	457.2
24	concrete	4’-6’’	137.16	41’	1249.68	16’-6’’	502.92
25	air	4’-6’’	137.16	41’	1249.68	14’-6’’	441.96
26	concrete	9’	274.32	41’	1249.68	15’	457.2
27	air	6’-6’’	198.12	46’	1402.08	15’	457.2

Region Index Number I	Material Type	XR(1)		XR(2)		XR(3)	
		ft-in	cm	ft-in	cm	ft-in	cm
28	concrete	2’	60.96	51’	1554.48	15’	457.2
29	concrete	4’-6’’	137.16	51’	1554.48	16’-6’’	502.92
30	air	4’-6’’	137.16	51’	1554.48	14’-6’’	441.96
31	concrete	9’	274.32	51’	1554.48	15’	457.2
32	air	6’-6’’	198.12	56’	1706.88	15’	457.2
33	concrete	2’	60.96	61’	1859.28	15’	457.2
34	concrete	4’-6’’	137.16	61’	1859.28	16’-6’’	502.92
35	air	4’-6’’	137.16	61’	1859.28	14’-6’’	441.96
36	concrete	9’	274.32	61’	1859.28	15’	457.2
37	air	6’-6’’	198.12	65’-9’’	2004.06	15’	457.2
38	concrete	12’-6’’	381	4’-2 ½’’	128.27	15’	457.2
39	concrete	12’-6’’	381	7’-5’’	226.06	16’-6’’	502.92
40	air	12’-6’’	381	7’-5’’	226.06	14’-6’’	441.96
41	concrete	12’-6’’	381	21’	640.08	15’	457.2
42	concrete	12’-6’’	381	35’-10’’	1092.2	16’-6’’	502.92
43	air	12’-6’’	381	35’-10’’	1092.2	14’-6’’	441.96
44	concrete	12’-6’’	381	51’	1554.48	15’	457.2
45	concrete	12’-6’’	381	64’-9 ½’’	1974.85	16’-6’’	502.92
46	air	12’-6’’	381	64’-9 ½’’	1974.85	14’-6’’	441.96
47	concrete	12’-6’’	381	68’-6’’	2087.88	15’	457.2
48	air	18’-3’’	556.26	6’-3’’	190.5	15’	457.2
49	concrete	18’-3’’	556.26	11’	335.28	15’	457.2
50	air	18’-3’’	556.26	16’	487.68	15’	457.2
51	concrete	18’-3’’	556.26	21’	640.08	15’	457.2
52	air	18’-3’’	556.26	26’	792.48	15’	457.2
53	concrete	18’-3’’	556.26	31’	944.88	15’	457.2
54	air	18’-3’’	556.26	36’	1097.28	15’	457.2
55	concrete	18’-3’’	556.26	41’	1249.68	15’	457.2
56	air	18’-3’’	556.26	46’	1402.08	15’	457.2
57	concrete	18’-3’’	556.26	51’	1554.48	15’	457.2
58	air	18’-3’’	556.26	56’	1706.88	15’	457.2
59	concrete	18’-3’’	556.26	61’	1859.28	15’	457.2
60	air	18’-3’’	556.26	65’-9’’	2004.06	15’	457.2
61	concrete	24’	731.52	5’-2’’	157.48	15’	457.2
62	concrete	24’	731.52	8’-11’’	271.78	16’-6’’	502.92
63	air	24’	731.52	8’-11’’	271.78	14’-6’’	441.96
64	concrete	24’	731.52	25’	762	15’	457.2
65	concrete	24’	731.52	35’-10’’	1092.2	16’-6’’	502.92
66	air	24’	731.52	35’-10’’	1092.2	14’-6’’	441.96
67	concrete	24’	731.52	51’	1554.48	15’	457.2
68	air	29’-9’’	906.78	6’-3’’	190.5	15’	457.2
69	concrete	29’-9’’	906.78	11’	335.28	15’	457.2
70	air	29’-9’’	906.78	16’	487.68	15’	457.2
71	concrete	29’-9’’	906.78	21’	640.08	15’	457.2
72	air	29’-9’’	906.78	26’	792.48	15’	457.2
73	concrete	29’-9’’	906.78	31’	944.88	15’	457.2
74	air	29’-9’’	906.78	36’	1097.28	15’	457.2
75	concrete	29’-9’’	906.78	41’	1249.68	15’	457.2
76	air	29’-9’’	906.78	46’	1402.08	15’	457.2

Region Index Number I	Material Type	XR(1)		XR(2)		XR(3)	
		ft-in	cm	ft-in	cm	ft-in	cm
77	concrete	29’-9’’	906.78	51’	1554.48	15’	457.2
78	air	29’-9’’	906.78	56’	1706.88	15’	457.2
79	concrete	29’-9’’	906.78	61’	1859.28	15’	457.2
80	air	29’-9’’	906.78	65’-9’’	2004.06	15’	457.2
81	concrete	35’-6’’	1082.04	15’	457.2	15’	457.2
82	concrete	35’-6’’	1082.04	35’-10’’	1092.2	16’-6’’	502.92
83	air	35’-6’’	1082.04	35’-10’’	1092.2	14’-6’’	441.96
84	concrete	35’-6’’	1082.04	50’	1524	15’	457.2
85	air	41’-6’’	1264.92	6’-3’’	190.5	15’	457.2
86	concrete	41’-6’’	1264.92	11’	335.28	15’	457.2
87	air	41’-6’’	1264.92	16’	487.68	15’	457.2
88	concrete	41’-6’’	1264.92	21’	640.08	15’	457.2
89	air	41’-6’’	1264.92	26’	792.48	15’	457.2
90	concrete	41’-6’’	1264.92	31’	944.88	15’	457.2
91	air	41’-6’’	1264.92	36’	1097.28	15’	457.2
92	concrete	36’-2’’	1102.36	41’	1249.68	15’	457.2
93	concrete	37’-8’’	1148.08	41’	1249.68	16’-6’’	502.92
94	air	37’-8’’	1148.08	41’	1249.68	14’-6’’	441.96
95	concrete	43’	1310.64	41’	1249.68	15’	457.2
96	air	41’-6’’	1264.92	46’	1402.08	15’	457.2
97	concrete	36’-2’’	1102.36	51’	1554.48	15’	457.2
98	concrete	37’-8’’	1148.08	51’	1554.48	16’-6’’	502.92
99	air	37’-8’’	1148.08	51’	1554.48	14’-6’’	441.96
100	concrete	43’	1310.64	51’	1554.48	15’	457.2
101	air	41’-6’’	1264.92	56’	1706.88	15’	457.2
102	concrete	41’-6’’	1264.92	61’	1859.28	15’	457.2
103	air	41’-6’’	1264.92	65’-9’’	2004.06	15’	457.2
104	concrete	48’	1463.04	15’	457.2	15’	457.2
105	concrete	48’	1463.04	35’	1066.8	16’-6’’	502.92
106	air	48’	1463.04	35’	1066.8	14’-6’’	441.96
107	concrete	48’	1463.04	41’	1249.68	15’	457.2
108	concrete	48’	1463.04	45’	1371.6	16’-6’’	502.92
109	air	48’	1463.04	45’	1371.6	14’-6’’	441.96
110	concrete	48’	1463.04	61’	1859.28	15’	457.2
111	concrete	24’	731.52	41’	1249.68	12’-6’’	381
112	air	24’	731.52	41’	1249.68	6’	182.88
113	air	-10’	-304.8	0’	0	0’	0
114	air	10’	304.8	0’	0	0’	0

The following table lists the material composition types. The material densities for water, aluminum, concrete, and air are the default densities from MicroShield as listed in Section 4.2 of Reference [11]. Reference [2] gives the density of sand as 1,515 kg/m^3, or 1.515 g/cc. The sand is assumed to be composed of SiO_2. The silicon and oxygen partial densities for the material composition are based on the ratio of the individual component molecular weights to the total sand molecular weight. The molecular weight for Si is 28.0855 and for O_2 is 31.9988. The total SiO_2 molecular weight is simply the sum of these and is 60.0843.

$$\rho_{Si} = \rho_{SiO2}\,(MW_{Si}/MW_{SiO2}) = 1.515\ g/cm^3\ (28.0855/60.0843) = 0.7082\ g/cm^3$$

$$\rho_{O2} = \rho_{SiO2}\,(MW_{O2}/MW_{SiO2}) = 1.515\ g/cm^3\ (31.9988/60.0843) = 0.8068\ g/cm^3$$

Table 6 – Material Compositions

Composition	Description	J=1 MATID(1) Water Partial Density (g/cm^3)	J=2 MATID(2) Aluminum Partial Density (g/cm^3)	J=3 MATID(3) Concrete Partial Density (g/cm^3)	J=4 MATID(4) Air Partial Density (g/cm^3)	J=5 MATID(5) Silicon Partial Density (g/cm^3)	J=6 MATID(6) Oxygen Partial Density (g/cm^3)
COMP(1,J)	Source water	1.0	-	-	-	-	-
COMP(2,J)	Tank wall	-	2.702	-	-	-	-
COMP(3,J)	Concrete	-	-	2.35	-	-	-
COMP(4,J)	Air	-	-	-	1.22e-3	-	-
COMP(5,J)	Sand	-	-	-	-	0.7082	0.8068

The source information for the QADMOD-GP runs originates from the RADTRAD-NAI output from the SIRWT case that uses the design basis inputs and is listed in Attachment A, which was developed during the preparation of Reference [4]. The case pal_sirwt_db_ast was modified, and the output is found in pal_sirwt_db_ast_shield.out in Attachment A. Pathway 1 in this case is the SIRWT backleakage path. The filter efficiency on this path was set to 100% for all species, and the total backleakage for all times greater than 0.316667 hr were set to 0.588192 cfm (4.4 gpm x 0.13368 ft^3/gal = 0.588192 cfm).

RADTRAD-NAI provides the source activity in terms of nuclides present and in the units of Curies. The nuclides and their activities are extracted from the SIRWT Backleakage pathway filter from the RADTRAD-NAI run. MicroShield is used to automatically generate the energy groups and their photon populations. The SIRWT activities for each time period are properly ordered and pasted into dummy MicroShield case files. The photon populations are sorted by MicroShield into 25 energy groups using the default Standard Indices source grouping. The MicroShield default of not including photon energies below 0.015 MeV is used. The energy groups that have zero photon population are not included in the QADMOD-GP cases.

The following tables list the energy groups, photon populations, and volumetric source for each group for each case. The photon populations are divided by the volume of liquid in the SIRWT from Table 2 (converted to appropriate units) to obtain the volume source.

Table 7 – Energy Group Photon Populations – 2 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	5.0665e10	2.9170E+03
0.02	1.0587e12	6.0954E+04
0.03	1.4258e14	8.2089E+06
0.04	3.1776e12	1.8295E+05
0.05	1.2535e13	7.2169E+05
0.06	3.0162e12	1.7366E+05
0.08	2.1674e13	1.2479E+06
0.1	1.5495e13	8.9211E+05
0.15	4.5599e13	2.6253E+06
0.2	1.3804e14	7.9475E+06
0.3	1.3150e14	7.5710E+06
0.4	6.3879e14	3.6778E+07
0.5	1.4278e15	8.2204E+07
0.6	1.1941e15	6.8749E+07

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.8	1.6933e15	9.7490E+07
1.0	8.7954e14	5.0639E+07
1.5	8.1596e14	4.6978E+07
2.0	1.8862e14	1.0860E+07
3.0	1.0774e13	6.2030E+05
4.0	7.9830e11	4.5961E+04
5.0	4.6161e10	2.6577E+03

Table 8 – Energy Group Photon Populations – 8 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	5.0166e11	2.1471E+04
0.02	8.4941e12	3.6354E+05
0.03	9.0262e14	3.8631E+07
0.04	2.1181e13	9.0653E+05
0.05	9.7636e13	4.1787E+06
0.06	2.1614e13	9.2506E+05
0.08	1.2837e14	5.4941E+06
0.1	1.0883e14	4.6578E+06
0.15	1.1795e14	5.0482E+06
0.2	7.9755e14	3.4134E+07
0.3	6.7382e14	2.8839E+07
0.4	3.9206e15	1.6780E+08
0.5	7.3681e15	3.1535E+08
0.6	3.3577e15	1.4371E+08
0.8	3.1272e15	1.3384E+08
1.0	2.4774e15	1.0603E+08
1.5	2.5669e15	1.0986E+08
2.0	4.6925e14	2.0083E+07
3.0	1.7707e12	7.5784E+04
4.0	4.9057e9	2.0996E+02
5.0	4.2172e5	1.8049E-02

Table 9 – Energy Group Photon Populations – 24 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	5.5239e11	1.4036E+04
0.02	2.5765e13	6.5469E+05
0.03	2.5765e15	6.5469E+07
0.04	6.4708e13	1.6442E+06
0.05	2.8184e14	7.1616E+06
0.06	6.7061e13	1.7040E+06
0.08	3.9693e14	1.0086E+07
0.1	2.9983e14	7.6187E+06
0.15	3.3039e14	8.3952E+06
0.2	2.1191e15	5.3846E+07
0.3	1.6794e15	4.2674E+07
0.4	1.1551e16	2.9351E+08
0.5	1.4036e16	3.5666E+08

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.6	6.9625e15	1.7692E+08
0.8	5.7644e15	1.4647E+08
1.0	2.6579e15	6.7537E+07
1.5	2.4254e15	6.1630E+07
2.0	3.3866e14	8.6054E+06
3.0	1.5395e13	3.9119E+05
4.0	6.6778e6	1.6968E-01

Table 10 – Energy Group Photon Populations – 96 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	1.8574e11	1.6687E+03
0.02	7.2027e13	6.4710E+05
0.03	6.5997e15	5.9293E+07
0.04	2.1233e14	1.9076E+06
0.05	6.0556e14	5.4404E+06
0.06	2.1780e14	1.9567E+06
0.08	1.2372e15	1.1115E+07
0.1	5.4355e14	4.8833E+06
0.15	8.7885e14	7.8957E+06
0.2	4.5285e15	4.0685E+07
0.3	5.1534e15	4.6299E+07
0.4	3.5512e16	3.1904E+08
0.5	9.5153e15	8.5487E+07
0.6	1.9834e16	1.7819E+08
0.8	1.3513e16	1.2140E+08
1.0	3.7781e15	3.3943E+07
1.5	4.7002e15	4.2227E+07
2.0	1.9593e14	1.7603E+06
3.0	1.3661e14	1.2273E+06

Table 11 – Energy Group Photon Populations – 720 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	8.8818e11	1.2086E+03
0.02	1.8161e14	2.4712E+05
0.03	5.9922e15	8.1538E+06
0.04	7.6695e14	1.0436E+06
0.05	2.3208e13	3.1580E+04
0.06	3.2895e14	4.4761E+05
0.08	9.3027e14	1.2658E+06
0.1	4.5577e13	6.2018E+04
0.15	1.1282e15	1.5352E+06
0.2	6.2908e14	8.5601E+05
0.3	5.4628e15	7.4334E+06
0.4	2.4224e16	3.2962E+07
0.5	8.2827e15	1.1271E+07
0.6	6.5676e16	8.9367E+07
0.8	3.4257e16	4.6615E+07

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
1.0	4.3733e15	5.9509E+06
1.5	8.3466e15	1.1357E+07
2.0	7.7204e13	1.0505E+05
3.0	2.7574e14	3.7521E+05

The following table lists the x and y coordinates for the several detector points. The SIRWT resides directly above the majority of the control room and viewing gallery. The point directly below the center of the SIRWT would provide the highest shielded dose if there was uniform shielding in the vertical direction. However, the shielding by the cellular slab roof is not uniform, and the dose point in line with the SIRWT centerline may or may not yield the highest shielded dose. It is expected however, that if this point does not have the highest shielded dose since it lies below one of the cellular concrete supports, that one very near to it that does not lie below one of the concrete supports does have the highest dose. A series of detector points are used to assure that the highest dose point 3 ft above the control room floor is identified.

A grid of detector points is generated with offsets of 7'', 1', 5', and 15' in the positive and negative x directions from the SIRWT centerpoint at (x,y) = (24',41'). The offsets in the positive and negative y directions are 1'-1'', 2', 5', and 15'. This results in 81 detector points for each case in the control room and viewing gallery areas. Detector 1 is the detector in line with the SIRWT centerline.

Table 12 – Detector Point Locations

Detector Point	RRC (x coordinate)		PHIRC (y coordinate)	
	ft-in	cm	ft-in	cm
1	24'	731.52	41'	1249.68
2	24'-7''	749.3	41'	1249.68
3	25'	762	41'	1249.68
4	29'	883.92	41'	1249.68
5	39'	1188.72	41'	1249.68
6	24'	731.52	42'-1''	1282.7
7	24'-7''	749.3	42'-1''	1282.7
8	25'	762	42'-1''	1282.7
9	29'	883.92	42'-1''	1282.7
10	39'	1188.72	42'-1''	1282.7
11	24'	731.52	43'	1310.64
12	24'-7''	749.3	43'	1310.64
13	25'	762	43'	1310.64
14	29'	883.92	43'	1310.64
15	39'	1188.72	43'	1310.64
16	24'	731.52	46'	1402.08
17	24'-7''	749.3	46'	1402.08
18	25'	762	46'	1402.08
19	29'	883.92	46'	1402.08
20	39'	1188.72	46'	1402.08
21	24'	731.52	56'	1706.88
22	24'-7''	749.3	56'	1706.88
23	25'	762	56'	1706.88
24	29'	883.92	56'	1706.88
25	39'	1188.72	56'	1706.88
26	24'	731.52	39'-11''	1216.66
27	24'-7''	749.3	39'-11''	1216.66
28	25'	762	39'-11''	1216.66

Detector Point	RRC (x coordinate)		PHIRC (y coordinate)	
	ft-in	cm	ft-in	cm
29	29’	883.92	39’-11’’	1216.66
30	39’	1188.72	39’-11’’	1216.66
31	24’	731.52	39’	1188.72
32	24’-7’’	749.3	39’	1188.72
33	25’	762	39’	1188.72
34	29’	883.92	39’	1188.72
35	39’	1188.72	39’	1188.72
36	24’	731.52	36’	1097.28
37	24’-7’’	749.3	36’	1097.28
38	25’	762	36’	1097.28
39	29’	883.92	36’	1097.28
40	39’	1188.72	36’	1097.28
41	24’	731.52	26’	792.48
42	24’-7’’	749.3	26’	792.48
43	25’	762	26’	792.48
44	29’	883.92	26’	792.48
45	39’	1188.72	26’	792.48
46	23’-5’’	713.74	41’	1249.68
47	23’	701.04	41’	1249.68
48	19’	579.12	41’	1249.68
49	9’	274.32	41’	1249.68
50	23’-5’’	713.74	42’-1’’	1282.7
51	23’	701.04	42’-1’’	1282.7
52	19’	579.12	42’-1’’	1282.7
53	9’	274.32	42’-1’’	1282.7
54	23’-5’’	713.74	43’	1310.64
55	23’	701.04	43’	1310.64
56	19’	579.12	43’	1310.64
57	9’	274.32	43’	1310.64
58	23’-5’’	713.74	46’	1402.08
59	23’	701.04	46’	1402.08
60	19’	579.12	46’	1402.08
61	9’	274.32	46’	1402.08
62	23’-5’’	713.74	56’	1706.88
63	23’	701.04	56’	1706.88
64	19’	579.12	56’	1706.88
65	9’	274.32	56’	1706.88
66	23’-5’’	713.74	39’-11’’	1216.66
67	23’	701.04	39’-11’’	1216.66
68	19’	579.12	39’-11’’	1216.66
69	9’	274.32	39’-11’’	1216.66
70	23’-5’’	713.74	39’	1188.72
71	23’	701.04	39’	1188.72
72	19’	579.12	39’	1188.72
73	9’	274.32	39’	1188.72
74	23’-5’’	713.74	36’	1097.28
75	23’	701.04	36’	1097.28
76	19’	579.12	36’	1097.28
77	9’	274.32	36’	1097.28
78	23’-5’’	713.74	26’	792.48
79	23’	701.04	26’	792.48

Detector Point	RRC (x coordinate)		PHIRC (y coordinate)	
	ft-in	cm	ft-in	cm
80	19’	579.12	26’	792.48
81	9’	274.32	26’	792.48

There are various scenarios considered. The following table lists the scenario identification number and a description of each.

Table 13 – Scenario Listings

Scenario	Description
1	Current configuration
2	0.5 in lead shielding in bottom of SIRWT
3	1 in lead shielding in bottom of SIRWT
4	2 in lead shielding in bottom of SIRWT
5	0.5 in lead shielding on floor of open cells (638’ el.)
6	1 in lead shielding on floor of open cells (638’ el.)
7	2 in lead shielding on floor of open cells (638’ el.)
8	0.5 in lead shielding on ceiling of roof (637’ el.)
9	1 in lead shielding on ceiling of roof (637’ el.)
10	2 in lead shielding on ceiling of roof (637’ el.)
11	0.5 in lead shielding on floor of open cells (638’ el.); 50% reduction in SIRWT backleakage rate
12	Current configuration; SIRWT backleakage rates of 4.4 gpm for the first two hours and 0.05 gpm for the remainder of the event

A case is run at each time point for the various scenarios. These time points are 2, 8, 24, 96, and 720 hours. The cases file names are of the form s#c#, where the number following the letter s is the scenario number, and the number following the letter c is the case number. For example, the case for the 24 hour time point with the base scenario is s1c3. The dose at each time point is used to determine the 30 day cumulative dose in a spreadsheet. The following table provides a representation of the spreadsheet calculation used to determine the overall 30 day dose for the current/base configuration geometry. The detector point with the maximum dose rate is used. For the current/base configuration geometry that detector point is point 26 from Table 12.

An example calculation for the time period ending at the transient time of 8 hours is described here to illustrate the calculation method used in the table. The first dose rate of 29.766 mrem/hr is taken from the QADMOD-GP output file, Out_s1c1.dat (for 2 hours). The second dose rate of 65.817 mrem/hr is taken from the QADMOD-GP output file, Out_s1c2.dat (for 8 hours). The average of the rates at each end of the time period is used. Therefore, the exposure rate used for the time period from 2 to 8 hours is 47.7915 mrem/hr. The dose for the previous time period is calculated as the product of the dose rate and the time period length. For the time period ending at 8 hours, the dose is calculated as the product of 6 hours (8 – 2 = 6) and 47.7915 mrem/hr, which is 286.749 mrem. The dose for the time period under consideration is multiplied by the control room occupancy factor, which in this case is 1. The cumulative dose is equal to the dose from the current time period added to the cumulative dose from the previous time period. For the time period ending at 8 hours, the cumulative dose is calculated as 25.0531 mrem + 286.749 mrem x 1, or 311.8021 mrem (0.312 rem).

Table 14 – SIRWT Source Cumulative Dose – Scenario 1

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	2.9766E+01	25.0531	1	0.025
8	6.5817E+01	286.7490	1	0.312
24	4.9637E+01	923.6320	1	1.235
96	4.8389E+01	3528.9360	0.6	3.353
720	1.3141E+01	19197.3600	0.4	11.032

5.2 Sensitivity Scenarios

The QADMOD-GP input files for scenarios 2, 3, and 4 are listed in Attachments D, E, and F, respectively.

All of the sensitivity scenarios require the addition of the material lead. As such, the values for the input variables NSET(2), NSET(3), and NSET(4) all increase by 1 to the new values of 7, 8, and 6, respectively. The variable MATID(7) is set equal to 13, which is the identifier for lead. Variables COMP(6,1) through COMP(6,6) are left blank, while variable COMP(6,7) is set to 11.3 for the lead density. The density of lead of 11.3 g/cm^3 is from Reference [11].

Scenarios 2, 3, and 4 require a change in the values of ZB(1) and ZB(2), which are the lower and upper bounds of the cylindrical source. Variable ZB(1) is increased for each scenario according to the thickness of the lead shielding in the bottom of the SIRWT. The new values for ZB(1) for scenarios 2, 3, and 4 are 577.85 cm, 579.12 cm, and 581.66 cm, respectively. The values for ZB(2) and ADM(1) for surface 34, which is also equal to the top of the source, are listed in the table below for scenarios 2, 3, and 4.

Table 15 – SIRWT Upper Bound for Scenarios 2, 3, and 4

Time hr	Scenario 1 Source Upper Bound cm	Scenario 2 Source Upper Bound cm	Scenario 3 Source Upper Bound cm	Scenario 4 Source Upper Bound cm
0	586.74	588.01	589.28	591.82
0.316667	586.74	588.01	589.28	591.82
2	587.83	589.10	590.37	592.91
8	591.71	592.98	594.25	596.79
24	602.07	603.34	604.61	607.15
96	648.67	649.94	651.21	653.75
720	1052.56	1053.83	1055.10	1057.64

An additional surface is required to represent the top of the lead layer at the bottom of the SIRWT. This layer is at the same location as the bottom of the source (i.e., ZB(1)). Boundary index number 51 is added to represent this surface and is of boundary type 3, which is a plane perpendicular to the z-axis. The value for ADM(1) for surface 51 is the same as the value for ZB(1) for scenarios 2, 3, and 4, which are 577.85 cm, 579.12 cm, and 581.66 cm, respectively.

Region index number 115 is added to represent the lead in the bottom of the SIRWT. The value for MATREG for this region is 6, for the lead material composition. Values for IDM(4), IDM(5), and IDM(6) are 1, 33, and 51 to represent the SIRWT inner surface and the bottom and top of the lead, respectively. Values for XR(1), XR(2), and XR(3) for region 115 are set to 731.52 cm, 1249.68 cm, and 577.0 cm, respectively. IDM(5) for region index 1 is changed to 51, since the water is not assumed to penetrate into the lead. XR(3) for region 1 is changed for scenarios 2, 3, and 4 to 580.39 cm, 581.66 cm, and 582.20 cm, respectively.

Adding a boundary and region require the increase of the values for NSET(5) and NSET(6) to 51 and 115, respectively.

Table 16 – SIRWT Source Cumulative Dose – Scenario 2

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	1.4872E+01	12.5173	1	0.013
8	3.2374E+01	141.7380	1	0.154
24	2.4200E+01	452.5920	1	0.607
96	2.4189E+01	1742.0040	0.6	1.652
720	6.5905E+00	9603.2040	0.4	5.493

Table 17 – SIRWT Source Cumulative Dose – Scenario 3

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	7.4985E+00	6.3112	1	0.006
8	1.6195E+01	71.0805	1	0.077
24	1.2079E+01	226.1920	1	0.304
96	1.2361E+01	879.8400	0.6	0.831
720	3.3835E+00	4912.2840	0.4	2.796

Table 18 – SIRWT Source Cumulative Dose – Scenario 4

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	1.9873E+00	1.6726	1	0.002

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
8	4.1701E+00	18.4722	1	0.020
24	3.1091E+00	58.2336	1	0.078
96	3.3315E+00	231.8616	0.6	0.217
720	9.1875E-01	1326.0780	0.4	0.748

Scenarios 5, 6, and 7 are for 0.5 in, 1 in, and 2 in of lead shielding on the floor of the cell openings of the roof structure. The changes described for this scenario are from the base scenario. The QADMOD-GP input files for scenarios 5, 6, and 7 are listed in Attachments G, H, and I, respectively.

An additional surface is required to represent the top of the lead layer at the bottom of the cell floors. Boundary index number 51 is added to represent this surface and is of boundary type 3, which is a plane perpendicular to the z-axis. The value for ADM(1) for surface 51 for scenarios 5, 6, and 7 are 397.51 cm, 398.78 cm, and 401.32 cm, respectively.

44 new regions are required to define the lead shielding on the cell floors. Regions 115 through 158 are added with MATREG for each region set to 6 for the lead material composition. All of these regions are bounded by boundary surfaces 29 and 51 (input for variables IDM(4) and IDM(5), respectively), which represent the cell floors and top of the lead shielding. The lead shielding is assumed to be solid. The other defining boundary surfaces are listed in the table below for each region. The table also lists the XR(1) (i.e., x direction) and XR(2) (i.e., y direction) values that define a point in the region along with XR(3) (i.e., z direction), which is set to 397 for all lead shield regions.

Table 19 – Lead Shield Geometry Region Parameters

Region Index Number I	IDM (6)	IDM (7)	IDM (8)	IDM (9)	XR(1) cm	XR(2) cm
115	4	5	13	14	198.12	190.5
116	35	36	14	15	137.16	335.28
117	4	5	15	16	198.12	487.68
118	35	36	16	17	137.16	640.08
119	4	5	17	18	198.12	792.48
120	35	36	18	19	137.16	944.88
121	4	5	19	20	198.12	1097.28
122	35	36	20	21	137.16	1249.68
123	4	5	21	22	198.12	1402.08
124	35	36	22	23	137.16	1554.48
125	4	5	23	24	198.12	1706.88
126	35	36	24	25	137.16	1859.28
127	4	5	25	26	198.12	2004.06
128	5	6	39	41	381	226.06
129	5	6	43	44	381	1092.2
130	5	6	48	49	381	1974.85
131	6	7	13	14	556.26	190.5
132	6	7	15	16	556.26	487.68
133	6	7	17	18	556.26	792.48
134	6	7	19	20	556.26	1097.28

Region Index Number I	IDM (6)	IDM (7)	IDM (8)	IDM (9)	XR(1) cm	XR(2) cm
135	6	7	21	22	556.26	1402.08
136	6	7	23	24	556.26	1706.88
137	6	7	25	26	556.26	2004.06
138	7	8	40	14	731.52	271.78
139	7	8	43	44	731.52	1092.2
140	8	9	13	14	906.78	190.5
141	8	9	15	16	906.78	487.68
142	8	9	17	18	906.78	792.48
143	8	9	19	20	906.78	1097.28
144	8	9	21	22	906.78	1402.08
145	8	9	23	24	906.78	1706.88
146	8	9	25	26	906.78	2004.06
147	9	10	43	44	1082.04	1092.2
148	10	11	13	14	1264.92	190.5
149	10	11	15	16	1264.92	487.68
150	10	11	17	18	1264.92	792.48
151	10	11	19	20	1264.92	1097.28
152	37	38	20	21	1148.08	1249.68
153	10	11	21	22	1264.92	1402.08
154	37	38	22	23	1148.08	1554.48
155	10	11	23	24	1264.92	1706.88
156	10	11	25	26	1264.92	2004.06
157	11	12	42	45	1463.04	1066.8
158	11	12	46	47	1463.04	1371.6

Table 20 – SIRWT Source Cumulative Dose – Scenario 5

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	1.4968E+01	12.5981	1	0.013
8	3.2606E+01	142.7220	1	0.155
24	2.4422E+01	456.2240	1	0.612
96	2.4429E+01	1758.6360	0.6	1.667
720	6.6848E+00	9707.5056	0.4	5.550

Table 21 – SIRWT Source Cumulative Dose – Scenario 6

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	7.8120E+00	6.5751	1	0.007
8	1.6775E+01	73.7610	1	0.080
24	1.2517E+01	234.3360	1	0.315
96	1.2807E+01	911.6640	0.6	0.862
720	3.5118E+00	5091.4656	0.4	2.898

Table 22 – SIRWT Source Cumulative Dose – Scenario 7

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	2.3593E+00	1.9857	1	0.002
8	4.8893E+00	21.7458	1	0.024
24	3.6680E+00	68.4584	1	0.092
96	3.9021E+00	272.5236	0.6	0.256
720	1.0657E+00	1549.9536	0.4	0.876

Scenarios 8, 9, and 10 are for 0.5 in, 1 in, and 2 in of lead shielding directly beneath the ceiling of the control room area. The lead shielding is assumed to extend across the entire ceiling from approximately column lines 22 to 28 and G to M from Reference [7]. The changes described for this scenario are from the base scenario. The QADMOD-GP input files for scenarios 8, 9, and 10 are listed in Attachments J, K, and L, respectively.

An additional surface is required to represent the bottom of the lead layer at the control room area ceiling roof. Boundary index number 51 is added to represent this surface and is of boundary type 3, which is a plane perpendicular to the z-axis. The value for ADM(1) for surface 51 for scenarios 8, 9, and 10 are 364.49 cm, 363.22 cm, and 360.68 cm, respectively.

Region index number 115 is added to represent the lead on the ceiling of the control room area. The value for MATREG for this region is 6, for the lead material composition. Values for IDM(4) through IDM(9) are 3, 12, 13, 26, 28, and 51 to represent the bounds of the lead shielding. Values for XR(1), XR(2), and XR(3) for region 115 are set to 731.52 cm, 1249.68 cm, and 365.0 cm, respectively. IDM(8) for region index 112 is changed to 51.

Adding a boundary and region require the increase of the values for NSET(5) and NSET(6) to 51 and 115, respectively.

Table 23 – SIRWT Source Cumulative Dose – Scenario 8

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	1.4866E+01	12.5122	1	0.013
8	3.2360E+01	141.6780	1	0.154
24	2.4196E+01	452.4480	1	0.607
96	2.4183E+01	1741.6440	0.6	1.652
720	6.5920E+00	9601.8000	0.4	5.492

Table 24 – SIRWT Source Cumulative Dose – Scenario 9

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	7.4988E+00	6.3115	1	0.006
8	1.6214E+01	71.1384	1	0.077
24	1.2094E+01	226.4640	1	0.304
96	1.2355E+01	880.1640	0.6	0.832
720	3.3845E+00	4910.7240	0.4	2.796

Table 25 – SIRWT Source Cumulative Dose – Scenario 10

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	1.9933E+00	1.6777	1	0.002
8	4.1835E+00	18.5304	1	0.020
24	3.1184E+00	58.4152	1	0.079
96	3.3338E+00	232.2792	0.6	0.218
720	9.1935E-01	1326.9828	0.4	0.749

The scenario 11 sensitivity is for 0.5 inch of lead shielding on the floor of the cell openings of the roof structure with a 50% decrease in SIRWT backleakage. The description for scenario 11 is for changes to the files for scenario 5. The QADMOD-GP input files for scenario 11 are listed in Attachment M.

A 50% decrease in SIRWT backleakage requires a change in the photon populations. The RADTRAD-NAI case pal_sirwt_db_ast_shield from Attachment A is modified to decrease the backleakage by 50%.

The total backleakage for all times greater than 0.316667 hr was set to 0.294096 cfm (0.5 x 4.4 gpm x 0.13368 ft^3/gal = 0.294096 cfm). The new RADTRAD-NAI case is titled pal_sirwt_db_ast_shield_50bl, and the output file pal_sirwt_db_ast_shield_50bl.out is presented in Attachment B.

The values from Table 2 are updated in the table below based on the 50% reduction in backleakage to 2.2 gpm. The value for variables ZB(2) and ADM(1) for surface 34 are from the table below for each case.

Table 26 – SIRWT Source Height & Upper Bound (50% Backleakage)

Time hr	Tank Volume gal	Tank Volume ft^3	Height of Water in	Source Height cm	Source Upper Bound cm
0	4144	554.0	4.00	10.16	586.74
0.316667	4144	554.0	4.00	10.16	586.74
2	4366.2	583.7	4.21	10.70	587.28
8	5158.2	689.5	4.98	12.65	589.23
24	7270.2	971.9	7.02	17.82	594.40
96	16774.2	2242.4	16.19	41.13	617.71
720	99142.2	13253.3	95.70	243.07	819.65

The same process is performed on the 50% backleakage RADTRAD-NAI case as was performed with the full backleakage case. The following tables list the energy groups, photon populations, and volumetric source for each group for each case. The photon populations are divided by the volume of liquid in the SIRWT from Table 26 (converted to appropriate units) to obtain the volume source.

Table 27 – Energy Group Photon Populations (50% Backleakage) – 2 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	2.5337E+10	1.5330E+03
0.02	5.2942E+11	3.2032E+04
0.03	7.1299E+13	4.3139E+06
0.04	1.5891E+12	9.6145E+04
0.05	6.2684E+12	3.7927E+05
0.06	1.5084E+12	9.1262E+04
0.08	1.0839E+13	6.5579E+05
0.1	7.7485E+12	4.6881E+05
0.15	2.2803E+13	1.3797E+06
0.2	6.9031E+13	4.1767E+06
0.3	6.5760E+13	3.9787E+06
0.4	3.1945E+14	1.9328E+07
0.5	7.1402E+14	4.3201E+07
0.6	5.9717E+14	3.6131E+07
0.8	8.4680E+14	5.1235E+07
1.0	4.3985E+14	2.6613E+07
1.5	4.0805E+14	2.4689E+07
2.0	9.4326E+13	5.7071E+06
3.0	5.3878E+12	3.2598E+05
4.0	3.9922E+11	2.4154E+04
5.0	2.3083E+10	1.3966E+03

Table 28 – Energy Group Photon Populations (50% Backleakage) – 8 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	2.5109E+11	1.2860E+04
0.02	4.2516E+12	2.1774E+05
0.03	4.5179E+14	2.3138E+07
0.04	1.0602E+13	5.4297E+05
0.05	4.8869E+13	2.5028E+06
0.06	1.0819E+13	5.5407E+05
0.08	6.4256E+13	3.2908E+06
0.1	5.4470E+13	2.7897E+06
0.15	5.9037E+13	3.0235E+06
0.2	3.9919E+14	2.0444E+07
0.3	3.3727E+14	1.7273E+07
0.4	1.9624E+15	1.0050E+08
0.5	3.6880E+15	1.8888E+08
0.6	1.6806E+15	8.6073E+07
0.8	1.5652E+15	8.0162E+07
1.0	1.2400E+15	6.3505E+07
1.5	1.2848E+15	6.5800E+07
2.0	2.3487E+14	1.2029E+07
3.0	8.8626E+11	4.5389E+04
4.0	2.4554E+09	1.2575E+02
5.0	2.1107E+05	1.0810E-02

Table 29 – Energy Group Photon Populations (50% Backleakage) – 24 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	2.7716E+11	1.0071E+04
0.02	1.2927E+13	4.6973E+05
0.03	1.2928E+15	4.6975E+07
0.04	3.2467E+13	1.1797E+06
0.05	1.4141E+14	5.1385E+06
0.06	3.3647E+13	1.2226E+06
0.08	1.9917E+14	7.2370E+06
0.1	1.5044E+14	5.4665E+06
0.15	1.6577E+14	6.0236E+06
0.2	1.0632E+15	3.8635E+07
0.3	8.4265E+14	3.0619E+07
0.4	5.7959E+15	2.1060E+08
0.5	7.0425E+15	2.5590E+08
0.6	3.4935E+15	1.2694E+08
0.8	2.8923E+15	1.0510E+08
1.0	1.3336E+15	4.8459E+07
1.5	1.2170E+15	4.4220E+07
2.0	1.6993E+14	6.1745E+06
3.0	7.7243E+12	2.8067E+05
4.0	3.3506E+06	1.2175E-01

Table 30 – Energy Group Photon Populations (50% Backleakage) – 96 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	9.4223E+10	1.4839E+03
0.02	3.6537E+13	5.7542E+05
0.03	3.3477E+15	5.2723E+07
0.04	1.0771E+14	1.6963E+06
0.05	3.0717E+14	4.8376E+06
0.06	1.1048E+14	1.7400E+06
0.08	6.2761E+14	9.8840E+06
0.1	2.7573E+14	4.3424E+06
0.15	4.4582E+14	7.0211E+06
0.2	2.2971E+15	3.6177E+07
0.3	2.6141E+15	4.1169E+07
0.4	1.8014E+16	2.8370E+08
0.5	4.8268E+15	7.6016E+07
0.6	1.0061E+16	1.5845E+08
0.8	6.8549E+15	1.0796E+08
1.0	1.9165E+15	3.0182E+07
1.5	2.3842E+15	3.7548E+07
2.0	9.9388E+13	1.5652E+06
3.0	6.9296E+13	1.0913E+06

Table 31 – Energy Group Photon Populations (50% Backleakage) – 720 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	4.9282E+11	1.3132E+03
0.02	1.0076E+14	2.6849E+05
0.03	3.3248E+15	8.8592E+06
0.04	4.2555E+14	1.1339E+06
0.05	1.2877E+13	3.4312E+04
0.06	1.8252E+14	4.8634E+05
0.08	5.1617E+14	1.3754E+06
0.1	2.5288E+13	6.7382E+04
0.15	6.2600E+14	1.6680E+06
0.2	3.4905E+14	9.3008E+05
0.3	3.0310E+15	8.0765E+06
0.4	1.3441E+16	3.5814E+07
0.5	4.5956E+15	1.2245E+07
0.6	3.6441E+16	9.7102E+07
0.8	1.9008E+16	5.0648E+07
1.0	2.4266E+15	6.4658E+06
1.5	4.6310E+15	1.2340E+07
2.0	4.2835E+13	1.1414E+05
3.0	1.5299E+14	4.0765E+05

The following table lists the results for 0.5 inch of lead shielding on the floor of the cell openings of the roof structure with a 50% decrease in SIRWT backleakage.

Table 32 – SIRWT Source Cumulative Dose – Scenario 11

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	7.5776E+00	6.3778	1	0.006
8	1.7300E+01	74.6328	1	0.081
24	1.4452E+01	254.0160	1	0.335
96	1.9374E+01	1217.7360	0.6	1.066
720	7.2918E+00	8319.7296	0.4	4.394

The scenario 12 sensitivity is for the current configuration with a decrease in SIRWT backleakage. The backleakage rate is 4.4 gpm for the first two hours and 0.05 gpm for the remainder of the event. The description for scenario 12 is for changes to the files for scenario 1. The QADMOD-GP input files for scenario 12 are listed in Attachment R.

The decrease in SIRWT backleakage requires a change in the photon populations. The RADTRAD-NAI case developed and provided by Palisades personnel, pal_sirwt_norefill_db_ast, employs a backleakage rate of 4.4 gpm until 2 hours and a rate of 0.05 gpm after 2 hours. The RADTRAD-NAI case output file pal_sirwt_norefill_db_ast.out is presented in Attachment P.

The values from Table 2 are updated in the table below based on the reduction in backleakage. The value for variables ZB(2) and ADM(1) for surface 34 are from the table below for each case.

Table 33 – SIRWT Source Height & Upper Bound (Reduced Backleakage)

Time hr	Tank Volume gal	Tank Volume ft^3	Height of Water in	Source Height cm	Source Upper Bound cm
0	4144	554.0	4.00	10.16	586.74
0.316667	4144	554.0	4.00	10.16	586.74
2	4588.4	613.4	4.43	11.25	587.83
8	4606.4	615.8	4.45	11.29	587.87
24	4654.4	622.2	4.49	11.41	587.99
96	4870.4	651.1	4.70	11.94	588.52
720	6742.4	901.3	6.51	16.53	593.11

The same process is performed on the reduced backleakage RADTRAD-NAI case as was performed with the full backleakage case. The activity in units of photons/sec grouped into energy levels was provided in MicroShield files by Palisades personnel. The relavent MicroShield files are presented in Attachment Q. The following tables list the energy groups, photon populations, and volumetric source for each group for each case. The photon populations are divided by the volume of liquid in the SIRWT from Table 33 (converted to appropriate units) to obtain the volume source.

Table 34 – Energy Group Photon Populations (Reduced Backleakage) – 2 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	4.6102E+10	2.6543E+03
0.02	1.1428E+12	6.5794E+04
0.03	1.8011E+14	1.0370E+07
0.04	4.3279E+12	2.4917E+05
0.05	1.2767E+13	7.3503E+05
0.06	5.2268E+12	3.0093E+05
0.08	2.5957E+13	1.4945E+06
0.1	1.8205E+13	1.0481E+06
0.15	4.8618E+13	2.7991E+06
0.2	2.1532E+14	1.2397E+07
0.3	1.4414E+14	8.2986E+06
0.4	6.5988E+14	3.7992E+07
0.5	1.5426E+15	8.8815E+07
0.6	1.3577E+15	7.8167E+07
0.8	1.7911E+15	1.0312E+08
1.0	8.9364E+14	5.1450E+07
1.5	8.0930E+14	4.6595E+07
2.0	1.8532E+14	1.0670E+07
3.0	1.0272E+13	5.9140E+05
4.0	7.2984E+11	4.2020E+04
5.0	4.1477E+10	2.3880E+03

Table 35 – Energy Group Photon Populations (Reduced Backleakage) – 8 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	6.0135E+10	3.4487E+03
0.02	1.2078E+12	6.9267E+04
0.03	1.8304E+14	1.0497E+07
0.04	4.2030E+12	2.4104E+05
0.05	1.3100E+13	7.5125E+05
0.06	5.4970E+12	3.1525E+05
0.08	3.6338E+13	2.0839E+06
0.1	1.7126E+13	9.8219E+05
0.15	1.9592E+13	1.1236E+06
0.2	4.0365E+14	2.3149E+07
0.3	1.1000E+14	6.3082E+06
0.4	5.8963E+14	3.3815E+07
0.5	1.1290E+15	6.4749E+07
0.6	6.3730E+14	3.6548E+07
0.8	5.5509E+14	3.1834E+07
1.0	3.7372E+14	2.1433E+07
1.5	3.6771E+14	2.1088E+07
2.0	6.6787E+13	3.8302E+06
3.0	2.2961E+11	1.3168E+04
4.0	6.3382E+08	3.6349E+01
5.0	3.7778E+04	2.1665E-03

Table 36 – Energy Group Photon Populations (Reduced Backleakage) – 24 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	2.3985E+10	1.3614E+03
0.02	1.3283E+12	7.5389E+04
0.03	2.1769E+14	1.2356E+07
0.04	4.6998E+12	2.6675E+05
0.05	1.3668E+13	7.7577E+05
0.06	6.1705E+12	3.5023E+05
0.08	6.8226E+13	3.8724E+06
0.1	1.7036E+13	9.6692E+05
0.15	1.9632E+13	1.1143E+06
0.2	3.7539E+14	2.1306E+07
0.3	1.0139E+14	5.7547E+06
0.4	6.2241E+14	3.5326E+07
0.5	7.3605E+14	4.1777E+07
0.6	5.3601E+14	3.0423E+07
0.8	4.1809E+14	2.3730E+07
1.0	1.5967E+14	9.0624E+06
1.5	1.2535E+14	7.1144E+06
2.0	1.7170E+13	9.7452E+05
3.0	7.1163E+11	4.0391E+04
4.0	3.0599E+05	1.7367E-02

Table 37 – Energy Group Photon Populations (Reduced Backleakage) – 96 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	3.6445E+09	1.9768E+02
0.02	1.6415E+12	8.9038E+04
0.03	2.9472E+14	1.5986E+07
0.04	6.7670E+12	3.6705E+05
0.05	1.2699E+13	6.8880E+05
0.06	8.5159E+12	4.6191E+05
0.08	1.3269E+14	7.1972E+06
0.1	1.3246E+13	7.1846E+05
0.15	2.2085E+13	1.1979E+06
0.2	1.0496E+14	5.6931E+06
0.3	1.3118E+14	7.1152E+06
0.4	7.9577E+14	4.3163E+07
0.5	2.0428E+14	1.1080E+07
0.6	7.0481E+14	3.8229E+07
0.8	4.8509E+14	2.6312E+07
1.0	1.1556E+14	6.2682E+06
1.5	1.0064E+14	5.4589E+06
2.0	4.1133E+12	2.2311E+05
3.0	2.7189E+12	1.4747E+05

Table 38 – Energy Group Photon Populations (Reduced Backleakage) – 720 hr

Energy MeV	Activity photons/sec	Volume Source photons/sec-cm^3
0.015	1.3148E+10	5.1513E+02
0.02	3.2504E+12	1.2735E+05
0.03	1.5521E+14	6.0812E+06
0.04	1.8560E+13	7.2718E+05
0.05	3.8838E+11	1.5217E+04
0.06	9.3254E+12	3.6538E+05
0.08	3.3736E+13	1.3218E+06
0.1	8.7700E+11	3.4362E+04
0.15	2.1741E+13	8.5185E+05
0.2	1.5107E+13	5.9189E+05
0.3	1.0593E+14	4.1506E+06
0.4	3.9212E+14	1.5363E+07
0.5	1.4730E+14	5.7712E+06
0.6	2.2217E+15	8.7047E+07
0.8	1.2872E+15	5.0434E+07
1.0	1.2324E+14	4.8287E+06
1.5	1.4893E+14	5.8352E+06
2.0	1.2418E+12	4.8653E+04
3.0	4.1079E+12	1.6095E+05

The following table lists the results for the current configuration with a decrease in the SIRWT backleakage rate to 4.4 gpm for the first two hours and 0.05 gpm for the remainder of the event.

Table 39 – SIRWT Source Cumulative Dose – Scenario 12

Transient Time hrs	Dose Rate mrem/hr	Dose for Previous Time Period mrem	Control Room Occupancy Factor for Previous Time Period	Cumulative Dose Including Occupancy Factor rem
0	0	-	1	0
0.31667	0	0	1	0
2	2.9324E+01	24.6810	1	0.025
8	1.0387E+01	119.1330	1	0.144
24	3.5831E+00	111.7608	1	0.256
96	3.0045E+00	237.1536	0.6	0.398
720	3.9729E+00	2176.9488	0.4	1.269

6.0 REFERENCES

1. Drawing C-38, "Field Erected Tanks Sheet 2," Rev. 6.
2. Introduction to Heat Transfer, 3rd ed., F. P. Incropera and D. P. DeWitt, 1996.
3. NAI Memorandum from Jim Harrell to NAI-PQAP-1180-0 File, "QA Requirements for WO 1180," March 2, 2005.
4. Calculation NAI-1149-014, "Palisades Design Basis AST MHA/LOCA Radiological Analysis," Rev. 0.
5. Report NAI-1180-001, "QADMOD-GP Qualification," Rev. 0.
6. ORNL RSICC Code Package CCC-565, "QADMOD-GP: Point Kernel Gamma-Ray Shielding Code with Geometric Progression Buildup Factors," November 1990.
7. Drawing C-539(Q), "Cellular Slab Repair Plan of Control Room Roof El 643'-0'','' Rev. 0.
8. Drawing M-4, "Equip. Loc. – Reactor & Aux. Bldg. Radwaste Modifications Plan of El 625'-0'','' Rev. 22.
9. NAI-E03-211 Project Memo 2004-03, "MHA/LOCA Inputs", June 11, 2004.
10. Drawing C-18, "Erection Diagram, 1-1570," Sheet 67, Rev. 6.
11. Grove Engineering, MicroShield, Version 5, User's Manual, October 1996.

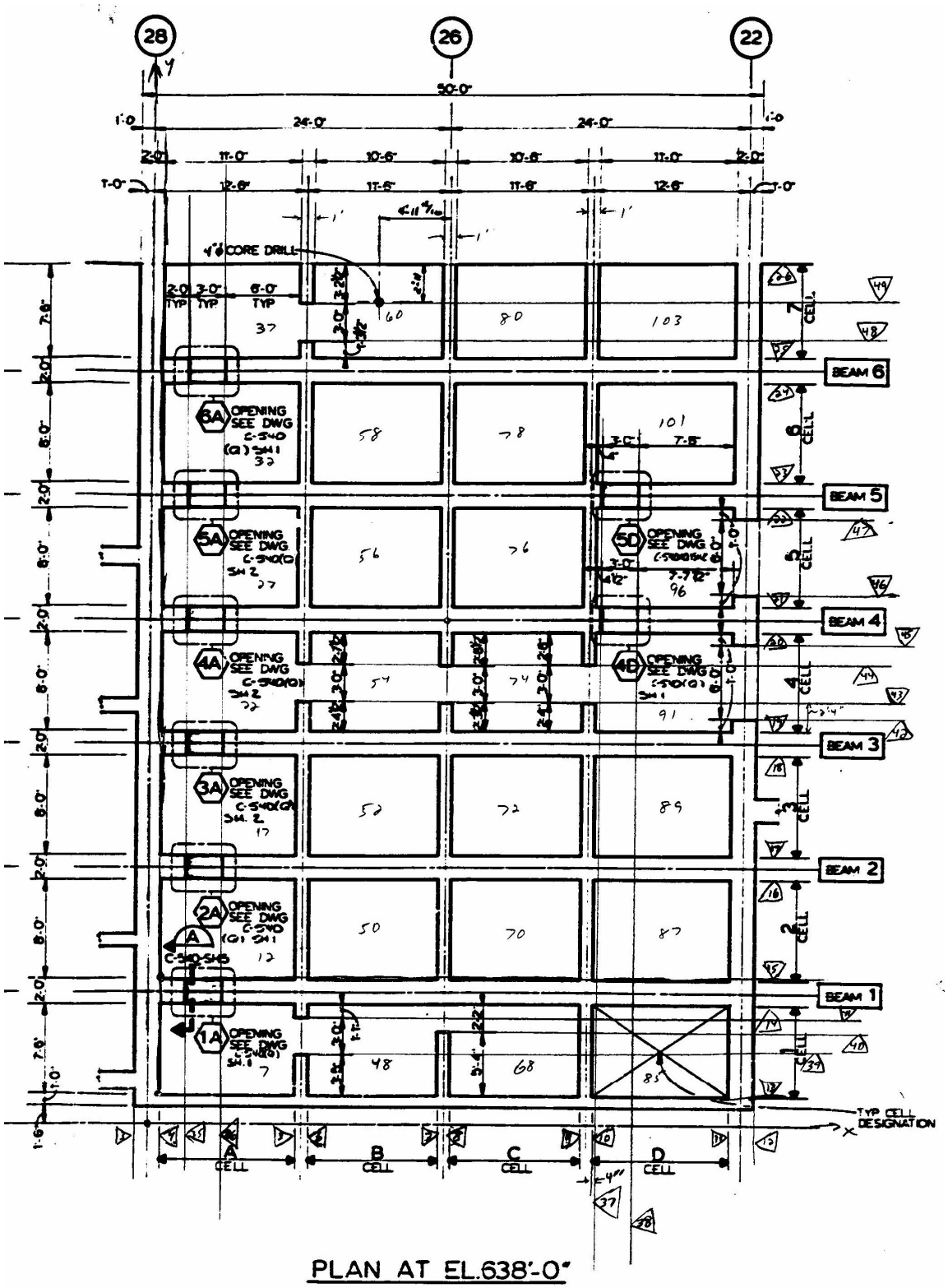

Figure 1 – Roof Shielding Geometry Plan at 638' El.

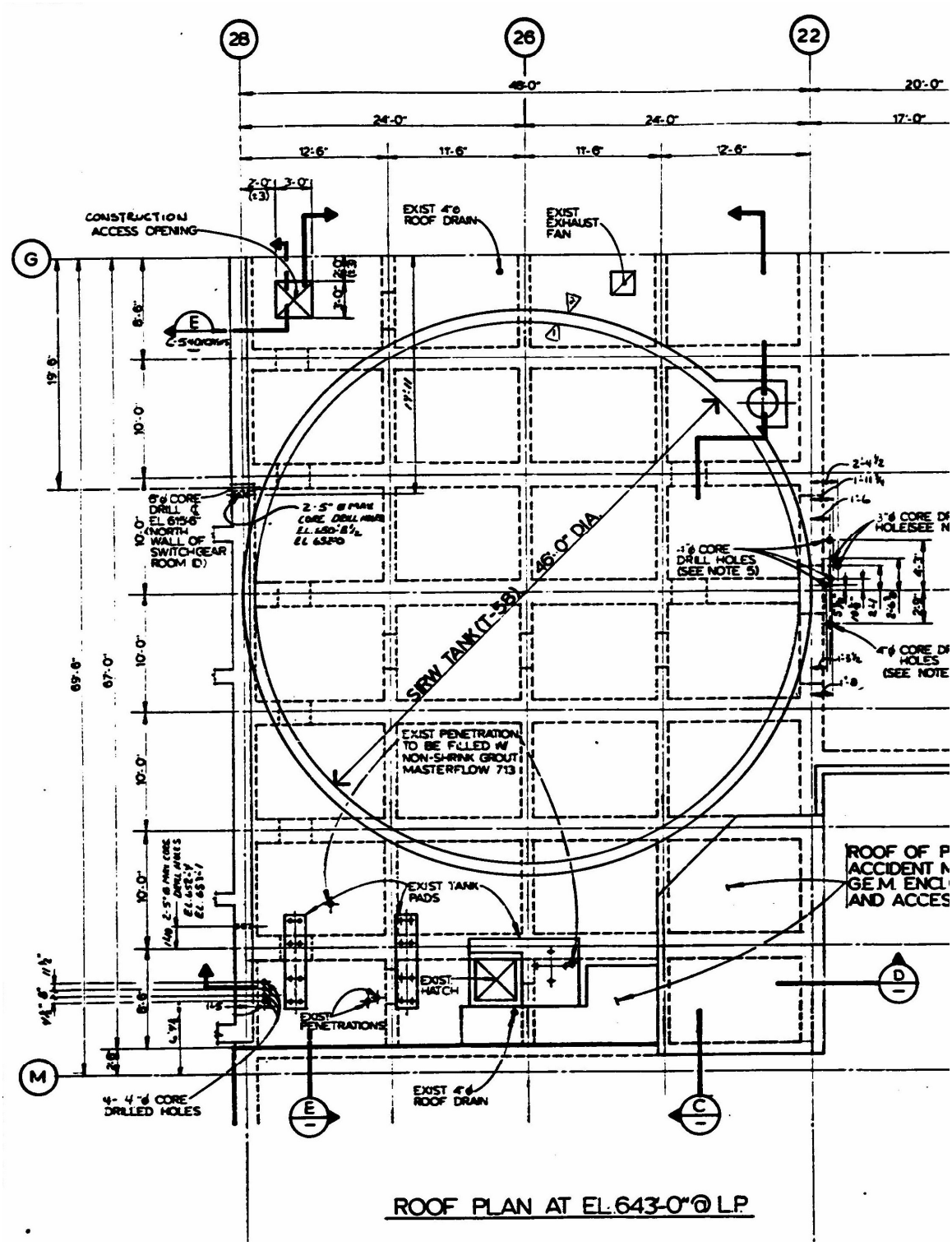

Figure 2 – Roof Shielding Geometry Plan at 643' El.

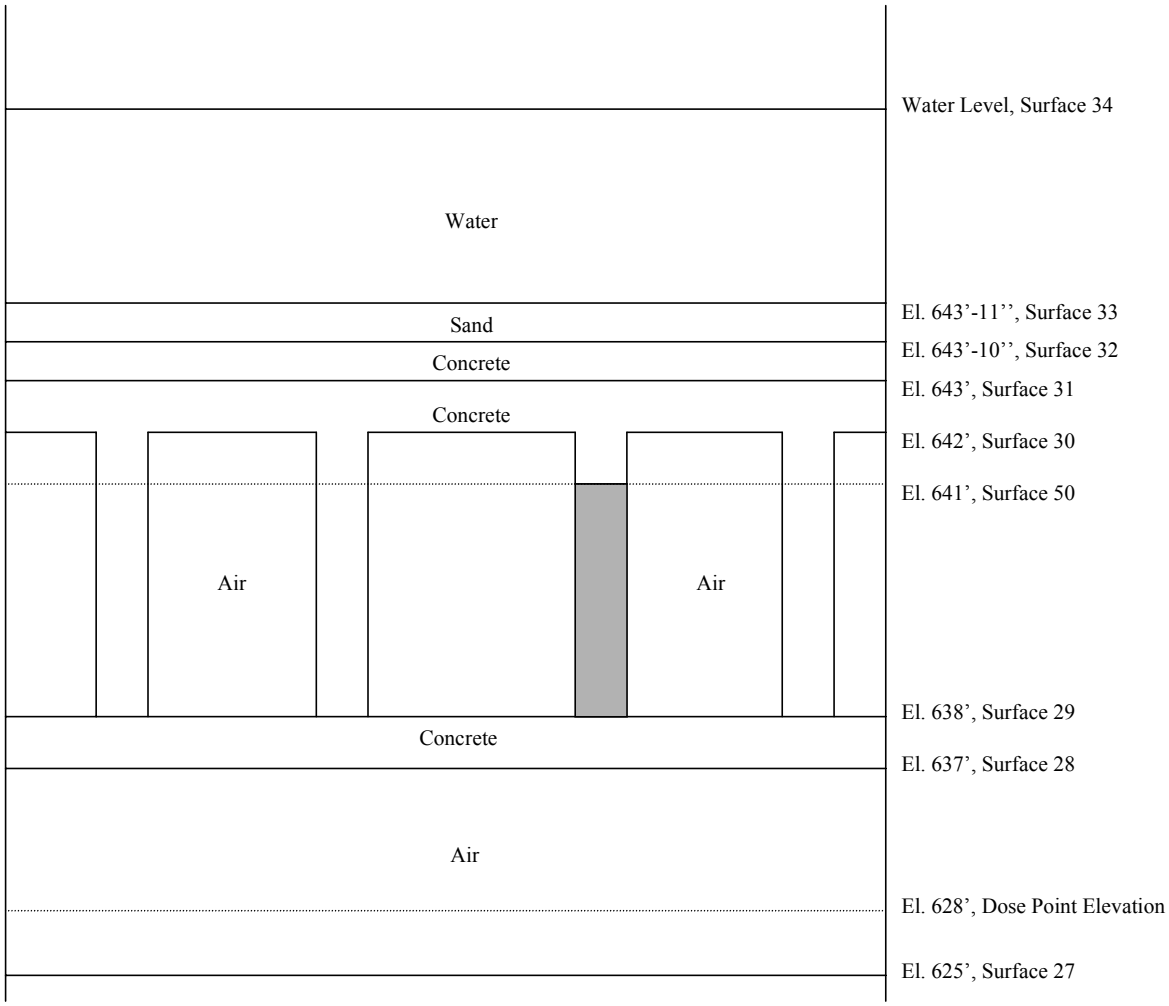

Figure 3 – Roof Shielding Geometry Side View

ATTACHMENT A

RADTRAD-NAI Output for Nuclide Source

pal_sirwt_db_ast_shield.out

```
#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on Feb 24, 2005 at 12:54:09
#######################################################################

#######################################################################
                    File information
#######################################################################

Plant file name           = pal/newLOCA/db/pal_sirwt_db_ast_shield.psf
Inventory file name       = pal/newLOCA/palisades_loca_be_ast.nif
Scenario file name        = pal/newLOCA/db/pal_sirwt_db_ast_shield.psf
Release file name         = pal/newLOCA/pal_loca_eccs_ast.rft
Dose conversion file name = pal/newLOCA/nai-1101-001rev0.dcf




     #####    ####   #####    #  #     #  #####   #    #  #####
     #    #  #       #        #  ##    #  #    #  #    #    #
     #    #  #       #        #  # #   #  #    #  #    #    #
     #####    ####   ####     #  #  #  #  #####   #    #    #
     #            #  #        #  #   # #  #       #    #    #
     #            #  #        #  #    ##  #       #    #    #
     #        ####   #        #  #     #  #        ####     #


*RADTRAD-NAI 1.1a(QA)
*24 Feb 2005 12:54:04
** Palisades LOCA Design Basis AST
** SIRWT Backleakage Dose
** Modified for SIRWT source activity for shielded dose
**
*Nuclide inventory file
pal/newLOCA/palisades_loca_be_ast.nif
*Plant power
2703
*Compartments
3
*Compartment 1:
Containment Sump
   3
57577
   0
   0
   0
   0
*Compartment 2:
Environment
   2
2e+20
   0
   0
   0
   0
*Compartment 3:
Control Room
   1
35923
   0
   1
   0
   0
*Pathways
   5
*Pathway 1:
SIRWT Backleakage
   1
   2
```

```
   2
*Pathway 2:
Control Room Unfiltered Makeup
   2
   3
   2
*Pathway 3:
Control Room Filtered Makeup
   2
   3
   2
*Pathway 4:
Control Room Unfiltered Inleakage
   2
   3
   2
*Pathway 5:
Control Room Exhaust
   3
   2
   2
*Sources
   3
   1 1
   2 0
   3 0
*dose conversion factors filename
pal/newLOCA/nai-1101-001rev0.dcf
*release fraction and timing filename
pal/newLOCA/pal_loca_eccs_ast.rft
0.008333
   1
   1
*Iodine
0 1 0
*Overlying pool
*aerosol model
   0
*elemental model
   0
*organic model
   0
*pH tracking
   0
*Compartment detail
*Compartment 1:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Compartment 2:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Compartment 3:
   1
*spray model
```

```
0
0
0
*filter model
   1
   3
0 0 99 99 99
0.025 1413.6 99 99 99
720 1413.6 99 99 99
*deposition model
0
0
*Pathways:
*Pathway 1
*filter efficiency model
   1
  10
0.316667 0.588192 100 100 100
4.17 0.588192 100 100 100
11.11 0.588192 100 100 100
22.22 0.588192 100 100 100
111.11 0.588192 100 100 100
305.56 0.588192 100 100 100
402.78 0.588192 100 100 100
500 0.588192 100 100 100
597.22 0.588192 100 100 100
694.44 0.588192 100 100 100
*Pathway 2
*filter efficiency model
   1
   3
0 384.2 0 0 0
0.025 0 0 0 0
720 0 0 0 0
*Pathway 3
*filter efficiency model
   1
   3
0 0 99 99 99
0.025 1413.6 99 99 99
720 1413.6 99 99 99
*Pathway 4
*filter efficiency model
   1
   3
0 0 0 0 0
0.025 85 0 0 0
720 85 0 0 0
*Pathway 5
*filter efficiency model
   1
   3
0 384.2 0 0 0
0.025 1498.6 0 0 0
720 1498.6 0 0 0
*x/q tables
   4
EAB
   2
0 0.000539
720 0.000539
LPZ
   6
0 6.66e-05
2 3.03e-05
8 2.04e-05
24 8.67e-06
96 2.54e-06
720 2.54e-06
Control Room-Normal
```

```
   6
0 0.0957
2 0.0759
8 0.0287
24 0.0219
96 0.0165
720 0.0165
Control Room-Emergency
   6
0 0.000966
2 0.000792
8 0.000313
24 0.00022
96 0.000164
720 0.000164
*dose locations
   3
*location name, compartment number and x/q table
EAB
   2
   1
*br model
   1
   4
0 0.00035
8 0.00018
24 0.00023
720 0.00023
*of model
   0
*location x/q input to be included
   0
*location name, compartment number and x/q table
LPZ
   2
   2
*br model
   1
   4
0 0.00035
8 0.00018
24 0.00023
720 0.00023
*of model
   0
*location x/q input to be included
   0
*location name, compartment number and x/q table
Control Room
   3
   0
*br model
   1
   2
0 0.00035
720 0.00035
*of model
   1
   4
0 1
24 0.6
96 0.4
720 0.4
*location x/q input to be included
   1
*number of intake combinations
   3
*intake combinations
2 1 3
3 1 4
```

```
4 1 3
*time step count
   3
0 1e-06
0.001 0.02
720 0.02
*show plant, scenario, event, step, model
   1
   1
   1
   0
   1

 ######################################################################
       RADTRAD-NAI Version 1.1a(QA) run on Feb 24, 2005 at 12:54:09
 ######################################################################

 ######################################################################
                     Plant Description
 ######################################################################

 Number of Nuclides = 107

 Inventory Power =   2.5806E+03 MWth
 Plant Power Level =   2.7030E+03 MWth

 Number of compartments    =   3

 Compartment information

 Compartment number  1  (Source term fraction =   1.0000E+00)
 Name: Containment Sump
 Compartment volume =   5.7577E+04 (Cubic feet)
 Pathways into and out of compartment  1
     Pathway to compartment number   2: SIRWT Backleakage

 Compartment number  2
 Name: Environment
 Pathways into and out of compartment  2
     Pathway to compartment number   3: Control Room Unfiltered Makeup
     Pathway to compartment number   3: Control Room Filtered Makeup
     Pathway to compartment number   3: Control Room Unfiltered Inleakage
     Pathway from compartment number 1: SIRWT Backleakage
     Pathway from compartment number 3: Control Room Exhaust

 Compartment number  3
 Name: Control Room
 Compartment volume =   3.5923E+04 (Cubic feet)
 Removal devices within compartment:
      Filter(s)
 Pathways into and out of compartment  3
     Pathway to compartment number   2: Control Room Exhaust
     Pathway from compartment number 2: Control Room Unfiltered Makeup
     Pathway from compartment number 2: Control Room Filtered Makeup
     Pathway from compartment number 2: Control Room Unfiltered Inleakage

 Total number of pathways =   5


 ######################################################################
       RADTRAD-NAI Version 1.1a(QA) run on Feb 24, 2005 at 12:54:09
 ######################################################################

 ######################################################################
                     Scenario Description
 ######################################################################


 Time between shutdown and first release =   8.3330E-03 (Hours)
```

Radioactive Decay is enabled
Calculation of Daughters is enabled

Iodine fractions
Aerosol = 0.0000E+00
Elemental = 1.0000E+00
Organic = 0.0000E+00

COMPARTMENT DATA

Compartment number 1: Containment Sump

Compartment number 2: Environment

Compartment number 3: Control Room

Compartment Filter Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	9.9000E+01	9.9000E+01	9.9000E+01
2.5000E-02	1.4136E+03	9.9000E+01	9.9000E+01	9.9000E+01
7.2000E+02	1.4136E+03	9.9000E+01	9.9000E+01	9.9000E+01

PATHWAY DATA

Pathway number 1: SIRWT Backleakage

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
3.1667E-01	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
4.1700E+00	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
1.1110E+01	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
2.2220E+01	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
1.1111E+02	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
3.0556E+02	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
4.0278E+02	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
5.0000E+02	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
5.9722E+02	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02
6.9444E+02	5.8819E-01	1.0000E+02	1.0000E+02	1.0000E+02

Pathway number 2: Control Room Unfiltered Makeup

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.8420E+02	0.0000E+00	0.0000E+00	0.0000E+00
2.5000E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 3: Control Room Filtered Makeup

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	9.9000E+01	9.9000E+01	9.9000E+01
2.5000E-02	1.4136E+03	9.9000E+01	9.9000E+01	9.9000E+01
7.2000E+02	1.4136E+03	9.9000E+01	9.9000E+01	9.9000E+01

Pathway number 4: Control Room Unfiltered Inleakage

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

```
       2.5000E-02    8.5000E+01   0.0000E+00   0.0000E+00   0.0000E+00
       7.2000E+02    8.5000E+01   0.0000E+00   0.0000E+00   0.0000E+00

 Pathway number  5: Control Room Exhaust

      Pathway Filter: Removal Data

        Time (hr)      Flow Rate          Filter Efficiencies (%)
                         (cfm)        Aerosol     Elemental    Organic
       0.0000E+00    3.8420E+02   0.0000E+00   0.0000E+00   0.0000E+00
       2.5000E-02    1.4986E+03   0.0000E+00   0.0000E+00   0.0000E+00
       7.2000E+02    1.4986E+03   0.0000E+00   0.0000E+00   0.0000E+00

 X/Q DATA

 X/Q table   1: EAB
       Time (hr)         X/Q (s * m^-3)
        0.0000E+00          5.3900E-04
        7.2000E+02          5.3900E-04

 X/Q table   2: LPZ
       Time (hr)         X/Q (s * m^-3)
        0.0000E+00          6.6600E-05
        2.0000E+00          3.0300E-05
        8.0000E+00          2.0400E-05
        2.4000E+01          8.6700E-06
        9.6000E+01          2.5400E-06
        7.2000E+02          2.5400E-06

 X/Q table   3: Control Room-Normal
       Time (hr)         X/Q (s * m^-3)
        0.0000E+00          9.5700E-02
        2.0000E+00          7.5900E-02
        8.0000E+00          2.8700E-02
        2.4000E+01          2.1900E-02
        9.6000E+01          1.6500E-02
        7.2000E+02          1.6500E-02

 X/Q table   4: Control Room-Emergency
       Time (hr)         X/Q (s * m^-3)
        0.0000E+00          9.6600E-04
        2.0000E+00          7.9200E-04
        8.0000E+00          3.1300E-04
        2.4000E+01          2.2000E-04
        9.6000E+01          1.6400E-04
        7.2000E+02          1.6400E-04

 LOCATION DATA

      Location EAB is in compartment   2

      Using X/Q Table   1

      Location Breathing Rate Data
       Time (hr)         Breathing Rate (m^3 * sec^-1)
        0.0000E+00                3.5000E-04
        8.0000E+00                1.8000E-04
        2.4000E+01                2.3000E-04
        7.2000E+02                2.3000E-04

      Location LPZ is in compartment   2

      Using X/Q Table   2

      Location Breathing Rate Data
       Time (hr)         Breathing Rate (m^3 * sec^-1)
        0.0000E+00                3.5000E-04
        8.0000E+00                1.8000E-04
        2.4000E+01                2.3000E-04
        7.2000E+02                2.3000E-04
```

```
     Location Control Room is in compartment   3

     Inleakage X/Q Table Assignments
     Inleakage Path   Source Path  X/Q Table
            2              1           3
            3              1           4
            4              1           3

     Location Breathing Rate Data
      Time (hr)         Breathing Rate (m^3 * sec^-1)
       0.0000E+00                3.5000E-04
       7.2000E+02                3.5000E-04

     Location Occupancy Factor Data
      Time (hr)         Occupancy Factor
       0.0000E+00           1.0000E+00
       2.4000E+01           6.0000E-01
       9.6000E+01           4.0000E-01
       7.2000E+02           4.0000E-01

USER SPECIFIED TIME STEP DATA - SUPPLEMENTAL TIME STEPS
     Time            Time step
      0.0000E+00       1.0000E-06
      1.0000E-03       2.0000E-02
      7.2000E+02       2.0000E-02

#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on Feb 24, 2005 at 12:54:09
#######################################################################


     ####   #    #  #####  #####   #    #  #####
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #####   #    #    #
    #    #  #    #    #    #       #    #    #
    #    #  #    #    #    #       #    #    #
     ####    ####     #    #        ####     #


#####################################################################
           Dose, Detailed Model and Detailed Inventory Output
#####################################################################

Detailed model information at time (H) =    0.0083

EAB Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Control Room Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Containment Sump Transport Group Inventory:
```

Time (h) = 0.0083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 0.0083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.0083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

```
                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   0.0083    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0083     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.0250

EAB Doses:

Time (h) =   0.0250     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.0250     Whole Body    Thyroid      Skin       TEDE
```

Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Doses:

Time (h) = 0.0250	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.0250	Ci	kg	Atoms	Bq
Rb-86	5.1155E+01	6.2869E-07	4.4024E+18	1.8927E+12
Sr-89	9.3140E-02	3.2059E-09	2.1693E+16	3.4462E+09
I-131	3.6151E+04	2.9160E-04	1.3405E+21	1.3376E+15
I-132	5.2223E+04	5.0593E-06	2.3082E+19	1.9322E+15
I-133	7.4351E+04	6.5634E-05	2.9719E+20	2.7510E+15
I-134	8.1376E+04	3.0505E-06	1.3709E+19	3.0109E+15
I-135	6.9158E+04	1.9693E-05	8.7847E+19	2.5589E+15
Xe-133	1.7915E+00	9.5709E-09	4.3336E+16	6.6285E+10
Xe-135	2.0109E+01	7.8745E-09	3.5127E+16	7.4405E+11
Cs-134	3.8388E+03	2.9670E-03	1.3334E+22	1.4204E+14
Cs-136	1.6150E+03	2.2036E-05	9.7577E+19	5.9757E+13
Cs-137	3.4015E+03	3.9106E-02	1.7190E+23	1.2586E+14
I-130	8.1062E+02	4.1563E-07	1.9254E+18	2.9993E+13
Kr-83m	8.3150E+00	4.0302E-10	2.9241E+15	3.0766E+11
Xe-131m	4.3886E-03	5.2394E-11	2.4086E+14	1.6238E+08
Xe-133m	1.2826E-01	2.8585E-10	1.2943E+15	4.7456E+09
Xe-135m	1.3055E+02	1.4332E-09	6.3931E+15	4.8303E+12
Cs-138	6.8679E+04	1.6231E-06	7.0829E+18	2.5411E+15
Cs-134m	1.2375E+03	1.5345E-07	6.8961E+17	4.5786E+13
Rb-88	2.9501E+04	2.4576E-07	1.6818E+18	1.0915E+15
Rb-89	3.5919E+04	2.5842E-07	1.7486E+18	1.3290E+15
Ba-137m	2.3608E+02	4.3897E-10	1.9296E+15	8.7348E+12
Br-82	1.3819E+02	1.2764E-07	9.3743E+17	5.1131E+12
Br-83	4.8686E+03	3.0819E-07	2.2361E+18	1.8014E+14
Br-84	8.4191E+03	1.1960E-07	8.5747E+17	3.1151E+14

Containment Sump Transport Group Inventory:

Time (h) = 0.0250	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	8.9316E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7683E+21	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	4.2098E-02	0.0000E+00	0.0000E+00

Time (h) = 0.0250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0250	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.0250	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00

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Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

SIRWT Backleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   0.0250    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0250     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
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Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.3167

EAB Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Control Room Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) =   0.3167       Ci           kg         Atoms         Bq
Rb-86                  3.0338E+03  3.7285E-05  2.6109E+20  1.1225E+14
Sr-89                  1.1688E+02  4.0232E-06  2.7223E+19  4.3247E+12
I-131                  2.1437E+06  1.7291E-02  7.9488E+22  7.9315E+16
I-132                  2.9579E+06  2.8656E-04  1.3073E+21  1.0944E+17
I-133                  4.3835E+06  3.8695E-03  1.7521E+22  1.6219E+17
I-134                  4.1521E+06  1.5564E-04  6.9948E+20  1.5363E+17
I-135                  3.9798E+06  1.1332E-03  5.0552E+21  1.4725E+17
Xe-133                 3.7096E+03  1.9818E-05  8.9736E+19  1.3726E+14
Xe-135                 4.2257E+04  1.6547E-05  7.3814E+19  1.5635E+15
Cs-134                 2.2777E+05  1.7604E-01  7.9116E+23  8.4275E+15
Cs-136                 9.5765E+04  1.3066E-03  5.7858E+21  3.5433E+15
Cs-137                 2.0182E+05  2.3203E+00  1.0199E+25  7.4675E+15
I-130                  4.7317E+04  2.4261E-05  1.1239E+20  1.7507E+15
Kr-83m                 1.5799E+04  7.6576E-07  5.5560E+18  5.8457E+14
Xe-131m                9.1232E+00  1.0892E-07  5.0071E+17  3.3756E+11
Xe-133m                2.6539E+02  5.9146E-07  2.6781E+18  9.8194E+12
Xe-135m                2.1068E+05  2.3128E-06  1.0317E+19  7.7951E+15
Cs-138                 3.1681E+06  7.4871E-05  3.2673E+20  1.1722E+17
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Cs-134m	6.8478E+04	8.4915E-06	3.8162E+19	2.5337E+15
Rb-88	1.2396E+06	1.0326E-05	7.0668E+19	4.5864E+16
Rb-89	9.5949E+05	6.9032E-06	4.6710E+19	3.5501E+16
Ba-137m	1.8326E+05	3.4076E-07	1.4979E+18	6.7806E+15
Br-82	8.1526E+03	7.5303E-06	5.5303E+19	3.0165E+14
Br-83	2.6544E+05	1.6803E-05	1.2191E+20	9.8214E+15
Br-84	3.4112E+05	4.8460E-06	3.4742E+19	1.2621E+16

Containment Sump Transport Group Inventory:

Time (h) = 0.3167	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.8260E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0440E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.4978E+00	0.0000E+00	0.0000E+00

Time (h) = 0.3167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.3167	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

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                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Transport Group Inventory:

                                                 Overlying
Time (h) =   0.3167    Atmosphere     Sump         Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.3167     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.5083
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EAB Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.7437E-03	0.0000E+00	2.7731E-03	1.7437E-03
Accumulated dose (rem)	1.7437E-03	0.0000E+00	2.7731E-03	1.7437E-03

LPZ Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.1545E-04	0.0000E+00	3.4265E-04	2.1545E-04
Accumulated dose (rem)	2.1545E-04	0.0000E+00	3.4265E-04	2.1545E-04

Control Room Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.4031E-04	0.0000E+00	7.5661E-03	1.4031E-04
Accumulated dose (rem)	1.4031E-04	0.0000E+00	7.5661E-03	1.4031E-04

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	4.9919E+03	6.1350E-05	4.2960E+20	1.8470E+14
Sr-89	2.2550E+02	7.7619E-06	5.2521E+19	8.3435E+12
I-131	3.5267E+06	2.8447E-02	1.3077E+23	1.3049E+17
I-132	4.7307E+06	4.5830E-04	2.0909E+21	1.7503E+17
I-133	7.1814E+06	6.3394E-03	2.8704E+22	2.6571E+17
I-134	6.1753E+06	2.3149E-04	1.0403E+21	2.2849E+17
I-135	6.4200E+06	1.8281E-03	8.1549E+21	2.3754E+17
Xe-133	9.7766E+03	5.2230E-05	2.3649E+20	3.6173E+14
Xe-135	1.1181E+05	4.3782E-05	1.9530E+20	4.1369E+15
Cs-134	3.7489E+05	2.8975E-01	1.3022E+24	1.3871E+16
Cs-136	1.5755E+05	2.1497E-03	9.5190E+21	5.8295E+15
Cs-137	3.3218E+05	3.8190E+00	1.6787E+25	1.2291E+16
I-130	7.7046E+04	3.9504E-05	1.8300E+20	2.8507E+15
Kr-83m	3.9292E+04	1.9044E-06	1.3818E+19	1.4538E+15
Xe-131m	2.4112E+01	2.8787E-07	1.3233E+18	8.9215E+11
Xe-133m	6.9906E+02	1.5579E-06	7.0542E+18	2.5865E+13
Xe-135m	4.7430E+05	5.2068E-06	2.3227E+19	1.7549E+16
Cs-138	4.3297E+06	1.0232E-04	4.4652E+20	1.6020E+17
Cs-134m	1.0766E+05	1.3350E-05	5.9998E+19	3.9835E+15
Rb-88	1.6663E+06	1.3881E-05	9.4994E+19	6.1652E+16
Rb-89	9.3474E+05	6.7252E-06	4.5506E+19	3.4586E+16
Ba-137m	3.2435E+05	6.0311E-07	2.6511E+18	1.2001E+16
Br-82	1.3368E+04	1.2348E-05	9.0682E+19	4.9462E+14
Br-83	4.1327E+05	2.6160E-05	1.8981E+20	1.5291E+16
Br-84	4.3696E+05	6.2077E-06	4.4504E+19	1.6168E+16

Containment Sump Transport Group Inventory:

Time (h) = 0.5083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.7722E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7127E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	4.1111E+00	0.0000E+00	0.0000E+00

Time (h) = 0.5083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	4.7138E-01	5.7932E-09	4.0567E+16	1.7441E+10
Sr-89	2.5443E-02	8.7575E-10	5.9257E+15	9.4137E+08
I-131	3.3299E+02	2.6859E-06	1.2347E+19	1.2320E+13

I-132	4.4081E+02	4.2705E-08	1.9483E+17	1.6310E+13
I-133	6.7761E+02	5.9817E-07	2.7085E+18	2.5072E+13
I-134	5.7010E+02	2.1371E-08	9.6042E+16	2.1094E+13
I-135	6.0624E+02	1.7263E-07	7.7006E+17	2.2431E+13
Cs-134	3.5400E+01	2.7361E-05	1.2296E+20	1.3098E+12
Cs-136	1.4878E+01	2.0299E-07	8.9887E+17	5.5047E+11
Cs-137	3.1368E+01	3.6063E-04	1.5852E+21	1.1606E+12
I-130	7.2754E+00	3.7303E-09	1.7281E+16	2.6919E+11
Cs-138	3.9804E+02	9.4068E-09	4.1050E+16	1.4728E+13
Cs-134m	1.0166E+01	1.2607E-09	5.6656E+15	3.7616E+11
Rb-88	1.4083E+02	1.1732E-09	8.0285E+15	5.2106E+12
Rb-89	8.8267E+01	6.3505E-10	4.2971E+15	3.2659E+12
Ba-137m	3.2950E+01	6.1268E-11	2.6932E+14	1.2192E+12
Br-82	1.2623E+00	1.1660E-09	8.5631E+15	4.6707E+10
Br-83	3.9025E+01	2.4703E-09	1.7923E+16	1.4439E+12
Br-84	4.1262E+01	5.8619E-10	4.2025E+15	1.5267E+12

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.6165E+19
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.8821E-04

Environment Integral Nuclide Release:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Xe-133	1.0790E+00	5.7644E-09	2.6101E+16	3.9923E+10
Xe-135	1.2370E+01	4.8441E-09	2.1609E+16	4.5770E+11
Kr-83m	4.3341E+00	2.1006E-10	1.5241E+15	1.6036E+11
Xe-131m	2.6612E-03	3.1772E-11	1.4606E+14	9.8466E+07
Xe-133m	7.7147E-02	1.7193E-10	7.7850E+14	2.8544E+09
Xe-135m	5.1404E+01	5.6431E-10	2.5173E+15	1.9019E+12

Environment Transport Group Inventory:

Time (h) = 0.5083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	2.3512E+15	3.2655E+13	5.2675E+16
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	4.7138E-01	5.7932E-09	4.0567E+16	1.7441E+10
Sr-89	2.5443E-02	8.7575E-10	5.9257E+15	9.4137E+08
I-131	3.3299E+02	2.6859E-06	1.2347E+19	1.2320E+13
I-132	4.4081E+02	4.2705E-08	1.9483E+17	1.6310E+13
I-133	6.7761E+02	5.9817E-07	2.7085E+18	2.5072E+13
I-134	5.7010E+02	2.1371E-08	9.6042E+16	2.1094E+13
I-135	6.0624E+02	1.7263E-07	7.7006E+17	2.2431E+13
Cs-134	3.5400E+01	2.7361E-05	1.2296E+20	1.3098E+12
Cs-136	1.4878E+01	2.0299E-07	8.9887E+17	5.5047E+11
Cs-137	3.1368E+01	3.6063E-04	1.5852E+21	1.1606E+12
I-130	7.2754E+00	3.7303E-09	1.7281E+16	2.6919E+11
Cs-138	3.9804E+02	9.4068E-09	4.1050E+16	1.4728E+13
Cs-134m	1.0166E+01	1.2607E-09	5.6656E+15	3.7616E+11
Rb-88	1.4083E+02	1.1732E-09	8.0285E+15	5.2106E+12
Rb-89	8.8267E+01	6.3505E-10	4.2971E+15	3.2659E+12
Ba-137m	3.2950E+01	6.1268E-11	2.6932E+14	1.2192E+12
Br-82	1.2623E+00	1.1660E-09	8.5631E+15	4.6707E+10
Br-83	3.9025E+01	2.4703E-09	1.7923E+16	1.4439E+12
Br-84	4.1262E+01	5.8619E-10	4.2025E+15	1.5267E+12

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.6165E+19
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.8821E-04

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Xe-133	4.0879E-03	2.1839E-11	9.8887E+13	1.5125E+08
Xe-135	4.6758E-02	1.8310E-11	8.1677E+13	1.7301E+09
Kr-83m	1.6433E-02	7.9647E-13	5.7788E+12	6.0801E+08
Xe-131m	1.0084E-05	1.2039E-13	5.5344E+11	3.7311E+05
Xe-133m	2.9230E-04	6.5143E-13	2.9496E+12	1.0815E+07
Xe-135m	1.9842E-01	2.1782E-12	9.7167E+12	7.3415E+09

Control Room Transport Group Inventory:

Time (h) = 0.5083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.9956E+14	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 0.5083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 0.5083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 0.5083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 0.5083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 0.5083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 1.8083

EAB Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.0979E-01	0.0000E+00	1.8273E-01	1.0979E-01
Accumulated dose (rem)	1.1153E-01	0.0000E+00	1.8551E-01	1.1153E-01

LPZ Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.3566E-02	0.0000E+00	2.2579E-02	1.3566E-02
Accumulated dose (rem)	1.3781E-02	0.0000E+00	2.2922E-02	1.3781E-02

Control Room Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.0875E-02	0.0000E+00	2.2898E+00	4.0875E-02
Accumulated dose (rem)	4.1016E-02	0.0000E+00	2.2973E+00	4.1016E-02

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	3.0365E+04	3.7318E-04	2.6132E+21	1.1235E+15
Sr-89	1.5792E+06	5.4358E-02	3.6781E+23	5.8431E+16
Sr-90	1.0766E+05	7.8928E-01	5.2813E+24	3.9835E+15
Sr-91	1.6967E+06	4.6805E-04	3.0975E+21	6.2778E+16
Sr-92	1.2983E+06	1.0329E-04	6.7610E+20	4.8036E+16
Y-90	1.8581E+03	3.4153E-06	2.2852E+19	6.8750E+13
Y-91	2.0337E+04	8.2927E-04	5.4879E+21	7.5247E+14
Y-92	1.8867E+05	1.9608E-05	1.2835E+20	6.9809E+15
Y-93	2.0677E+04	6.1974E-06	4.0131E+19	7.6504E+14
Zr-95	2.5508E+04	1.1873E-03	7.5267E+21	9.4378E+14
Zr-97	2.2834E+04	1.1944E-05	7.4155E+19	8.4485E+14
Nb-95	2.5691E+04	6.5701E-04	4.1649E+21	9.5058E+14

Mo-99	3.2859E+05	6.8512E-04	4.1675E+21	1.2158E+16
Tc-99m	2.9270E+05	5.5664E-05	3.3860E+20	1.0830E+16
Ru-103	2.6839E+05	8.3159E-03	4.8621E+22	9.9303E+15
Ru-105	1.3387E+05	1.9915E-05	1.1422E+20	4.9532E+15
Ru-106	8.0275E+04	2.3994E-02	1.3632E+23	2.9702E+15
Rh-105	1.6700E+05	1.9785E-04	1.1348E+21	6.1789E+15
Sb-127	3.7450E+05	1.4023E-03	6.6497E+21	1.3856E+16
Sb-129	8.5432E+05	1.5192E-04	7.0922E+20	3.1610E+16
Te-127	3.7357E+05	1.4155E-04	6.7122E+20	1.3822E+16
Te-127m	4.9591E+04	5.2574E-03	2.4930E+22	1.8349E+15
Te-129	9.5126E+05	4.5423E-05	2.1205E+20	3.5197E+16
Te-129m	1.6771E+05	5.5672E-03	2.5989E+22	6.2054E+15
Te-131m	4.9484E+05	6.2057E-04	2.8528E+21	1.8309E+16
Te-132	5.0224E+06	1.6543E-02	7.5474E+22	1.8583E+17
I-131	2.8553E+07	2.3031E-01	1.0588E+24	1.0565E+18
I-132	3.3959E+07	3.2899E-03	1.5009E+22	1.2565E+18
I-133	5.6347E+07	4.9741E-02	2.2522E+23	2.0848E+18
I-134	2.5086E+07	9.4036E-04	4.2261E+21	9.2817E+17
I-135	4.5509E+07	1.2959E-02	5.7807E+22	1.6838E+18
Xe-133	2.3384E+05	1.2493E-03	5.6565E+21	8.6520E+15
Xe-135	2.5520E+06	9.9932E-04	4.4578E+21	9.4423E+16
Cs-134	2.2849E+06	1.7660E+00	7.9365E+24	8.4540E+16
Cs-136	9.5755E+05	1.3065E-02	5.7853E+22	3.5429E+16
Cs-137	2.0247E+06	2.3277E+01	1.0232E+26	7.4913E+16
Ba-139	1.0757E+06	6.5766E-05	2.8493E+20	3.9802E+16
Ba-140	2.5731E+06	3.5148E-02	1.5119E+23	9.5205E+16
La-140	5.4855E+04	9.8690E-05	4.2452E+20	2.0296E+15
La-141	3.3308E+04	5.8897E-06	2.5155E+19	1.2324E+15
La-142	1.0557E+04	7.3746E-07	3.1275E+18	3.9060E+14
Ce-141	6.1564E+04	2.1606E-03	9.2281E+21	2.2779E+15
Ce-143	5.6027E+04	8.4367E-05	3.5530E+20	2.0730E+15
Ce-144	4.6643E+04	1.4624E-02	6.1158E+22	1.7258E+15
Pr-143	2.2689E+04	3.3693E-04	1.4189E+21	8.3948E+14
Nd-147	9.6660E+03	1.1948E-04	4.8949E+20	3.5764E+14
Np-239	7.0127E+05	3.0228E-03	7.6167E+21	2.5947E+16
Pu-238	4.8549E+01	2.8358E-03	7.1755E+21	1.7963E+12
Pu-239	1.5211E+01	2.4471E-01	6.1661E+23	5.6279E+11
Pu-240	1.5419E+01	6.7667E-02	1.6979E+23	5.7050E+11
Pu-241	4.6568E+03	4.5206E-02	1.1296E+23	1.7230E+14
Am-241	1.6651E+00	4.8514E-04	1.2123E+21	6.1608E+10
Cm-242	2.9538E+02	8.9124E-05	2.2178E+20	1.0929E+13
Cm-244	7.0060E+00	8.6598E-05	2.1373E+20	2.5922E+11
I-130	5.8191E+05	2.9836E-04	1.3821E+21	2.1530E+16
Kr-83m	6.4120E+05	3.1078E-05	2.2549E+20	2.3724E+16
Xe-131m	5.8984E+02	7.0419E-06	3.2372E+19	2.1824E+13
Xe-133m	1.6672E+04	3.7156E-05	1.6824E+20	6.1686E+14
Xe-135m	5.6408E+06	6.1924E-05	2.7624E+20	2.0871E+17
Cs-138	6.1154E+06	1.4452E-04	6.3068E+20	2.2627E+17
Cs-134m	4.8095E+05	5.9639E-05	2.6802E+20	1.7795E+16
Rb-88	3.6851E+06	3.0699E-05	2.1009E+20	1.3635E+17
Rb-89	1.6252E+05	1.1693E-06	7.9119E+18	6.0133E+15
Sb-124	3.2423E+03	1.8536E-04	9.0021E+20	1.1997E+14
Sb-125	4.6141E+04	4.4689E-02	2.1530E+23	1.7072E+15
Sb-126	3.5327E+03	4.2271E-05	2.0203E+20	1.3071E+14
Te-131	2.6435E+05	4.6043E-06	2.1166E+19	9.7808E+15
Te-133	1.3449E+05	1.1844E-06	5.3629E+18	4.9763E+15
Te-134	1.0497E+06	3.1269E-05	1.4053E+20	3.8838E+16
Te-125m	9.5677E+03	5.3123E-04	2.5593E+21	3.5401E+14
Te-133m	7.2378E+05	2.8362E-05	1.2842E+20	2.6780E+16
Ba-141	3.9653E+04	5.4326E-07	2.3203E+18	1.4671E+15
Ba-137m	2.1493E+06	3.9965E-06	1.7568E+19	7.9526E+16
Pd-109	4.4469E+04	2.0768E-05	1.1474E+20	1.6453E+15
Rh-106	1.3818E+05	3.8820E-08	2.2055E+17	5.1128E+15
Rh-103m	2.6246E+05	8.0685E-06	4.7174E+19	9.7110E+15
Tc-101	1.5233E+03	1.1619E-08	6.9279E+16	5.6362E+13
Eu-154	7.9937E+01	3.0303E-04	1.1850E+21	2.9577E+12
Eu-155	6.1342E+01	1.3192E-04	5.1253E+20	2.2697E+12
Eu-156	1.2779E+03	2.3191E-05	8.9524E+19	4.7282E+13
La-143	1.1650E+02	1.2608E-09	5.3097E+15	4.3106E+12
Nb-97	9.5441E+03	3.5499E-07	2.2039E+18	3.5313E+14

Nb-95m	1.8488E+02	4.8534E-07	3.0766E+18	6.8404E+12
Pm-147	2.4616E+03	2.6554E-03	1.0878E+22	9.1080E+13
Pm-148	3.7447E+03	2.2793E-05	9.2744E+19	1.3856E+14
Pm-149	7.6532E+03	1.9315E-05	7.8065E+19	2.8317E+14
Pm-151	2.6330E+03	3.6030E-06	1.4369E+19	9.7420E+13
Pm-148m	5.3349E+02	2.4973E-05	1.0162E+20	1.9739E+13
Pr-144	3.9067E+04	5.1700E-07	2.1621E+18	1.4455E+15
Pr-144m	8.1083E+02	4.4709E-09	1.8698E+16	3.0001E+13
Sm-153	4.8063E+03	1.0958E-05	4.3132E+19	1.7783E+14
Y-94	4.5396E+02	4.3347E-09	2.7770E+16	1.6797E+13
Y-95	2.1883E+01	1.1830E-10	7.4994E+14	8.0969E+11
Y-91m	4.0565E+05	9.7593E-06	6.4584E+19	1.5009E+16
Br-82	1.0586E+05	9.7783E-05	7.1812E+20	3.9169E+15
Br-83	2.3028E+06	1.4577E-04	1.0576E+21	8.5204E+16
Br-84	6.4839E+05	9.2112E-06	6.6037E+19	2.3990E+16
Am-242	6.2369E+02	7.7157E-07	1.9201E+18	2.3077E+13
Np-238	7.8912E+03	3.0449E-05	7.7046E+19	2.9197E+14
Pu-243	4.0449E+03	1.5544E-06	3.8522E+18	1.4966E+14

Containment Sump Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.0817E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3643E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6432E+01	0.0000E+00	0.0000E+00

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	1.4511E+01	1.7834E-07	1.2488E+18	5.3691E+11
Sr-89	6.2387E+02	2.1474E-05	1.4530E+20	2.3083E+13
Sr-90	4.2515E+01	3.1168E-04	2.0855E+21	1.5731E+12
Sr-91	6.7001E+02	1.8483E-07	1.2232E+18	2.4790E+13
Sr-92	5.1267E+02	4.0787E-08	2.6699E+17	1.8969E+13
Y-90	8.3097E-01	1.5273E-09	1.0220E+16	3.0746E+10
Y-91	8.0791E+00	3.2944E-07	2.1801E+18	2.9893E+11
Y-92	9.6749E+01	1.0055E-08	6.5816E+16	3.5797E+12
Y-93	8.1650E+00	2.4473E-09	1.5847E+16	3.0211E+11
Zr-95	1.0073E+01	4.6887E-07	2.9722E+18	3.7269E+11
Zr-97	9.0168E+00	4.7167E-09	2.9283E+16	3.3362E+11
Nb-95	1.0145E+01	2.5945E-07	1.6447E+18	3.7537E+11
Mo-99	1.2976E+02	2.7055E-07	1.6457E+18	4.8010E+12
Tc-99m	1.1558E+02	2.1981E-08	1.3371E+17	4.2766E+12
Ru-103	1.0598E+02	3.2839E-06	1.9200E+19	3.9214E+12
Ru-105	5.2864E+01	7.8643E-09	4.5105E+16	1.9560E+12
Ru-106	3.1700E+01	9.4751E-06	5.3830E+19	1.1729E+12
Rh-105	6.5946E+01	7.8130E-08	4.4810E+17	2.4400E+12
Sb-127	1.4789E+02	5.5377E-07	2.6259E+18	5.4718E+12
Sb-129	3.3736E+02	5.9993E-08	2.8006E+17	1.2482E+13
Te-127	1.4752E+02	5.5898E-08	2.6506E+17	5.4582E+12
Te-127m	1.9583E+01	2.0761E-06	9.8445E+18	7.2457E+11
Te-129	3.7564E+02	1.7937E-08	8.3736E+16	1.3899E+13
Te-129m	6.6229E+01	2.1984E-06	1.0263E+19	2.4505E+12
Te-131m	1.9541E+02	2.4506E-07	1.1265E+18	7.2301E+12
Te-132	1.9833E+03	6.5327E-06	2.9804E+19	7.3382E+13
I-131	1.3049E+04	1.0526E-04	4.8387E+20	4.8282E+14
I-132	1.4386E+04	1.3937E-06	6.3583E+18	5.3227E+14
I-133	2.5707E+04	2.2693E-05	1.0275E+20	9.5115E+14
I-134	1.0534E+04	3.9489E-07	1.7747E+18	3.8977E+14
I-135	2.0805E+04	5.9242E-06	2.6427E+19	7.6978E+14
Cs-134	1.0919E+03	8.4394E-04	3.7928E+21	4.0401E+13

Cs-136	4.5760E+02	6.2437E-06	2.7647E+19	1.6931E+13
Cs-137	9.6757E+02	1.1124E-02	4.8897E+22	3.5800E+13
Ba-139	4.2480E+02	2.5970E-08	1.1252E+17	1.5717E+13
Ba-140	1.0161E+03	1.3879E-05	5.9703E+19	3.7596E+13
La-140	2.5345E+01	4.5598E-08	1.9614E+17	9.3775E+11
La-141	1.5930E+01	2.8168E-09	1.2030E+16	5.8940E+11
La-142	4.1688E+00	2.9122E-10	1.2350E+15	1.5424E+11
Ce-141	2.4311E+01	8.5320E-07	3.6440E+18	8.9949E+11
Ce-143	2.2122E+01	3.3312E-08	1.4028E+17	8.1850E+11
Ce-144	1.8419E+01	5.7748E-06	2.4151E+19	6.8150E+11
Pr-143	8.9657E+00	1.3314E-07	5.6071E+17	3.3173E+11
Nd-147	3.8170E+00	4.7183E-08	1.9329E+17	1.4123E+11
Np-239	2.7692E+02	1.1937E-06	3.0078E+18	1.0246E+13
Pu-238	1.9171E-02	1.1198E-06	2.8335E+18	7.0934E+08
Pu-239	6.0065E-03	9.6635E-05	2.4349E+20	2.2224E+08
Pu-240	6.0888E-03	2.6721E-05	6.7049E+19	2.2529E+08
Pu-241	1.8389E+00	1.7851E-05	4.4607E+19	6.8040E+10
Am-241	6.5757E-04	1.9159E-07	4.7875E+17	2.4330E+07
Cm-242	1.1664E-01	3.5194E-08	8.7581E+16	4.3158E+09
Cm-244	2.7666E-03	3.4197E-08	8.4400E+16	1.0236E+08
I-130	2.6602E+02	1.3640E-07	6.3186E+17	9.8429E+12
Cs-138	2.7666E+03	6.5382E-08	2.8532E+17	1.0236E+14
Cs-134m	2.2984E+02	2.8501E-08	1.2809E+17	8.5040E+12
Rb-88	9.1774E+02	7.6453E-09	5.2320E+16	3.3956E+13
Rb-89	7.7668E+01	5.5879E-10	3.7810E+15	2.8737E+12
Sb-124	1.2804E+00	7.3197E-08	3.5549E+17	4.7374E+10
Sb-125	1.8220E+01	1.7647E-05	8.5020E+19	6.7416E+11
Sb-126	1.3950E+00	1.6692E-08	7.9781E+16	5.1616E+10
Te-131	1.0439E+02	1.8182E-09	8.3583E+15	3.8623E+12
Te-133	5.3110E+01	4.6771E-10	2.1178E+15	1.9651E+12
Te-134	4.1451E+02	1.2348E-08	5.5492E+16	1.5337E+13
Te-125m	3.7782E+00	2.0978E-07	1.0107E+18	1.3979E+11
Te-133m	2.8581E+02	1.1200E-08	5.0713E+16	1.0575E+13
Ba-141	1.5658E+01	2.1453E-10	9.1625E+14	5.7936E+11
Ba-137m	1.0581E+03	1.9674E-09	8.6480E+15	3.9148E+13
Pd-109	1.7560E+01	8.2010E-09	4.5310E+16	6.4973E+11
Rh-106	5.4568E+01	1.5330E-11	8.7093E+13	2.0190E+12
Rh-103m	1.0364E+02	3.1862E-09	1.8629E+16	3.8348E+12
Tc-101	6.0153E-01	4.5882E-12	2.7357E+13	2.2257E+10
Eu-154	3.1566E-02	1.1966E-07	4.6794E+17	1.1680E+09
Eu-155	2.4224E-02	5.2093E-08	2.0239E+17	8.9627E+08
Eu-156	5.0463E-01	9.1578E-09	3.5352E+16	1.8671E+10
La-143	4.6006E-02	4.9788E-13	2.0967E+12	1.7022E+09
Nb-97	3.7689E+00	1.4018E-10	8.7031E+14	1.3945E+11
Nb-95m	7.3005E-02	1.9166E-10	1.2149E+15	2.7012E+09
Pm-147	9.7207E-01	1.0486E-06	4.2958E+18	3.5967E+10
Pm-148	1.4788E+00	9.0006E-09	3.6624E+16	5.4714E+10
Pm-149	3.0222E+00	7.6272E-09	3.0827E+16	1.1182E+11
Pm-151	1.0397E+00	1.4228E-09	5.6744E+15	3.8470E+10
Pm-148m	2.1067E-01	9.8618E-09	4.0128E+16	7.7948E+09
Pr-144	1.6964E+01	2.2449E-10	9.3883E+14	6.2765E+11
Pr-144m	3.3956E-01	1.8723E-12	7.8302E+12	1.2564E+10
Sm-153	1.8979E+00	4.3273E-09	1.7033E+16	7.0224E+10
Y-94	1.7927E-01	1.7117E-12	1.0966E+13	6.6329E+09
Y-95	8.6416E-03	4.6717E-14	2.9614E+11	3.1974E+08
Y-91m	2.0337E+02	4.8928E-09	3.2379E+16	7.5248E+12
Br-82	4.8397E+01	4.4703E-08	3.2830E+17	1.7907E+12
Br-83	1.0528E+03	6.6639E-08	4.8351E+17	3.8952E+13
Br-84	2.9642E+02	4.2110E-09	3.0190E+16	1.0967E+13
Am-242	2.4629E-01	3.0469E-10	7.5821E+14	9.1128E+09
Np-238	3.1161E+00	1.2024E-08	3.0425E+16	1.1530E+11
Pu-243	1.5973E+00	6.1383E-10	1.5212E+15	5.9099E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.2266E+20
Organic I (atoms)	0.0000E+00

Aerosols (kg) 1.2517E-02

Environment Integral Nuclide Release:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Xe-133	1.4432E+02	7.7100E-07	3.4910E+18	5.3397E+12
Xe-135	1.5907E+03	6.2291E-07	2.7787E+18	5.8857E+13
Kr-83m	3.9286E+02	1.9041E-08	1.3815E+17	1.4536E+13
Xe-131m	3.6373E-01	4.3425E-09	1.9963E+16	1.3458E+10
Xe-133m	1.0283E+01	2.2917E-08	1.0377E+17	3.8048E+11
Xe-135m	3.0215E+03	3.3169E-08	1.4796E+17	1.1179E+14

Environment Transport Group Inventory:

Time (h) = 1.8083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	5.4707E+16	7.5982E+14	6.6796E+18
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	1.4511E+01	1.7834E-07	1.2488E+18	5.3691E+11
Sr-89	6.2387E+02	2.1474E-05	1.4530E+20	2.3083E+13
Sr-90	4.2515E+01	3.1168E-04	2.0855E+21	1.5731E+12
Sr-91	6.7001E+02	1.8483E-07	1.2232E+18	2.4790E+13
Sr-92	5.1267E+02	4.0787E-08	2.6699E+17	1.8969E+13
Y-90	8.3097E-01	1.5273E-09	1.0220E+16	3.0746E+10
Y-91	8.0791E+00	3.2944E-07	2.1801E+18	2.9893E+11
Y-92	9.6749E+01	1.0055E-08	6.5816E+16	3.5797E+12
Y-93	8.1650E+00	2.4473E-09	1.5847E+16	3.0211E+11
Zr-95	1.0073E+01	4.6887E-07	2.9722E+18	3.7269E+11
Zr-97	9.0168E+00	4.7167E-09	2.9283E+16	3.3362E+11
Nb-95	1.0145E+01	2.5945E-07	1.6447E+18	3.7537E+11
Mo-99	1.2976E+02	2.7055E-07	1.6457E+18	4.8010E+12
Tc-99m	1.1558E+02	2.1981E-08	1.3371E+17	4.2766E+12
Ru-103	1.0598E+02	3.2839E-06	1.9200E+19	3.9214E+12
Ru-105	5.2864E+01	7.8643E-09	4.5105E+16	1.9560E+12
Ru-106	3.1700E+01	9.4751E-06	5.3830E+19	1.1729E+12
Rh-105	6.5946E+01	7.8130E-08	4.4810E+17	2.4400E+12
Sb-127	1.4789E+02	5.5377E-07	2.6259E+18	5.4718E+12
Sb-129	3.3736E+02	5.9993E-08	2.8006E+17	1.2482E+13
Te-127	1.4752E+02	5.5898E-08	2.6506E+17	5.4582E+12
Te-127m	1.9583E+01	2.0761E-06	9.8445E+18	7.2457E+11
Te-129	3.7564E+02	1.7937E-08	8.3736E+16	1.3899E+13
Te-129m	6.6229E+01	2.1984E-06	1.0263E+19	2.4505E+12
Te-131m	1.9541E+02	2.4506E-07	1.1265E+18	7.2301E+12
Te-132	1.9833E+03	6.5327E-06	2.9804E+19	7.3382E+13
I-131	1.3049E+04	1.0526E-04	4.8387E+20	4.8282E+14
I-132	1.4386E+04	1.3937E-06	6.3583E+18	5.3227E+14
I-133	2.5707E+04	2.2693E-05	1.0275E+20	9.5115E+14
I-134	1.0534E+04	3.9489E-07	1.7747E+18	3.8977E+14
I-135	2.0805E+04	5.9242E-06	2.6427E+19	7.6978E+14
Cs-134	1.0919E+03	8.4394E-04	3.7928E+21	4.0401E+13
Cs-136	4.5760E+02	6.2437E-06	2.7647E+19	1.6931E+13
Cs-137	9.6757E+02	1.1124E-02	4.8897E+22	3.5800E+13
Ba-139	4.2480E+02	2.5970E-08	1.1252E+17	1.5717E+13
Ba-140	1.0161E+03	1.3879E-05	5.9703E+19	3.7596E+13
La-140	2.5345E+01	4.5598E-08	1.9614E+17	9.3775E+11
La-141	1.5930E+01	2.8168E-09	1.2030E+16	5.8940E+11
La-142	4.1688E+00	2.9122E-10	1.2350E+15	1.5424E+11
Ce-141	2.4311E+01	8.5320E-07	3.6440E+18	8.9949E+11
Ce-143	2.2122E+01	3.3312E-08	1.4028E+17	8.1850E+11
Ce-144	1.8419E+01	5.7748E-06	2.4151E+19	6.8150E+11
Pr-143	8.9657E+00	1.3314E-07	5.6071E+17	3.3173E+11
Nd-147	3.8170E+00	4.7183E-08	1.9329E+17	1.4123E+11
Np-239	2.7692E+02	1.1937E-06	3.0078E+18	1.0246E+13
Pu-238	1.9171E-02	1.1198E-06	2.8335E+18	7.0934E+08

Pu-239	6.0065E-03	9.6635E-05	2.4349E+20	2.2224E+08
Pu-240	6.0888E-03	2.6721E-05	6.7049E+19	2.2529E+08
Pu-241	1.8389E+00	1.7851E-05	4.4607E+19	6.8040E+10
Am-241	6.5757E-04	1.9159E-07	4.7875E+17	2.4330E+07
Cm-242	1.1664E-01	3.5194E-08	8.7581E+16	4.3158E+09
Cm-244	2.7666E-03	3.4197E-08	8.4400E+16	1.0236E+08
I-130	2.6602E+02	1.3640E-07	6.3186E+17	9.8429E+12
Cs-138	2.7666E+03	6.5382E-08	2.8532E+17	1.0236E+14
Cs-134m	2.2984E+02	2.8501E-08	1.2809E+17	8.5040E+12
Rb-88	9.1774E+02	7.6453E-09	5.2320E+16	3.3956E+13
Rb-89	7.7668E+01	5.5879E-10	3.7810E+15	2.8737E+12
Sb-124	1.2804E+00	7.3197E-08	3.5549E+17	4.7374E+10
Sb-125	1.8220E+01	1.7647E-05	8.5020E+19	6.7416E+11
Sb-126	1.3950E+00	1.6692E-08	7.9781E+16	5.1616E+10
Te-131	1.0439E+02	1.8182E-09	8.3583E+15	3.8623E+12
Te-133	5.3110E+01	4.6771E-10	2.1178E+15	1.9651E+12
Te-134	4.1451E+02	1.2348E-08	5.5492E+16	1.5337E+13
Te-125m	3.7782E+00	2.0978E-07	1.0107E+18	1.3979E+11
Te-133m	2.8581E+02	1.1200E-08	5.0713E+16	1.0575E+13
Ba-141	1.5658E+01	2.1453E-10	9.1625E+14	5.7936E+11
Ba-137m	1.0581E+03	1.9674E-09	8.6480E+15	3.9148E+13
Pd-109	1.7560E+01	8.2010E-09	4.5310E+16	6.4973E+11
Rh-106	5.4568E+01	1.5330E-11	8.7093E+13	2.0190E+12
Rh-103m	1.0364E+02	3.1862E-09	1.8629E+16	3.8348E+12
Tc-101	6.0153E-01	4.5882E-12	2.7357E+13	2.2257E+10
Eu-154	3.1566E-02	1.1966E-07	4.6794E+17	1.1680E+09
Eu-155	2.4224E-02	5.2093E-08	2.0239E+17	8.9627E+08
Eu-156	5.0463E-01	9.1578E-09	3.5352E+16	1.8671E+10
La-143	4.6006E-02	4.9788E-13	2.0967E+12	1.7022E+09
Nb-97	3.7689E+00	1.4018E-10	8.7031E+14	1.3945E+11
Nb-95m	7.3005E-02	1.9166E-10	1.2149E+15	2.7012E+09
Pm-147	9.7207E-01	1.0486E-06	4.2958E+18	3.5967E+10
Pm-148	1.4788E+00	9.0006E-09	3.6624E+16	5.4714E+10
Pm-149	3.0222E+00	7.6272E-09	3.0827E+16	1.1182E+11
Pm-151	1.0397E+00	1.4228E-09	5.6744E+15	3.8470E+10
Pm-148m	2.1067E-01	9.8618E-09	4.0128E+16	7.7948E+09
Pr-144	1.6964E+01	2.2449E-10	9.3883E+14	6.2765E+11
Pr-144m	3.3956E-01	1.8723E-12	7.8302E+12	1.2564E+10
Sm-153	1.8979E+00	4.3273E-09	1.7033E+16	7.0224E+10
Y-94	1.7927E-01	1.7117E-12	1.0966E+13	6.6329E+09
Y-95	8.6416E-03	4.6717E-14	2.9614E+11	3.1974E+08
Y-91m	2.0337E+02	4.8928E-09	3.2379E+16	7.5248E+12
Br-82	4.8397E+01	4.4703E-08	3.2830E+17	1.7907E+12
Br-83	1.0528E+03	6.6639E-08	4.8351E+17	3.8952E+13
Br-84	2.9642E+02	4.2110E-09	3.0190E+16	1.0967E+13
Am-242	2.4629E-01	3.0469E-10	7.5821E+14	9.1128E+09
Np-238	3.1161E+00	1.2024E-08	3.0425E+16	1.1530E+11
Pu-243	1.5973E+00	6.1383E-10	1.5212E+15	5.9099E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.2266E+20
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.2517E-02

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Pathway

```
Time (h) =   1.8083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                       Pathway
Time (h) =   1.8083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                       Pathway
Time (h) =   1.8083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =   1.8083       Ci           kg         Atoms         Bq
Xe-133                3.1148E-01  1.6641E-09  7.5347E+15  1.1525E+10
Xe-135                3.3666E+00  1.3183E-09  5.8808E+15  1.2456E+11
Kr-83m                8.6152E-01  4.1757E-11  3.0297E+14  3.1876E+10
Xe-131m               7.8758E-04  9.4027E-12  4.3225E+13  2.9141E+07
Xe-133m               2.2220E-02  4.9520E-11  2.2422E+14  8.2214E+08
Xe-135m               8.7270E+00  9.5804E-11  4.2737E+14  3.2290E+11

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   1.8083    Atmosphere     Sump        Pool
Noble gases (atoms)    1.4413E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   1.8083     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                       Pathway
Time (h) =   1.8083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                       Pathway
Time (h) =   1.8083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:
```

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 2.0000

EAB Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.6494E-02	0.0000E+00	6.2530E-02	3.6494E-02
Accumulated dose (rem)	1.4803E-01	0.0000E+00	2.4804E-01	1.4803E-01

LPZ Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.5093E-03	0.0000E+00	7.7263E-03	4.5093E-03
Accumulated dose (rem)	1.8291E-02	0.0000E+00	3.0648E-02	1.8291E-02

Control Room Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.7941E-02	0.0000E+00	1.0199E+00	1.7941E-02
Accumulated dose (rem)	5.8957E-02	0.0000E+00	3.3173E+00	5.8957E-02

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	3.0581E+04	3.7584E-04	2.6318E+21	1.1315E+15
Sr-89	1.5932E+06	5.4838E-02	3.7106E+23	5.8947E+16
Sr-90	1.0863E+05	7.9633E-01	5.3285E+24	4.0191E+15
Sr-91	1.6881E+06	4.6568E-04	3.0817E+21	6.2459E+16
Sr-92	1.2472E+06	9.9226E-05	6.4951E+20	4.6147E+16
Y-90	2.0893E+03	3.8402E-06	2.5696E+19	7.7305E+13
Y-91	2.0624E+04	8.4096E-04	5.5652E+21	7.6307E+14
Y-92	2.2904E+05	2.3803E-05	1.5581E+20	8.4744E+15
Y-93	2.0589E+04	6.1711E-06	3.9961E+19	7.6179E+14
Zr-95	2.5733E+04	1.1979E-03	7.5933E+21	9.5213E+14
Zr-97	2.2857E+04	1.1957E-05	7.4232E+19	8.4573E+14
Nb-95	2.5921E+04	6.6289E-04	4.2021E+21	9.5907E+14
Mo-99	3.3086E+05	6.8985E-04	4.1963E+21	1.2242E+16
Tc-99m	2.9521E+05	5.6142E-05	3.4151E+20	1.0923E+16
Ru-103	2.7075E+05	8.3891E-03	4.9049E+22	1.0018E+16
Ru-105	1.3109E+05	1.9501E-05	1.1185E+20	4.8502E+15
Ru-106	8.0991E+04	2.4208E-02	1.3753E+23	2.9967E+15
Rh-105	1.6836E+05	1.9946E-04	1.1440E+21	6.2293E+15
Sb-127	3.7730E+05	1.4128E-03	6.6995E+21	1.3960E+16
Sb-129	8.3585E+05	1.4864E-04	6.9389E+20	3.0926E+16
Te-127	3.7668E+05	1.4273E-04	6.7680E+20	1.3937E+16
Te-127m	5.0035E+04	5.3045E-03	2.5153E+22	1.8513E+15
Te-129	9.3946E+05	4.4859E-05	2.0942E+20	3.4760E+16
Te-129m	1.6922E+05	5.6171E-03	2.6222E+22	6.2610E+15
Te-131m	4.9706E+05	6.2335E-04	2.8656E+21	1.8391E+16
Te-132	5.0587E+06	1.6663E-02	7.6019E+22	1.8717E+17
I-131	2.8757E+07	2.3196E-01	1.0663E+24	1.0640E+18
I-132	3.2642E+07	3.1623E-03	1.4427E+22	1.2078E+18
I-133	5.6431E+07	4.9815E-02	2.2556E+23	2.0880E+18
I-134	2.1898E+07	8.2085E-04	3.6890E+21	8.1021E+17
I-135	4.4951E+07	1.2800E-02	5.7098E+22	1.6632E+18

Xe-133	2.9157E+05	1.5577E-03	7.0530E+21	1.0788E+16
Xe-135	3.1566E+06	1.2361E-03	5.5139E+21	1.1679E+17
Cs-134	2.3018E+06	1.7791E+00	7.9954E+24	8.5167E+16
Cs-136	9.6425E+05	1.3156E-02	5.8257E+22	3.5677E+16
Cs-137	2.0397E+06	2.3450E+01	1.0308E+26	7.5469E+16
Ba-139	9.8562E+05	6.0257E-05	2.6106E+20	3.6468E+16
Ba-140	2.5950E+06	3.5446E-02	1.5247E+23	9.6014E+16
La-140	6.3455E+04	1.1416E-04	4.9108E+20	2.3479E+15
La-141	3.3444E+04	5.9136E-06	2.5257E+19	1.2374E+15
La-142	9.7718E+03	6.8262E-07	2.8950E+18	3.6155E+14
Ce-141	6.2109E+04	2.1798E-03	9.3098E+21	2.2980E+15
Ce-143	5.6301E+04	8.4781E-05	3.5703E+20	2.0831E+15
Ce-144	4.7059E+04	1.4754E-02	6.1703E+22	1.7412E+15
Pr-143	2.2905E+04	3.4014E-04	1.4324E+21	8.4748E+14
Nd-147	9.7476E+03	1.2049E-04	4.9361E+20	3.6066E+14
Np-239	7.0588E+05	3.0427E-03	7.6667E+21	2.6118E+16
Pu-238	4.8984E+01	2.8613E-03	7.2399E+21	1.8124E+12
Pu-239	1.5347E+01	2.4691E-01	6.2214E+23	5.6784E+11
Pu-240	1.5557E+01	6.8272E-02	1.7131E+23	5.7561E+11
Pu-241	4.6984E+03	4.5610E-02	1.1397E+23	1.7384E+14
Am-241	1.6801E+00	4.8953E-04	1.2232E+21	6.2165E+10
Cm-242	2.9803E+02	8.9923E-05	2.2377E+20	1.1027E+13
Cm-244	7.0686E+00	8.7372E-05	2.1564E+20	2.6154E+11
I-130	5.8017E+05	2.9747E-04	1.3780E+21	2.1466E+16
Kr-83m	7.5484E+05	3.6586E-05	2.6545E+20	2.7929E+16
Xe-131m	7.3799E+02	8.8107E-06	4.0503E+19	2.7306E+13
Xe-133m	2.0777E+04	4.6303E-05	2.0966E+20	7.6873E+14
Xe-135m	6.2635E+06	6.8760E-05	3.0673E+20	2.3175E+17
Cs-138	4.8134E+06	1.1375E-04	4.9640E+20	1.7809E+17
Cs-134m	4.6282E+05	5.7391E-05	2.5792E+20	1.7124E+16
Rb-88	2.4164E+06	2.0130E-05	1.3776E+20	8.9407E+16
Rb-89	9.6910E+04	6.9724E-07	4.7178E+18	3.5857E+15
Sb-124	3.2710E+03	1.8700E-04	9.0818E+20	1.2103E+14
Sb-125	4.6553E+04	4.5089E-02	2.1722E+23	1.7225E+15
Sb-126	3.5627E+03	4.2630E-05	2.0375E+20	1.3182E+14
Te-131	2.2458E+05	3.9116E-06	1.7982E+19	8.3094E+15
Te-133	1.1440E+05	1.0075E-06	4.5617E+18	4.2328E+15
Te-134	8.7519E+05	2.6071E-05	1.1717E+20	3.2382E+16
Te-125m	9.6534E+03	5.3599E-04	2.5822E+21	3.5717E+14
Te-133m	6.3239E+05	2.4781E-05	1.1221E+20	2.3398E+16
Ba-141	2.5861E+04	3.5431E-07	1.5133E+18	9.5688E+14
Ba-137m	2.2549E+06	4.1928E-06	1.8430E+19	8.3431E+16
Pd-109	4.4425E+04	2.0747E-05	1.1463E+20	1.6437E+15
Rh-106	1.6657E+05	4.6794E-08	2.6585E+17	6.1630E+15
Rh-103m	2.6575E+05	8.1696E-06	4.7765E+19	9.8326E+15
Tc-101	8.7671E+02	6.6872E-09	3.9872E+16	3.2438E+13
Eu-154	8.0652E+01	3.0574E-04	1.1956E+21	2.9841E+12
Eu-155	6.1891E+01	1.3310E-04	5.1711E+20	2.2900E+12
Eu-156	1.2888E+03	2.3390E-05	9.0292E+19	4.7687E+13
La-143	6.7131E+01	7.2651E-10	3.0595E+15	2.4838E+12
Nb-97	8.7495E+03	3.2544E-07	2.0204E+18	3.2373E+14
Nb-95m	1.8652E+02	4.8966E-07	3.1040E+18	6.9012E+12
Pm-147	2.4837E+03	2.6792E-03	1.0976E+22	9.1896E+13
Pm-148	3.7743E+03	2.2973E-05	9.3477E+19	1.3965E+14
Pm-149	7.7024E+03	1.9439E-05	7.8566E+19	2.8499E+14
Pm-151	2.6441E+03	3.6183E-06	1.4430E+19	9.7832E+13
Pm-148m	5.3819E+02	2.5193E-05	1.0251E+20	1.9913E+13
Pr-144	4.2524E+04	5.6275E-07	2.3534E+18	1.5734E+15
Pr-144m	8.6235E+02	4.7550E-09	1.9886E+16	3.1907E+13
Sm-153	4.8354E+03	1.1025E-05	4.3394E+19	1.7891E+14
Y-94	3.0174E+02	2.8812E-09	1.8459E+16	1.1165E+13
Y-95	1.0482E+01	5.6667E-11	3.5922E+14	3.8783E+11
Y-91m	4.9234E+05	1.1845E-05	7.8385E+19	1.8216E+16
Br-82	1.0629E+05	9.8175E-05	7.2101E+20	3.9327E+15
Br-83	2.1953E+06	1.3896E-04	1.0082E+21	8.1226E+16
Br-84	5.0856E+05	7.2248E-06	5.1796E+19	1.8817E+16
Am-242	6.2407E+02	7.7204E-07	1.9212E+18	2.3091E+13
Np-238	7.9409E+03	3.0641E-05	7.7532E+19	2.9381E+14
Pu-243	3.9731E+03	1.5268E-06	3.7839E+18	1.4700E+14

Containment Sump Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3389E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3702E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6630E+01	0.0000E+00	0.0000E+00

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	1.8099E+01	2.2243E-07	1.5576E+18	6.6965E+11
Sr-89	8.1094E+02	2.7913E-05	1.8887E+20	3.0005E+13
Sr-90	5.5274E+01	4.0521E-04	2.7114E+21	2.0451E+12
Sr-91	8.5898E+02	2.3696E-07	1.5681E+18	3.1782E+13
Sr-92	6.3464E+02	5.0491E-08	3.3050E+17	2.3482E+13
Y-90	1.1629E+00	2.1373E-09	1.4302E+16	4.3026E+10
Y-91	1.0548E+01	4.3009E-07	2.8463E+18	3.9026E+11
Y-92	1.3855E+02	1.4399E-08	9.4254E+16	5.1265E+12
Y-93	1.0477E+01	3.1402E-09	2.0334E+16	3.8763E+11
Zr-95	1.3094E+01	6.0952E-07	3.8638E+18	4.8449E+11
Zr-97	1.1631E+01	6.0842E-09	3.7773E+16	4.3035E+11
Nb-95	1.3190E+01	3.3731E-07	2.1382E+18	4.8802E+11
Mo-99	1.6836E+02	3.5103E-07	2.1353E+18	6.2293E+12
Tc-99m	1.5022E+02	2.8568E-08	1.7378E+17	5.5580E+12
Ru-103	1.3777E+02	4.2688E-06	2.4958E+19	5.0975E+12
Ru-105	6.6703E+01	9.9230E-09	5.6912E+16	2.4680E+12
Ru-106	4.1212E+01	1.2318E-05	6.9984E+19	1.5248E+12
Rh-105	8.5669E+01	1.0150E-07	5.8212E+17	3.1697E+12
Sb-127	1.9199E+02	7.1892E-07	3.4090E+18	7.1036E+12
Sb-129	4.2532E+02	7.5634E-08	3.5308E+17	1.5737E+13
Te-127	1.9167E+02	7.2627E-08	3.4439E+17	7.0918E+12
Te-127m	2.5460E+01	2.6992E-06	1.2799E+19	9.4203E+11
Te-129	4.7804E+02	2.2827E-08	1.0656E+17	1.7688E+13
Te-129m	8.6105E+01	2.8582E-06	1.3343E+19	3.1859E+12
Te-131m	2.5293E+02	3.1719E-07	1.4581E+18	9.3584E+12
Te-132	2.5741E+03	8.4788E-06	3.8682E+19	9.5242E+13
I-131	1.6418E+04	1.3243E-04	6.0880E+20	6.0747E+14
I-132	1.7524E+04	1.6977E-06	7.7452E+18	6.4838E+14
I-133	3.2173E+04	2.8401E-05	1.2860E+20	1.1904E+15
I-134	1.1678E+04	4.3778E-07	1.9674E+18	4.3210E+14
I-135	2.5671E+04	7.3098E-06	3.2608E+19	9.4982E+14
Cs-134	1.3623E+03	1.0529E-03	4.7319E+21	5.0404E+13
Cs-136	5.7067E+02	7.7864E-06	3.4478E+19	2.1115E+13
Cs-137	1.2072E+03	1.3878E-02	6.1005E+22	4.4665E+13
Ba-139	5.0153E+02	3.0662E-08	1.3284E+17	1.8557E+13
Ba-140	1.3205E+03	1.8037E-05	7.7586E+19	4.8857E+13
La-140	3.6062E+01	6.4879E-08	2.7908E+17	1.3343E+12
La-141	1.9751E+01	3.4924E-09	1.4916E+16	7.3078E+11
La-142	4.9723E+00	3.4735E-10	1.4731E+15	1.8398E+11
Ce-141	3.1604E+01	1.1092E-06	4.7373E+18	1.1694E+12
Ce-143	2.8646E+01	4.3136E-08	1.8166E+17	1.0599E+12
Ce-144	2.3946E+01	7.5077E-06	3.1398E+19	8.8600E+11
Pr-143	1.1661E+01	1.7318E-07	7.2929E+17	4.3147E+11
Nd-147	4.9600E+00	6.1312E-08	2.5117E+17	1.8352E+11
Np-239	3.5918E+02	1.5483E-06	3.9012E+18	1.3290E+13
Pu-238	2.4925E-02	1.4559E-06	3.6840E+18	9.2224E+08
Pu-239	7.8093E-03	1.2564E-04	3.1657E+20	2.8894E+08
Pu-240	7.9161E-03	3.4740E-05	8.7170E+19	2.9290E+08
Pu-241	2.3908E+00	2.3209E-05	5.7994E+19	8.8459E+10
Am-241	8.5498E-04	2.4911E-07	6.2247E+17	3.1634E+07
Cm-242	1.5165E-01	4.5757E-08	1.1387E+17	5.6112E+09

Cm-244	3.5968E-03	4.4459E-08	1.0973E+17	1.3308E+08
I-130	3.3133E+02	1.6988E-07	7.8697E+17	1.2259E+13
Cs-138	2.7253E+03	6.4406E-08	2.8106E+17	1.0084E+14
Cs-134m	2.7391E+02	3.3966E-08	1.5265E+17	1.0135E+13
Rb-88	8.7013E+02	7.2487E-09	4.9606E+16	3.2195E+13
Rb-89	5.7354E+01	4.1265E-10	2.7921E+15	2.1221E+12
Sb-124	1.6645E+00	9.5155E-08	4.6212E+17	6.1585E+10
Sb-125	2.3688E+01	2.2943E-05	1.1053E+20	8.7647E+11
Sb-126	1.8129E+00	2.1692E-08	1.0368E+17	6.7076E+10
Te-131	1.1428E+02	1.9904E-09	9.1500E+15	4.2282E+12
Te-133	5.8212E+01	5.1264E-10	2.3212E+15	2.1539E+12
Te-134	4.4534E+02	1.3266E-08	5.9620E+16	1.6477E+13
Te-125m	4.9121E+00	2.7274E-07	1.3140E+18	1.8175E+11
Te-133m	3.2179E+02	1.2610E-08	5.7096E+16	1.1906E+13
Ba-141	1.3160E+01	1.8029E-10	7.7003E+14	4.8690E+11
Ba-137m	1.3362E+03	2.4845E-09	1.0921E+16	4.9439E+13
Pd-109	2.2605E+01	1.0557E-08	5.8327E+16	8.3640E+11
Rh-106	8.4757E+01	2.3811E-11	1.3528E+14	3.1360E+12
Rh-103m	1.3522E+02	4.1571E-09	2.4305E+16	5.0033E+12
Tc-101	4.4611E-01	3.4028E-12	2.0289E+13	1.6506E+10
Eu-154	4.1039E-02	1.5557E-07	6.0836E+17	1.5185E+09
Eu-155	3.1493E-02	6.7726E-08	2.6313E+17	1.1652E+09
Eu-156	6.5583E-01	1.1902E-08	4.5945E+16	2.4266E+10
La-143	3.4159E-02	3.6968E-13	1.5568E+12	1.2639E+09
Nb-97	4.4522E+00	1.6560E-10	1.0281E+15	1.6473E+11
Nb-95m	9.4909E-02	2.4916E-10	1.5795E+15	3.5116E+09
Pm-147	1.2638E+00	1.3633E-06	5.5851E+18	4.6761E+10
Pm-148	1.9206E+00	1.1690E-08	4.7566E+16	7.1061E+10
Pm-149	3.9193E+00	9.8914E-09	3.9978E+16	1.4501E+11
Pm-151	1.3454E+00	1.8412E-09	7.3428E+15	4.9781E+10
Pm-148m	2.7386E-01	1.2820E-08	5.2163E+16	1.0133E+10
Pr-144	2.2656E+01	2.9983E-10	1.2539E+15	8.3829E+11
Pr-144m	4.4575E-01	2.4579E-12	1.0279E+13	1.6493E+10
Sm-153	2.4605E+00	5.6100E-09	2.2081E+16	9.1039E+10
Y-94	1.5354E-01	1.4661E-12	9.3926E+12	5.6810E+09
Y-95	5.3337E-03	2.8835E-14	1.8279E+11	1.9735E+08
Y-91m	2.8851E+02	6.9411E-09	4.5934E+16	1.0675E+13
Br-82	6.0700E+01	5.6066E-08	4.1175E+17	2.2459E+12
Br-83	1.2537E+03	7.9359E-08	5.7579E+17	4.6387E+13
Br-84	2.9043E+02	4.1260E-09	2.9580E+16	1.0746E+13
Am-242	3.1756E-01	3.9285E-10	9.7761E+14	1.1750E+10
Np-238	4.0407E+00	1.5592E-08	3.9452E+16	1.4951E+11
Pu-243	2.0217E+00	7.7693E-10	1.9254E+15	7.4803E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.8152E+20
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.5645E-02

Environment Integral Nuclide Release:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Xe-133	2.0458E+02	1.0929E-06	4.9487E+18	7.5694E+12
Xe-135	2.2339E+03	8.7478E-07	3.9022E+18	8.2656E+13
Kr-83m	5.2570E+02	2.5480E-08	1.8487E+17	1.9451E+13
Xe-131m	5.1734E-01	6.1764E-09	2.8393E+16	1.9142E+10
Xe-133m	1.4569E+01	3.2468E-08	1.4701E+17	5.3904E+11
Xe-135m	3.8463E+03	4.2224E-08	1.8835E+17	1.4231E+14

Environment Transport Group Inventory:

Time (h) = 2.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.6094E+17	2.2353E+15	9.3996E+18
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00

Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00	

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	1.8099E+01	2.2243E-07	1.5576E+18	6.6965E+11
Sr-89	8.1094E+02	2.7913E-05	1.8887E+20	3.0005E+13
Sr-90	5.5274E+01	4.0521E-04	2.7114E+21	2.0451E+12
Sr-91	8.5898E+02	2.3696E-07	1.5681E+18	3.1782E+13
Sr-92	6.3464E+02	5.0491E-08	3.3050E+17	2.3482E+13
Y-90	1.1629E+00	2.1373E-09	1.4302E+16	4.3026E+10
Y-91	1.0548E+01	4.3009E-07	2.8463E+18	3.9026E+11
Y-92	1.3855E+02	1.4399E-08	9.4254E+16	5.1265E+12
Y-93	1.0477E+01	3.1402E-09	2.0334E+16	3.8763E+11
Zr-95	1.3094E+01	6.0952E-07	3.8638E+18	4.8449E+11
Zr-97	1.1631E+01	6.0842E-09	3.7773E+16	4.3035E+11
Nb-95	1.3190E+01	3.3731E-07	2.1382E+18	4.8802E+11
Mo-99	1.6836E+02	3.5103E-07	2.1353E+18	6.2293E+12
Tc-99m	1.5022E+02	2.8568E-08	1.7378E+17	5.5580E+12
Ru-103	1.3777E+02	4.2688E-06	2.4958E+19	5.0975E+12
Ru-105	6.6703E+01	9.9230E-09	5.6912E+16	2.4680E+12
Ru-106	4.1212E+01	1.2318E-05	6.9984E+19	1.5248E+12
Rh-105	8.5669E+01	1.0150E-07	5.8212E+17	3.1697E+12
Sb-127	1.9199E+02	7.1892E-07	3.4090E+18	7.1036E+12
Sb-129	4.2532E+02	7.5634E-08	3.5308E+17	1.5737E+13
Te-127	1.9167E+02	7.2627E-08	3.4439E+17	7.0918E+12
Te-127m	2.5460E+01	2.6992E-06	1.2799E+19	9.4203E+11
Te-129	4.7804E+02	2.2827E-08	1.0656E+17	1.7688E+13
Te-129m	8.6105E+01	2.8582E-06	1.3343E+19	3.1859E+12
Te-131m	2.5293E+02	3.1719E-07	1.4581E+18	9.3584E+12
Te-132	2.5741E+03	8.4788E-06	3.8682E+19	9.5242E+13
I-131	1.6418E+04	1.3243E-04	6.0880E+20	6.0747E+14
I-132	1.7524E+04	1.6977E-06	7.7452E+18	6.4838E+14
I-133	3.2173E+04	2.8401E-05	1.2860E+20	1.1904E+15
I-134	1.1678E+04	4.3778E-07	1.9674E+18	4.3210E+14
I-135	2.5671E+04	7.3098E-06	3.2608E+19	9.4982E+14
Cs-134	1.3623E+03	1.0529E-03	4.7319E+21	5.0404E+13
Cs-136	5.7067E+02	7.7864E-06	3.4478E+19	2.1115E+13
Cs-137	1.2072E+03	1.3878E-02	6.1005E+22	4.4665E+13
Ba-139	5.0153E+02	3.0662E-08	1.3284E+17	1.8557E+13
Ba-140	1.3205E+03	1.8037E-05	7.7586E+19	4.8857E+13
La-140	3.6062E+01	6.4879E-08	2.7908E+17	1.3343E+12
La-141	1.9751E+01	3.4924E-09	1.4916E+16	7.3078E+11
La-142	4.9723E+00	3.4735E-10	1.4731E+15	1.8398E+11
Ce-141	3.1604E+01	1.1092E-06	4.7373E+18	1.1694E+12
Ce-143	2.8646E+01	4.3136E-08	1.8166E+17	1.0599E+12
Ce-144	2.3946E+01	7.5077E-06	3.1398E+19	8.8600E+11
Pr-143	1.1661E+01	1.7318E-07	7.2929E+17	4.3147E+11
Nd-147	4.9600E+00	6.1312E-08	2.5117E+17	1.8352E+11
Np-239	3.5918E+02	1.5483E-06	3.9012E+18	1.3290E+13
Pu-238	2.4925E-02	1.4559E-06	3.6840E+18	9.2224E+08
Pu-239	7.8093E-03	1.2564E-04	3.1657E+20	2.8894E+08
Pu-240	7.9161E-03	3.4740E-05	8.7170E+19	2.9290E+08
Pu-241	2.3908E+00	2.3209E-05	5.7994E+19	8.8459E+10
Am-241	8.5498E-04	2.4911E-07	6.2247E+17	3.1634E+07
Cm-242	1.5165E-01	4.5757E-08	1.1387E+17	5.6112E+09
Cm-244	3.5968E-03	4.4459E-08	1.0973E+17	1.3308E+08
I-130	3.3133E+02	1.6988E-07	7.8697E+17	1.2259E+13
Cs-138	2.7253E+03	6.4406E-08	2.8106E+17	1.0084E+14
Cs-134m	2.7391E+02	3.3966E-08	1.5265E+17	1.0135E+13
Rb-88	8.7013E+02	7.2487E-09	4.9606E+16	3.2195E+13
Rb-89	5.7354E+01	4.1265E-10	2.7921E+15	2.1221E+12
Sb-124	1.6645E+00	9.5155E-08	4.6212E+17	6.1585E+10
Sb-125	2.3688E+01	2.2943E-05	1.1053E+20	8.7647E+11
Sb-126	1.8129E+00	2.1692E-08	1.0368E+17	6.7076E+10
Te-131	1.1428E+02	1.9904E-09	9.1500E+15	4.2282E+12
Te-133	5.8212E+01	5.1264E-10	2.3212E+15	2.1539E+12
Te-134	4.4534E+02	1.3266E-08	5.9620E+16	1.6477E+13
Te-125m	4.9121E+00	2.7274E-07	1.3140E+18	1.8175E+11
Te-133m	3.2179E+02	1.2610E-08	5.7096E+16	1.1906E+13

Ba-141	1.3160E+01	1.8029E-10	7.7003E+14	4.8690E+11
Ba-137m	1.3362E+03	2.4845E-09	1.0921E+16	4.9439E+13
Pd-109	2.2605E+01	1.0557E-08	5.8327E+16	8.3640E+11
Rh-106	8.4757E+01	2.3811E-11	1.3528E+14	3.1360E+12
Rh-103m	1.3522E+02	4.1571E-09	2.4305E+16	5.0033E+12
Tc-101	4.4611E-01	3.4028E-12	2.0289E+13	1.6506E+10
Eu-154	4.1039E-02	1.5557E-07	6.0836E+17	1.5185E+09
Eu-155	3.1493E-02	6.7726E-08	2.6313E+17	1.1652E+09
Eu-156	6.5583E-01	1.1902E-08	4.5945E+16	2.4266E+10
La-143	3.4159E-02	3.6968E-13	1.5568E+12	1.2639E+09
Nb-97	4.4522E+00	1.6560E-10	1.0281E+15	1.6473E+11
Nb-95m	9.4909E-02	2.4916E-10	1.5795E+15	3.5116E+09
Pm-147	1.2638E+00	1.3633E-06	5.5851E+18	4.6761E+10
Pm-148	1.9206E+00	1.1690E-08	4.7566E+16	7.1061E+10
Pm-149	3.9193E+00	9.8914E-09	3.9978E+16	1.4501E+11
Pm-151	1.3454E+00	1.8412E-09	7.3428E+15	4.9781E+10
Pm-148m	2.7386E-01	1.2820E-08	5.2163E+16	1.0133E+10
Pr-144	2.2656E+01	2.9983E-10	1.2539E+15	8.3829E+11
Pr-144m	4.4575E-01	2.4579E-12	1.0279E+13	1.6493E+10
Sm-153	2.4605E+00	5.6100E-09	2.2081E+16	9.1039E+10
Y-94	1.5354E-01	1.4661E-12	9.3926E+12	5.6810E+09
Y-95	5.3337E-03	2.8835E-14	1.8279E+11	1.9735E+08
Y-91m	2.8851E+02	6.9411E-09	4.5934E+16	1.0675E+13
Br-82	6.0700E+01	5.6066E-08	4.1175E+17	2.2459E+12
Br-83	1.2537E+03	7.9359E-08	5.7579E+17	4.6387E+13
Br-84	2.9043E+02	4.1260E-09	2.9580E+16	1.0746E+13
Am-242	3.1756E-01	3.9285E-10	9.7761E+14	1.1750E+10
Np-238	4.0407E+00	1.5592E-08	3.9452E+16	1.4951E+11
Pu-243	2.0217E+00	7.7693E-10	1.9254E+15	7.4803E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.8152E+20
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.5645E-02

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	

```
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =   2.0000       Ci           kg         Atoms         Bq
Xe-133                 4.1263E-01  2.2044E-09  9.9814E+15  1.5267E+10
Xe-135                 4.4115E+00  1.7275E-09  7.7060E+15  1.6323E+11
Kr-83m                 1.0807E+00  5.2379E-11  3.8004E+14  3.9986E+10
Xe-131m                1.0476E-03  1.2507E-11  5.7494E+13  3.8760E+07
Xe-133m                2.9425E-02  6.5578E-11  2.9693E+14  1.0887E+09
Xe-135m                1.0878E+01  1.1941E-10  5.3269E+14  4.0247E+11

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   2.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    1.8955E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   2.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   2.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   2.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   2.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   2.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    4.1700

EAB Doses:
```

Time (h) = 4.1700	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	5.4684E-01	0.0000E+00	1.0281E+00	5.4684E-01
Accumulated dose (rem)	6.9486E-01	0.0000E+00	1.2762E+00	6.9486E-01

LPZ Doses:

Time (h) = 4.1700	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.0740E-02	0.0000E+00	5.7796E-02	3.0740E-02
Accumulated dose (rem)	4.9031E-02	0.0000E+00	8.8444E-02	4.9031E-02

Control Room Doses:

Time (h) = 4.1700	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.6155E-01	0.0000E+00	2.1261E+01	3.6155E-01
Accumulated dose (rem)	4.2051E-01	0.0000E+00	2.4579E+01	4.2051E-01

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Rb-86	3.0438E+04	3.7408E-04	2.6195E+21	1.1262E+15
Sr-89	1.5891E+06	5.4698E-02	3.7011E+23	5.8796E+16
Sr-90	1.0848E+05	7.9527E-01	5.3214E+24	4.0138E+15
Sr-91	1.4390E+06	3.9696E-04	2.6270E+21	5.3242E+16
Sr-92	7.1502E+05	5.6885E-05	3.7236E+20	2.6456E+16
Y-90	4.5582E+03	8.3780E-06	5.6059E+19	1.6865E+14
Y-91	2.2048E+04	8.9902E-04	5.9495E+21	8.1576E+14
Y-92	4.7465E+05	4.9328E-05	3.2289E+20	1.7562E+16
Y-93	1.7717E+04	5.3102E-06	3.4386E+19	6.5551E+14
Zr-95	2.5674E+04	1.1951E-03	7.5758E+21	9.4994E+14
Zr-97	2.0883E+04	1.0924E-05	6.7821E+19	7.7268E+14
Nb-95	2.5886E+04	6.6200E-04	4.1965E+21	9.5779E+14
Mo-99	3.2298E+05	6.7341E-04	4.0963E+21	1.1950E+16
Tc-99m	2.9295E+05	5.5712E-05	3.3889E+20	1.0839E+16
Ru-103	2.6996E+05	8.3646E-03	4.8905E+22	9.9884E+15
Ru-105	9.3294E+04	1.3879E-05	7.9600E+19	3.4519E+15
Ru-106	8.0870E+04	2.4172E-02	1.3733E+23	2.9922E+15
Rh-105	1.6575E+05	1.9638E-04	1.1263E+21	6.1328E+15
Sb-127	3.7072E+05	1.3882E-03	6.5826E+21	1.3717E+16
Sb-129	5.8930E+05	1.0480E-04	4.8922E+20	2.1804E+16
Te-127	3.7332E+05	1.4146E-04	6.7076E+20	1.3813E+16
Te-127m	4.9978E+04	5.2984E-03	2.5124E+22	1.8492E+15
Te-129	7.2164E+05	3.4459E-05	1.6086E+20	2.6701E+16
Te-129m	1.6897E+05	5.6090E-03	2.6185E+22	6.2520E+15
Te-131m	4.7213E+05	5.9208E-04	2.7218E+21	1.7469E+16
Te-132	4.9557E+06	1.6324E-02	7.4472E+22	1.8336E+17
I-131	2.8499E+07	2.2988E-01	1.0568E+24	1.0545E+18
I-132	1.9357E+07	1.8753E-03	8.5555E+21	7.1621E+17
I-133	5.2447E+07	4.6298E-02	2.0964E+23	1.9405E+18
I-134	4.1522E+06	1.5565E-04	6.9951E+20	1.5363E+17
I-135	3.5755E+07	1.0181E-02	4.5417E+22	1.3229E+18
Xe-133	9.1542E+05	4.8905E-03	2.2144E+22	3.3871E+16
Xe-135	8.7914E+06	3.4426E-03	1.5357E+22	3.2528E+17
Cs-134	2.2986E+06	1.7766E+00	7.9842E+24	8.5048E+16
Cs-136	9.5837E+05	1.3076E-02	5.7902E+22	3.5460E+16
Cs-137	2.0370E+06	2.3418E+01	1.0294E+26	7.5368E+16
Ba-139	3.3052E+05	2.0207E-05	8.7546E+19	1.2229E+16
Ba-140	2.5788E+06	3.5226E-02	1.5152E+23	9.5416E+16
La-140	1.5584E+05	2.8037E-04	1.2060E+21	5.7659E+15
La-141	2.4245E+04	4.2870E-06	1.8310E+19	8.9705E+14
La-142	3.6785E+03	2.5697E-07	1.0898E+18	1.3611E+14
Ce-141	6.1963E+04	2.1746E-03	9.2880E+21	2.2926E+15
Ce-143	5.3722E+04	8.0896E-05	3.4068E+20	1.9877E+15
Ce-144	4.6986E+04	1.4732E-02	6.1608E+22	1.7385E+15
Pr-143	2.3022E+04	3.4189E-04	1.4398E+21	8.5183E+14
Nd-147	9.6792E+03	1.1965E-04	4.9015E+20	3.5813E+14
Np-239	6.8643E+05	2.9589E-03	7.4555E+21	2.5398E+16
Pu-238	4.8935E+01	2.8584E-03	7.2326E+21	1.8106E+12
Pu-239	1.5332E+01	2.4666E-01	6.2152E+23	5.6727E+11
Pu-240	1.5536E+01	6.8181E-02	1.7108E+23	5.7484E+11

Pu-241	4.6921E+03	4.5549E-02	1.1382E+23	1.7361E+14
Am-241	1.6798E+00	4.8942E-04	1.2230E+21	6.2151E+10
Cm-242	2.9771E+02	8.9827E-05	2.2353E+20	1.1015E+13
Cm-244	7.0591E+00	8.7255E-05	2.1535E+20	2.6119E+11
I-130	5.1302E+05	2.6304E-04	1.2185E+21	1.8982E+16
Kr-83m	1.2082E+06	5.8560E-05	4.2489E+20	4.4704E+16
Xe-131m	2.4012E+03	2.8667E-05	1.3179E+20	8.8845E+13
Xe-133m	6.4693E+04	1.4418E-04	6.5282E+20	2.3936E+15
Xe-135m	5.8792E+06	6.4541E-05	2.8791E+20	2.1753E+17
Cs-138	2.9152E+05	6.8893E-06	3.0064E+19	1.0786E+16
Cs-134m	2.7516E+05	3.4120E-05	1.5334E+20	1.0181E+16
Rb-88	1.5159E+04	1.2629E-07	8.6422E+17	5.6089E+14
Rb-89	2.5541E+02	1.8376E-09	1.2434E+16	9.4501E+12
Sb-124	3.2633E+03	1.8656E-04	9.0603E+20	1.2074E+14
Sb-125	4.6488E+04	4.5026E-02	2.1692E+23	1.7201E+15
Sb-126	3.5400E+03	4.2358E-05	2.0245E+20	1.3098E+14
Te-131	1.1105E+05	1.9341E-06	8.8914E+18	4.1087E+15
Te-133	2.1467E+04	1.8905E-07	8.5598E+17	7.9428E+14
Te-134	1.0089E+05	3.0055E-06	1.3507E+19	3.7331E+15
Te-125m	9.6416E+03	5.3533E-04	2.5791E+21	3.5674E+14
Te-133m	1.2386E+05	4.8537E-06	2.1977E+19	4.5828E+15
Ba-141	1.8484E+02	2.5324E-09	1.0816E+16	6.8392E+12
Ba-137m	2.2325E+06	4.1512E-06	1.8247E+19	8.2603E+16
Pd-109	3.9664E+04	1.8524E-05	1.0234E+20	1.4676E+15
Rh-106	1.3968E+05	3.9242E-08	2.2294E+17	5.1683E+15
Rh-103m	2.7012E+05	8.3039E-06	4.8551E+19	9.9943E+15
Tc-101	1.5210E+00	1.1602E-11	6.9175E+13	5.6277E+10
Eu-154	8.0543E+01	3.0532E-04	1.1940E+21	2.9801E+12
Eu-155	6.1806E+01	1.3292E-04	5.1641E+20	2.2868E+12
Eu-156	1.2818E+03	2.3262E-05	8.9801E+19	4.7428E+13
La-143	1.1804E-01	1.2774E-12	5.3796E+12	4.3673E+09
Nb-97	3.3229E+03	1.2360E-07	7.6733E+17	1.2295E+14
Nb-95m	1.8616E+02	4.8871E-07	3.0980E+18	6.8879E+12
Pm-147	2.4809E+03	2.6762E-03	1.0963E+22	9.1792E+13
Pm-148	3.7259E+03	2.2678E-05	9.2277E+19	1.3786E+14
Pm-149	7.4772E+03	1.8871E-05	7.6269E+19	2.7666E+14
Pm-151	2.5044E+03	3.4271E-06	1.3668E+19	9.2662E+13
Pm-148m	5.3666E+02	2.5122E-05	1.0222E+20	1.9856E+13
Pr-144	4.8083E+04	6.3632E-07	2.6611E+18	1.7791E+15
Pr-144m	8.8421E+02	4.8756E-09	2.0390E+16	3.2716E+13
Sm-153	4.6760E+03	1.0661E-05	4.1963E+19	1.7301E+14
Y-94	2.6731E+00	2.5524E-11	1.6352E+14	9.8904E+10
Y-95	2.2744E-03	1.2296E-14	7.7943E+10	8.4153E+07
Y-91m	8.2363E+05	1.9815E-05	1.3113E+20	3.0474E+16
Br-82	1.0172E+05	9.3955E-05	6.9001E+20	3.7636E+15
Br-83	1.1684E+06	7.3960E-05	5.3662E+20	4.3231E+16
Br-84	2.9734E+04	4.2241E-07	3.0283E+18	1.1001E+15
Am-242	5.6739E+02	7.0192E-07	1.7467E+18	2.0993E+13
Np-238	7.6990E+03	2.9708E-05	7.5170E+19	2.8486E+14
Pu-243	2.9292E+03	1.1257E-06	2.7897E+18	1.0838E+14

Containment Sump Transport Group Inventory:

Time (h) = 4.1700	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.8998E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3235E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6594E+01	0.0000E+00	0.0000E+00

Time (h) = 4.1700	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 4.1700	Ci	kg	Atoms	Bq

Rb-86	5.8550E+01	7.1958E-07	5.0388E+18	2.1664E+12
Sr-89	2.9250E+03	1.0068E-04	6.8125E+20	1.0822E+14
Sr-90	1.9966E+02	1.4637E-03	9.7940E+21	7.3874E+12
Sr-91	2.6484E+03	7.3061E-07	4.8350E+18	9.7993E+13
Sr-92	1.3160E+03	1.0470E-07	6.8533E+17	4.8692E+13
Y-90	8.4867E+00	1.5599E-08	1.0437E+17	3.1401E+11
Y-91	4.0651E+01	1.6576E-06	1.0969E+19	1.5041E+12
Y-92	8.8798E+02	9.2284E-08	6.0407E+17	3.2855E+13
Y-93	3.2607E+01	9.7734E-09	6.3287E+16	1.2065E+12
Zr-95	4.7253E+01	2.1996E-06	1.3943E+19	1.7484E+12
Zr-97	3.8436E+01	2.0106E-08	1.2482E+17	1.4221E+12
Nb-95	4.7643E+01	1.2184E-06	7.7236E+18	1.7628E+12
Mo-99	5.9444E+02	1.2394E-06	7.5393E+18	2.1994E+13
Tc-99m	5.3917E+02	1.0254E-07	6.2374E+17	1.9949E+13
Ru-103	4.9686E+02	1.5395E-05	9.0010E+19	1.8384E+13
Ru-105	1.7171E+02	2.5544E-08	1.4650E+17	6.3532E+12
Ru-106	1.4884E+02	4.4489E-05	2.5275E+20	5.5071E+12
Rh-105	3.0507E+02	3.6143E-07	2.0729E+18	1.1287E+13
Sb-127	6.8231E+02	2.5550E-06	1.2115E+19	2.5245E+13
Sb-129	1.0846E+03	1.9288E-07	9.0040E+17	4.0131E+13
Te-127	6.8709E+02	2.6035E-07	1.2345E+18	2.5422E+13
Te-127m	9.1984E+01	9.7517E-06	4.6241E+19	3.4034E+12
Te-129	1.3282E+03	6.3421E-08	2.9607E+17	4.9143E+13
Te-129m	3.1099E+02	1.0323E-05	4.8193E+19	1.1507E+13
Te-131m	8.6895E+02	1.0897E-06	5.0095E+18	3.2151E+13
Te-132	9.1210E+03	3.0044E-05	1.3707E+20	3.3748E+14
I-131	5.4225E+04	4.3738E-04	2.0107E+21	2.0063E+15
I-132	3.6102E+04	3.4975E-06	1.5957E+19	1.3358E+15
I-133	9.9746E+04	8.8052E-05	3.9869E+20	3.6906E+15
I-134	7.7385E+03	2.9008E-07	1.3037E+18	2.8632E+14
I-135	6.8036E+04	1.9373E-05	8.6421E+19	2.5173E+15
Cs-134	4.4215E+03	3.4174E-03	1.5358E+22	1.6360E+14
Cs-136	1.8435E+03	2.5153E-05	1.1138E+20	6.8210E+13
Cs-137	3.9183E+03	4.5048E-02	1.9802E+23	1.4498E+14
Ba-139	6.0833E+02	3.7191E-08	1.6113E+17	2.2508E+13
Ba-140	4.7463E+03	6.4833E-05	2.7888E+20	1.7561E+14
La-140	2.9045E+02	5.2255E-07	2.2478E+18	1.0747E+13
La-141	4.6486E+01	8.2199E-09	3.5107E+16	1.7200E+12
La-142	6.7703E+00	4.7295E-10	2.0058E+15	2.5050E+11
Ce-141	1.1405E+02	4.0026E-06	1.7095E+19	4.2198E+12
Ce-143	9.8872E+01	1.4888E-07	6.2700E+17	3.6583E+12
Ce-144	8.6478E+01	2.7113E-05	1.1339E+20	3.1997E+12
Pr-143	4.2379E+01	6.2934E-07	2.6503E+18	1.5680E+12
Nd-147	1.7815E+01	2.2021E-07	9.0213E+17	6.5914E+11
Np-239	1.2634E+03	5.4458E-06	1.3722E+19	4.6745E+13
Pu-238	9.0064E-02	5.2609E-06	1.3312E+19	3.3324E+09
Pu-239	2.8218E-02	4.5398E-04	1.1439E+21	1.0441E+09
Pu-240	2.8594E-02	1.2549E-04	3.1488E+20	1.0580E+09
Pu-241	8.6359E+00	8.3833E-05	2.0948E+20	3.1953E+11
Am-241	3.0916E-03	9.0079E-07	2.2509E+18	1.1439E+08
Cm-242	5.4794E-01	1.6533E-07	4.1141E+17	2.0274E+10
Cm-244	1.2992E-02	1.6059E-07	3.9636E+17	4.8072E+08
I-130	9.7618E+02	5.0052E-07	2.3186E+18	3.6118E+13
Cs-138	5.5327E+02	1.3075E-08	5.7059E+16	2.0471E+13
Cs-134m	5.2929E+02	6.5633E-08	2.9497E+17	1.9584E+13
Rb-88	2.5642E+01	2.1362E-10	1.4619E+15	9.4877E+11
Rb-89	4.9130E-01	3.5347E-12	2.3918E+13	1.8178E+10
Sb-124	6.0061E+00	3.4336E-07	1.6675E+18	2.2222E+11
Sb-125	8.5561E+01	8.2870E-05	3.9924E+20	3.1658E+12
Sb-126	6.5154E+00	7.7961E-08	3.7261E+17	2.4107E+11
Te-131	2.0438E+02	3.5598E-09	1.6365E+16	7.5620E+12
Te-133	3.9510E+01	3.4794E-10	1.5754E+15	1.4619E+12
Te-134	1.8569E+02	5.5317E-09	2.4860E+16	6.8707E+12
Te-125m	1.7745E+01	9.8528E-07	4.7468E+18	6.5658E+11
Te-133m	2.2796E+02	8.9332E-09	4.0449E+16	8.4347E+12
Ba-141	3.4020E-01	4.6610E-12	1.9907E+13	1.2588E+10
Ba-137m	4.2944E+03	7.9852E-09	3.5101E+16	1.5889E+14
Pd-109	7.3001E+01	3.4093E-08	1.8836E+17	2.7011E+12
Rh-106	2.5709E+02	7.2224E-11	4.1032E+14	9.5122E+12
Rh-103m	4.9715E+02	1.5283E-08	8.9357E+16	1.8394E+13

Tc-101	2.7994E-03	2.1353E-14	1.2732E+11	1.0358E+08
Eu-154	1.4824E-01	5.6195E-07	2.1975E+18	5.4848E+09
Eu-155	1.1375E-01	2.4463E-07	9.5045E+17	4.2089E+09
Eu-156	2.3592E+00	4.2814E-08	1.6528E+17	8.7291E+10
La-143	2.1725E-04	2.3511E-15	9.9011E+09	8.0381E+06
Nb-97	6.1158E+00	2.2748E-10	1.4123E+15	2.2629E+11
Nb-95m	3.4263E-01	8.9948E-10	5.7019E+15	1.2677E+10
Pm-147	4.5660E+00	4.9255E-06	2.0178E+19	1.6894E+11
Pm-148	6.8575E+00	4.1739E-08	1.6984E+17	2.5373E+11
Pm-149	1.3762E+01	3.4731E-08	1.4037E+17	5.0919E+11
Pm-151	4.6093E+00	6.3075E-09	2.5155E+16	1.7054E+11
Pm-148m	9.8772E-01	4.6237E-08	1.8814E+17	3.6546E+10
Pr-144	8.8503E+01	1.1712E-09	4.8981E+15	3.2746E+12
Pr-144m	1.6274E+00	8.9735E-12	3.7528E+13	6.0214E+10
Sm-153	8.6061E+00	1.9622E-08	7.7233E+16	3.1843E+11
Y-94	4.9198E-03	4.6977E-14	3.0096E+11	1.8203E+08
Y-95	4.1860E-06	2.2630E-17	1.4345E+08	1.5488E+05
Y-91m	1.5221E+03	3.6618E-08	2.4233E+17	5.6317E+13
Br-82	1.9355E+02	1.7878E-07	1.3130E+18	7.1615E+12
Br-83	2.2233E+03	1.4073E-07	1.0211E+18	8.2261E+13
Br-84	5.6578E+01	8.0376E-10	5.7624E+15	2.0934E+12
Am-242	1.0443E+00	1.2919E-09	3.2148E+15	3.8638E+10
Np-238	1.4170E+01	5.4678E-08	1.3835E+17	5.2429E+11
Pu-243	5.3911E+00	2.0718E-09	5.1344E+15	1.9947E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.5177E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.1040E-02

Environment Integral Nuclide Release:

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Xe-133	1.7779E+03	9.4984E-06	4.3008E+19	6.5784E+13
Xe-135	1.7092E+04	6.6928E-06	2.9856E+19	6.3239E+14
Kr-83m	2.3391E+03	1.1337E-07	8.2259E+17	8.6548E+13
Xe-131m	4.6616E+00	5.5653E-08	2.5584E+17	1.7248E+11
Xe-133m	1.2561E+02	2.7994E-07	1.2676E+18	4.6477E+12
Xe-135m	1.1166E+04	1.2258E-07	5.4679E+17	4.1313E+14

Environment Transport Group Inventory:

Time (h) = 4.1700	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	2.3892E+17	3.3184E+15	7.5757E+19
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Rb-86	5.8550E+01	7.1958E-07	5.0388E+18	2.1664E+12
Sr-89	2.9250E+03	1.0068E-04	6.8125E+20	1.0822E+14
Sr-90	1.9966E+02	1.4637E-03	9.7940E+21	7.3874E+12
Sr-91	2.6484E+03	7.3061E-07	4.8350E+18	9.7993E+13
Sr-92	1.3160E+03	1.0470E-07	6.8533E+17	4.8692E+13
Y-90	8.4867E+00	1.5599E-08	1.0437E+17	3.1401E+11
Y-91	4.0651E+01	1.6576E-06	1.0969E+19	1.5041E+12
Y-92	8.8798E+02	9.2284E-08	6.0407E+17	3.2855E+13
Y-93	3.2607E+01	9.7734E-09	6.3287E+16	1.2065E+12
Zr-95	4.7253E+01	2.1996E-06	1.3943E+19	1.7484E+12
Zr-97	3.8436E+01	2.0106E-08	1.2482E+17	1.4221E+12
Nb-95	4.7643E+01	1.2184E-06	7.7236E+18	1.7628E+12
Mo-99	5.9444E+02	1.2394E-06	7.5393E+18	2.1994E+13
Tc-99m	5.3917E+02	1.0254E-07	6.2374E+17	1.9949E+13

Ru-103	4.9686E+02	1.5395E-05	9.0010E+19	1.8384E+13
Ru-105	1.7171E+02	2.5544E-08	1.4650E+17	6.3532E+12
Ru-106	1.4884E+02	4.4489E-05	2.5275E+20	5.5071E+12
Rh-105	3.0507E+02	3.6143E-07	2.0729E+18	1.1287E+13
Sb-127	6.8231E+02	2.5550E-06	1.2115E+19	2.5245E+13
Sb-129	1.0846E+03	1.9288E-07	9.0040E+17	4.0131E+13
Te-127	6.8709E+02	2.6035E-07	1.2345E+18	2.5422E+13
Te-127m	9.1984E+01	9.7517E-06	4.6241E+19	3.4034E+12
Te-129	1.3282E+03	6.3421E-08	2.9607E+17	4.9143E+13
Te-129m	3.1099E+02	1.0323E-05	4.8193E+19	1.1507E+13
Te-131m	8.6895E+02	1.0897E-06	5.0095E+18	3.2151E+13
Te-132	9.1210E+03	3.0044E-05	1.3707E+20	3.3748E+14
I-131	5.4225E+04	4.3738E-04	2.0107E+21	2.0063E+15
I-132	3.6102E+04	3.4975E-06	1.5957E+19	1.3358E+15
I-133	9.9746E+04	8.8052E-05	3.9869E+20	3.6906E+15
I-134	7.7385E+03	2.9008E-07	1.3037E+18	2.8632E+14
I-135	6.8036E+04	1.9373E-05	8.6421E+19	2.5173E+15
Cs-134	4.4215E+03	3.4174E-03	1.5358E+22	1.6360E+14
Cs-136	1.8435E+03	2.5153E-05	1.1138E+20	6.8210E+13
Cs-137	3.9183E+03	4.5048E-02	1.9802E+23	1.4498E+14
Ba-139	6.0833E+02	3.7191E-08	1.6113E+17	2.2508E+13
Ba-140	4.7463E+03	6.4833E-05	2.7888E+20	1.7561E+14
La-140	2.9045E+02	5.2255E-07	2.2478E+18	1.0747E+13
La-141	4.6486E+01	8.2199E-09	3.5107E+16	1.7200E+12
La-142	6.7703E+00	4.7295E-10	2.0058E+15	2.5050E+11
Ce-141	1.1405E+02	4.0026E-06	1.7095E+19	4.2198E+12
Ce-143	9.8872E+01	1.4888E-07	6.2700E+17	3.6583E+12
Ce-144	8.6478E+01	2.7113E-05	1.1339E+20	3.1997E+12
Pr-143	4.2379E+01	6.2934E-07	2.6503E+18	1.5680E+12
Nd-147	1.7815E+01	2.2021E-07	9.0213E+17	6.5914E+11
Np-239	1.2634E+03	5.4458E-06	1.3722E+19	4.6745E+13
Pu-238	9.0064E-02	5.2609E-06	1.3312E+19	3.3324E+09
Pu-239	2.8218E-02	4.5398E-04	1.1439E+21	1.0441E+09
Pu-240	2.8594E-02	1.2549E-04	3.1488E+20	1.0580E+09
Pu-241	8.6359E+00	8.3833E-05	2.0948E+20	3.1953E+11
Am-241	3.0916E-03	9.0079E-07	2.2509E+18	1.1439E+08
Cm-242	5.4794E-01	1.6533E-07	4.1141E+17	2.0274E+10
Cm-244	1.2992E-02	1.6059E-07	3.9636E+17	4.8072E+08
I-130	9.7618E+02	5.0052E-07	2.3186E+18	3.6118E+13
Cs-138	5.5327E+02	1.3075E-08	5.7059E+16	2.0471E+13
Cs-134m	5.2929E+02	6.5633E-08	2.9497E+17	1.9584E+13
Rb-88	2.5642E+01	2.1362E-10	1.4619E+15	9.4877E+11
Rb-89	4.9130E-01	3.5347E-12	2.3918E+13	1.8178E+10
Sb-124	6.0061E+00	3.4336E-07	1.6675E+18	2.2222E+11
Sb-125	8.5561E+01	8.2870E-05	3.9924E+20	3.1658E+12
Sb-126	6.5154E+00	7.7961E-08	3.7261E+17	2.4107E+11
Te-131	2.0438E+02	3.5598E-09	1.6365E+16	7.5620E+12
Te-133	3.9510E+01	3.4794E-10	1.5754E+15	1.4619E+12
Te-134	1.8569E+02	5.5317E-09	2.4860E+16	6.8707E+12
Te-125m	1.7745E+01	9.8528E-07	4.7468E+18	6.5658E+11
Te-133m	2.2796E+02	8.9332E-09	4.0449E+16	8.4347E+12
Ba-141	3.4020E-01	4.6610E-12	1.9907E+13	1.2588E+10
Ba-137m	4.2944E+03	7.9852E-09	3.5101E+16	1.5889E+14
Pd-109	7.3001E+01	3.4093E-08	1.8836E+17	2.7011E+12
Rh-106	2.5709E+02	7.2224E-11	4.1032E+14	9.5122E+12
Rh-103m	4.9715E+02	1.5283E-08	8.9357E+16	1.8394E+13
Tc-101	2.7994E-03	2.1353E-14	1.2732E+11	1.0358E+08
Eu-154	1.4824E-01	5.6195E-07	2.1975E+18	5.4848E+09
Eu-155	1.1375E-01	2.4463E-07	9.5045E+17	4.2089E+09
Eu-156	2.3592E+00	4.2814E-08	1.6528E+17	8.7291E+10
La-143	2.1725E-04	2.3511E-15	9.9011E+09	8.0381E+06
Nb-97	6.1158E+00	2.2748E-10	1.4123E+15	2.2629E+11
Nb-95m	3.4263E-01	8.9948E-10	5.7019E+15	1.2677E+10
Pm-147	4.5660E+00	4.9255E-06	2.0178E+19	1.6894E+11
Pm-148	6.8575E+00	4.1739E-08	1.6984E+17	2.5373E+11
Pm-149	1.3762E+01	3.4731E-08	1.4037E+17	5.0919E+11
Pm-151	4.6093E+00	6.3075E-09	2.5155E+16	1.7054E+11
Pm-148m	9.8772E-01	4.6237E-08	1.8814E+17	3.6546E+10
Pr-144	8.8503E+01	1.1712E-09	4.8981E+15	3.2746E+12
Pr-144m	1.6274E+00	8.9735E-12	3.7528E+13	6.0214E+10

Sm-153	8.6061E+00	1.9622E-08	7.7233E+16	3.1843E+11
Y-94	4.9198E-03	4.6977E-14	3.0096E+11	1.8203E+08
Y-95	4.1860E-06	2.2630E-17	1.4345E+08	1.5488E+05
Y-91m	1.5221E+03	3.6618E-08	2.4233E+17	5.6317E+13
Br-82	1.9355E+02	1.7878E-07	1.3130E+18	7.1615E+12
Br-83	2.2233E+03	1.4073E-07	1.0211E+18	8.2261E+13
Br-84	5.6578E+01	8.0376E-10	5.7624E+15	2.0934E+12
Am-242	1.0443E+00	1.2919E-09	3.2148E+15	3.8638E+10
Np-238	1.4170E+01	5.4678E-08	1.3835E+17	5.2429E+11
Pu-243	5.3911E+00	2.0718E-09	5.1344E+15	1.9947E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.5177E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.1040E-02

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Xe-133	1.3889E+00	7.4201E-09	3.3598E+16	5.1390E+10
Xe-135	1.2954E+01	5.0725E-09	2.2627E+16	4.7929E+11
Kr-83m	1.9538E+00	9.4699E-11	6.8710E+14	7.2292E+10
Xe-131m	3.6971E-03	4.4139E-11	2.0291E+14	1.3679E+08
Xe-133m	9.8587E-02	2.1971E-10	9.9485E+14	3.6477E+09
Xe-135m	2.2124E+01	2.4288E-10	1.0834E+15	8.1859E+11

Control Room Transport Group Inventory:

Time (h) = 4.1700	Atmosphere	Sump	Overlying Pool

```
Noble gases (atoms)    5.9193E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                      Deposition Recirculating
Time (h) =   4.1700    Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                       Pathway
Time (h) =   4.1700     Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                       Pathway
Time (h) =   4.1700     Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                       Pathway
Time (h) =   4.1700     Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                       Pathway
Time (h) =   4.1700     Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    8.0000

EAB Doses:

Time (h) =   8.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.1411E+00  0.0000E+00  2.4507E+00  1.1411E+00
Accumulated dose (rem)  1.8359E+00  0.0000E+00  3.7269E+00  1.8359E+00

LPZ Doses:

Time (h) =   8.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        6.4145E-02  0.0000E+00  1.3777E-01  6.4145E-02
Accumulated dose (rem)  1.1318E-01  0.0000E+00  2.2621E-01  1.1318E-01

Control Room Doses:

Time (h) =   8.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.1524E+00  0.0000E+00  6.9564E+01  1.1524E+00
Accumulated dose (rem)  1.5729E+00  0.0000E+00  9.4143E+01  1.5729E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:
```

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	3.0187E+04	3.7100E-04	2.5979E+21	1.1169E+15
Sr-89	1.5819E+06	5.4450E-02	3.6843E+23	5.8530E+16
Sr-90	1.0823E+05	7.9340E-01	5.3088E+24	4.0043E+15
Sr-91	1.0856E+06	2.9948E-04	1.9819E+21	4.0168E+16
Sr-92	2.6783E+05	2.1308E-05	1.3948E+20	9.9096E+15
Y-90	8.7606E+03	1.6102E-05	1.0774E+20	3.2414E+14
Y-91	2.4398E+04	9.9486E-04	6.5837E+21	9.0272E+14
Y-92	4.4993E+05	4.6759E-05	3.0608E+20	1.6647E+16
Y-93	1.3590E+04	4.0732E-06	2.6376E+19	5.0282E+14
Zr-95	2.5570E+04	1.1902E-03	7.5450E+21	9.4607E+14
Zr-97	1.7806E+04	9.3141E-06	5.7826E+19	6.5881E+14
Nb-95	2.5825E+04	6.6043E-04	4.1865E+21	9.5551E+14
Mo-99	3.0952E+05	6.4535E-04	3.9256E+21	1.1452E+16
Tc-99m	2.8667E+05	5.4518E-05	3.3163E+20	1.0607E+16
Ru-103	2.6857E+05	8.3215E-03	4.8653E+22	9.9370E+15
Ru-105	5.1187E+04	7.6148E-06	4.3674E+19	1.8939E+15
Ru-106	8.0656E+04	2.4108E-02	1.3696E+23	2.9843E+15
Rh-105	1.5845E+05	1.8773E-04	1.0767E+21	5.8627E+15
Sb-127	3.5937E+05	1.3457E-03	6.3811E+21	1.3297E+16
Sb-129	3.1801E+05	5.6550E-05	2.6400E+20	1.1766E+16
Te-127	3.6668E+05	1.3894E-04	6.5884E+20	1.3567E+16
Te-127m	4.9875E+04	5.2875E-03	2.5073E+22	1.8454E+15
Te-129	4.4737E+05	2.1362E-05	9.9726E+19	1.6553E+16
Te-129m	1.6835E+05	5.5882E-03	2.6088E+22	6.2288E+15
Te-131m	4.3113E+05	5.4066E-04	2.4855E+21	1.5952E+16
Te-132	4.7791E+06	1.5742E-02	7.1817E+22	1.7683E+17
I-131	2.8050E+07	2.2626E-01	1.0401E+24	1.0379E+18
I-132	9.4167E+06	9.1228E-04	4.1620E+21	3.4842E+17
I-133	4.6060E+07	4.0660E-02	1.8410E+23	1.7042E+18
I-134	2.1081E+05	7.9025E-06	3.5515E+19	7.8001E+15
I-135	2.3872E+07	6.7976E-03	3.0323E+22	8.8328E+17
Xe-133	1.8916E+06	1.0106E-02	4.5757E+22	6.9989E+16
Xe-135	1.3970E+07	5.4704E-03	2.4403E+22	5.1689E+17
Cs-134	2.2929E+06	1.7722E+00	7.9644E+24	8.4837E+16
Cs-136	9.4808E+05	1.2936E-02	5.7281E+22	3.5079E+16
Cs-137	2.0322E+06	2.3363E+01	1.0270E+26	7.5191E+16
Ba-139	4.8051E+04	2.9377E-06	1.2727E+19	1.7779E+15
Ba-140	2.5505E+06	3.4839E-02	1.4986E+23	9.4370E+16
La-140	3.0899E+05	5.5591E-04	2.3913E+21	1.1433E+16
La-141	1.2317E+04	2.1779E-06	9.3020E+18	4.5573E+14
La-142	6.5584E+02	4.5815E-08	1.9430E+17	2.4266E+13
Ce-141	6.1668E+04	2.1643E-03	9.2437E+21	2.2817E+15
Ce-143	4.9453E+04	7.4468E-05	3.1361E+20	1.8298E+15
Ce-144	4.6858E+04	1.4691E-02	6.1439E+22	1.7337E+15
Pr-143	2.3200E+04	3.4453E-04	1.4509E+21	8.5841E+14
Nd-147	9.5597E+03	1.1817E-04	4.8410E+20	3.5371E+14
Np-239	6.5340E+05	2.8165E-03	7.0967E+21	2.4176E+16
Pu-238	4.8847E+01	2.8532E-03	7.2196E+21	1.8073E+12
Pu-239	1.5304E+01	2.4622E-01	6.2040E+23	5.6625E+11
Pu-240	1.5500E+01	6.8021E-02	1.7068E+23	5.7349E+11
Pu-241	4.6810E+03	4.5441E-02	1.1355E+23	1.7320E+14
Am-241	1.6791E+00	4.8923E-04	1.2225E+21	6.2127E+10
Cm-242	2.9710E+02	8.9643E-05	2.2308E+20	1.0993E+13
Cm-244	7.0425E+00	8.7049E-05	2.1484E+20	2.6057E+11
I-130	4.1289E+05	2.1170E-04	9.8068E+20	1.5277E+16
Kr-83m	7.5643E+05	3.6663E-05	2.6601E+20	2.7988E+16
Xe-131m	5.2738E+03	6.2963E-05	2.8944E+20	1.9513E+14
Xe-133m	1.3156E+05	2.9321E-04	1.3276E+21	4.8679E+15
Xe-135m	3.9287E+06	4.3129E-05	1.9239E+20	1.4536E+17
Cs-138	2.0668E+03	4.8844E-08	2.1315E+17	7.6472E+13
Cs-134m	1.0990E+05	1.3628E-05	6.1245E+19	4.0663E+15
Rb-88	1.9648E+00	1.6368E-11	1.1201E+14	7.2699E+10
Rb-89	7.1633E-03	5.1538E-14	3.4873E+11	2.6504E+08
Sb-124	3.2497E+03	1.8578E-04	9.0224E+20	1.2024E+14
Sb-125	4.6374E+04	4.4915E-02	2.1639E+23	1.7158E+15
Sb-126	3.5004E+03	4.1884E-05	2.0018E+20	1.2951E+14
Te-131	9.8687E+04	1.7189E-06	7.9019E+18	3.6514E+15
Te-133	1.2083E+03	1.0641E-08	4.8182E+16	4.4708E+13
Te-134	2.2279E+03	6.6368E-08	2.9827E+17	8.2433E+13

Te-125m	9.6208E+03	5.3418E-04	2.5735E+21	3.5597E+14
Te-133m	6.9700E+03	2.7313E-07	1.2367E+18	2.5789E+14
Ba-141	3.0160E-02	4.1320E-13	1.7648E+12	1.1159E+09
Ba-137m	2.2527E+06	4.1888E-06	1.8413E+19	8.3351E+16
Pd-109	3.2472E+04	1.5165E-05	8.3785E+19	1.2015E+15
Rh-106	1.6588E+05	4.6600E-08	2.6475E+17	6.1375E+15
Rh-103m	2.6994E+05	8.2985E-06	4.8519E+19	9.9879E+15
Tc-101	2.0394E-05	1.5556E-16	9.2753E+08	7.5460E+05
Eu-154	8.0351E+01	3.0460E-04	1.1911E+21	2.9730E+12
Eu-155	6.1658E+01	1.3260E-04	5.1517E+20	2.2813E+12
Eu-156	1.2695E+03	2.3039E-05	8.8940E+19	4.6973E+13
La-143	1.6206E-06	1.7538E-17	7.3858E+07	5.9961E+04
Nb-97	1.2545E+03	4.6661E-08	2.8969E+17	4.6416E+13
Nb-95m	1.8552E+02	4.8705E-07	3.0874E+18	6.8644E+12
Pm-147	2.4759E+03	2.6708E-03	1.0941E+22	9.1607E+13
Pm-148	3.6419E+03	2.2167E-05	9.0196E+19	1.3475E+14
Pm-149	7.0958E+03	1.7908E-05	7.2378E+19	2.6254E+14
Pm-151	2.2755E+03	3.1139E-06	1.2419E+19	8.4195E+13
Pm-148m	5.3397E+02	2.4996E-05	1.0171E+20	1.9757E+13
Pr-144	4.7996E+04	6.3516E-07	2.6563E+18	1.7758E+15
Pr-144m	8.8319E+02	4.8699E-09	2.0366E+16	3.2678E+13
Sm-153	4.4072E+03	1.0048E-05	3.9551E+19	1.6307E+14
Y-94	6.3706E-04	6.0830E-15	3.8971E+10	2.3571E+07
Y-91m	6.8935E+05	1.6584E-05	1.0975E+20	2.5506E+16
Br-82	9.4129E+04	8.6944E-05	6.3852E+20	3.4828E+15
Br-83	3.8386E+05	2.4298E-05	1.7630E+20	1.4203E+16
Br-84	1.9809E+02	2.8141E-09	2.0175E+16	7.3293E+12
Am-242	4.7962E+02	5.9333E-07	1.4765E+18	1.7746E+13
Np-238	7.2899E+03	2.8129E-05	7.1176E+19	2.6973E+14
Pu-243	1.7104E+03	6.5728E-07	1.6289E+18	6.3283E+13

Containment Sump Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.2236E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2605E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6530E+01	0.0000E+00	0.0000E+00

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	1.2915E+02	1.5873E-06	1.1115E+19	4.7787E+12
Sr-89	6.6366E+03	2.2844E-04	1.5457E+21	2.4555E+14
Sr-90	4.5402E+02	3.3284E-03	2.2271E+22	1.6799E+13
Sr-91	4.5543E+03	1.2564E-06	8.3143E+18	1.6851E+14
Sr-92	1.1236E+03	8.9390E-08	5.8513E+17	4.1572E+13
Y-90	3.6846E+01	6.7723E-08	4.5315E+17	1.3633E+12
Y-91	1.0243E+02	4.1767E-06	2.7640E+19	3.7898E+12
Y-92	1.8943E+03	1.9687E-07	1.2887E+18	7.0090E+13
Y-93	5.7011E+01	1.7088E-08	1.1065E+17	2.1094E+12
Zr-95	1.0727E+02	4.9932E-06	3.1652E+19	3.9689E+12
Zr-97	7.4697E+01	3.9074E-08	2.4259E+17	2.7638E+12
Nb-95	1.0834E+02	2.7706E-06	1.7563E+19	4.0085E+12
Mo-99	1.2985E+03	2.7073E-06	1.6469E+19	4.8044E+13
Tc-99m	1.2026E+03	2.2871E-07	1.3912E+18	4.4497E+13
Ru-103	1.1267E+03	3.4910E-05	2.0411E+20	4.1687E+13
Ru-105	2.1474E+02	3.1946E-08	1.8322E+17	7.9453E+12
Ru-106	3.3836E+02	1.0114E-04	5.7459E+20	1.2519E+13
Rh-105	6.6473E+02	7.8755E-07	4.5169E+18	2.4595E+13
Sb-127	1.5076E+03	5.6455E-06	2.6770E+19	5.5782E+13
Sb-129	1.3341E+03	2.3724E-07	1.1075E+18	4.9361E+13

Te-127	1.5383E+03	5.8289E-07	2.7640E+18	5.6917E+13
Te-127m	2.0923E+02	2.2182E-05	1.0518E+20	7.7416E+12
Te-129	1.8768E+03	8.9618E-08	4.1837E+17	6.9442E+13
Te-129m	7.0624E+02	2.3443E-05	1.0944E+20	2.6131E+13
Te-131m	1.8087E+03	2.2682E-06	1.0427E+19	6.6920E+13
Te-132	2.0049E+04	6.6039E-05	3.0129E+20	7.4181E+14
I-131	1.1942E+05	9.6328E-04	4.4283E+21	4.4186E+15
I-132	3.9655E+04	3.8417E-06	1.7527E+19	1.4672E+15
I-133	1.9606E+05	1.7307E-04	7.8366E+20	7.2542E+15
I-134	8.8906E+02	3.3327E-08	1.4978E+17	3.2895E+13
I-135	1.0164E+05	2.8942E-05	1.2911E+20	3.7607E+15
Cs-134	9.8100E+03	7.5821E-03	3.4075E+22	3.6297E+14
Cs-136	4.0563E+03	5.5346E-05	2.4507E+20	1.5008E+14
Cs-137	8.6946E+03	9.9959E-02	4.3939E+23	3.2170E+14
Ba-139	2.0158E+02	1.2324E-08	5.3393E+16	7.4586E+12
Ba-140	1.0700E+04	1.4616E-04	6.2869E+20	3.9590E+14
La-140	1.2997E+03	2.3383E-06	1.0058E+19	4.8088E+13
La-141	5.2620E+01	9.3045E-09	3.9740E+16	1.9470E+12
La-142	2.7514E+00	1.9220E-10	8.1511E+14	1.0180E+11
Ce-141	2.5871E+02	9.0798E-06	3.8780E+19	9.5724E+12
Ce-143	2.0746E+02	3.1240E-07	1.3156E+18	7.6760E+12
Ce-144	1.9658E+02	6.1632E-05	2.5775E+20	7.2733E+12
Pr-143	9.7335E+01	1.4454E-06	6.0872E+18	3.6014E+12
Nd-147	4.0104E+01	4.9574E-07	2.0309E+18	1.4839E+12
Np-239	2.7411E+03	1.1816E-05	2.9772E+19	1.0142E+14
Pu-238	2.0492E-01	1.1970E-05	3.0287E+19	7.5820E+09
Pu-239	6.4203E-02	1.0329E-03	2.6027E+21	2.3755E+09
Pu-240	6.5024E-02	2.8536E-04	7.1603E+20	2.4059E+09
Pu-241	1.9638E+01	1.9063E-04	4.7636E+20	7.2659E+11
Am-241	7.0442E-03	2.0524E-06	5.1285E+18	2.6063E+08
Cm-242	1.2464E+00	3.7607E-07	9.3584E+17	4.6117E+10
Cm-244	2.9544E-02	3.6518E-07	9.0131E+17	1.0931E+09
I-130	1.7579E+03	9.0134E-07	4.1754E+18	6.5043E+13
Cs-138	8.7895E+00	2.0772E-10	9.0646E+14	3.2521E+11
Cs-134m	4.7020E+02	5.8306E-08	2.6203E+17	1.7397E+13
Rb-88	7.9494E-03	6.6224E-14	4.5319E+11	2.9413E+08
Rb-89	3.0648E-05	2.2050E-16	1.4920E+09	1.1340E+06
Sb-124	1.3633E+01	7.7937E-07	3.7851E+18	5.0442E+11
Sb-125	1.9455E+02	1.8843E-04	9.0779E+20	7.1982E+12
Sb-126	1.4685E+01	1.7571E-07	8.3980E+17	5.4333E+11
Te-131	4.1401E+02	7.2111E-09	3.3150E+16	1.5318E+13
Te-133	5.0692E+00	4.4641E-11	2.0213E+14	1.8756E+11
Te-134	9.3465E+00	2.7842E-10	1.2513E+15	3.4582E+11
Te-125m	4.0361E+01	2.2410E-06	1.0796E+19	1.4933E+12
Te-133m	2.9240E+01	1.1458E-09	5.1882E+15	1.0819E+12
Ba-141	1.2653E-04	1.7335E-15	7.4036E+09	4.6815E+06
Ba-137m	9.6382E+03	1.7921E-08	7.8778E+16	3.5661E+14
Pd-109	1.3623E+02	6.3620E-08	3.5149E+17	5.0403E+12
Rh-106	6.9588E+02	1.9550E-10	1.1107E+15	2.5748E+13
Rh-103m	1.1324E+03	3.4814E-08	2.0355E+17	4.1901E+13
Tc-101	8.5558E-08	6.5260E-19	3.8911E+06	3.1657E+03
Eu-154	3.3709E-01	1.2778E-06	4.9969E+18	1.2472E+10
Eu-155	2.5866E-01	5.5626E-07	2.1612E+18	9.5705E+09
Eu-156	5.3260E+00	9.6654E-08	3.7312E+17	1.9706E+11
La-143	6.7986E-09	7.3576E-20	3.0985E+05	2.5155E+02
Nb-97	5.2628E+00	1.9575E-10	1.2153E+15	1.9472E+11
Nb-95m	7.7831E-01	2.0432E-09	1.2952E+16	2.8797E+10
Pm-147	1.0387E+01	1.1204E-05	4.5901E+19	3.8431E+11
Pm-148	1.5278E+01	9.2992E-08	3.7839E+17	5.6529E+11
Pm-149	2.9768E+01	7.5127E-08	3.0364E+17	1.1014E+12
Pm-151	9.5462E+00	1.3063E-08	5.2099E+16	3.5321E+11
Pm-148m	2.2401E+00	1.0486E-07	4.2668E+17	8.2883E+10
Pr-144	2.0135E+02	2.6646E-09	1.1144E+16	7.4499E+12
Pr-144m	3.7051E+00	2.0430E-11	8.5440E+13	1.3709E+11
Sm-153	1.8489E+01	4.2155E-08	1.6592E+17	6.8409E+11
Y-94	2.6726E-06	2.5519E-17	1.6349E+08	9.8885E+04
Y-91m	2.8922E+03	6.9580E-08	4.6046E+17	1.0701E+14
Br-82	4.0076E+02	3.7017E-07	2.7186E+18	1.4828E+13
Br-83	1.6343E+03	1.0345E-07	7.5061E+17	6.0470E+13
Br-84	8.4339E-01	1.1982E-11	8.5898E+13	3.1205E+10

Am-242	2.0121E+00	2.4891E-09	6.1942E+15	7.4446E+10
Np-238	3.0583E+01	1.1801E-07	2.9860E+17	1.1316E+12
Pu-243	7.1752E+00	2.7574E-09	6.8335E+15	2.6548E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	5.3663E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.1339E-01

Environment Integral Nuclide Release:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Xe-133	8.0864E+03	4.3201E-05	1.9561E+20	2.9920E+14
Xe-135	5.9738E+04	2.3393E-05	1.0435E+20	2.2103E+15
Kr-83m	3.2290E+03	1.5650E-07	1.1355E+18	1.1947E+14
Xe-131m	2.2540E+01	2.6910E-07	1.2371E+18	8.3398E+11
Xe-133m	5.6236E+02	1.2533E-06	5.6748E+18	2.0807E+13
Xe-135m	1.6695E+04	1.8328E-07	8.1756E+17	6.1772E+14

Environment Transport Group Inventory:

Time (h) = 8.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.8579E+17	1.2303E+16	3.0883E+20
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	1.2915E+02	1.5873E-06	1.1115E+19	4.7787E+12
Sr-89	6.6366E+03	2.2844E-04	1.5457E+21	2.4555E+14
Sr-90	4.5402E+02	3.3284E-03	2.2271E+22	1.6799E+13
Sr-91	4.5543E+03	1.2564E-06	8.3143E+18	1.6851E+14
Sr-92	1.1236E+03	8.9390E-08	5.8513E+17	4.1572E+13
Y-90	3.6846E+01	6.7723E-08	4.5315E+17	1.3633E+12
Y-91	1.0243E+02	4.1767E-06	2.7640E+19	3.7898E+12
Y-92	1.8943E+03	1.9687E-07	1.2887E+18	7.0090E+13
Y-93	5.7011E+01	1.7088E-08	1.1065E+17	2.1094E+12
Zr-95	1.0727E+02	4.9932E-06	3.1652E+19	3.9689E+12
Zr-97	7.4697E+01	3.9074E-08	2.4259E+17	2.7638E+12
Nb-95	1.0834E+02	2.7706E-06	1.7563E+19	4.0085E+12
Mo-99	1.2985E+03	2.7073E-06	1.6469E+19	4.8044E+13
Tc-99m	1.2026E+03	2.2871E-07	1.3912E+18	4.4497E+13
Ru-103	1.1267E+03	3.4910E-05	2.0411E+20	4.1687E+13
Ru-105	2.1474E+02	3.1946E-08	1.8322E+17	7.9453E+12
Ru-106	3.3836E+02	1.0114E-04	5.7459E+20	1.2519E+13
Rh-105	6.6473E+02	7.8755E-07	4.5169E+18	2.4595E+13
Sb-127	1.5076E+03	5.6455E-06	2.6770E+19	5.5782E+13
Sb-129	1.3341E+03	2.3724E-07	1.1075E+18	4.9361E+13
Te-127	1.5383E+03	5.8289E-07	2.7640E+18	5.6917E+13
Te-127m	2.0923E+02	2.2182E-05	1.0518E+20	7.7416E+12
Te-129	1.8768E+03	8.9618E-08	4.1837E+17	6.9442E+13
Te-129m	7.0624E+02	2.3443E-05	1.0944E+20	2.6131E+13
Te-131m	1.8087E+03	2.2682E-06	1.0427E+19	6.6920E+13
Te-132	2.0049E+04	6.6039E-05	3.0129E+20	7.4181E+14
I-131	1.1942E+05	9.6328E-04	4.4283E+21	4.4186E+15
I-132	3.9655E+04	3.8417E-06	1.7527E+19	1.4672E+15
I-133	1.9606E+05	1.7307E-04	7.8366E+20	7.2542E+15
I-134	8.8906E+02	3.3327E-08	1.4978E+17	3.2895E+13
I-135	1.0164E+05	2.8942E-05	1.2911E+20	3.7607E+15
Cs-134	9.8100E+03	7.5821E-03	3.4075E+22	3.6297E+14
Cs-136	4.0563E+03	5.5346E-05	2.4507E+20	1.5008E+14
Cs-137	8.6946E+03	9.9959E-02	4.3939E+23	3.2170E+14
Ba-139	2.0158E+02	1.2324E-08	5.3393E+16	7.4586E+12

Ba-140	1.0700E+04	1.4616E-04	6.2869E+20	3.9590E+14
La-140	1.2997E+03	2.3383E-06	1.0058E+19	4.8088E+13
La-141	5.2620E+01	9.3045E-09	3.9740E+16	1.9470E+12
La-142	2.7514E+00	1.9220E-10	8.1511E+14	1.0180E+11
Ce-141	2.5871E+02	9.0798E-06	3.8780E+19	9.5724E+12
Ce-143	2.0746E+02	3.1240E-07	1.3156E+18	7.6760E+12
Ce-144	1.9658E+02	6.1632E-05	2.5775E+20	7.2733E+12
Pr-143	9.7335E+01	1.4454E-06	6.0872E+18	3.6014E+12
Nd-147	4.0104E+01	4.9574E-07	2.0309E+18	1.4839E+12
Np-239	2.7411E+03	1.1816E-05	2.9772E+19	1.0142E+14
Pu-238	2.0492E-01	1.1970E-05	3.0287E+19	7.5820E+09
Pu-239	6.4203E-02	1.0329E-03	2.6027E+21	2.3755E+09
Pu-240	6.5024E-02	2.8536E-04	7.1603E+20	2.4059E+09
Pu-241	1.9638E+01	1.9063E-04	4.7636E+20	7.2659E+11
Am-241	7.0442E-03	2.0524E-06	5.1285E+18	2.6063E+08
Cm-242	1.2464E+00	3.7607E-07	9.3584E+17	4.6117E+10
Cm-244	2.9544E-02	3.6518E-07	9.0131E+17	1.0931E+09
I-130	1.7579E+03	9.0134E-07	4.1754E+18	6.5043E+13
Cs-138	8.7895E+00	2.0772E-10	9.0646E+14	3.2521E+11
Cs-134m	4.7020E+02	5.8306E-08	2.6203E+17	1.7397E+13
Rb-88	7.9494E-03	6.6224E-14	4.5319E+11	2.9413E+08
Rb-89	3.0648E-05	2.2050E-16	1.4920E+09	1.1340E+06
Sb-124	1.3633E+01	7.7937E-07	3.7851E+18	5.0442E+11
Sb-125	1.9455E+02	1.8843E-04	9.0779E+20	7.1982E+12
Sb-126	1.4685E+01	1.7571E-07	8.3980E+17	5.4333E+11
Te-131	4.1401E+02	7.2111E-09	3.3150E+16	1.5318E+13
Te-133	5.0692E+00	4.4641E-11	2.0213E+14	1.8756E+11
Te-134	9.3465E+00	2.7842E-10	1.2513E+15	3.4582E+11
Te-125m	4.0361E+01	2.2410E-06	1.0796E+19	1.4933E+12
Te-133m	2.9240E+01	1.1458E-09	5.1882E+15	1.0819E+12
Ba-141	1.2653E-04	1.7335E-15	7.4036E+09	4.6815E+06
Ba-137m	9.6382E+03	1.7921E-08	7.8778E+16	3.5661E+14
Pd-109	1.3623E+02	6.3620E-08	3.5149E+17	5.0403E+12
Rh-106	6.9588E+02	1.9550E-10	1.1107E+15	2.5748E+13
Rh-103m	1.1324E+03	3.4814E-08	2.0355E+17	4.1901E+13
Tc-101	8.5558E-08	6.5260E-19	3.8911E+06	3.1657E+03
Eu-154	3.3709E-01	1.2778E-06	4.9969E+18	1.2472E+10
Eu-155	2.5866E-01	5.5626E-07	2.1612E+18	9.5705E+09
Eu-156	5.3260E+00	9.6654E-08	3.7312E+17	1.9706E+11
La-143	6.7986E-09	7.3576E-20	3.0985E+05	2.5155E+02
Nb-97	5.2628E+00	1.9575E-10	1.2153E+15	1.9472E+11
Nb-95m	7.7831E-01	2.0432E-09	1.2952E+16	2.8797E+10
Pm-147	1.0387E+01	1.1204E-05	4.5901E+19	3.8431E+11
Pm-148	1.5278E+01	9.2992E-08	3.7839E+17	5.6529E+11
Pm-149	2.9768E+01	7.5127E-08	3.0364E+17	1.1014E+12
Pm-151	9.5462E+00	1.3063E-08	5.2099E+16	3.5321E+11
Pm-148m	2.2401E+00	1.0486E-07	4.2668E+17	8.2883E+10
Pr-144	2.0135E+02	2.6646E-09	1.1144E+16	7.4499E+12
Pr-144m	3.7051E+00	2.0430E-11	8.5440E+13	1.3709E+11
Sm-153	1.8489E+01	4.2155E-08	1.6592E+17	6.8409E+11
Y-94	2.6726E-06	2.5519E-17	1.6349E+08	9.8885E+04
Y-91m	2.8922E+03	6.9580E-08	4.6046E+17	1.0701E+14
Br-82	4.0076E+02	3.7017E-07	2.7186E+18	1.4828E+13
Br-83	1.6343E+03	1.0345E-07	7.5061E+17	6.0470E+13
Br-84	8.4339E-01	1.1982E-11	8.5898E+13	3.1205E+10
Am-242	2.0121E+00	2.4891E-09	6.1942E+15	7.4446E+10
Np-238	3.0583E+01	1.1801E-07	2.9860E+17	1.1316E+12
Pu-243	7.1752E+00	2.7574E-09	6.8335E+15	2.6548E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	5.3663E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.1339E-01

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Xe-133	3.0299E+00	1.6187E-08	7.3294E+16	1.1211E+11
Xe-135	2.1616E+01	8.4646E-09	3.7759E+16	7.9980E+11
Kr-83m	1.4422E+00	6.9903E-11	5.0718E+14	5.3363E+10
Xe-131m	8.7910E-03	1.0495E-10	4.8247E+14	3.2527E+08
Xe-133m	2.1325E-01	4.7526E-10	2.1519E+15	7.8903E+09
Xe-135m	3.2104E+01	3.5243E-10	1.5722E+15	1.1878E+12

Control Room Transport Group Inventory:

			Overlying
Time (h) = 8.0000	Atmosphere	Sump	Pool
Noble gases (atoms)	1.1577E+17	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

	Deposition	Recirculating
Time (h) = 8.0000	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 11.1100

EAB Doses:

Time (h) = 11.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	9.4804E-01	0.0000E+00	2.1895E+00	9.4804E-01
Accumulated dose (rem)	2.7840E+00	0.0000E+00	5.9164E+00	2.7840E+00

LPZ Doses:

Time (h) = 11.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.5881E-02	0.0000E+00	8.2869E-02	3.5881E-02
Accumulated dose (rem)	1.4906E-01	0.0000E+00	3.0908E-01	1.4906E-01

Control Room Doses:

Time (h) = 11.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.8356E-01	0.0000E+00	2.9878E+01	4.8356E-01
Accumulated dose (rem)	2.0565E+00	0.0000E+00	1.2402E+02	2.0565E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Rb-86	2.9985E+04	3.6851E-04	2.5805E+21	1.1094E+15
Sr-89	1.5761E+06	5.4250E-02	3.6708E+23	5.8315E+16
Sr-90	1.0802E+05	7.9188E-01	5.2987E+24	3.9967E+15
Sr-91	8.6357E+05	2.3823E-04	1.5765E+21	3.1952E+16
Sr-92	1.2066E+05	9.5995E-06	6.2837E+19	4.4644E+15
Y-90	1.2032E+04	2.2116E-05	1.4798E+20	4.4520E+14
Y-91	2.5882E+04	1.0554E-03	6.9841E+21	9.5762E+14
Y-92	3.2519E+05	3.3796E-05	2.2122E+20	1.2032E+16
Y-93	1.0957E+04	3.2841E-06	2.1266E+19	4.0540E+14
Zr-95	2.5485E+04	1.1863E-03	7.5200E+21	9.4295E+14
Zr-97	1.5643E+04	8.1831E-06	5.0804E+19	5.7881E+14
Nb-95	2.5775E+04	6.5915E-04	4.1784E+21	9.5367E+14
Mo-99	2.9900E+05	6.2342E-04	3.7922E+21	1.1063E+16
Tc-99m	2.8015E+05	5.3279E-05	3.2409E+20	1.0366E+16
Ru-103	2.6744E+05	8.2867E-03	4.8450E+22	9.8954E+15
Ru-105	3.1440E+04	4.6771E-06	2.6825E+19	1.1633E+15
Ru-106	8.0483E+04	2.4056E-02	1.3667E+23	2.9779E+15
Rh-105	1.5119E+05	1.7912E-04	1.0273E+21	5.5939E+15
Sb-127	3.5042E+05	1.3122E-03	6.2221E+21	1.2965E+16
Sb-129	1.9270E+05	3.4268E-05	1.5998E+20	7.1301E+15
Te-127	3.6081E+05	1.3672E-04	6.4829E+20	1.3350E+16

Te-127m	4.9790E+04	5.2785E-03	2.5030E+22	1.8422E+15
Te-129	3.1490E+05	1.5037E-05	7.0195E+19	1.1651E+16
Te-129m	1.6773E+05	5.5677E-03	2.5992E+22	6.2059E+15
Te-131m	4.0047E+05	5.0222E-04	2.3087E+21	1.4817E+16
Te-132	4.6403E+06	1.5285E-02	6.9732E+22	1.7169E+17
I-131	2.7690E+07	2.2336E-01	1.0268E+24	1.0245E+18
I-132	6.5460E+06	6.3417E-04	2.8932E+21	2.4220E+17
I-133	4.1446E+07	3.6587E-02	1.6566E+23	1.5335E+18
I-134	1.8344E+04	6.8765E-07	3.0904E+18	6.7873E+14
I-135	1.7196E+07	4.8966E-03	2.1843E+22	6.3626E+17
Xe-133	2.5785E+06	1.3775E-02	6.2373E+22	9.5403E+16
Xe-135	1.5295E+07	5.9893E-03	2.6717E+22	5.6591E+17
Cs-134	2.2883E+06	1.7686E+00	7.9483E+24	8.4665E+16
Cs-136	9.3981E+05	1.2823E-02	5.6781E+22	3.4773E+16
Cs-137	2.0283E+06	2.3319E+01	1.0250E+26	7.5047E+16
Ba-139	1.0038E+04	6.1368E-07	2.6588E+18	3.7141E+14
Ba-140	2.5278E+06	3.4528E-02	1.4853E+23	9.3528E+16
La-140	4.2456E+05	7.6384E-04	3.2857E+21	1.5709E+16
La-141	7.1032E+03	1.2560E-06	5.3645E+18	2.6282E+14
La-142	1.6170E+02	1.1296E-08	4.7904E+16	5.9828E+12
Ce-141	6.1406E+04	2.1551E-03	9.2045E+21	2.2720E+15
Ce-143	4.6237E+04	6.9626E-05	2.9322E+20	1.7108E+15
Ce-144	4.6754E+04	1.4659E-02	6.1303E+22	1.7299E+15
Pr-143	2.3319E+04	3.4629E-04	1.4583E+21	8.6279E+14
Nd-147	9.4638E+03	1.1698E-04	4.7924E+20	3.5016E+14
Np-239	6.2775E+05	2.7059E-03	6.8181E+21	2.3227E+16
Pu-238	4.8774E+01	2.8490E-03	7.2089E+21	1.8046E+12
Pu-239	1.5281E+01	2.4585E-01	6.1948E+23	5.6541E+11
Pu-240	1.5470E+01	6.7892E-02	1.7036E+23	5.7240E+11
Pu-241	4.6720E+03	4.5354E-02	1.1333E+23	1.7287E+14
Am-241	1.6786E+00	4.8907E-04	1.2221E+21	6.2107E+10
Cm-242	2.9658E+02	8.9485E-05	2.2268E+20	1.0973E+13
Cm-244	7.0290E+00	8.6882E-05	2.1443E+20	2.6007E+11
I-130	3.4614E+05	1.7748E-04	8.2216E+20	1.2807E+16
Kr-83m	3.9310E+05	1.9053E-05	1.3824E+20	1.4545E+16
Xe-131m	7.5482E+03	9.0116E-05	4.1427E+20	2.7928E+14
Xe-133m	1.7696E+05	3.9437E-04	1.7857E+21	6.5474E+15
Xe-135m	2.8291E+06	3.1057E-05	1.3854E+20	1.0467E+17
Cs-138	3.7153E+01	8.7802E-10	3.8316E+15	1.3747E+12
Cs-134m	5.2160E+04	6.4680E-06	2.9068E+19	1.9299E+15
Rb-88	1.3701E-03	1.1414E-14	7.8109E+10	5.0694E+07
Rb-89	1.4413E-06	1.0370E-17	7.0165E+07	5.3327E+04
Sb-124	3.2386E+03	1.8515E-04	8.9918E+20	1.1983E+14
Sb-125	4.6282E+04	4.4826E-02	2.1596E+23	1.7124E+15
Sb-126	3.4685E+03	4.1502E-05	1.9836E+20	1.2833E+14
Te-131	9.1653E+04	1.5964E-06	7.3386E+18	3.3912E+15
Te-133	1.1674E+02	1.0281E-09	4.6552E+15	4.3196E+12
Te-134	1.0075E+02	3.0012E-09	1.3488E+16	3.7277E+12
Te-125m	9.6039E+03	5.3324E-04	2.5690E+21	3.5535E+14
Te-133m	6.7370E+02	2.6400E-08	1.1954E+17	2.4927E+13
Ba-141	2.5354E-05	3.4736E-16	1.4836E+09	9.3809E+05
Ba-137m	2.2230E+06	4.1335E-06	1.8170E+19	8.2251E+16
Pd-109	2.7603E+04	1.2891E-05	7.1222E+19	1.0213E+15
Rh-106	1.3901E+05	3.9054E-08	2.2187E+17	5.1435E+15
Rh-103m	2.6887E+05	8.2657E-06	4.8327E+19	9.9483E+15
Tc-101	2.2537E-09	1.7190E-20	1.0250E+05	8.3387E+01
Eu-154	8.0196E+01	3.0401E-04	1.1888E+21	2.9672E+12
Eu-155	6.1537E+01	1.3234E-04	5.1416E+20	2.2769E+12
Eu-156	1.2597E+03	2.2860E-05	8.8247E+19	4.6607E+13
Nb-97	9.3634E+02	3.4827E-08	2.1622E+17	3.4644E+13
Nb-95m	1.8501E+02	4.8569E-07	3.0788E+18	6.8453E+12
Pm-147	2.4718E+03	2.6664E-03	1.0923E+22	9.1457E+13
Pm-148	3.5750E+03	2.1760E-05	8.8541E+19	1.3228E+14
Pm-149	6.8004E+03	1.7162E-05	6.9365E+19	2.5161E+14
Pm-151	2.1052E+03	2.8808E-06	1.1489E+19	7.7892E+13
Pm-148m	5.3179E+02	2.4894E-05	1.0129E+20	1.9676E+13
Pr-144	4.7876E+04	6.3358E-07	2.6497E+18	1.7714E+15
Pr-144m	8.7984E+02	4.8515E-09	2.0289E+16	3.2554E+13
Sm-153	4.2004E+03	9.5769E-06	3.7695E+19	1.5541E+14
Y-94	7.2845E-07	6.9556E-18	4.4561E+07	2.6953E+04

Y-91m	5.5112E+05	1.3259E-05	8.7744E+19	2.0391E+16
Br-82	8.8384E+04	8.1637E-05	5.9955E+20	3.2702E+15
Br-83	1.5546E+05	9.8408E-06	7.1401E+19	5.7521E+15
Br-84	3.3854E+00	4.8094E-11	3.4480E+14	1.2526E+11
Am-242	4.1843E+02	5.1764E-07	1.2882E+18	1.5482E+13
Np-238	6.9738E+03	2.6910E-05	6.8090E+19	2.5803E+14
Pu-243	1.1050E+03	4.2464E-07	1.0524E+18	4.0884E+13

Containment Sump Transport Group Inventory:

Time (h) = 11.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.1567E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2187E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6478E+01	0.0000E+00	0.0000E+00

Time (h) = 11.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Rb-86	1.8575E+02	2.2828E-06	1.5985E+19	6.8726E+12
Sr-89	9.6320E+03	3.3154E-04	2.2434E+21	3.5639E+14
Sr-90	6.6012E+02	4.8394E-03	3.2382E+22	2.4425E+13
Sr-91	5.2775E+03	1.4559E-06	9.6345E+18	1.9527E+14
Sr-92	7.3739E+02	5.8665E-08	3.8401E+17	2.7283E+13
Y-90	7.3623E+01	1.3532E-07	9.0547E+17	2.7241E+12
Y-91	1.5824E+02	6.4527E-06	4.2702E+19	5.8551E+12
Y-92	1.9910E+03	2.0692E-07	1.3544E+18	7.3668E+13
Y-93	6.6960E+01	2.0070E-08	1.2996E+17	2.4775E+12
Zr-95	1.5575E+02	7.2497E-06	4.5957E+19	5.7626E+12
Zr-97	9.5601E+01	5.0009E-08	3.1047E+17	3.5372E+12
Nb-95	1.5752E+02	4.0282E-06	2.5535E+19	5.8281E+12
Mo-99	1.8273E+03	3.8099E-06	2.3175E+19	6.7609E+13
Tc-99m	1.7121E+03	3.2560E-07	1.9806E+18	6.3347E+13
Ru-103	1.6344E+03	5.0642E-05	2.9609E+20	6.0473E+13
Ru-105	1.9213E+02	2.8583E-08	1.6393E+17	7.1090E+12
Ru-106	4.9185E+02	1.4701E-04	8.3523E+20	1.8198E+13
Rh-105	9.2393E+02	1.0946E-06	6.2781E+18	3.4185E+13
Sb-127	2.1415E+03	8.0190E-06	3.8025E+19	7.9235E+13
Sb-129	1.1777E+03	2.0942E-07	9.7765E+17	4.3574E+13
Te-127	2.2050E+03	8.3551E-07	3.9619E+18	8.1585E+13
Te-127m	3.0428E+02	3.2258E-05	1.5296E+20	1.1258E+13
Te-129	1.9244E+03	9.1892E-08	4.2898E+17	7.1204E+13
Te-129m	1.0250E+03	3.4025E-05	1.5884E+20	3.7926E+13
Te-131m	2.4474E+03	3.0692E-06	1.4109E+19	9.0553E+13
Te-132	2.8358E+04	9.3408E-05	4.2615E+20	1.0492E+15
I-131	1.7095E+05	1.3789E-03	6.3389E+21	6.3252E+15
I-132	4.0063E+04	3.8812E-06	1.7707E+19	1.4823E+15
I-133	2.5584E+05	2.2585E-04	1.0226E+21	9.4661E+15
I-134	1.1250E+02	4.2173E-09	1.8953E+16	4.1627E+12
I-135	1.0617E+05	3.0231E-05	1.3486E+20	3.9282E+15
Cs-134	1.4175E+04	1.0956E-02	4.9237E+22	5.2448E+14
Cs-136	5.8219E+03	7.9435E-05	3.5174E+20	2.1541E+14
Cs-137	1.2565E+04	1.4445E-01	6.3497E+23	4.6489E+14
Ba-139	6.1345E+01	3.7504E-09	1.6248E+16	2.2698E+12
Ba-140	1.5448E+04	2.1101E-04	9.0767E+20	5.7157E+14
La-140	2.5978E+03	4.6738E-06	2.0105E+19	9.6120E+13
La-141	4.3958E+01	7.7728E-09	3.3198E+16	1.6264E+12
La-142	9.8817E-01	6.9030E-11	2.9275E+14	3.6562E+10
Ce-141	3.7528E+02	1.3171E-05	5.6253E+19	1.3885E+13
Ce-143	2.8257E+02	4.2550E-07	1.7919E+18	1.0455E+13
Ce-144	2.8572E+02	8.9583E-05	3.7464E+20	1.0572E+13
Pr-143	1.4251E+02	2.1163E-06	8.9125E+18	5.2729E+12

Nd-147	5.7835E+01	7.1491E-07	2.9288E+18	2.1399E+12
Np-239	3.8363E+03	1.6536E-05	4.1667E+19	1.4194E+14
Pu-238	2.9807E-01	1.7411E-05	4.4055E+19	1.1029E+10
Pu-239	9.3388E-02	1.5025E-03	3.7858E+21	3.4554E+09
Pu-240	9.4543E-02	4.1490E-04	1.0411E+21	3.4981E+09
Pu-241	2.8552E+01	2.7717E-04	6.9259E+20	1.0564E+12
Am-241	1.0258E-02	2.9888E-06	7.4685E+18	3.7955E+08
Cm-242	1.8125E+00	5.4686E-07	1.3609E+18	6.7061E+10
Cm-244	4.2956E-02	5.3096E-07	1.3104E+18	1.5894E+09
I-130	2.1370E+03	1.0957E-06	5.0759E+18	7.9070E+13
Cs-138	2.2919E-01	5.4164E-12	2.3637E+13	8.4801E+09
Cs-134m	3.2311E+02	4.0067E-08	1.8007E+17	1.1955E+13
Rb-88	8.1681E-06	6.8046E-17	4.6566E+08	3.0222E+05
Rb-89	8.9283E-09	6.4236E-20	4.3465E+05	3.3035E+02
Sb-124	1.9792E+01	1.1315E-06	5.4951E+18	7.3231E+11
Sb-125	2.8284E+02	2.7394E-04	1.3198E+21	1.0465E+13
Sb-126	2.1197E+01	2.5363E-07	1.2122E+18	7.8428E+11
Te-131	5.6011E+02	9.7558E-09	4.4848E+16	2.0724E+13
Te-133	7.1346E-01	6.2830E-12	2.8449E+13	2.6398E+10
Te-134	6.1570E-01	1.8341E-11	8.2428E+13	2.2781E+10
Te-125m	5.8692E+01	3.2588E-06	1.5700E+19	2.1716E+12
Te-133m	4.1172E+00	1.6134E-10	7.3052E+14	1.5233E+11
Ba-141	1.5494E-07	2.1228E-18	9.0665E+06	5.7329E+03
Ba-137m	1.3771E+04	2.5606E-08	1.1256E+17	5.0952E+14
Pd-109	1.6869E+02	7.8780E-08	4.3525E+17	6.2415E+12
Rh-106	8.4955E+02	2.3867E-10	1.3559E+15	3.1433E+13
Rh-103m	1.6432E+03	5.0514E-08	2.9534E+17	6.0797E+13
Eu-154	4.9010E-01	1.8579E-06	7.2652E+18	1.8134E+10
Eu-155	3.7607E-01	8.0874E-07	3.1422E+18	1.3915E+10
Eu-156	7.6981E+00	1.3970E-07	5.3930E+17	2.8483E+11
Nb-97	5.7222E+00	2.1284E-10	1.3214E+15	2.1172E+11
Nb-95m	1.1306E+00	2.9682E-09	1.8816E+16	4.1833E+10
Pm-147	1.5106E+01	1.6295E-05	6.6756E+19	5.5891E+11
Pm-148	2.1848E+01	1.3298E-07	5.4110E+17	8.0837E+11
Pm-149	4.1559E+01	1.0488E-07	4.2391E+17	1.5377E+12
Pm-151	1.2865E+01	1.7605E-08	7.0213E+16	4.7602E+11
Pm-148m	3.2499E+00	1.5213E-07	6.1903E+17	1.2025E+11
Pr-144	2.9258E+02	3.8720E-09	1.6193E+16	1.0826E+13
Pr-144m	5.3769E+00	2.9649E-11	1.2399E+14	1.9895E+11
Sm-153	2.5670E+01	5.8527E-08	2.3036E+17	9.4977E+11
Y-94	4.4517E-09	4.2507E-20	2.7233E+05	1.6471E+02
Y-91m	3.3680E+03	8.1029E-08	5.3623E+17	1.2462E+14
Br-82	5.4567E+02	5.0402E-07	3.7015E+18	2.0190E+13
Br-83	9.5980E+02	6.0755E-08	4.4081E+17	3.5513E+13
Br-84	2.0901E-02	2.9693E-13	2.1287E+12	7.7334E+08
Am-242	2.5571E+00	3.1635E-09	7.8722E+15	9.4614E+10
Np-238	4.2619E+01	1.6445E-07	4.1611E+17	1.5769E+12
Pu-243	6.7528E+00	2.5951E-09	6.4313E+15	2.4985E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.5234E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.6391E-01

Environment Integral Nuclide Release:

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Xe-133	1.5952E+04	8.5221E-05	3.8588E+20	5.9022E+14
Xe-135	9.4641E+04	3.7060E-05	1.6532E+20	3.5017E+15
Kr-83m	2.4297E+03	1.1776E-07	8.5443E+17	8.9897E+13
Xe-131m	4.6690E+01	5.5742E-07	2.5625E+18	1.7275E+12
Xe-133m	1.0947E+03	2.4396E-06	1.1046E+19	4.0503E+13
Xe-135m	1.7453E+04	1.9160E-07	8.5470E+17	6.4578E+14

Environment Transport Group Inventory:

Time (h) = 11.1100	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	5.6140E+17	7.7972E+15	5.6651E+20
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Rb-86	1.8575E+02	2.2828E-06	1.5985E+19	6.8726E+12
Sr-89	9.6320E+03	3.3154E-04	2.2434E+21	3.5639E+14
Sr-90	6.6012E+02	4.8394E-03	3.2382E+22	2.4425E+13
Sr-91	5.2775E+03	1.4559E-06	9.6345E+18	1.9527E+14
Sr-92	7.3739E+02	5.8665E-08	3.8401E+17	2.7283E+13
Y-90	7.3623E+01	1.3532E-07	9.0547E+17	2.7241E+12
Y-91	1.5824E+02	6.4527E-06	4.2702E+19	5.8551E+12
Y-92	1.9910E+03	2.0692E-07	1.3544E+18	7.3668E+13
Y-93	6.6960E+01	2.0070E-08	1.2996E+17	2.4775E+12
Zr-95	1.5575E+02	7.2497E-06	4.5957E+19	5.7626E+12
Zr-97	9.5601E+01	5.0009E-08	3.1047E+17	3.5372E+12
Nb-95	1.5752E+02	4.0282E-06	2.5535E+19	5.8281E+12
Mo-99	1.8273E+03	3.8099E-06	2.3175E+19	6.7609E+13
Tc-99m	1.7121E+03	3.2560E-07	1.9806E+18	6.3347E+13
Ru-103	1.6344E+03	5.0642E-05	2.9609E+20	6.0473E+13
Ru-105	1.9213E+02	2.8583E-08	1.6393E+17	7.1090E+12
Ru-106	4.9185E+02	1.4701E-04	8.3523E+20	1.8198E+13
Rh-105	9.2393E+02	1.0946E-06	6.2781E+18	3.4185E+13
Sb-127	2.1415E+03	8.0190E-06	3.8025E+19	7.9235E+13
Sb-129	1.1777E+03	2.0942E-07	9.7765E+17	4.3574E+13
Te-127	2.2050E+03	8.3551E-07	3.9619E+18	8.1585E+13
Te-127m	3.0428E+02	3.2258E-05	1.5296E+20	1.1258E+13
Te-129	1.9244E+03	9.1892E-08	4.2898E+17	7.1204E+13
Te-129m	1.0250E+03	3.4025E-05	1.5884E+20	3.7926E+13
Te-131m	2.4474E+03	3.0692E-06	1.4109E+19	9.0553E+13
Te-132	2.8358E+04	9.3408E-05	4.2615E+20	1.0492E+15
I-131	1.7095E+05	1.3789E-03	6.3389E+21	6.3252E+15
I-132	4.0063E+04	3.8812E-06	1.7707E+19	1.4823E+15
I-133	2.5584E+05	2.2585E-04	1.0226E+21	9.4661E+15
I-134	1.1250E+02	4.2173E-09	1.8953E+16	4.1627E+12
I-135	1.0617E+05	3.0231E-05	1.3486E+20	3.9282E+15
Cs-134	1.4175E+04	1.0956E-02	4.9237E+22	5.2448E+14
Cs-136	5.8219E+03	7.9435E-05	3.5174E+20	2.1541E+14
Cs-137	1.2565E+04	1.4445E-01	6.3497E+23	4.6489E+14
Ba-139	6.1345E+01	3.7504E-09	1.6248E+16	2.2698E+12
Ba-140	1.5448E+04	2.1101E-04	9.0767E+20	5.7157E+14
La-140	2.5978E+03	4.6738E-06	2.0105E+19	9.6120E+13
La-141	4.3958E+01	7.7728E-09	3.3198E+16	1.6264E+12
La-142	9.8817E-01	6.9030E-11	2.9275E+14	3.6562E+10
Ce-141	3.7528E+02	1.3171E-05	5.6253E+19	1.3885E+13
Ce-143	2.8257E+02	4.2550E-07	1.7919E+18	1.0455E+13
Ce-144	2.8572E+02	8.9583E-05	3.7464E+20	1.0572E+13
Pr-143	1.4251E+02	2.1163E-06	8.9125E+18	5.2729E+12
Nd-147	5.7835E+01	7.1491E-07	2.9288E+18	2.1399E+12
Np-239	3.8363E+03	1.6536E-05	4.1667E+19	1.4194E+14
Pu-238	2.9807E-01	1.7411E-05	4.4055E+19	1.1029E+10
Pu-239	9.3388E-02	1.5025E-03	3.7858E+21	3.4554E+09
Pu-240	9.4543E-02	4.1490E-04	1.0411E+21	3.4981E+09
Pu-241	2.8552E+01	2.7717E-04	6.9259E+20	1.0564E+12
Am-241	1.0258E-02	2.9888E-06	7.4685E+18	3.7955E+08
Cm-242	1.8125E+00	5.4686E-07	1.3609E+18	6.7061E+10
Cm-244	4.2956E-02	5.3096E-07	1.3104E+18	1.5894E+09
I-130	2.1370E+03	1.0957E-06	5.0759E+18	7.9070E+13
Cs-138	2.2919E-01	5.4164E-12	2.3637E+13	8.4801E+09
Cs-134m	3.2311E+02	4.0067E-08	1.8007E+17	1.1955E+13
Rb-88	8.1681E-06	6.8046E-17	4.6566E+08	3.0222E+05
Rb-89	8.9283E-09	6.4236E-20	4.3465E+05	3.3035E+02
Sb-124	1.9792E+01	1.1315E-06	5.4951E+18	7.3231E+11
Sb-125	2.8284E+02	2.7394E-04	1.3198E+21	1.0465E+13
Sb-126	2.1197E+01	2.5363E-07	1.2122E+18	7.8428E+11

Te-131	5.6011E+02	9.7558E-09	4.4848E+16	2.0724E+13
Te-133	7.1346E-01	6.2830E-12	2.8449E+13	2.6398E+10
Te-134	6.1570E-01	1.8341E-11	8.2428E+13	2.2781E+10
Te-125m	5.8692E+01	3.2588E-06	1.5700E+19	2.1716E+12
Te-133m	4.1172E+00	1.6134E-10	7.3052E+14	1.5233E+11
Ba-141	1.5494E-07	2.1228E-18	9.0665E+06	5.7329E+03
Ba-137m	1.3771E+04	2.5606E-08	1.1256E+17	5.0952E+14
Pd-109	1.6869E+02	7.8780E-08	4.3525E+17	6.2415E+12
Rh-106	8.4955E+02	2.3867E-10	1.3559E+15	3.1433E+13
Rh-103m	1.6432E+03	5.0514E-08	2.9534E+17	6.0797E+13
Eu-154	4.9010E-01	1.8579E-06	7.2652E+18	1.8134E+10
Eu-155	3.7607E-01	8.0874E-07	3.1422E+18	1.3915E+10
Eu-156	7.6981E+00	1.3970E-07	5.3930E+17	2.8483E+11
Nb-97	5.7222E+00	2.1284E-10	1.3214E+15	2.1172E+11
Nb-95m	1.1306E+00	2.9682E-09	1.8816E+16	4.1833E+10
Pm-147	1.5106E+01	1.6295E-05	6.6756E+19	5.5891E+11
Pm-148	2.1848E+01	1.3298E-07	5.4110E+17	8.0837E+11
Pm-149	4.1559E+01	1.0488E-07	4.2391E+17	1.5377E+12
Pm-151	1.2865E+01	1.7605E-08	7.0213E+16	4.7602E+11
Pm-148m	3.2499E+00	1.5213E-07	6.1903E+17	1.2025E+11
Pr-144	2.9258E+02	3.8720E-09	1.6193E+16	1.0826E+13
Pr-144m	5.3769E+00	2.9649E-11	1.2399E+14	1.9895E+11
Sm-153	2.5670E+01	5.8527E-08	2.3036E+17	9.4977E+11
Y-94	4.4517E-09	4.2507E-20	2.7233E+05	1.6471E+02
Y-91m	3.3680E+03	8.1029E-08	5.3623E+17	1.2462E+14
Br-82	5.4567E+02	5.0402E-07	3.7015E+18	2.0190E+13
Br-83	9.5980E+02	6.0755E-08	4.4081E+17	3.5513E+13
Br-84	2.0901E-02	2.9693E-13	2.1287E+12	7.7334E+08
Am-242	2.5571E+00	3.1635E-09	7.8722E+15	9.4614E+10
Np-238	4.2619E+01	1.6445E-07	4.1611E+17	1.5769E+12
Pu-243	6.7528E+00	2.5951E-09	6.4313E+15	2.4985E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.5234E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.6391E-01

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Xe-133	1.5696E+00	8.3854E-09	3.7969E+16	5.8075E+10
Xe-135	8.9858E+00	3.5187E-09	1.5696E+16	3.3248E+11
Kr-83m	3.1222E-01	1.5133E-11	1.0980E+14	1.1552E+10
Xe-131m	4.8818E-03	5.8283E-11	2.6793E+14	1.8063E+08
Xe-133m	1.0967E-01	2.4441E-10	1.1067E+15	4.0578E+09
Xe-135m	1.2650E+01	1.3887E-10	6.1948E+14	4.6805E+11

Control Room Transport Group Inventory:

Time (h) = 11.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.5769E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 11.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 22.2200

EAB Doses:

Time (h) = 22.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.8413E+00	0.0000E+00	6.9626E+00	2.8413E+00
Accumulated dose (rem)	5.6253E+00	0.0000E+00	1.2879E+01	5.6253E+00

LPZ Doses:

Time (h) = 22.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.0754E-01	0.0000E+00	2.6352E-01	1.0754E-01
Accumulated dose (rem)	2.5659E-01	0.0000E+00	5.7260E-01	2.5659E-01

Control Room Doses:

Time (h) = 22.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.3475E+00	0.0000E+00	8.3642E+01	1.3475E+00
Accumulated dose (rem)	3.4040E+00	0.0000E+00	2.0766E+02	3.4040E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Rb-86	2.9274E+04	3.5977E-04	2.5193E+21	1.0831E+15
Sr-89	1.5555E+06	5.3540E-02	3.6228E+23	5.7552E+16
Sr-90	1.0728E+05	7.8648E-01	5.2626E+24	3.9694E+15
Sr-91	3.8132E+05	1.0519E-04	6.9614E+20	1.4109E+16
Sr-92	6.9903E+03	5.5614E-07	3.6404E+18	2.5864E+14
Y-90	2.2760E+04	4.1833E-05	2.7992E+20	8.4211E+14
Y-91	2.8957E+04	1.1808E-03	7.8140E+21	1.0714E+15
Y-92	5.8335E+04	6.0625E-06	3.9684E+19	2.1584E+15
Y-93	5.0769E+03	1.5217E-06	9.8536E+18	1.8784E+14
Zr-95	2.5185E+04	1.1723E-03	7.4316E+21	9.3186E+14
Zr-97	9.8510E+03	5.1531E-06	3.1992E+19	3.6449E+14
Nb-95	2.5597E+04	6.5460E-04	4.1495E+21	9.4708E+14
Mo-99	2.6427E+05	5.5100E-04	3.3517E+21	9.7778E+15
Tc-99m	2.5271E+05	4.8059E-05	2.9234E+20	9.3501E+15
Ru-103	2.6347E+05	8.1635E-03	4.7730E+22	9.7483E+15
Ru-105	5.5115E+03	8.1991E-07	4.7025E+18	2.0392E+14
Ru-106	7.9867E+04	2.3872E-02	1.3562E+23	2.9551E+15
Rh-105	1.2359E+05	1.4642E-04	8.3979E+20	4.5728E+15
Sb-127	3.2021E+05	1.1991E-03	5.6857E+21	1.1848E+16
Sb-129	3.2193E+04	5.7248E-06	2.6725E+19	1.1911E+15
Te-127	3.3803E+05	1.2808E-04	6.0735E+20	1.2507E+16
Te-127m	4.9480E+04	5.2456E-03	2.4874E+22	1.8308E+15
Te-129	1.4248E+05	6.8034E-06	3.1761E+19	5.2717E+15
Te-129m	1.6520E+05	5.4837E-03	2.5599E+22	6.1123E+15
Te-131m	3.0770E+05	3.8588E-04	1.7739E+21	1.1385E+16
Te-132	4.1766E+06	1.3757E-02	6.2763E+22	1.5453E+17
I-131	2.6440E+07	2.1327E-01	9.8042E+23	9.7829E+17
I-132	4.3772E+06	4.2406E-04	1.9347E+21	1.6196E+17
I-133	2.8427E+07	2.5095E-02	1.1363E+23	1.0518E+18
I-134	2.8435E+00	1.0659E-10	4.7903E+14	1.0521E+11
I-135	5.3273E+06	1.5170E-03	6.7669E+21	1.9711E+17
Xe-133	4.4019E+06	2.3517E-02	1.0648E+23	1.6287E+17
Xe-135	1.1862E+07	4.6450E-03	2.0720E+22	4.3889E+17
Cs-134	2.2718E+06	1.7558E+00	7.8910E+24	8.4055E+16
Cs-136	9.1085E+05	1.2428E-02	5.5031E+22	3.3701E+16
Cs-137	2.0145E+06	2.3160E+01	1.0180E+26	7.4535E+16
Ba-139	3.7347E+01	2.2832E-09	9.8920E+15	1.3818E+12
Ba-140	2.4482E+06	3.3441E-02	1.4385E+23	9.0583E+16
La-140	7.7971E+05	1.4028E-03	6.0341E+21	2.8849E+16
La-141	9.9425E+02	1.7581E-07	7.5087E+17	3.6787E+13
La-142	1.0874E+00	7.5960E-11	3.2214E+14	4.0233E+10
Ce-141	6.0421E+04	2.1205E-03	9.0568E+21	2.2356E+15
Ce-143	3.6366E+04	5.4761E-05	2.3061E+20	1.3455E+15
Ce-144	4.6384E+04	1.4543E-02	6.0818E+22	1.7162E+15
Pr-143	2.3576E+04	3.5011E-04	1.4744E+21	8.7232E+14
Nd-147	9.1288E+03	1.1284E-04	4.6228E+20	3.3777E+14
Np-239	5.4407E+05	2.3452E-03	5.9093E+21	2.0131E+16
Pu-238	4.8510E+01	2.8336E-03	7.1699E+21	1.7949E+12

Pu-239	1.5199E+01	2.4453E-01	6.1614E+23	5.6236E+11
Pu-240	1.5365E+01	6.7431E-02	1.6920E+23	5.6852E+11
Pu-241	4.6400E+03	4.5043E-02	1.1255E+23	1.7168E+14
Am-241	1.6766E+00	4.8850E-04	1.2207E+21	6.2034E+10
Cm-242	2.9452E+02	8.8865E-05	2.2114E+20	1.0897E+13
Cm-244	6.9809E+00	8.6288E-05	2.1297E+20	2.5829E+11
I-130	1.8438E+05	9.4538E-05	4.3794E+20	6.8221E+15
Kr-83m	2.2342E+04	1.0829E-06	7.8569E+18	8.2666E+14
Xe-131m	1.5261E+04	1.8219E-04	8.3755E+20	5.6465E+14
Xe-133m	2.8728E+05	6.4024E-04	2.8990E+21	1.0629E+16
Xe-135m	8.7673E+05	9.6247E-06	4.2934E+19	3.2439E+16
Cs-138	2.1635E-05	5.1129E-16	2.2312E+09	8.0049E+05
Cs-134m	3.6402E+03	4.5139E-07	2.0286E+18	1.3469E+14
Sb-124	3.1996E+03	1.8291E-04	8.8833E+20	1.1838E+14
Sb-125	4.5953E+04	4.4507E-02	2.1442E+23	1.7003E+15
Sb-126	3.3570E+03	4.0168E-05	1.9198E+20	1.2421E+14
Te-131	7.0431E+04	1.2267E-06	5.6394E+18	2.6060E+15
Te-133	2.7690E-02	2.4385E-13	1.1041E+12	1.0245E+09
Te-134	1.5836E-03	4.7174E-14	2.1201E+11	5.8593E+07
Te-125m	9.5439E+03	5.2991E-04	2.5530E+21	3.5313E+14
Te-133m	1.5972E-01	6.2590E-12	2.8340E+13	5.9098E+09
Ba-137m	2.2331E+06	4.1523E-06	1.8252E+19	8.2624E+16
Pd-109	1.5450E+04	7.2152E-06	3.9863E+19	5.7163E+14
Rh-106	1.6425E+05	4.6145E-08	2.6216E+17	6.0774E+15
Rh-103m	2.6489E+05	8.1433E-06	4.7612E+19	9.8010E+15
Eu-154	7.9644E+01	3.0191E-04	1.1806E+21	2.9468E+12
Eu-155	6.1109E+01	1.3142E-04	5.1058E+20	2.2610E+12
Eu-156	1.2250E+03	2.2230E-05	8.5816E+19	4.5324E+13
Nb-97	5.6538E+02	2.1029E-08	1.3056E+17	2.0919E+13
Nb-95m	1.8316E+02	4.8083E-07	3.0480E+18	6.7768E+12
Pm-147	2.4573E+03	2.6508E-03	1.0859E+22	9.0920E+13
Pm-148	3.3462E+03	2.0367E-05	8.2874E+19	1.2381E+14
Pm-149	5.8421E+03	1.4744E-05	5.9591E+19	2.1616E+14
Pm-151	1.5943E+03	2.1817E-06	8.7010E+18	5.8989E+13
Pm-148m	5.2410E+02	2.4534E-05	9.9828E+19	1.9392E+13
Pr-144	4.7510E+04	6.2874E-07	2.6294E+18	1.7579E+15
Pr-144m	8.7426E+02	4.8207E-09	2.0160E+16	3.2348E+13
Sm-153	3.5377E+03	8.0659E-06	3.1748E+19	1.3089E+14
Y-91m	2.4349E+05	5.8579E-06	3.8766E+19	9.0091E+15
Br-82	7.0578E+04	6.5191E-05	4.7877E+20	2.6114E+15
Br-83	6.1563E+03	3.8969E-07	2.8275E+18	2.2778E+14
Br-84	1.6458E-06	2.3381E-17	1.6762E+08	6.0896E+04
Am-242	2.5698E+02	3.1791E-07	7.9112E+17	9.5083E+12
Np-238	5.9523E+03	2.2968E-05	5.8116E+19	2.2024E+14
Pu-243	2.3204E+02	8.9174E-08	2.2099E+17	8.5856E+12

Containment Sump Transport Group Inventory:

Time (h) = 22.2200	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3099E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1037E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6294E+01	0.0000E+00	0.0000E+00

Time (h) = 22.2200	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Rb-86	3.8261E+02	4.7022E-06	3.2927E+19	1.4157E+13
Sr-89	2.0200E+04	6.9529E-04	4.7046E+21	7.4739E+14
Sr-90	1.3932E+03	1.0213E-02	6.8340E+22	5.1547E+13
Sr-91	4.9519E+03	1.3660E-06	9.0401E+18	1.8322E+14
Sr-92	9.0776E+01	7.2220E-09	4.7274E+16	3.3587E+12

Y-90	2.9564E+02	5.4339E-07	3.6360E+18	1.0939E+13
Y-91	3.7611E+02	1.5337E-05	1.0149E+20	1.3916E+13
Y-92	7.5796E+02	7.8771E-08	5.1562E+17	2.8045E+13
Y-93	6.5928E+01	1.9761E-08	1.2796E+17	2.4393E+12
Zr-95	3.2706E+02	1.5224E-05	9.6508E+19	1.2101E+13
Zr-97	1.2792E+02	6.6918E-08	4.1545E+17	4.7332E+12
Nb-95	3.3240E+02	8.5006E-06	5.3886E+19	1.2299E+13
Mo-99	3.4318E+03	7.1553E-06	4.3525E+19	1.2698E+14
Tc-99m	3.2817E+03	6.2410E-07	3.7964E+18	1.2142E+14
Ru-103	3.4214E+03	1.0601E-04	6.1982E+20	1.2659E+14
Ru-105	7.1572E+01	1.0647E-08	6.1067E+16	2.6482E+12
Ru-106	1.0372E+03	3.1001E-04	1.7612E+21	3.8375E+13
Rh-105	1.6049E+03	1.9014E-06	1.0906E+19	5.9382E+13
Sb-127	4.1583E+03	1.5571E-05	7.3835E+19	1.5386E+14
Sb-129	4.1806E+02	7.4343E-08	3.4706E+17	1.5468E+13
Te-127	4.3896E+03	1.6633E-06	7.8871E+18	1.6242E+14
Te-127m	6.4255E+02	6.8120E-05	3.2301E+20	2.3774E+13
Te-129	1.8502E+03	8.8350E-08	4.1244E+17	6.8459E+13
Te-129m	2.1453E+03	7.1211E-05	3.3244E+20	7.9375E+13
Te-131m	3.9959E+03	5.0111E-06	2.3036E+19	1.4785E+14
Te-132	5.4237E+04	1.7865E-04	8.1505E+20	2.0068E+15
I-131	3.4501E+05	2.7829E-03	1.2793E+22	1.2766E+16
I-132	5.6845E+04	5.5071E-06	2.5125E+19	2.1033E+15
I-133	3.7092E+05	3.2744E-04	1.4826E+21	1.3724E+16
I-134	3.6987E-02	1.3865E-12	6.2310E+12	1.3685E+09
I-135	6.9517E+04	1.9795E-05	8.8302E+19	2.5721E+15
Cs-134	2.9692E+04	2.2949E-02	1.0314E+23	1.0986E+15
Cs-136	1.1905E+04	1.6243E-04	7.1926E+20	4.4048E+14
Cs-137	2.6329E+04	3.0270E-01	1.3306E+24	9.7418E+14
Ba-139	4.8498E-01	2.9650E-11	1.2846E+14	1.7944E+10
Ba-140	3.1792E+04	4.3427E-04	1.8680E+21	1.1763E+15
La-140	1.0128E+04	1.8221E-05	7.8380E+19	3.7474E+14
La-141	1.2989E+01	2.2967E-09	9.8092E+15	4.8058E+11
La-142	1.4121E-02	9.8642E-13	4.1834E+12	5.2246E+08
Ce-141	7.8464E+02	2.7538E-05	1.1761E+20	2.9032E+13
Ce-143	4.7224E+02	7.1112E-07	2.9947E+18	1.7473E+13
Ce-144	6.0234E+02	1.8885E-04	7.8979E+20	2.2287E+13
Pr-143	3.0617E+02	4.5467E-06	1.9147E+19	1.1328E+13
Nd-147	1.1855E+02	1.4654E-06	6.0032E+18	4.3863E+12
Np-239	7.0653E+03	3.0455E-05	7.6738E+19	2.6142E+14
Pu-238	6.2996E-01	3.6797E-05	9.3108E+19	2.3308E+10
Pu-239	1.9737E-01	3.1754E-03	8.0012E+21	7.3029E+09
Pu-240	1.9953E-01	8.7566E-04	2.1972E+21	7.3828E+09
Pu-241	6.0256E+01	5.8494E-04	1.4616E+21	2.2295E+12
Am-241	2.1772E-02	6.3436E-06	1.5852E+19	8.0558E+08
Cm-242	3.8247E+00	1.1540E-06	2.8717E+18	1.4151E+11
Cm-244	9.0655E-02	1.1205E-06	2.7656E+18	3.3542E+09
I-130	2.4060E+03	1.2336E-06	5.7147E+18	8.9022E+13
Cs-138	2.8221E-07	6.6693E-18	2.9104E+07	1.0442E+04
Cs-134m	4.7578E+01	5.8997E-09	2.6514E+16	1.7604E+12
Sb-124	4.1550E+01	2.3753E-06	1.1536E+19	1.5373E+12
Sb-125	5.9675E+02	5.7798E-04	2.7845E+21	2.2080E+13
Sb-126	4.3594E+01	5.2162E-07	2.4931E+18	1.6130E+12
Te-131	9.1463E+02	1.5931E-08	7.3234E+16	3.3841E+13
Te-133	3.5958E-04	3.1666E-15	1.4338E+10	1.3305E+07
Te-134	2.0565E-05	6.1261E-16	2.7531E+09	7.6090E+05
Te-125m	1.2394E+02	6.8815E-06	3.3153E+19	4.5857E+12
Te-133m	2.0742E-03	8.1280E-14	3.6803E+11	7.6745E+07
Ba-137m	2.9187E+04	5.4270E-08	2.3856E+17	1.0799E+15
Pd-109	2.0063E+02	9.3697E-08	5.1767E+17	7.4232E+12
Rh-106	2.1330E+03	5.9924E-10	3.4044E+15	7.8922E+13
Rh-103m	3.4399E+03	1.0575E-07	6.1829E+17	1.2728E+14
Eu-154	1.0343E+00	3.9207E-06	1.5332E+19	3.8268E+10
Eu-155	7.9356E-01	1.7066E-06	6.6304E+18	2.9362E+10
Eu-156	1.5907E+01	2.8868E-07	1.1144E+18	5.8857E+11
Nb-97	7.3420E+00	2.7309E-10	1.6954E+15	2.7166E+11
Nb-95m	2.3785E+00	6.2441E-09	3.9582E+16	8.8004E+10
Pm-147	3.1911E+01	3.4423E-05	1.4102E+20	1.1807E+12
Pm-148	4.3454E+01	2.6449E-07	1.0762E+18	1.6078E+12
Pm-149	7.5866E+01	1.9147E-07	7.7385E+17	2.8070E+12

Pm-151	2.0704E+01	2.8332E-08	1.1299E+17	7.6604E+11
Pm-148m	6.8060E+00	3.1860E-07	1.2964E+18	2.5182E+11
Pr-144	6.1697E+02	8.1649E-09	3.4146E+16	2.2828E+13
Pr-144m	1.1353E+01	6.2602E-11	2.6180E+14	4.2007E+11
Sm-153	4.5940E+01	1.0474E-07	4.1228E+17	1.6998E+12
Y-91m	3.1620E+03	7.6071E-08	5.0342E+17	1.1699E+14
Br-82	9.2098E+02	8.5068E-07	6.2475E+18	3.4076E+13
Br-83	8.0334E+01	5.0851E-09	3.6896E+16	2.9724E+12
Br-84	2.1476E-08	3.0510E-19	2.1873E+06	7.9463E+02
Am-242	3.3372E+00	4.1284E-09	1.0274E+16	1.2348E+11
Np-238	7.7297E+01	2.9826E-07	7.5470E+17	2.8600E+12
Pu-243	3.0133E+00	1.1580E-09	2.8698E+15	1.1149E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.4401E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.4355E-01

Environment Integral Nuclide Release:

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Xe-133	5.7469E+04	3.0702E-04	1.3902E+21	2.1263E+15
Xe-135	1.5488E+05	6.0647E-05	2.7054E+20	5.7304E+15
Kr-83m	2.9157E+02	1.4132E-08	1.0253E+17	1.0788E+13
Xe-131m	1.9922E+02	2.3784E-06	1.0934E+19	7.3710E+12
Xe-133m	3.7504E+03	8.3582E-06	3.7845E+19	1.3876E+14
Xe-135m	1.1432E+04	1.2550E-07	5.5985E+17	4.2300E+14

Environment Transport Group Inventory:

Time (h) = 22.2200	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.6063E+18	2.2309E+16	1.7101E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Rb-86	3.8261E+02	4.7022E-06	3.2927E+19	1.4157E+13
Sr-89	2.0200E+04	6.9529E-04	4.7046E+21	7.4739E+14
Sr-90	1.3932E+03	1.0213E-02	6.8340E+22	5.1547E+13
Sr-91	4.9519E+03	1.3660E-06	9.0401E+18	1.8322E+14
Sr-92	9.0776E+01	7.2220E-09	4.7274E+16	3.3587E+12
Y-90	2.9564E+02	5.4339E-07	3.6360E+18	1.0939E+13
Y-91	3.7611E+02	1.5337E-05	1.0149E+20	1.3916E+13
Y-92	7.5796E+02	7.8771E-08	5.1562E+17	2.8045E+13
Y-93	6.5928E+01	1.9761E-08	1.2796E+17	2.4393E+12
Zr-95	3.2706E+02	1.5224E-05	9.6508E+19	1.2101E+13
Zr-97	1.2792E+02	6.6918E-08	4.1545E+17	4.7332E+12
Nb-95	3.3240E+02	8.5006E-06	5.3886E+19	1.2299E+13
Mo-99	3.4318E+03	7.1553E-06	4.3525E+19	1.2698E+14
Tc-99m	3.2817E+03	6.2410E-07	3.7964E+18	1.2142E+14
Ru-103	3.4214E+03	1.0601E-04	6.1982E+20	1.2659E+14
Ru-105	7.1572E+01	1.0647E-08	6.1067E+16	2.6482E+12
Ru-106	1.0372E+03	3.1001E-04	1.7612E+21	3.8375E+13
Rh-105	1.6049E+03	1.9014E-06	1.0906E+19	5.9382E+13
Sb-127	4.1583E+03	1.5571E-05	7.3835E+19	1.5386E+14
Sb-129	4.1806E+02	7.4343E-08	3.4706E+17	1.5468E+13
Te-127	4.3896E+03	1.6633E-06	7.8871E+18	1.6242E+14
Te-127m	6.4255E+02	6.8120E-05	3.2301E+20	2.3774E+13
Te-129	1.8502E+03	8.8350E-08	4.1244E+17	6.8459E+13
Te-129m	2.1453E+03	7.1211E-05	3.3244E+20	7.9375E+13
Te-131m	3.9959E+03	5.0111E-06	2.3036E+19	1.4785E+14
Te-132	5.4237E+04	1.7865E-04	8.1505E+20	2.0068E+15

I-131	3.4501E+05	2.7829E-03	1.2793E+22	1.2766E+16
I-132	5.6845E+04	5.5071E-06	2.5125E+19	2.1033E+15
I-133	3.7092E+05	3.2744E-04	1.4826E+21	1.3724E+16
I-134	3.6987E-02	1.3865E-12	6.2310E+12	1.3685E+09
I-135	6.9517E+04	1.9795E-05	8.8302E+19	2.5721E+15
Cs-134	2.9692E+04	2.2949E-02	1.0314E+23	1.0986E+15
Cs-136	1.1905E+04	1.6243E-04	7.1926E+20	4.4048E+14
Cs-137	2.6329E+04	3.0270E-01	1.3306E+24	9.7418E+14
Ba-139	4.8498E-01	2.9650E-11	1.2846E+14	1.7944E+10
Ba-140	3.1792E+04	4.3427E-04	1.8680E+21	1.1763E+15
La-140	1.0128E+04	1.8221E-05	7.8380E+19	3.7474E+14
La-141	1.2989E+01	2.2967E-09	9.8092E+15	4.8058E+11
La-142	1.4121E-02	9.8642E-13	4.1834E+12	5.2246E+08
Ce-141	7.8464E+02	2.7538E-05	1.1761E+20	2.9032E+13
Ce-143	4.7224E+02	7.1112E-07	2.9947E+18	1.7473E+13
Ce-144	6.0234E+02	1.8885E-04	7.8979E+20	2.2287E+13
Pr-143	3.0617E+02	4.5467E-06	1.9147E+19	1.1328E+13
Nd-147	1.1855E+02	1.4654E-06	6.0032E+18	4.3863E+12
Np-239	7.0653E+03	3.0455E-05	7.6738E+19	2.6142E+14
Pu-238	6.2996E-01	3.6797E-05	9.3108E+19	2.3308E+10
Pu-239	1.9737E-01	3.1754E-03	8.0012E+21	7.3029E+09
Pu-240	1.9953E-01	8.7566E-04	2.1972E+21	7.3828E+09
Pu-241	6.0256E+01	5.8494E-04	1.4616E+21	2.2295E+12
Am-241	2.1772E-02	6.3436E-06	1.5852E+19	8.0558E+08
Cm-242	3.8247E+00	1.1540E-06	2.8717E+18	1.4151E+11
Cm-244	9.0655E-02	1.1205E-06	2.7656E+18	3.3542E+09
I-130	2.4060E+03	1.2336E-06	5.7147E+18	8.9022E+13
Cs-138	2.8221E-07	6.6693E-18	2.9104E+07	1.0442E+04
Cs-134m	4.7578E+01	5.8997E-09	2.6514E+16	1.7604E+12
Sb-124	4.1550E+01	2.3753E-06	1.1536E+19	1.5373E+12
Sb-125	5.9675E+02	5.7798E-04	2.7845E+21	2.2080E+13
Sb-126	4.3594E+01	5.2162E-07	2.4931E+18	1.6130E+12
Te-131	9.1463E+02	1.5931E-08	7.3234E+16	3.3841E+13
Te-133	3.5958E-04	3.1666E-15	1.4338E+10	1.3305E+07
Te-134	2.0565E-05	6.1261E-16	2.7531E+09	7.6090E+05
Te-125m	1.2394E+02	6.8815E-06	3.3153E+19	4.5857E+12
Te-133m	2.0742E-03	8.1280E-14	3.6803E+11	7.6745E+07
Ba-137m	2.9187E+04	5.4270E-08	2.3856E+17	1.0799E+15
Pd-109	2.0063E+02	9.3697E-08	5.1767E+17	7.4232E+12
Rh-106	2.1330E+03	5.9924E-10	3.4044E+15	7.8922E+13
Rh-103m	3.4399E+03	1.0575E-07	6.1829E+17	1.2728E+14
Eu-154	1.0343E+00	3.9207E-06	1.5332E+19	3.8268E+10
Eu-155	7.9356E-01	1.7066E-06	6.6304E+18	2.9362E+10
Eu-156	1.5907E+01	2.8868E-07	1.1144E+18	5.8857E+11
Nb-97	7.3420E+00	2.7309E-10	1.6954E+15	2.7166E+11
Nb-95m	2.3785E+00	6.2441E-09	3.9582E+16	8.8004E+10
Pm-147	3.1911E+01	3.4423E-05	1.4102E+20	1.1807E+12
Pm-148	4.3454E+01	2.6449E-07	1.0762E+18	1.6078E+12
Pm-149	7.5866E+01	1.9147E-07	7.7385E+17	2.8070E+12
Pm-151	2.0704E+01	2.8332E-08	1.1299E+17	7.6604E+11
Pm-148m	6.8060E+00	3.1860E-07	1.2964E+18	2.5182E+11
Pr-144	6.1697E+02	8.1649E-09	3.4146E+16	2.2828E+13
Pr-144m	1.1353E+01	6.2602E-11	2.6180E+14	4.2007E+11
Sm-153	4.5940E+01	1.0474E-07	4.1228E+17	1.6998E+12
Y-91m	3.1620E+03	7.6071E-08	5.0342E+17	1.1699E+14
Br-82	9.2098E+02	8.5068E-07	6.2475E+18	3.4076E+13
Br-83	8.0334E+01	5.0851E-09	3.6896E+16	2.9724E+12
Br-84	2.1476E-08	3.0510E-19	2.1873E+06	7.9463E+02
Am-242	3.3372E+00	4.1284E-09	1.0274E+16	1.2348E+11
Np-238	7.7297E+01	2.9826E-07	7.5470E+17	2.8600E+12
Pu-243	3.0133E+00	1.1580E-09	2.8698E+15	1.1149E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 22.2200	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.4401E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.4355E-01

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Xe-133	2.5424E+00	1.3582E-08	6.1500E+16	9.4067E+10
Xe-135	6.6143E+00	2.5901E-09	1.1554E+16	2.4473E+11
Kr-83m	2.3278E-02	1.1282E-12	8.1860E+12	8.6128E+08
Xe-131m	1.0073E-02	1.2025E-10	5.5281E+14	3.7268E+08
Xe-133m	1.7249E-01	3.8442E-10	1.7406E+15	6.3822E+09
Xe-135m	8.2177E+00	9.0213E-11	4.0243E+14	3.0406E+11

Control Room Transport Group Inventory:

Time (h) = 22.2200	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.5758E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 22.2200	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00

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Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =   24.0000

EAB Doses:

Time (h) =  24.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        3.4897E-01  0.0000E+00  8.8511E-01  3.4897E-01
Accumulated dose (rem)  5.9742E+00  0.0000E+00  1.3764E+01  5.9742E+00

LPZ Doses:

Time (h) =  24.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.3208E-02  0.0000E+00  3.3500E-02  1.3208E-02
Accumulated dose (rem)  2.6980E-01  0.0000E+00  6.0610E-01  2.6980E-01

Control Room Doses:

Time (h) =  24.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.6133E-01  0.0000E+00  1.0177E+01  1.6133E-01
Accumulated dose (rem)  3.5653E+00  0.0000E+00  2.1784E+02  3.5653E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) =  24.0000       Ci           kg         Atoms         Bq
Rb-86                  2.9161E+04  3.5839E-04  2.5096E+21  1.0790E+15
Sr-89                  1.5522E+06  5.3428E-02  3.6151E+23  5.7431E+16
Sr-90                  1.0716E+05  7.8562E-01  5.2568E+24  3.9651E+15
Sr-91                  3.3452E+05  9.2280E-05  6.1069E+20  1.2377E+16
Sr-92                  4.4289E+03  3.5236E-07  2.3065E+18  1.6387E+14
Y-90                   2.4347E+04  4.4751E-05  2.9944E+20  9.0085E+14
Y-91                   2.9231E+04  1.1920E-03  7.8880E+21  1.0816E+15
Y-92                   4.2756E+04  4.4434E-06  2.9086E+19  1.5820E+15
Y-93                   4.4882E+03  1.3452E-06  8.7110E+18  1.6606E+14
Zr-95                  2.5138E+04  1.1701E-03  7.4176E+21  9.3010E+14
Zr-97                  9.1474E+03  4.7850E-06  2.9707E+19  3.3845E+14
Nb-95                  2.5568E+04  6.5387E-04  4.1449E+21  9.4603E+14
Mo-99                  2.5909E+05  5.4020E-04  3.2860E+21  9.5863E+15
Tc-99m                 2.4814E+05  4.7191E-05  2.8706E+20  9.1812E+15
Ru-103                 2.6284E+05  8.1439E-03  4.7615E+22  9.7249E+15
Ru-105                 4.1697E+03  6.2031E-07  3.5577E+18  1.5428E+14
Ru-106                 7.9768E+04  2.3843E-02  1.3546E+23  2.9514E+15
Rh-105                 1.1939E+05  1.4144E-04  8.1122E+20  4.4172E+15
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Sb-127	3.1562E+05	1.1819E-03	5.6042E+21	1.1678E+16
Sb-129	2.4168E+04	4.2978E-06	2.0064E+19	8.9423E+14
Te-127	3.3427E+05	1.2666E-04	6.0060E+20	1.2368E+16
Te-127m	4.9429E+04	5.2402E-03	2.4848E+22	1.8289E+15
Te-129	1.3365E+05	6.3819E-06	2.9793E+19	4.9451E+15
Te-129m	1.6477E+05	5.4696E-03	2.5534E+22	6.0966E+15
Te-131m	2.9498E+05	3.6993E-04	1.7006E+21	1.0914E+16
Te-132	4.1067E+06	1.3527E-02	6.1713E+22	1.5195E+17
I-131	2.6245E+07	2.1170E-01	9.7318E+23	9.7107E+17
I-132	4.2796E+06	4.1460E-04	1.8915E+21	1.5835E+17
I-133	2.6761E+07	2.3624E-02	1.0697E+23	9.9016E+17
I-134	6.9574E-01	2.6080E-11	1.1721E+14	2.5742E+10
I-135	4.4154E+06	1.2573E-03	5.6086E+21	1.6337E+17
Xe-133	4.6182E+06	2.4672E-02	1.1171E+23	1.7087E+17
Xe-135	1.0964E+07	4.2934E-03	1.9152E+22	4.0568E+17
Cs-134	2.2691E+06	1.7538E+00	7.8819E+24	8.3958E+16
Cs-136	9.0629E+05	1.2366E-02	5.4756E+22	3.3533E+16
Cs-137	2.0123E+06	2.3134E+01	1.0169E+26	7.4454E+16
Ba-139	1.5241E+01	9.3179E-10	4.0370E+15	5.6393E+11
Ba-140	2.4357E+06	3.3270E-02	1.4311E+23	9.0120E+16
La-140	8.2901E+05	1.4915E-03	6.4157E+21	3.0673E+16
La-141	7.2557E+02	1.2830E-07	5.4796E+17	2.6846E+13
La-142	4.8791E-01	3.4083E-11	1.4455E+14	1.8053E+10
Ce-141	6.0261E+04	2.1149E-03	9.0328E+21	2.2297E+15
Ce-143	3.4993E+04	5.2693E-05	2.2191E+20	1.2947E+15
Ce-144	4.6325E+04	1.4524E-02	6.0741E+22	1.7140E+15
Pr-143	2.3596E+04	3.5041E-04	1.4757E+21	8.7306E+14
Nd-147	9.0763E+03	1.1219E-04	4.5962E+20	3.3582E+14
Np-239	5.3174E+05	2.2921E-03	5.7754E+21	1.9674E+16
Pu-238	4.8467E+01	2.8311E-03	7.1635E+21	1.7933E+12
Pu-239	1.5186E+01	2.4431E-01	6.1560E+23	5.6187E+11
Pu-240	1.5349E+01	6.7358E-02	1.6902E+23	5.6790E+11
Pu-241	4.6349E+03	4.4994E-02	1.1243E+23	1.7149E+14
Am-241	1.6763E+00	4.8840E-04	1.2204E+21	6.2022E+10
Cm-242	2.9417E+02	8.8759E-05	2.2088E+20	1.0884E+13
Cm-244	6.9732E+00	8.6193E-05	2.1273E+20	2.5801E+11
I-130	1.6668E+05	8.5463E-05	3.9590E+20	6.1672E+15
Kr-83m	1.3670E+04	6.6254E-07	4.8071E+18	5.0578E+14
Xe-131m	1.6438E+04	1.9625E-04	9.0217E+20	6.0821E+14
Xe-133m	2.9887E+05	6.6607E-04	3.0159E+21	1.1058E+16
Xe-135m	7.2666E+05	7.9771E-06	3.5585E+19	2.6886E+16
Cs-138	2.1689E-06	5.1256E-17	2.2367E+08	8.0248E+04
Cs-134m	2.3762E+03	2.9465E-07	1.3242E+18	8.7919E+13
Sb-124	3.1933E+03	1.8256E-04	8.8661E+20	1.1815E+14
Sb-125	4.5901E+04	4.4457E-02	2.1418E+23	1.6983E+15
Sb-126	3.3394E+03	3.9958E-05	1.9098E+20	1.2356E+14
Te-131	6.7520E+04	1.1760E-06	5.4063E+18	2.4982E+15
Te-133	7.2698E-03	6.4021E-14	2.8988E+11	2.6898E+08
Te-134	2.6917E-04	8.0185E-15	3.6036E+10	9.9594E+06
Te-125m	9.5344E+03	5.2938E-04	2.5504E+21	3.5277E+14
Te-133m	4.1934E-02	1.6433E-12	7.4406E+12	1.5516E+09
Ba-137m	2.2306E+06	4.1477E-06	1.8232E+19	8.2534E+16
Pd-109	1.4078E+04	6.5746E-06	3.6324E+19	5.2088E+14
Rh-106	1.6405E+05	4.6088E-08	2.6184E+17	6.0700E+15
Rh-103m	2.6426E+05	8.1238E-06	4.7497E+19	9.7775E+15
Eu-154	7.9556E+01	3.0158E-04	1.1793E+21	2.9436E+12
Eu-155	6.1040E+01	1.3127E-04	5.1001E+20	2.2585E+12
Eu-156	1.2195E+03	2.2131E-05	8.5433E+19	4.5121E+13
Nb-97	5.2496E+02	1.9526E-08	1.2122E+17	1.9424E+13
Nb-95m	1.8286E+02	4.8005E-07	3.0431E+18	6.7658E+12
Pm-147	2.4550E+03	2.6483E-03	1.0849E+22	9.0834E+13
Pm-148	3.3110E+03	2.0153E-05	8.2001E+19	1.2251E+14
Pm-149	5.7016E+03	1.4389E-05	5.8158E+19	2.1096E+14
Pm-151	1.5249E+03	2.0867E-06	8.3220E+18	5.6420E+13
Pm-148m	5.2287E+02	2.4476E-05	9.9595E+19	1.9346E+13
Pr-144	4.7450E+04	6.2794E-07	2.6261E+18	1.7557E+15
Pr-144m	8.7315E+02	4.8146E-09	2.0135E+16	3.2306E+13
Sm-153	3.4417E+03	7.8470E-06	3.0886E+19	1.2734E+14
Y-91m	2.1360E+05	5.1388E-06	3.4007E+19	7.9032E+15
Br-82	6.8080E+04	6.2883E-05	4.6182E+20	2.5190E+15

Br-83	3.6698E+03	2.3230E-07	1.6855E+18	1.3578E+14
Br-84	1.6029E-07	2.2771E-18	1.6325E+07	5.9307E+03
Am-242	2.3767E+02	2.9403E-07	7.3168E+17	8.7939E+12
Np-238	5.8032E+03	2.2393E-05	5.6660E+19	2.1472E+14
Pu-243	1.8071E+02	6.9446E-08	1.7210E+17	6.6862E+12

Containment Sump Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3482E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0885E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6264E+01	0.0000E+00	0.0000E+00

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	4.1339E+02	5.0805E-06	3.5576E+19	1.5295E+13
Sr-89	2.1873E+04	7.5290E-04	5.0945E+21	8.0932E+14
Sr-90	1.5101E+03	1.1071E-02	7.4078E+22	5.5875E+13
Sr-91	4.7139E+03	1.3004E-06	8.6057E+18	1.7442E+14
Sr-92	6.2412E+01	4.9654E-09	3.2502E+16	2.3092E+12
Y-90	3.4318E+02	6.3077E-07	4.2206E+18	1.2698E+13
Y-91	4.1200E+02	1.6800E-05	1.1118E+20	1.5244E+13
Y-92	6.0280E+02	6.2646E-08	4.1007E+17	2.2304E+13
Y-93	6.3247E+01	1.8957E-08	1.2275E+17	2.3401E+12
Zr-95	3.5424E+02	1.6489E-05	1.0453E+20	1.3107E+13
Zr-97	1.2890E+02	6.7430E-08	4.1863E+17	4.7695E+12
Nb-95	3.6030E+02	9.2142E-06	5.8410E+19	1.3331E+13
Mo-99	3.6510E+03	7.6125E-06	4.6306E+19	1.3509E+14
Tc-99m	3.4968E+03	6.6501E-07	4.0452E+18	1.2938E+14
Ru-103	3.7038E+03	1.1476E-04	6.7099E+20	1.3704E+14
Ru-105	5.8759E+01	8.7413E-09	5.0135E+16	2.1741E+12
Ru-106	1.1241E+03	3.3599E-04	1.9089E+21	4.1591E+13
Rh-105	1.6824E+03	1.9932E-06	1.1432E+19	6.2247E+13
Sb-127	4.4476E+03	1.6655E-05	7.8973E+19	1.6456E+14
Sb-129	3.4058E+02	6.0565E-08	2.8274E+17	1.2601E+13
Te-127	4.7105E+03	1.7849E-06	8.4636E+18	1.7429E+14
Te-127m	6.9655E+02	7.3845E-05	3.5016E+20	2.5772E+13
Te-129	1.8834E+03	8.9933E-08	4.1984E+17	6.9686E+13
Te-129m	2.3220E+03	7.7077E-05	3.5982E+20	8.5913E+13
Te-131m	4.1569E+03	5.2130E-06	2.3964E+19	1.5380E+14
Te-132	5.7871E+04	1.9062E-04	8.6966E+20	2.1412E+15
I-131	3.7149E+05	2.9965E-03	1.3775E+22	1.3745E+16
I-132	6.0309E+04	5.8427E-06	2.6656E+19	2.2314E+15
I-133	3.7877E+05	3.3437E-04	1.5140E+21	1.4015E+16
I-134	9.8192E-03	3.6808E-13	1.6542E+12	3.6331E+08
I-135	6.2500E+04	1.7797E-05	7.9389E+19	2.3125E+15
Cs-134	3.2167E+04	2.4862E-02	1.1173E+23	1.1902E+15
Cs-136	1.2848E+04	1.7530E-04	7.7622E+20	4.7536E+14
Cs-137	2.8526E+04	3.2795E-01	1.4416E+24	1.0555E+15
Ba-139	2.1478E-01	1.3131E-11	5.6888E+13	7.9468E+09
Ba-140	3.4323E+04	4.6884E-04	2.0167E+21	1.2700E+15
La-140	1.1685E+04	2.1022E-05	9.0429E+19	4.3234E+14
La-141	1.0281E+01	1.8179E-09	7.7644E+15	3.8040E+11
La-142	6.8755E-03	4.8030E-13	2.0369E+12	2.5439E+08
Ce-141	8.4920E+02	2.9803E-05	1.2729E+20	3.1420E+13
Ce-143	4.9311E+02	7.4255E-07	3.1271E+18	1.8245E+13
Ce-144	6.5281E+02	2.0467E-04	8.5596E+20	2.4154E+13
Pr-143	3.3252E+02	4.9380E-06	2.0795E+19	1.2303E+13
Nd-147	1.2790E+02	1.5810E-06	6.4769E+18	4.7324E+12
Np-239	7.4932E+03	3.2300E-05	8.1386E+19	2.7725E+14

Pu-238	6.8299E-01	3.9895E-05	1.0095E+20	2.5271E+10
Pu-239	2.1399E-01	3.4428E-03	8.6749E+21	7.9177E+09
Pu-240	2.1629E-01	9.4919E-04	2.3817E+21	8.0027E+09
Pu-241	6.5315E+01	6.3405E-04	1.5844E+21	2.4167E+12
Am-241	2.3622E-02	6.8825E-06	1.7198E+19	8.7401E+08
Cm-242	4.1455E+00	1.2508E-06	3.1126E+18	1.5338E+11
Cm-244	9.8266E-02	1.2146E-06	2.9978E+18	3.6358E+09
I-130	2.3594E+03	1.2097E-06	5.6039E+18	8.7297E+13
Cs-138	3.0689E-08	7.2527E-19	3.1650E+06	1.1355E+03
Cs-134m	3.3685E+01	4.1770E-09	1.8772E+16	1.2463E+12
Sb-124	4.5000E+01	2.5726E-06	1.2494E+19	1.6650E+12
Sb-125	6.4682E+02	6.2648E-04	3.0182E+21	2.3932E+13
Sb-126	4.7059E+01	5.6308E-07	2.6912E+18	1.7412E+12
Te-131	9.5148E+02	1.6573E-08	7.6185E+16	3.5205E+13
Te-133	1.0245E-04	9.0217E-16	4.0850E+09	3.7905E+06
Te-134	3.7932E-06	1.1300E-16	5.0782E+08	1.4035E+05
Te-125m	1.3436E+02	7.4600E-06	3.5940E+19	4.9712E+12
Te-133m	5.9094E-04	2.3157E-14	1.0485E+11	2.1865E+07
Ba-137m	3.1622E+04	5.8798E-08	2.5846E+17	1.1700E+15
Pd-109	1.9838E+02	9.2648E-08	5.1187E+17	7.3401E+12
Rh-106	2.3118E+03	6.4946E-10	3.6898E+15	8.5537E+13
Rh-103m	3.7239E+03	1.1448E-07	6.6933E+17	1.3778E+14
Eu-154	1.1211E+00	4.2498E-06	1.6619E+19	4.1480E+10
Eu-155	8.6017E-01	1.8498E-06	7.1870E+18	3.1826E+10
Eu-156	1.7185E+01	3.1187E-07	1.2039E+18	6.3584E+11
Nb-97	7.3977E+00	2.7516E-10	1.7083E+15	2.7372E+11
Nb-95m	2.5768E+00	6.7648E-09	4.2883E+16	9.5343E+10
Pm-147	3.4595E+01	3.7319E-05	1.5288E+20	1.2800E+12
Pm-148	4.6658E+01	2.8399E-07	1.1555E+18	1.7263E+12
Pm-149	8.0347E+01	2.0277E-07	8.1956E+17	2.9728E+12
Pm-151	2.1488E+01	2.9405E-08	1.1727E+17	7.9506E+11
Pm-148m	7.3683E+00	3.4492E-07	1.4035E+18	2.7263E+11
Pr-144	6.6866E+02	8.8489E-09	3.7006E+16	2.4740E+13
Pr-144m	1.2304E+01	6.7847E-11	2.8374E+14	4.5526E+11
Sm-153	4.8499E+01	1.1058E-07	4.3524E+17	1.7945E+12
Y-91m	3.0100E+03	7.2416E-08	4.7923E+17	1.1137E+14
Br-82	9.6367E+02	8.9011E-07	6.5370E+18	3.5656E+13
Br-83	5.1946E+01	3.2882E-09	2.3858E+16	1.9220E+12
Br-84	2.2689E-09	3.2233E-20	2.3108E+05	8.3949E+01
Am-242	3.3493E+00	4.1434E-09	1.0311E+16	1.2392E+11
Np-238	8.1778E+01	3.1555E-07	7.9845E+17	3.0258E+12
Pu-243	2.5465E+00	9.7862E-10	2.4253E+15	9.4221E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.5407E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.7221E-01

Environment Integral Nuclide Release:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Xe-133	6.5398E+04	3.4938E-04	1.5820E+21	2.4197E+15
Xe-135	1.5528E+05	6.0804E-05	2.7124E+20	5.7452E+15
Kr-83m	1.9350E+02	9.3786E-09	6.8048E+16	7.1595E+12
Xe-131m	2.3276E+02	2.7788E-06	1.2775E+19	8.6121E+12
Xe-133m	4.2321E+03	9.4317E-06	4.2706E+19	1.5659E+14
Xe-135m	1.0278E+04	1.1284E-07	5.0334E+17	3.8030E+14

Environment Transport Group Inventory:

Time (h) = 24.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.6534E+18	2.2963E+16	1.9093E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	4.1339E+02	5.0805E-06	3.5576E+19	1.5295E+13
Sr-89	2.1873E+04	7.5290E-04	5.0945E+21	8.0932E+14
Sr-90	1.5101E+03	1.1071E-02	7.4078E+22	5.5875E+13
Sr-91	4.7139E+03	1.3004E-06	8.6057E+18	1.7442E+14
Sr-92	6.2412E+01	4.9654E-09	3.2502E+16	2.3092E+12
Y-90	3.4318E+02	6.3077E-07	4.2206E+18	1.2698E+13
Y-91	4.1200E+02	1.6800E-05	1.1118E+20	1.5244E+13
Y-92	6.0280E+02	6.2646E-08	4.1007E+17	2.2304E+13
Y-93	6.3247E+01	1.8957E-08	1.2275E+17	2.3401E+12
Zr-95	3.5424E+02	1.6489E-05	1.0453E+20	1.3107E+13
Zr-97	1.2890E+02	6.7430E-08	4.1863E+17	4.7695E+12
Nb-95	3.6030E+02	9.2142E-06	5.8410E+19	1.3331E+13
Mo-99	3.6510E+03	7.6125E-06	4.6306E+19	1.3509E+14
Tc-99m	3.4968E+03	6.6501E-07	4.0452E+18	1.2938E+14
Ru-103	3.7038E+03	1.1476E-04	6.7099E+20	1.3704E+14
Ru-105	5.8759E+01	8.7413E-09	5.0135E+16	2.1741E+12
Ru-106	1.1241E+03	3.3599E-04	1.9089E+21	4.1591E+13
Rh-105	1.6824E+03	1.9932E-06	1.1432E+19	6.2247E+13
Sb-127	4.4476E+03	1.6655E-05	7.8973E+19	1.6456E+14
Sb-129	3.4058E+02	6.0565E-08	2.8274E+17	1.2601E+13
Te-127	4.7105E+03	1.7849E-06	8.4636E+18	1.7429E+14
Te-127m	6.9655E+02	7.3845E-05	3.5016E+20	2.5772E+13
Te-129	1.8834E+03	8.9933E-08	4.1984E+17	6.9686E+13
Te-129m	2.3220E+03	7.7077E-05	3.5982E+20	8.5913E+13
Te-131m	4.1569E+03	5.2130E-06	2.3964E+19	1.5380E+14
Te-132	5.7871E+04	1.9062E-04	8.6966E+20	2.1412E+15
I-131	3.7149E+05	2.9965E-03	1.3775E+22	1.3745E+16
I-132	6.0309E+04	5.8427E-06	2.6656E+19	2.2314E+15
I-133	3.7877E+05	3.3437E-04	1.5140E+21	1.4015E+16
I-134	9.8192E-03	3.6808E-13	1.6542E+12	3.6331E+08
I-135	6.2500E+04	1.7797E-05	7.9389E+19	2.3125E+15
Cs-134	3.2167E+04	2.4862E-02	1.1173E+23	1.1902E+15
Cs-136	1.2848E+04	1.7530E-04	7.7622E+20	4.7536E+14
Cs-137	2.8526E+04	3.2795E-01	1.4416E+24	1.0555E+15
Ba-139	2.1478E-01	1.3131E-11	5.6888E+13	7.9468E+09
Ba-140	3.4323E+04	4.6884E-04	2.0167E+21	1.2700E+15
La-140	1.1685E+04	2.1022E-05	9.0429E+19	4.3234E+14
La-141	1.0281E+01	1.8179E-09	7.7644E+15	3.8040E+11
La-142	6.8755E-03	4.8030E-13	2.0369E+12	2.5439E+08
Ce-141	8.4920E+02	2.9803E-05	1.2729E+20	3.1420E+13
Ce-143	4.9311E+02	7.4255E-07	3.1271E+18	1.8245E+13
Ce-144	6.5281E+02	2.0467E-04	8.5596E+20	2.4154E+13
Pr-143	3.3252E+02	4.9380E-06	2.0795E+19	1.2303E+13
Nd-147	1.2790E+02	1.5810E-06	6.4769E+18	4.7324E+12
Np-239	7.4932E+03	3.2300E-05	8.1386E+19	2.7725E+14
Pu-238	6.8299E-01	3.9895E-05	1.0095E+20	2.5271E+10
Pu-239	2.1399E-01	3.4428E-03	8.6749E+21	7.9177E+09
Pu-240	2.1629E-01	9.4919E-04	2.3817E+21	8.0027E+09
Pu-241	6.5315E+01	6.3405E-04	1.5844E+21	2.4167E+12
Am-241	2.3622E-02	6.8825E-06	1.7198E+19	8.7401E+08
Cm-242	4.1455E+00	1.2508E-06	3.1126E+18	1.5338E+11
Cm-244	9.8266E-02	1.2146E-06	2.9978E+18	3.6358E+09
I-130	2.3594E+03	1.2097E-06	5.6039E+18	8.7297E+13
Cs-138	3.0689E-08	7.2527E-19	3.1650E+06	1.1355E+03
Cs-134m	3.3685E+01	4.1770E-09	1.8772E+16	1.2463E+12
Sb-124	4.5000E+01	2.5726E-06	1.2494E+19	1.6650E+12
Sb-125	6.4682E+02	6.2648E-04	3.0182E+21	2.3932E+13
Sb-126	4.7059E+01	5.6308E-07	2.6912E+18	1.7412E+12
Te-131	9.5148E+02	1.6573E-08	7.6185E+16	3.5205E+13
Te-133	1.0245E-04	9.0217E-16	4.0850E+09	3.7905E+06
Te-134	3.7932E-06	1.1300E-16	5.0782E+08	1.4035E+05
Te-125m	1.3436E+02	7.4600E-06	3.5940E+19	4.9712E+12
Te-133m	5.9094E-04	2.3157E-14	1.0485E+11	2.1865E+07
Ba-137m	3.1622E+04	5.8798E-08	2.5846E+17	1.1700E+15
Pd-109	1.9838E+02	9.2648E-08	5.1187E+17	7.3401E+12
Rh-106	2.3118E+03	6.4946E-10	3.6898E+15	8.5537E+13

Rh-103m	3.7239E+03	1.1448E-07	6.6933E+17	1.3778E+14
Eu-154	1.1211E+00	4.2498E-06	1.6619E+19	4.1480E+10
Eu-155	8.6017E-01	1.8498E-06	7.1870E+18	3.1826E+10
Eu-156	1.7185E+01	3.1187E-07	1.2039E+18	6.3584E+11
Nb-97	7.3977E+00	2.7516E-10	1.7083E+15	2.7372E+11
Nb-95m	2.5768E+00	6.7648E-09	4.2883E+16	9.5343E+10
Pm-147	3.4595E+01	3.7319E-05	1.5288E+20	1.2800E+12
Pm-148	4.6658E+01	2.8399E-07	1.1555E+18	1.7263E+12
Pm-149	8.0347E+01	2.0277E-07	8.1956E+17	2.9728E+12
Pm-151	2.1488E+01	2.9405E-08	1.1727E+17	7.9506E+11
Pm-148m	7.3683E+00	3.4492E-07	1.4035E+18	2.7263E+11
Pr-144	6.6866E+02	8.8489E-09	3.7006E+16	2.4740E+13
Pr-144m	1.2304E+01	6.7847E-11	2.8374E+14	4.5526E+11
Sm-153	4.8499E+01	1.1058E-07	4.3524E+17	1.7945E+12
Y-91m	3.0100E+03	7.2416E-08	4.7923E+17	1.1137E+14
Br-82	9.6367E+02	8.9011E-07	6.5370E+18	3.5656E+13
Br-83	5.1946E+01	3.2882E-09	2.3858E+16	1.9220E+12
Br-84	2.2689E-09	3.2233E-20	2.3108E+05	8.3949E+01
Am-242	3.3493E+00	4.1434E-09	1.0311E+16	1.2392E+11
Np-238	8.1778E+01	3.1555E-07	7.9845E+17	3.0258E+12
Pu-243	2.5465E+00	9.7862E-10	2.4253E+15	9.4221E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.5407E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.7221E-01

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Bq

```
Xe-133                 2.6405E+00  1.4107E-08  6.3874E+16  9.7699E+10
Xe-135                 6.0539E+00  2.3706E-09  1.0575E+16  2.2400E+11
Kr-83m                 1.4823E-02  7.1847E-13  5.2129E+12  5.4847E+08
Xe-131m                1.0864E-02  1.2970E-10  5.9624E+14  4.0196E+08
Xe-133m                1.7822E-01  3.9718E-10  1.7984E+15  6.5940E+09
Xe-135m                7.3835E+00  8.1055E-11  3.6157E+14  2.7319E+11

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =  24.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    7.7210E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =  24.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =   96.0000

EAB Doses:

Time (h) =  96.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        3.7176E+00  0.0000E+00  1.0210E+01  3.7176E+00
Accumulated dose (rem)  9.6919E+00  0.0000E+00  2.3974E+01  9.6919E+00

LPZ Doses:

Time (h) =  96.0000     Whole Body    Thyroid      Skin       TEDE
```

Delta dose (rem)	5.9799E-02	0.0000E+00	1.6424E-01	5.9799E-02
Accumulated dose (rem)	3.2960E-01	0.0000E+00	7.7034E-01	3.2960E-01

Control Room Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.0037E-01	0.0000E+00	4.1191E+01	6.0037E-01
Accumulated dose (rem)	4.1657E+00	0.0000E+00	2.5903E+02	4.1657E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	2.4960E+04	3.0676E-04	2.1481E+21	9.2352E+14
Sr-89	1.4253E+06	4.9059E-02	3.3195E+23	5.2735E+16
Sr-90	1.0252E+05	7.5156E-01	5.0289E+24	3.7932E+15
Sr-91	1.6740E+03	4.6180E-07	3.0561E+18	6.1939E+13
Sr-92	4.2588E-05	3.3882E-15	2.2179E+10	1.5758E+06
Y-90	6.6205E+04	1.2169E-04	8.1424E+20	2.4496E+15
Y-91	2.9202E+04	1.1908E-03	7.8801E+21	1.0805E+15
Y-92	4.1158E-02	4.2774E-12	2.7999E+13	1.5229E+09
Y-93	3.0686E+01	9.1977E-09	5.9559E+16	1.1354E+12
Zr-95	2.3283E+04	1.0838E-03	6.8704E+21	8.6148E+14
Zr-97	4.5671E+02	2.3890E-07	1.4832E+18	1.6898E+13
Nb-95	2.4419E+04	6.2447E-04	3.9586E+21	9.0349E+14
Mo-99	1.1638E+05	2.4266E-04	1.4761E+21	4.3061E+15
Tc-99m	1.1231E+05	2.1359E-05	1.2993E+20	4.1555E+15
Ru-103	2.3852E+05	7.3905E-03	4.3210E+22	8.8253E+15
Ru-105	5.2405E-02	7.7961E-12	4.4713E+13	1.9390E+09
Ru-106	7.5895E+04	2.2685E-02	1.2888E+23	2.8081E+15
Rh-105	2.7990E+04	3.3161E-05	1.9019E+20	1.0356E+15
Sb-127	1.7597E+05	6.5892E-04	3.1245E+21	6.5107E+15
Sb-129	2.2229E-01	3.9529E-11	1.8454E+14	8.2247E+09
Te-127	2.0755E+05	7.8642E-05	3.7291E+20	7.6792E+15
Te-127m	4.7177E+04	5.0014E-03	2.3716E+22	1.7455E+15
Te-129	9.7063E+04	4.6348E-06	2.1637E+19	3.5913E+15
Te-129m	1.4823E+05	4.9203E-03	2.2970E+22	5.4843E+15
Te-131m	5.3476E+04	6.7063E-05	3.0829E+20	1.9786E+15
Te-132	2.0757E+06	6.8371E-03	3.1192E+22	7.6801E+16
I-131	1.9419E+07	1.5664E-01	7.2008E+23	7.1852E+17
I-132	2.1450E+06	2.0781E-04	9.4808E+20	7.9367E+16
I-133	2.3244E+06	2.0519E-03	9.2908E+21	8.6002E+16
I-135	2.2223E+03	6.3281E-07	2.8229E+18	8.2226E+13
Xe-133	5.9388E+06	3.1727E-02	1.4366E+23	2.1974E+17
Xe-135	8.4127E+04	3.2943E-05	1.4695E+20	3.1127E+15
Cs-134	2.1652E+06	1.6735E+00	7.5208E+24	8.0112E+16
Cs-136	7.3988E+05	1.0095E-02	4.4702E+22	2.7376E+16
Cs-137	1.9250E+06	2.2131E+01	9.7283E+25	7.1226E+16
Ba-140	1.9795E+06	2.7040E-02	1.1631E+23	7.3243E+16
La-140	1.7325E+06	3.1170E-03	1.3408E+22	6.4102E+16
La-141	2.1206E-03	3.7497E-13	1.6015E+12	7.8462E+07
Ce-141	5.4089E+04	1.8983E-03	8.1077E+21	2.0013E+15
Ce-143	7.3794E+03	1.1112E-05	4.6796E+19	2.7304E+14
Ce-144	4.4002E+04	1.3796E-02	5.7695E+22	1.6281E+15
Pr-143	2.1776E+04	3.2338E-04	1.3618E+21	8.0571E+14
Nd-147	7.1861E+03	8.8828E-05	3.6390E+20	2.6589E+14
Np-239	2.1041E+05	9.0695E-04	2.2853E+21	7.7850E+15
Pu-238	4.6619E+01	2.7231E-03	6.8904E+21	1.7249E+12
Pu-239	1.4610E+01	2.3505E-01	5.9226E+23	5.4057E+11
Pu-240	1.4686E+01	6.4450E-02	1.6172E+23	5.4338E+11
Pu-241	4.4331E+03	4.3034E-02	1.0753E+23	1.6402E+14
Am-241	1.6623E+00	4.8433E-04	1.2102E+21	6.1505E+10
Cm-242	2.7863E+02	8.4070E-05	2.0921E+20	1.0309E+13
Cm-244	6.6701E+00	8.2446E-05	2.0348E+20	2.4679E+11
I-130	2.8129E+03	1.4422E-06	6.6811E+18	1.0408E+14
Kr-83m	1.2840E-05	6.2232E-16	4.5153E+09	4.7507E+05
Xe-131m	5.2475E+04	6.2649E-04	2.8800E+21	1.9416E+15
Xe-133m	2.5465E+05	5.6752E-04	2.5697E+21	9.4220E+15
Xe-135m	3.6574E+02	4.0150E-09	1.7910E+16	1.3532E+13
Cs-134m	7.6360E-05	9.4688E-15	4.2554E+10	2.8253E+06
Sb-124	2.9517E+03	1.6875E-04	8.1953E+20	1.0921E+14

Sb-125	4.3829E+04	4.2450E-02	2.0451E+23	1.6217E+15
Sb-126	2.7019E+03	3.2330E-05	1.5452E+20	9.9971E+13
Te-131	1.2240E+04	2.1320E-07	9.8008E+17	4.5289E+14
Te-125m	9.1537E+03	5.0825E-04	2.4486E+21	3.3869E+14
Ba-137m	2.1339E+06	3.9679E-06	1.7442E+19	7.8956E+16
Pd-109	3.2745E+02	1.5293E-07	8.4490E+17	1.2116E+13
Rh-106	1.5609E+05	4.3850E-08	2.4912E+17	5.7752E+15
Rh-103m	2.3981E+05	7.3722E-06	4.3104E+19	8.8730E+15
Eu-154	7.6072E+01	2.8837E-04	1.1277E+21	2.8147E+12
Eu-155	5.8338E+01	1.2546E-04	4.8743E+20	2.1585E+12
Eu-156	1.0176E+03	1.8466E-05	7.1286E+19	3.7650E+13
Nb-97	2.6209E+01	9.7484E-10	6.0522E+15	9.6973E+11
Nb-95m	1.7078E+02	4.4835E-07	2.8421E+18	6.3190E+12
Pm-147	2.3611E+03	2.5469E-03	1.0434E+22	8.7359E+13
Pm-148	2.1581E+03	1.3135E-05	5.3448E+19	7.9848E+13
Pm-149	2.1306E+03	5.3771E-06	2.1733E+19	7.8833E+13
Pm-151	2.5170E+02	3.4444E-07	1.3737E+18	9.3130E+12
Pm-148m	4.7573E+02	2.2270E-05	9.0616E+19	1.7602E+13
Pr-144	4.5071E+04	5.9645E-07	2.4944E+18	1.6676E+15
Pr-144m	8.2936E+02	4.5732E-09	1.9125E+16	3.0686E+13
Sm-153	1.1311E+03	2.5788E-06	1.0150E+19	4.1849E+13
Y-91m	1.0689E+03	2.5716E-08	1.7018E+17	3.9550E+13
Br-82	1.5844E+04	1.4634E-05	1.0747E+20	5.8621E+14
Br-83	2.9977E-06	1.8976E-16	1.3768E+09	1.1092E+05
Am-242	1.0090E+01	1.2482E-08	3.1061E+16	3.7331E+11
Np-238	2.0793E+03	8.0232E-06	2.0301E+19	7.6933E+13
Pu-243	7.3197E-03	2.8129E-12	6.9712E+12	2.7083E+08

Containment Sump Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.4926E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.3044E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.5106E+01	0.0000E+00	0.0000E+00

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	1.4960E+03	1.8386E-05	1.2875E+20	5.5352E+13
Sr-89	8.5299E+04	2.9361E-03	1.9867E+22	3.1561E+15
Sr-90	6.1355E+03	4.4979E-02	3.0097E+23	2.2701E+14
Sr-91	1.0019E+02	2.7638E-08	1.8290E+17	3.7069E+12
Sr-92	2.5488E-06	2.0278E-16	1.3273E+09	9.4306E+04
Y-90	3.9623E+03	7.2828E-06	4.8731E+19	1.4660E+14
Y-91	1.7477E+03	7.1267E-05	4.7163E+20	6.4667E+13
Y-92	2.4635E-03	2.5602E-13	1.6758E+12	9.1148E+07
Y-93	1.8365E+00	5.5046E-10	3.5645E+15	6.7951E+10
Zr-95	1.3935E+03	6.4864E-05	4.1118E+20	5.1558E+13
Zr-97	2.7333E+01	1.4298E-08	8.8767E+16	1.0113E+12
Nb-95	1.4614E+03	3.7373E-05	2.3691E+20	5.4072E+13
Mo-99	6.9652E+03	1.4523E-05	8.8340E+19	2.5771E+14
Tc-99m	6.7216E+03	1.2783E-06	7.7759E+18	2.4870E+14
Ru-103	1.4275E+04	4.4231E-04	2.5861E+21	5.2818E+14
Ru-105	3.1364E-03	4.6658E-13	2.6760E+12	1.1605E+08
Ru-106	4.5422E+03	1.3577E-03	7.7132E+21	1.6806E+14
Rh-105	1.6751E+03	1.9846E-06	1.1383E+19	6.1980E+13
Sb-127	1.0531E+04	3.9435E-05	1.8699E+20	3.8965E+14
Sb-129	1.3304E-02	2.3657E-12	1.1044E+13	4.9223E+08
Te-127	1.2421E+04	4.7066E-06	2.2318E+19	4.5958E+14
Te-127m	2.8234E+03	2.9933E-04	1.4194E+21	1.0447E+14
Te-129	5.8090E+03	2.7738E-07	1.2949E+18	2.1493E+14

Te-129m	8.8710E+03	2.9447E-04	1.3747E+21	3.2823E+14
Te-131m	3.2004E+03	4.0136E-06	1.8451E+19	1.1842E+14
Te-132	1.2423E+05	4.0919E-04	1.8668E+21	4.5964E+15
I-131	1.1635E+06	9.3849E-03	4.3143E+22	4.3049E+16
I-132	1.2838E+05	1.2437E-05	5.6740E+19	4.7499E+15
I-133	1.3926E+05	1.2293E-04	5.5664E+20	5.1527E+15
I-135	1.3315E+02	3.7914E-08	1.6913E+17	4.9265E+12
Cs-134	1.2977E+05	1.0030E-01	4.5077E+23	4.8016E+15
Cs-136	4.4346E+04	6.0506E-04	2.6792E+21	1.6408E+15
Cs-137	1.1538E+05	1.3265E+00	5.8308E+24	4.2690E+15
Ba-140	1.1847E+05	1.6183E-03	6.9611E+21	4.3835E+15
La-140	1.0369E+05	1.8655E-04	8.0243E+20	3.8364E+15
La-141	1.2709E-04	2.2472E-14	9.5977E+10	4.7022E+06
Ce-141	3.2371E+03	1.1361E-04	4.8523E+20	1.1977E+14
Ce-143	4.4164E+02	6.6504E-07	2.8007E+18	1.6341E+13
Ce-144	2.6334E+03	8.2566E-04	3.4529E+21	9.7437E+13
Pr-143	1.3033E+03	1.9354E-05	8.1504E+19	4.8221E+13
Nd-147	4.3007E+02	5.3162E-06	2.1779E+19	1.5913E+13
Np-239	1.2592E+04	5.4279E-05	1.3677E+20	4.6592E+14
Pu-238	2.7901E+00	1.6297E-04	4.1238E+20	1.0323E+11
Pu-239	8.7437E-01	1.4067E-02	3.5446E+22	3.2352E+10
Pu-240	8.7892E-01	3.8572E-03	9.6785E+21	3.2520E+10
Pu-241	2.6531E+02	2.5755E-03	6.4357E+21	9.8165E+12
Am-241	9.9485E-02	2.8986E-05	7.2431E+19	3.6810E+09
Cm-242	1.6676E+01	5.0314E-06	1.2521E+19	6.1700E+11
Cm-244	3.9919E-01	4.9342E-06	1.2178E+19	1.4770E+10
I-130	1.6853E+02	8.6411E-08	4.0029E+17	6.2356E+12
Cs-134m	4.5767E-06	5.6752E-16	2.5505E+09	1.6934E+05
Sb-124	1.7666E+02	1.0099E-05	4.9047E+19	6.5362E+12
Sb-125	2.6231E+03	2.5406E-03	1.2240E+22	9.7053E+13
Sb-126	1.6171E+02	1.9349E-06	9.2477E+18	5.9831E+12
Te-131	7.3256E+02	1.2759E-08	5.8656E+16	2.7105E+13
Te-125m	5.4783E+02	3.0418E-05	1.4654E+20	2.0270E+13
Ba-137m	1.2790E+05	2.3782E-07	1.0454E+18	4.7323E+15
Pd-109	1.9597E+01	9.1523E-09	5.0565E+16	7.2510E+11
Rh-106	9.3415E+03	2.6243E-09	1.4909E+16	3.4563E+14
Rh-103m	1.4352E+04	4.4121E-07	2.5797E+18	5.3103E+14
Eu-154	4.5527E+00	1.7259E-05	6.7489E+19	1.6845E+11
Eu-155	3.4914E+00	7.5083E-06	2.9172E+19	1.2918E+11
Eu-156	6.0899E+01	1.1052E-06	4.2664E+18	2.2533E+12
Nb-97	1.5686E+00	5.8342E-11	3.6221E+14	5.8036E+10
Nb-95m	1.0221E+01	2.6833E-08	1.7009E+17	3.7818E+11
Pm-147	1.4130E+02	1.5243E-04	6.2445E+20	5.2283E+12
Pm-148	1.2916E+02	7.8612E-07	3.1987E+18	4.7788E+12
Pm-149	1.2751E+02	3.2181E-07	1.3007E+18	4.7180E+12
Pm-151	1.5064E+01	2.0614E-08	8.2212E+16	5.5737E+11
Pm-148m	2.8472E+01	1.3328E-06	5.4232E+18	1.0535E+12
Pr-144	2.6974E+03	3.5697E-08	1.4928E+17	9.9803E+13
Pr-144m	4.9636E+01	2.7369E-10	1.1446E+15	1.8365E+12
Sm-153	6.7692E+01	1.5434E-07	6.0748E+17	2.5046E+12
Y-91m	6.3973E+01	1.5391E-09	1.0185E+16	2.3670E+12
Br-82	9.4925E+02	8.7680E-07	6.4392E+18	3.5122E+13
Br-83	1.7961E-07	1.1369E-17	8.2490E+07	6.6455E+03
Am-242	6.0384E-01	7.4701E-10	1.8589E+15	2.2342E+10
Np-238	1.2444E+02	4.8017E-07	1.2150E+18	4.6043E+12
Pu-243	4.3807E-04	1.6835E-13	4.1721E+11	1.6209E+07

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.3763E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.5046E+00

Environment Integral Nuclide Release:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Xe-133	3.5583E+05	1.9010E-03	8.6076E+21	1.3166E+16

Xe-135	5.0407E+03	1.9739E-06	8.8050E+18	1.8650E+14
Xe-131m	3.1440E+03	3.7536E-05	1.7255E+20	1.1633E+14
Xe-133m	1.5257E+04	3.4003E-05	1.5396E+20	5.6453E+14
Xe-135m	2.1901E+01	2.4043E-10	1.0725E+15	8.1033E+11

Environment Transport Group Inventory:

Time (h) = 96.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.8301E+18	2.5417E+16	8.9429E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	1.4960E+03	1.8386E-05	1.2875E+20	5.5352E+13
Sr-89	8.5299E+04	2.9361E-03	1.9867E+22	3.1561E+15
Sr-90	6.1355E+03	4.4979E-02	3.0097E+23	2.2701E+14
Sr-91	1.0019E+02	2.7638E-08	1.8290E+17	3.7069E+12
Sr-92	2.5488E-06	2.0278E-16	1.3273E+09	9.4306E+04
Y-90	3.9623E+03	7.2828E-06	4.8731E+19	1.4660E+14
Y-91	1.7477E+03	7.1267E-05	4.7163E+20	6.4667E+13
Y-92	2.4635E-03	2.5602E-13	1.6758E+12	9.1148E+07
Y-93	1.8365E+00	5.5046E-10	3.5645E+15	6.7951E+10
Zr-95	1.3935E+03	6.4864E-05	4.1118E+20	5.1558E+13
Zr-97	2.7333E+01	1.4298E-08	8.8767E+16	1.0113E+12
Nb-95	1.4614E+03	3.7373E-05	2.3691E+20	5.4072E+13
Mo-99	6.9652E+03	1.4523E-05	8.8340E+19	2.5771E+14
Tc-99m	6.7216E+03	1.2783E-06	7.7759E+18	2.4870E+14
Ru-103	1.4275E+04	4.4231E-04	2.5861E+21	5.2818E+14
Ru-105	3.1364E-03	4.6658E-13	2.6760E+12	1.1605E+08
Ru-106	4.5422E+03	1.3577E-03	7.7132E+21	1.6806E+14
Rh-105	1.6751E+03	1.9846E-06	1.1383E+19	6.1980E+13
Sb-127	1.0531E+04	3.9435E-05	1.8699E+20	3.8965E+14
Sb-129	1.3304E-02	2.3657E-12	1.1044E+13	4.9223E+08
Te-127	1.2421E+04	4.7066E-06	2.2318E+19	4.5958E+14
Te-127m	2.8234E+03	2.9933E-04	1.4194E+21	1.0447E+14
Te-129	5.8090E+03	2.7738E-07	1.2949E+18	2.1493E+14
Te-129m	8.8710E+03	2.9447E-04	1.3747E+21	3.2823E+14
Te-131m	3.2004E+03	4.0136E-06	1.8451E+19	1.1842E+14
Te-132	1.2423E+05	4.0919E-04	1.8668E+21	4.5964E+15
I-131	1.1635E+06	9.3849E-03	4.3143E+22	4.3049E+16
I-132	1.2838E+05	1.2437E-05	5.6740E+19	4.7499E+15
I-133	1.3926E+05	1.2293E-04	5.5664E+20	5.1527E+15
I-135	1.3315E+02	3.7914E-08	1.6913E+17	4.9265E+12
Cs-134	1.2977E+05	1.0030E-01	4.5077E+23	4.8016E+15
Cs-136	4.4346E+04	6.0506E-04	2.6792E+21	1.6408E+15
Cs-137	1.1538E+05	1.3265E+00	5.8308E+24	4.2690E+15
Ba-140	1.1847E+05	1.6183E-03	6.9611E+21	4.3835E+15
La-140	1.0369E+05	1.8655E-04	8.0243E+20	3.8364E+15
La-141	1.2709E-04	2.2472E-14	9.5977E+10	4.7022E+06
Ce-141	3.2371E+03	1.1361E-04	4.8523E+20	1.1977E+14
Ce-143	4.4164E+02	6.6504E-07	2.8007E+18	1.6341E+13
Ce-144	2.6334E+03	8.2566E-04	3.4529E+21	9.7437E+13
Pr-143	1.3033E+03	1.9354E-05	8.1504E+19	4.8221E+13
Nd-147	4.3007E+02	5.3162E-06	2.1779E+19	1.5913E+13
Np-239	1.2592E+04	5.4279E-05	1.3677E+20	4.6592E+14
Pu-238	2.7901E+00	1.6297E-04	4.1238E+20	1.0323E+11
Pu-239	8.7437E-01	1.4067E-02	3.5446E+22	3.2352E+10
Pu-240	8.7892E-01	3.8572E-03	9.6785E+21	3.2520E+10
Pu-241	2.6531E+02	2.5755E-03	6.4357E+21	9.8165E+12
Am-241	9.9485E-02	2.8986E-05	7.2431E+19	3.6810E+09
Cm-242	1.6676E+01	5.0314E-06	1.2521E+19	6.1700E+11
Cm-244	3.9919E-01	4.9342E-06	1.2178E+19	1.4770E+10
I-130	1.6853E+02	8.6411E-08	4.0029E+17	6.2356E+12
Cs-134m	4.5767E-06	5.6752E-16	2.5505E+09	1.6934E+05
Sb-124	1.7666E+02	1.0099E-05	4.9047E+19	6.5362E+12
Sb-125	2.6231E+03	2.5406E-03	1.2240E+22	9.7053E+13

Sb-126	1.6171E+02	1.9349E-06	9.2477E+18	5.9831E+12
Te-131	7.3256E+02	1.2759E-08	5.8656E+16	2.7105E+13
Te-125m	5.4783E+02	3.0418E-05	1.4654E+20	2.0270E+13
Ba-137m	1.2790E+05	2.3782E-07	1.0454E+18	4.7323E+15
Pd-109	1.9597E+01	9.1523E-09	5.0565E+16	7.2510E+11
Rh-106	9.3415E+03	2.6243E-09	1.4909E+16	3.4563E+14
Rh-103m	1.4352E+04	4.4121E-07	2.5797E+18	5.3103E+14
Eu-154	4.5527E+00	1.7259E-05	6.7489E+19	1.6845E+11
Eu-155	3.4914E+00	7.5083E-06	2.9172E+19	1.2918E+11
Eu-156	6.0899E+01	1.1052E-06	4.2664E+18	2.2533E+12
Nb-97	1.5686E+00	5.8342E-11	3.6221E+14	5.8036E+10
Nb-95m	1.0221E+01	2.6833E-08	1.7009E+17	3.7818E+11
Pm-147	1.4130E+02	1.5243E-04	6.2445E+20	5.2283E+12
Pm-148	1.2916E+02	7.8612E-07	3.1987E+18	4.7788E+12
Pm-149	1.2751E+02	3.2181E-07	1.3007E+18	4.7180E+12
Pm-151	1.5064E+01	2.0614E-08	8.2212E+16	5.5737E+11
Pm-148m	2.8472E+01	1.3328E-06	5.4232E+18	1.0535E+12
Pr-144	2.6974E+03	3.5697E-08	1.4928E+17	9.9803E+13
Pr-144m	4.9636E+01	2.7369E-10	1.1446E+15	1.8365E+12
Sm-153	6.7692E+01	1.5434E-07	6.0748E+17	2.5046E+12
Y-91m	6.3973E+01	1.5391E-09	1.0185E+16	2.3670E+12
Br-82	9.4925E+02	8.7680E-07	6.4392E+18	3.5122E+13
Br-83	1.7961E-07	1.1369E-17	8.2490E+07	6.6455E+03
Am-242	6.0384E-01	7.4701E-10	1.8589E+15	2.2342E+10
Np-238	1.2444E+02	4.8017E-07	1.2150E+18	4.6043E+12
Pu-243	4.3807E-04	1.6835E-13	4.1721E+11	1.6209E+07

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.3763E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.5046E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00

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Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =  96.0000       Ci           kg         Atoms         Bq
Xe-133                 1.8052E+00  9.6440E-09  4.3667E+16  6.6792E+10
Xe-135                 2.5091E-02  9.8252E-12  4.3829E+13  9.2836E+08
Xe-131m                2.6242E-02  3.1330E-10  1.4402E+15  9.7095E+08
Xe-133m                8.6341E-02  1.9242E-10  8.7128E+14  3.1946E+09
Xe-135m                1.1788E-02  1.2941E-13  5.7727E+11  4.3616E+08

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =  96.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    4.6023E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =  96.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =  111.1100

EAB Doses:

Time (h) = 111.1100     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.8347E-01  0.0000E+00  6.0802E-01  1.8347E-01
Accumulated dose (rem)  9.8753E+00  0.0000E+00  2.4583E+01  9.8753E+00
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LPZ Doses:

Time (h) = 111.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.6460E-04	0.0000E+00	2.8653E-03	8.6460E-04
Accumulated dose (rem)	3.3047E-01	0.0000E+00	7.7320E-01	3.3047E-01

Control Room Doses:

Time (h) = 111.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	5.4586E-03	0.0000E+00	6.0378E-01	5.4586E-03
Accumulated dose (rem)	4.1711E+00	0.0000E+00	2.5964E+02	4.1711E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Rb-86	2.4158E+04	2.9690E-04	2.0791E+21	8.9385E+14
Sr-89	1.4000E+06	4.8188E-02	3.2606E+23	5.1799E+16
Sr-90	1.0157E+05	7.4460E-01	4.9823E+24	3.7580E+15
Sr-91	5.5073E+02	1.5193E-07	1.0054E+18	2.0377E+13
Sr-92	8.8476E-07	7.0390E-17	4.6076E+08	3.2736E+04
Y-90	7.1027E+04	1.3055E-04	8.7354E+20	2.6280E+15
Y-91	2.8726E+04	1.1713E-03	7.7516E+21	1.0628E+15
Y-92	2.1203E-03	2.2036E-13	1.4424E+12	7.8453E+07
Y-93	1.0779E+01	3.2307E-09	2.0920E+16	3.9882E+11
Zr-95	2.2912E+04	1.0665E-03	6.7608E+21	8.4774E+14
Zr-97	2.4348E+02	1.2737E-07	7.9074E+17	9.0089E+12
Nb-95	2.4179E+04	6.1834E-04	3.9197E+21	8.9462E+14
Mo-99	9.8389E+04	2.0514E-04	1.2479E+21	3.6404E+15
Tc-99m	9.4948E+04	1.8057E-05	1.0984E+20	3.5131E+15
Ru-103	2.3371E+05	7.2415E-03	4.2339E+22	8.6473E+15
Ru-105	4.9080E-03	7.3013E-13	4.1876E+12	1.8159E+08
Ru-106	7.5106E+04	2.2449E-02	1.2754E+23	2.7789E+15
Rh-105	2.0623E+04	2.4433E-05	1.4013E+20	7.6303E+14
Sb-127	1.5566E+05	5.8288E-04	2.7639E+21	5.7594E+15
Sb-129	1.9498E-02	3.4673E-12	1.6186E+13	7.2142E+08
Te-127	1.8845E+05	7.1405E-05	3.3859E+20	6.9725E+15
Te-127m	4.6671E+04	4.9478E-03	2.3462E+22	1.7268E+15
Te-129	9.4926E+04	4.5327E-06	2.1160E+19	3.5122E+15
Te-129m	1.4496E+05	4.8120E-03	2.2464E+22	5.3637E+15
Te-131m	3.7370E+04	4.6864E-05	2.1544E+20	1.3827E+15
Te-132	1.7988E+06	5.9249E-03	2.7031E+22	6.6554E+16
I-131	1.8226E+07	1.4702E-01	6.7584E+23	6.7437E+17
I-132	1.8589E+06	1.8008E-04	8.2159E+20	6.8778E+16
I-133	1.3919E+06	1.2287E-03	5.5635E+21	5.1500E+16
I-135	4.5150E+02	1.2856E-07	5.7350E+17	1.6705E+13
Xe-133	5.5727E+06	2.9772E-02	1.3480E+23	2.0619E+17
Xe-135	2.6990E+04	1.0569E-05	4.7145E+19	9.9861E+14
Cs-134	2.1440E+06	1.6571E+00	7.4471E+24	7.9327E+16
Cs-136	7.0905E+05	9.6744E-03	4.2839E+22	2.6235E+16
Cs-137	1.9072E+06	2.1926E+01	9.6382E+25	7.0566E+16
Ba-140	1.8953E+06	2.5888E-02	1.1136E+23	7.0124E+16
La-140	1.7647E+06	3.1749E-03	1.3657E+22	6.5295E+16
La-141	1.4623E-04	2.5857E-14	1.1044E+11	5.4106E+06
Ce-141	5.2876E+04	1.8557E-03	7.9258E+21	1.9564E+15
Ce-143	5.3231E+03	8.0157E-06	3.3756E+19	1.9695E+14
Ce-144	4.3530E+04	1.3648E-02	5.7076E+22	1.6106E+15
Pr-143	2.1090E+04	3.1320E-04	1.3190E+21	7.8034E+14
Nd-147	6.8424E+03	8.4580E-05	3.4650E+20	2.5317E+14
Np-239	1.7320E+05	7.4660E-04	1.8812E+21	6.4085E+15
Pu-238	4.6218E+01	2.6997E-03	6.8311E+21	1.7101E+12
Pu-239	1.4485E+01	2.3304E-01	5.8718E+23	5.3593E+11
Pu-240	1.4551E+01	6.3855E-02	1.6023E+23	5.3837E+11
Pu-241	4.3918E+03	4.2634E-02	1.0653E+23	1.6250E+14
Am-241	1.6591E+00	4.8340E-04	1.2079E+21	6.1387E+10
Cm-242	2.7534E+02	8.3077E-05	2.0674E+20	1.0188E+13
Cm-244	6.6082E+00	8.1681E-05	2.0160E+20	2.4450E+11
I-130	1.1943E+03	6.1236E-07	2.8367E+18	4.4190E+13
Kr-83m	1.5901E-07	7.7072E-18	5.5920E+07	5.8835E+03
Xe-131m	5.7604E+04	6.8772E-04	3.1615E+21	2.1314E+15

Xe-133m	2.1609E+05	4.8159E-04	2.1806E+21	7.9954E+15
Xe-135m	7.4278E+01	8.1542E-10	3.6374E+15	2.7483E+12
Cs-134m	2.0435E-06	2.5340E-16	1.1388E+09	7.5609E+04
Sb-124	2.9034E+03	1.6598E-04	8.0611E+20	1.0743E+14
Sb-125	4.3406E+04	4.2041E-02	2.0254E+23	1.6060E+15
Sb-126	2.5844E+03	3.0924E-05	1.4780E+20	9.5625E+13
Te-131	8.5525E+03	1.4896E-07	6.8480E+17	3.1644E+14
Te-125m	9.0756E+03	5.0391E-04	2.4277E+21	3.3580E+14
Ba-137m	2.0903E+06	3.8867E-06	1.7085E+19	7.7340E+16
Pd-109	1.4872E+02	6.9454E-08	3.8372E+17	5.5025E+12
Rh-106	1.2973E+05	3.6445E-08	2.0705E+17	4.7999E+15
Rh-103m	2.3497E+05	7.2234E-06	4.2233E+19	8.6938E+15
Eu-154	7.5360E+01	2.8568E-04	1.1171E+21	2.7883E+12
Eu-155	5.7786E+01	1.2427E-04	4.8282E+20	2.1381E+12
Eu-156	9.7963E+02	1.7778E-05	6.8629E+19	3.6246E+13
Nb-97	1.3973E+01	5.1971E-10	3.2265E+15	5.1698E+11
Nb-95m	1.6827E+02	4.4174E-07	2.8002E+18	6.2258E+12
Pm-147	2.3414E+03	2.5257E-03	1.0347E+22	8.6632E+13
Pm-148	1.9730E+03	1.2009E-05	4.8864E+19	7.3000E+13
Pm-149	1.7330E+03	4.3736E-06	1.7677E+19	6.4120E+13
Pm-151	1.7247E+02	2.3601E-07	9.4125E+17	6.3813E+12
Pm-148m	4.6639E+02	2.1833E-05	8.8837E+19	1.7257E+13
Pr-144	4.4575E+04	5.8989E-07	2.4669E+18	1.6493E+15
Pr-144m	8.1916E+02	4.5169E-09	1.8890E+16	3.0309E+13
Sm-153	8.9550E+02	2.0417E-06	8.0364E+18	3.3133E+13
Y-91m	3.5165E+02	8.4601E-09	5.5987E+16	1.3011E+13
Br-82	1.1667E+04	1.0777E-05	7.9146E+19	4.3170E+14
Br-83	3.7120E-08	2.3497E-18	1.7048E+07	1.3734E+03
Am-242	5.1990E+00	6.4317E-09	1.6005E+16	1.9236E+11
Np-238	1.6764E+03	6.4685E-06	1.6367E+19	6.2025E+13
Pu-243	8.7636E-04	3.3678E-13	8.3463E+11	3.2425E+07

Containment Sump Transport Group Inventory:

Time (h) = 111.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.4019E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.8231E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.4870E+01	0.0000E+00	0.0000E+00

Time (h) = 111.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Rb-86	1.6862E+03	2.0723E-05	1.4511E+20	6.2389E+13
Sr-89	9.7592E+04	3.3592E-03	2.2730E+22	3.6109E+15
Sr-90	7.0803E+03	5.1906E-02	3.4731E+23	2.6197E+14
Sr-91	3.8391E+01	1.0591E-08	7.0087E+16	1.4205E+12
Sr-92	6.1676E-08	4.9069E-18	3.2119E+07	2.2820E+03
Y-90	4.9513E+03	9.1006E-06	6.0895E+19	1.8320E+14
Y-91	2.0025E+03	8.1656E-05	5.4038E+20	7.4093E+13
Y-92	1.4782E-04	1.5362E-14	1.0056E+11	5.4693E+06
Y-93	7.5139E-01	2.2521E-10	1.4584E+15	2.7801E+10
Zr-95	1.5972E+03	7.4346E-05	4.7129E+20	5.9096E+13
Zr-97	1.6973E+01	8.8787E-09	5.5122E+16	6.2800E+11
Nb-95	1.6855E+03	4.3104E-05	2.7324E+20	6.2363E+13
Mo-99	6.8586E+03	1.4300E-05	8.6988E+19	2.5377E+14
Tc-99m	6.6188E+03	1.2587E-06	7.6569E+18	2.4490E+14
Ru-103	1.6292E+04	5.0480E-04	2.9514E+21	6.0280E+14
Ru-105	3.4213E-04	5.0897E-14	2.9191E+11	1.2659E+07
Ru-106	5.2356E+03	1.5649E-03	8.8908E+21	1.9372E+14
Rh-105	1.4376E+03	1.7032E-06	9.7684E+18	5.3191E+13
Sb-127	1.0851E+04	4.0632E-05	1.9267E+20	4.0149E+14

Sb-129	1.3592E-03	2.4170E-13	1.1283E+12	5.0290E+07
Te-127	1.3136E+04	4.9776E-06	2.3603E+19	4.8605E+14
Te-127m	3.2534E+03	3.4491E-04	1.6355E+21	1.2038E+14
Te-129	6.6172E+03	3.1597E-07	1.4751E+18	2.4484E+14
Te-129m	1.0105E+04	3.3544E-04	1.5660E+21	3.7390E+14
Te-131m	2.6050E+03	3.2669E-06	1.5018E+19	9.6386E+13
Te-132	1.2539E+05	4.1302E-04	1.8843E+21	4.6395E+15
I-131	1.2717E+06	1.0258E-02	4.7157E+22	4.7055E+16
I-132	1.2958E+05	1.2554E-05	5.7272E+19	4.7945E+15
I-133	9.7119E+04	8.5733E-05	3.8819E+20	3.5934E+15
I-135	3.1504E+01	8.9706E-09	4.0017E+16	1.1656E+12
Cs-134	1.4965E+05	1.1566E-01	5.1980E+23	5.5369E+15
Cs-136	4.9490E+04	6.7526E-04	2.9901E+21	1.8311E+15
Cs-137	1.3312E+05	1.5304E+00	6.7273E+24	4.9254E+15
Ba-140	1.3212E+05	1.8047E-03	7.7628E+21	4.8883E+15
La-140	1.2302E+05	2.2132E-04	9.5203E+20	4.5517E+15
La-141	1.0206E-05	1.8046E-15	7.7075E+09	3.7761E+05
Ce-141	3.6859E+03	1.2936E-04	5.5250E+20	1.3638E+14
Ce-143	3.7107E+02	5.5877E-07	2.3531E+18	1.3730E+13
Ce-144	3.0344E+03	9.5138E-04	3.9787E+21	1.1227E+14
Pr-143	1.4702E+03	2.1833E-05	9.1944E+19	5.4397E+13
Nd-147	4.7698E+02	5.8960E-06	2.4154E+19	1.7648E+13
Np-239	1.2074E+04	5.2045E-05	1.3114E+20	4.4674E+14
Pu-238	3.2218E+00	1.8819E-04	4.7619E+20	1.1921E+11
Pu-239	1.0097E+00	1.6245E-02	4.0932E+22	3.7360E+10
Pu-240	1.0143E+00	4.4513E-03	1.1169E+22	3.7529E+10
Pu-241	3.0615E+02	2.9720E-03	7.4265E+21	1.1328E+13
Am-241	1.1566E-01	3.3698E-05	8.4204E+19	4.2793E+09
Cm-242	1.9194E+01	5.7912E-06	1.4411E+19	7.1017E+11
Cm-244	4.6065E-01	5.6939E-06	1.4053E+19	1.7044E+10
I-130	8.3335E+01	4.2728E-08	1.9794E+17	3.0834E+12
Cs-134m	1.4263E-07	1.7687E-17	7.9487E+07	5.2774E+03
Sb-124	2.0239E+02	1.1571E-05	5.6193E+19	7.4886E+12
Sb-125	3.0258E+03	2.9306E-03	1.4119E+22	1.1195E+14
Sb-126	1.8016E+02	2.1557E-06	1.0303E+19	6.6659E+12
Te-131	5.9619E+02	1.0384E-08	4.7737E+16	2.2059E+13
Te-125m	6.3265E+02	3.5127E-05	1.6923E+20	2.3408E+13
Ba-137m	1.4590E+05	2.7129E-07	1.1925E+18	5.3982E+15
Pd-109	1.0367E+01	4.8416E-09	2.6749E+16	3.8358E+11
Rh-106	9.0433E+03	2.5406E-09	1.4434E+16	3.3460E+14
Rh-103m	1.6379E+04	5.0354E-07	2.9441E+18	6.0604E+14
Eu-154	5.2533E+00	1.9914E-05	7.7875E+19	1.9437E+11
Eu-155	4.0283E+00	8.6628E-06	3.3657E+19	1.4905E+11
Eu-156	6.8289E+01	1.2393E-06	4.7841E+18	2.5267E+12
Nb-97	9.7402E-01	3.6229E-11	2.2492E+14	3.6039E+10
Nb-95m	1.1730E+01	3.0793E-08	1.9520E+17	4.3400E+11
Pm-147	1.6322E+02	1.7607E-04	7.2129E+20	6.0391E+12
Pm-148	1.3753E+02	8.3712E-07	3.4063E+18	5.0888E+12
Pm-149	1.2080E+02	3.0488E-07	1.2322E+18	4.4697E+12
Pm-151	1.2023E+01	1.6452E-08	6.5614E+16	4.4484E+11
Pm-148m	3.2512E+01	1.5219E-06	6.1928E+18	1.2029E+12
Pr-144	3.1073E+03	4.1121E-08	1.7197E+17	1.1497E+14
Pr-144m	5.7104E+01	3.1487E-10	1.3168E+15	2.1128E+12
Sm-153	6.2425E+01	1.4233E-07	5.6021E+17	2.3097E+12
Y-91m	2.4514E+01	5.8975E-10	3.9028E+15	9.0700E+11
Br-82	8.1411E+02	7.5197E-07	5.5225E+18	3.0122E+13
Br-83	2.5901E-09	1.6395E-19	1.1896E+06	9.5833E+01
Am-242	3.6242E-01	4.4835E-10	1.1157E+15	1.3409E+10
Np-238	1.1686E+02	4.5091E-07	1.1410E+18	4.3237E+12
Pu-243	6.1091E-05	2.3477E-14	5.8182E+10	2.2604E+06

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.7608E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7358E+00

Environment Integral Nuclide Release:

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Xe-133	3.8886E+05	2.0774E-03	9.4065E+21	1.4388E+16
Xe-135	1.8833E+03	7.3748E-07	3.2898E+18	6.9683E+13
Xe-131m	4.0194E+03	4.7987E-05	2.2060E+20	1.4872E+14
Xe-133m	1.5078E+04	3.3604E-05	1.5216E+20	5.5790E+14
Xe-135m	5.1807E+00	5.6874E-11	2.5370E+14	1.9169E+11

Environment Transport Group Inventory:

Time (h) = 111.1100	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.5941E+17	1.1936E+16	9.7825E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Rb-86	1.6862E+03	2.0723E-05	1.4511E+20	6.2389E+13
Sr-89	9.7592E+04	3.3592E-03	2.2730E+22	3.6109E+15
Sr-90	7.0803E+03	5.1906E-02	3.4731E+23	2.6197E+14
Sr-91	3.8391E+01	1.0591E-08	7.0087E+16	1.4205E+12
Sr-92	6.1676E-08	4.9069E-18	3.2119E+07	2.2820E+03
Y-90	4.9513E+03	9.1006E-06	6.0895E+19	1.8320E+14
Y-91	2.0025E+03	8.1656E-05	5.4038E+20	7.4093E+13
Y-92	1.4782E-04	1.5362E-14	1.0056E+11	5.4693E+06
Y-93	7.5139E-01	2.2521E-10	1.4584E+15	2.7801E+10
Zr-95	1.5972E+03	7.4346E-05	4.7129E+20	5.9096E+13
Zr-97	1.6973E+01	8.8787E-09	5.5122E+16	6.2800E+11
Nb-95	1.6855E+03	4.3104E-05	2.7324E+20	6.2363E+13
Mo-99	6.8586E+03	1.4300E-05	8.6988E+19	2.5377E+14
Tc-99m	6.6188E+03	1.2587E-06	7.6569E+18	2.4490E+14
Ru-103	1.6292E+04	5.0480E-04	2.9514E+21	6.0280E+14
Ru-105	3.4213E-04	5.0897E-14	2.9191E+11	1.2659E+07
Ru-106	5.2356E+03	1.5649E-03	8.8908E+21	1.9372E+14
Rh-105	1.4376E+03	1.7032E-06	9.7684E+18	5.3191E+13
Sb-127	1.0851E+04	4.0632E-05	1.9267E+20	4.0149E+14
Sb-129	1.3592E-03	2.4170E-13	1.1283E+12	5.0290E+07
Te-127	1.3136E+04	4.9776E-06	2.3603E+19	4.8605E+14
Te-127m	3.2534E+03	3.4491E-04	1.6355E+21	1.2038E+14
Te-129	6.6172E+03	3.1597E-07	1.4751E+18	2.4484E+14
Te-129m	1.0105E+04	3.3544E-04	1.5660E+21	3.7390E+14
Te-131m	2.6050E+03	3.2669E-06	1.5018E+19	9.6386E+13
Te-132	1.2539E+05	4.1302E-04	1.8843E+21	4.6395E+15
I-131	1.2717E+06	1.0258E-02	4.7157E+22	4.7055E+16
I-132	1.2958E+05	1.2554E-05	5.7272E+19	4.7945E+15
I-133	9.7119E+04	8.5733E-05	3.8819E+20	3.5934E+15
I-135	3.1504E+01	8.9706E-09	4.0017E+16	1.1656E+12
Cs-134	1.4965E+05	1.1566E-01	5.1980E+23	5.5369E+15
Cs-136	4.9490E+04	6.7526E-04	2.9901E+21	1.8311E+15
Cs-137	1.3312E+05	1.5304E+00	6.7273E+24	4.9254E+15
Ba-140	1.3212E+05	1.8047E-03	7.7628E+21	4.8883E+15
La-140	1.2302E+05	2.2132E-04	9.5203E+20	4.5517E+15
La-141	1.0206E-05	1.8046E-15	7.7075E+09	3.7761E+05
Ce-141	3.6859E+03	1.2936E-04	5.5250E+20	1.3638E+14
Ce-143	3.7107E+02	5.5877E-07	2.3531E+18	1.3730E+13
Ce-144	3.0344E+03	9.5138E-04	3.9787E+21	1.1227E+14
Pr-143	1.4702E+03	2.1833E-05	9.1944E+19	5.4397E+13
Nd-147	4.7698E+02	5.8960E-06	2.4154E+19	1.7648E+13
Np-239	1.2074E+04	5.2045E-05	1.3114E+20	4.4674E+14
Pu-238	3.2218E+00	1.8819E-04	4.7619E+20	1.1921E+11
Pu-239	1.0097E+00	1.6245E-02	4.0932E+22	3.7360E+10
Pu-240	1.0143E+00	4.4513E-03	1.1169E+22	3.7529E+10
Pu-241	3.0615E+02	2.9720E-03	7.4265E+21	1.1328E+13
Am-241	1.1566E-01	3.3698E-05	8.4204E+19	4.2793E+09
Cm-242	1.9194E+01	5.7912E-06	1.4411E+19	7.1017E+11
Cm-244	4.6065E-01	5.6939E-06	1.4053E+19	1.7044E+10

I-130	8.3335E+01	4.2728E-08	1.9794E+17	3.0834E+12
Cs-134m	1.4263E-07	1.7687E-17	7.9487E+07	5.2774E+03
Sb-124	2.0239E+02	1.1571E-05	5.6193E+19	7.4886E+12
Sb-125	3.0258E+03	2.9306E-03	1.4119E+22	1.1195E+14
Sb-126	1.8016E+02	2.1557E-06	1.0303E+19	6.6659E+12
Te-131	5.9619E+02	1.0384E-08	4.7737E+16	2.2059E+13
Te-125m	6.3265E+02	3.5127E-05	1.6923E+20	2.3408E+13
Ba-137m	1.4590E+05	2.7129E-07	1.1925E+18	5.3982E+15
Pd-109	1.0367E+01	4.8416E-09	2.6749E+16	3.8358E+11
Rh-106	9.0433E+03	2.5406E-09	1.4434E+16	3.3460E+14
Rh-103m	1.6379E+04	5.0354E-07	2.9441E+18	6.0604E+14
Eu-154	5.2533E+00	1.9914E-05	7.7875E+19	1.9437E+11
Eu-155	4.0283E+00	8.6628E-06	3.3657E+19	1.4905E+11
Eu-156	6.8289E+01	1.2393E-06	4.7841E+18	2.5267E+12
Nb-97	9.7402E-01	3.6229E-11	2.2492E+14	3.6039E+10
Nb-95m	1.1730E+01	3.0793E-08	1.9520E+17	4.3400E+11
Pm-147	1.6322E+02	1.7607E-04	7.2129E+20	6.0391E+12
Pm-148	1.3753E+02	8.3712E-07	3.4063E+18	5.0888E+12
Pm-149	1.2080E+02	3.0488E-07	1.2322E+18	4.4697E+12
Pm-151	1.2023E+01	1.6452E-08	6.5614E+16	4.4484E+11
Pm-148m	3.2512E+01	1.5219E-06	6.1928E+18	1.2029E+12
Pr-144	3.1073E+03	4.1121E-08	1.7197E+17	1.1497E+14
Pr-144m	5.7104E+01	3.1487E-10	1.3168E+15	2.1128E+12
Sm-153	6.2425E+01	1.4233E-07	5.6021E+17	2.3097E+12
Y-91m	2.4514E+01	5.8975E-10	3.9028E+15	9.0700E+11
Br-82	8.1411E+02	7.5197E-07	5.5225E+18	3.0122E+13
Br-83	2.5901E-09	1.6395E-19	1.1896E+06	9.5833E+01
Am-242	3.6242E-01	4.4835E-10	1.1157E+15	1.3409E+10
Np-238	1.1686E+02	4.5091E-07	1.1410E+18	4.3237E+12
Pu-243	6.1091E-05	2.3477E-14	5.8182E+10	2.2604E+06

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.7608E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7358E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Pathway

Time (h) = 111.1100	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Xe-133	1.2176E+00	6.5048E-09	2.9453E+16	4.5050E+10
Xe-135	5.8052E-03	2.2732E-12	1.0141E+13	2.1479E+08
Xe-131m	2.1634E-02	2.5828E-10	1.1873E+15	8.0045E+08
Xe-133m	5.2582E-02	1.1719E-10	5.3061E+14	1.9455E+09
Xe-135m	2.0950E-03	2.2999E-14	1.0259E+11	7.7516E+07

Control Room Transport Group Inventory:

Time (h) = 111.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.1181E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 111.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 305.5600

EAB Doses:

Time (h) = 305.5600	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.3039E+00	0.0000E+00	4.3291E+00	1.3039E+00
Accumulated dose (rem)	1.1179E+01	0.0000E+00	2.8912E+01	1.1179E+01

LPZ Doses:

Time (h) = 305.5600	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.1447E-03	0.0000E+00	2.0401E-02	6.1447E-03
Accumulated dose (rem)	3.3661E-01	0.0000E+00	7.9360E-01	3.3661E-01

Control Room Doses:

Time (h) = 305.5600	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.2967E-02	0.0000E+00	3.7544E+00	3.2967E-02
Accumulated dose (rem)	4.2041E+00	0.0000E+00	2.6339E+02	4.2041E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Rb-86	1.5871E+04	1.9505E-04	1.3658E+21	5.8722E+14
Sr-89	1.1119E+06	3.8272E-02	2.5897E+23	4.1140E+16
Sr-90	9.0109E+04	6.6059E-01	4.4202E+24	3.3340E+15
Sr-91	3.3695E-04	9.2953E-14	6.1514E+11	1.2467E+07
Y-90	8.6837E+04	1.5961E-04	1.0680E+21	3.2130E+15
Y-91	2.3168E+04	9.4470E-04	6.2518E+21	8.5720E+14
Y-93	1.5319E-05	4.5916E-15	2.9733E+10	5.6681E+05
Zr-95	1.8628E+04	8.6713E-04	5.4968E+21	6.8925E+14
Zr-97	7.4316E-02	3.8875E-11	2.4135E+14	2.7497E+09
Nb-95	2.1166E+04	5.4128E-04	3.4312E+21	7.8314E+14
Mo-99	1.1331E+04	2.3626E-05	1.4372E+20	4.1926E+14
Tc-99m	1.0935E+04	2.0796E-06	1.2650E+19	4.0460E+14
Ru-103	1.7981E+05	5.5715E-03	3.2575E+22	6.6531E+15
Ru-106	6.5658E+04	1.9625E-02	1.1150E+23	2.4294E+15
Rh-105	4.0473E+02	4.7951E-07	2.7502E+18	1.4975E+13
Sb-127	3.2130E+04	1.2032E-04	5.7051E+20	1.1888E+15
Te-127	6.8651E+04	2.6013E-05	1.2335E+20	2.5401E+15
Te-127m	3.9985E+04	4.2391E-03	2.0101E+22	1.4795E+15
Te-129	7.1292E+04	3.4042E-06	1.5892E+19	2.6378E+15
Te-129m	1.0887E+05	3.6139E-03	1.6871E+22	4.0282E+15
Te-131m	3.7118E+02	4.6548E-07	2.1398E+18	1.3734E+13
Te-132	2.8489E+05	9.3840E-04	4.2812E+21	1.0541E+16
I-131	8.0490E+06	6.4924E-02	2.9846E+23	2.9781E+17
I-132	2.9441E+05	2.8522E-05	1.3012E+20	1.0893E+16
I-133	1.8952E+03	1.6730E-06	7.5751E+18	7.0121E+13
I-135	5.5889E-07	1.5914E-16	7.0991E+08	2.0679E+04
Xe-133	1.8159E+06	9.7015E-03	4.3927E+22	6.7190E+16
Xe-135	9.0973E-03	3.5624E-12	1.5891E+13	3.3660E+08
Cs-134	1.8889E+06	1.4600E+00	6.5613E+24	6.9891E+16
Cs-136	4.0995E+05	5.5935E-03	2.4768E+22	1.5168E+16
Cs-137	1.6920E+06	1.9453E+01	8.5509E+25	6.2606E+16
Ba-140	1.0826E+06	1.4788E-02	6.3610E+22	4.0056E+16
La-140	1.2339E+06	2.2200E-03	9.5495E+21	4.5656E+16
Ce-141	3.9487E+04	1.3858E-03	5.9189E+21	1.4610E+15
Ce-143	7.9543E+01	1.1978E-07	5.0442E+17	2.9431E+12
Ce-144	3.7883E+04	1.1877E-02	4.9672E+22	1.4017E+15
Pr-143	1.2716E+04	1.8883E-04	7.9523E+20	4.7049E+14
Nd-147	3.6418E+03	4.5017E-05	1.8442E+20	1.3475E+14
Np-239	1.4162E+04	6.1047E-05	1.5382E+20	5.2401E+14
Pu-238	4.1151E+01	2.4037E-03	6.0822E+21	1.5226E+12
Pu-239	1.2895E+01	2.0745E-01	5.2272E+23	4.7710E+11
Pu-240	1.2916E+01	5.6681E-02	1.4222E+23	4.7788E+11
Pu-241	3.8942E+03	3.7803E-02	9.4464E+22	1.4409E+14
Am-241	1.6113E+00	4.6946E-04	1.1731E+21	5.9616E+10
Cm-242	2.3613E+02	7.1246E-05	1.7730E+20	8.7369E+12
Cm-244	5.8607E+00	7.2442E-05	1.7879E+20	2.1685E+11
I-130	1.9476E-02	9.9858E-12	4.6258E+13	7.2060E+08
Xe-131m	7.9215E+04	9.4573E-04	4.3476E+21	2.9310E+15
Xe-133m	1.6498E+04	3.6767E-05	1.6648E+20	6.1041E+14
Xe-135m	9.1978E-08	1.0097E-18	4.5042E+06	3.4032E+03

Sb-124	2.3476E+03	1.3421E-04	6.5180E+20	8.6862E+13
Sb-125	3.8316E+04	3.7110E-02	1.7879E+23	1.4177E+15
Sb-126	1.4585E+03	1.7452E-05	8.3412E+19	5.3966E+13
Te-131	8.4960E+01	1.4798E-09	6.8027E+15	3.1435E+12
Te-125m	8.1208E+03	4.5090E-04	2.1723E+21	3.0047E+14
Ba-137m	1.8757E+06	3.4877E-06	1.5331E+19	6.9400E+16
Pd-109	5.7687E-03	2.6941E-12	1.4885E+13	2.1344E+08
Rh-106	1.3503E+05	3.7935E-08	2.1552E+17	4.9962E+15
Rh-103m	1.8079E+05	5.5577E-06	3.2495E+19	6.6891E+15
Eu-154	6.6776E+01	2.5314E-04	9.8988E+20	2.4707E+12
Eu-155	5.1135E+01	1.0997E-04	4.2725E+20	1.8920E+12
Eu-156	6.0081E+02	1.0903E-05	4.2090E+19	2.2230E+13
Nb-97	4.2647E-03	1.5863E-13	9.8482E+11	1.5780E+08
Nb-95m	1.3788E+02	3.6198E-07	2.2946E+18	5.1017E+12
Pm-147	2.0940E+03	2.2588E-03	9.2536E+21	7.7476E+13
Pm-148	6.2684E+02	3.8153E-06	1.5525E+19	2.3193E+13
Pm-149	1.2141E+02	3.0641E-07	1.2384E+18	4.4921E+12
Pm-151	1.3300E+00	1.8200E-09	7.2584E+15	4.9209E+10
Pm-148m	3.6136E+02	1.6916E-05	6.8830E+19	1.3370E+13
Pr-144	3.8803E+04	5.1351E-07	2.1475E+18	1.4357E+15
Pr-144m	7.1403E+02	3.9372E-09	1.6465E+16	2.6419E+13
Sm-153	4.4348E+01	1.0111E-07	3.9798E+17	1.6409E+12
Y-91m	2.1516E-04	5.1763E-15	3.4255E+10	7.9608E+06
Br-82	2.2751E+02	2.1014E-07	1.5433E+18	8.4177E+12
Am-242	1.0239E-03	1.2667E-12	3.1522E+12	3.7885E+07
Np-238	1.0484E+02	4.0453E-07	1.0236E+18	3.8790E+12

Containment Sump Transport Group Inventory:

Time (h) = 305.5600	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.8442E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.9860E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.2030E+01	0.0000E+00	0.0000E+00

Time (h) = 305.5600	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Rb-86	3.2569E+03	4.0027E-05	2.8029E+20	1.2050E+14
Sr-89	2.2806E+05	7.8501E-03	5.3118E+22	8.4384E+15
Sr-90	1.8483E+04	1.3550E-01	9.0664E+23	6.8385E+14
Sr-91	6.9114E-05	1.9066E-14	1.2617E+11	2.5572E+06
Y-90	1.7812E+04	3.2738E-05	2.1906E+20	6.5903E+14
Y-91	4.7521E+03	1.9377E-04	1.2823E+21	1.7583E+14
Y-93	3.1422E-06	9.4181E-16	6.0986E+09	1.1626E+05
Zr-95	3.8210E+03	1.7786E-04	1.1275E+21	1.4138E+14
Zr-97	1.5243E-02	7.9738E-12	4.9504E+13	5.6400E+08
Nb-95	4.3414E+03	1.1102E-04	7.0380E+20	1.6063E+14
Mo-99	2.3242E+03	4.8461E-06	2.9478E+19	8.5997E+13
Tc-99m	2.2430E+03	4.2656E-07	2.5948E+18	8.2990E+13
Ru-103	3.6883E+04	1.1428E-03	6.6816E+21	1.3647E+15
Ru-106	1.3467E+04	4.0254E-03	2.2870E+22	4.9829E+14
Rh-105	8.3017E+01	9.8355E-08	5.6410E+17	3.0716E+12
Sb-127	6.5904E+03	2.4678E-05	1.1702E+20	2.4384E+14
Te-127	1.4081E+04	5.3356E-06	2.5301E+19	5.2100E+14
Te-127m	8.2015E+03	8.6949E-04	4.1230E+21	3.0346E+14
Te-129	1.4623E+04	6.9825E-07	3.2597E+18	5.4105E+14
Te-129m	2.2331E+04	7.4126E-04	3.4605E+21	8.2624E+14
Te-131m	7.6134E+01	9.5477E-08	4.3891E+17	2.8169E+12
Te-132	5.8435E+04	1.9248E-04	8.7813E+20	2.1621E+15
I-131	1.6516E+06	1.3322E-02	6.1241E+22	6.1108E+16
I-132	6.0388E+04	5.8503E-06	2.6690E+19	2.2343E+15

I-133	3.8887E+02	3.4327E-07	1.5543E+18	1.4388E+13
I-135	1.1468E-07	3.2655E-17	1.4567E+08	4.2431E+03
Cs-134	3.8764E+05	2.9961E-01	1.3465E+24	1.4343E+16
Cs-136	8.4127E+04	1.1479E-03	5.0828E+21	3.1127E+15
Cs-137	3.4723E+05	3.9920E+00	1.7548E+25	1.2848E+16
Ba-140	2.2205E+05	3.0332E-03	1.3047E+22	8.2160E+15
La-140	2.5310E+05	4.5536E-04	1.9587E+21	9.3647E+15
Ce-141	8.0993E+03	2.8425E-04	1.2140E+21	2.9967E+14
Ce-143	1.6315E+01	2.4568E-08	1.0346E+17	6.0367E+11
Ce-144	7.7703E+03	2.4362E-03	1.0188E+22	2.8750E+14
Pr-143	2.6082E+03	3.8732E-05	1.6311E+20	9.6503E+13
Nd-147	7.4699E+02	9.2337E-06	3.7827E+19	2.7639E+13
Np-239	2.9049E+03	1.2522E-05	3.1551E+19	1.0748E+14
Pu-238	8.4407E+00	4.9304E-04	1.2475E+21	3.1231E+11
Pu-239	2.6449E+00	4.2552E-02	1.0722E+23	9.7860E+10
Pu-240	2.6492E+00	1.1626E-02	2.9172E+22	9.8019E+10
Pu-241	7.9876E+02	7.7540E-03	1.9376E+22	2.9554E+13
Am-241	3.3049E-01	9.6292E-05	2.4062E+20	1.2228E+10
Cm-242	4.8434E+01	1.4614E-05	3.6366E+19	1.7921E+12
Cm-244	1.2021E+00	1.4859E-05	3.6673E+19	4.4478E+10
I-130	3.9962E-03	2.0490E-12	9.4917E+12	1.4786E+08
Sb-124	4.8153E+02	2.7529E-05	1.3369E+20	1.7817E+13
Sb-125	7.8591E+03	7.6119E-03	3.6672E+22	2.9079E+14
Sb-126	2.9916E+02	3.5797E-06	1.7109E+19	1.1069E+13
Te-131	1.7426E+01	3.0353E-10	1.3953E+15	6.4478E+11
Te-125m	1.6657E+03	9.2485E-05	4.4557E+20	6.1631E+13
Ba-137m	3.8491E+05	7.1572E-07	3.1461E+18	1.4242E+16
Pd-109	1.1832E-03	5.5259E-13	3.0530E+12	4.3780E+07
Rh-106	2.7697E+04	7.7811E-09	4.4206E+16	1.0248E+15
Rh-103m	3.7082E+04	1.1400E-06	6.6651E+18	1.3720E+15
Eu-154	1.3697E+01	5.1922E-05	2.0304E+20	5.0678E+11
Eu-155	1.0488E+01	2.2556E-05	8.7634E+19	3.8807E+11
Eu-156	1.2323E+02	2.2364E-06	8.6333E+18	4.5596E+12
Nb-97	8.7476E-04	3.2537E-14	2.0200E+11	3.2366E+07
Nb-95m	2.8282E+01	7.4246E-08	4.7065E+17	1.0464E+12
Pm-147	4.2950E+02	4.6331E-04	1.8981E+21	1.5892E+13
Pm-148	1.2857E+02	7.8258E-07	3.1843E+18	4.7572E+12
Pm-149	2.4903E+01	6.2848E-08	2.5401E+17	9.2140E+11
Pm-151	2.7280E-01	3.7330E-10	1.4888E+15	1.0093E+10
Pm-148m	7.4119E+01	3.4696E-06	1.4118E+19	2.7424E+12
Pr-144	7.9590E+03	1.0533E-07	4.4048E+17	2.9448E+14
Pr-144m	1.4646E+02	8.0757E-10	3.3773E+15	5.4189E+12
Sm-153	9.0963E+00	2.0740E-08	8.1632E+16	3.3656E+11
Y-91m	4.4132E-05	1.0617E-15	7.0262E+09	1.6329E+06
Br-82	4.6682E+01	4.3118E-08	3.1666E+17	1.7272E+12
Am-242	2.1002E-04	2.5982E-13	6.4655E+11	7.7708E+06
Np-238	2.1504E+01	8.2975E-08	2.0995E+17	7.9563E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.1269E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.5208E+00

Environment Integral Nuclide Release:

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Xe-133	3.7262E+05	1.9907E-03	9.0136E+21	1.3787E+16
Xe-135	1.8667E-03	7.3097E-13	3.2608E+12	6.9068E+07
Xe-131m	1.6254E+04	1.9405E-04	8.9207E+20	6.0140E+14
Xe-133m	3.3852E+03	7.5443E-06	3.4160E+19	1.2525E+14

Environment Transport Group Inventory:

Time (h) = 305.5600	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	5.9388E+17	8.2483E+15	9.9398E+21

Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Rb-86	3.2569E+03	4.0027E-05	2.8029E+20	1.2050E+14
Sr-89	2.2806E+05	7.8501E-03	5.3118E+22	8.4384E+15
Sr-90	1.8483E+04	1.3550E-01	9.0664E+23	6.8385E+14
Sr-91	6.9114E-05	1.9066E-14	1.2617E+11	2.5572E+06
Y-90	1.7812E+04	3.2738E-05	2.1906E+20	6.5903E+14
Y-91	4.7521E+03	1.9377E-04	1.2823E+21	1.7583E+14
Y-93	3.1422E-06	9.4181E-16	6.0986E+09	1.1626E+05
Zr-95	3.8210E+03	1.7786E-04	1.1275E+21	1.4138E+14
Zr-97	1.5243E-02	7.9738E-12	4.9504E+13	5.6400E+08
Nb-95	4.3414E+03	1.1102E-04	7.0380E+20	1.6063E+14
Mo-99	2.3242E+03	4.8461E-06	2.9478E+19	8.5997E+13
Tc-99m	2.2430E+03	4.2656E-07	2.5948E+18	8.2990E+13
Ru-103	3.6883E+04	1.1428E-03	6.6816E+21	1.3647E+15
Ru-106	1.3467E+04	4.0254E-03	2.2870E+22	4.9829E+14
Rh-105	8.3017E+01	9.8355E-08	5.6410E+17	3.0716E+12
Sb-127	6.5904E+03	2.4678E-05	1.1702E+20	2.4384E+14
Te-127	1.4081E+04	5.3356E-06	2.5301E+19	5.2100E+14
Te-127m	8.2015E+03	8.6949E-04	4.1230E+21	3.0346E+14
Te-129	1.4623E+04	6.9825E-07	3.2597E+18	5.4105E+14
Te-129m	2.2331E+04	7.4126E-04	3.4605E+21	8.2624E+14
Te-131m	7.6134E+01	9.5477E-08	4.3891E+17	2.8169E+12
Te-132	5.8435E+04	1.9248E-04	8.7813E+20	2.1621E+15
I-131	1.6516E+06	1.3322E-02	6.1241E+22	6.1108E+16
I-132	6.0388E+04	5.8503E-06	2.6690E+19	2.2343E+15
I-133	3.8887E+02	3.4327E-07	1.5543E+18	1.4388E+13
I-135	1.1468E-07	3.2655E-17	1.4567E+08	4.2431E+03
Cs-134	3.8764E+05	2.9961E-01	1.3465E+24	1.4343E+16
Cs-136	8.4127E+04	1.1479E-03	5.0828E+21	3.1127E+15
Cs-137	3.4723E+05	3.9920E+00	1.7548E+25	1.2848E+16
Ba-140	2.2205E+05	3.0332E-03	1.3047E+22	8.2160E+15
La-140	2.5310E+05	4.5536E-04	1.9587E+21	9.3647E+15
Ce-141	8.0993E+03	2.8425E-04	1.2140E+21	2.9967E+14
Ce-143	1.6315E+01	2.4568E-08	1.0346E+17	6.0367E+11
Ce-144	7.7703E+03	2.4362E-03	1.0188E+22	2.8750E+14
Pr-143	2.6082E+03	3.8732E-05	1.6311E+20	9.6503E+13
Nd-147	7.4699E+02	9.2337E-06	3.7827E+19	2.7639E+13
Np-239	2.9049E+03	1.2522E-05	3.1551E+19	1.0748E+14
Pu-238	8.4407E+00	4.9304E-04	1.2475E+21	3.1231E+11
Pu-239	2.6449E+00	4.2552E-02	1.0722E+23	9.7860E+10
Pu-240	2.6492E+00	1.1626E-02	2.9172E+22	9.8019E+10
Pu-241	7.9876E+02	7.7540E-03	1.9376E+22	2.9554E+13
Am-241	3.3049E-01	9.6292E-05	2.4062E+20	1.2228E+10
Cm-242	4.8434E+01	1.4614E-05	3.6366E+19	1.7921E+12
Cm-244	1.2021E+00	1.4859E-05	3.6673E+19	4.4478E+10
I-130	3.9962E-03	2.0490E-12	9.4917E+12	1.4786E+08
Sb-124	4.8153E+02	2.7529E-05	1.3369E+20	1.7817E+13
Sb-125	7.8591E+03	7.6119E-03	3.6672E+22	2.9079E+14
Sb-126	2.9916E+02	3.5797E-06	1.7109E+19	1.1069E+13
Te-131	1.7426E+01	3.0353E-10	1.3953E+15	6.4478E+11
Te-125m	1.6657E+03	9.2485E-05	4.4557E+20	6.1631E+13
Ba-137m	3.8491E+05	7.1572E-07	3.1461E+18	1.4242E+16
Pd-109	1.1832E-03	5.5259E-13	3.0530E+12	4.3780E+07
Rh-106	2.7697E+04	7.7811E-09	4.4206E+16	1.0248E+15
Rh-103m	3.7082E+04	1.1400E-06	6.6651E+18	1.3720E+15
Eu-154	1.3697E+01	5.1922E-05	2.0304E+20	5.0678E+11
Eu-155	1.0488E+01	2.2556E-05	8.7634E+19	3.8807E+11
Eu-156	1.2323E+02	2.2364E-06	8.6333E+18	4.5596E+12
Nb-97	8.7476E-04	3.2537E-14	2.0200E+11	3.2366E+07
Nb-95m	2.8282E+01	7.4246E-08	4.7065E+17	1.0464E+12
Pm-147	4.2950E+02	4.6331E-04	1.8981E+21	1.5892E+13
Pm-148	1.2857E+02	7.8258E-07	3.1843E+18	4.7572E+12
Pm-149	2.4903E+01	6.2848E-08	2.5401E+17	9.2140E+11
Pm-151	2.7280E-01	3.7330E-10	1.4888E+15	1.0093E+10

Pm-148m	7.4119E+01	3.4696E-06	1.4118E+19	2.7424E+12
Pr-144	7.9590E+03	1.0533E-07	4.4048E+17	2.9448E+14
Pr-144m	1.4646E+02	8.0757E-10	3.3773E+15	5.4189E+12
Sm-153	9.0963E+00	2.0740E-08	8.1632E+16	3.3656E+11
Y-91m	4.4132E-05	1.0617E-15	7.0262E+09	1.6329E+06
Br-82	4.6682E+01	4.3118E-08	3.1666E+17	1.7272E+12
Am-242	2.1002E-04	2.5982E-13	6.4655E+11	7.7708E+06
Np-238	2.1504E+01	8.2975E-08	2.0995E+17	7.9563E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.1269E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.5208E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Xe-133	3.4374E-01	1.8364E-09	8.3152E+15	1.2719E+10
Xe-135	1.7213E-09	6.7404E-19	3.0068E+06	6.3689E+01
Xe-131m	2.8996E-02	3.4618E-10	1.5914E+15	1.0729E+09
Xe-133m	3.1642E-03	7.0518E-12	3.1930E+13	1.1707E+08

Control Room Transport Group Inventory:

Time (h) = 305.5600	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.9385E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 305.5600	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 402.7800

EAB Doses:

Time (h) = 402.7800	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.5927E-01	0.0000E+00	8.6530E-01	2.5927E-01
Accumulated dose (rem)	1.1439E+01	0.0000E+00	2.9777E+01	1.1439E+01

LPZ Doses:

Time (h) = 402.7800	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.2218E-03	0.0000E+00	4.0777E-03	1.2218E-03
Accumulated dose (rem)	3.3783E-01	0.0000E+00	7.9768E-01	3.3783E-01

Control Room Doses:

Time (h) = 402.7800	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.2817E-03	0.0000E+00	7.3323E-01	6.2817E-03
Accumulated dose (rem)	4.2104E+00	0.0000E+00	2.6412E+02	4.2104E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Rb-86	1.2864E+04	1.5809E-04	1.1071E+21	4.7596E+14
Sr-89	9.9091E+05	3.4108E-02	2.3079E+23	3.6664E+16
Sr-90	8.4874E+04	6.2221E-01	4.1634E+24	3.1403E+15

Sr-91	2.6366E-07	7.2734E-17	4.8133E+08	9.7554E+03
Y-90	8.3818E+04	1.5406E-04	1.0309E+21	3.1013E+15
Y-91	2.0805E+04	8.4834E-04	5.6141E+21	7.6977E+14
Y-93	1.8269E-08	5.4758E-18	3.5458E+07	6.7596E+02
Zr-95	1.6797E+04	7.8189E-04	4.9565E+21	6.2150E+14
Zr-97	1.2986E-03	6.7930E-13	4.2174E+12	4.8048E+07
Nb-95	1.9729E+04	5.0454E-04	3.1983E+21	7.2997E+14
Mo-99	3.8457E+03	8.0184E-06	4.8776E+19	1.4229E+14
Tc-99m	3.7113E+03	7.0580E-07	4.2934E+18	1.3732E+14
Ru-103	1.5773E+05	4.8871E-03	2.8573E+22	5.8358E+15
Ru-106	6.1390E+04	1.8350E-02	1.0425E+23	2.2714E+15
Rh-105	5.6706E+01	6.7183E-08	3.8532E+17	2.0981E+12
Sb-127	1.4598E+04	5.4665E-05	2.5921E+20	5.4014E+14
Te-127	4.9465E+04	1.8743E-05	8.8878E+19	1.8302E+15
Te-127m	3.6810E+04	3.9024E-03	1.8505E+22	1.3620E+15
Te-129	6.1783E+04	2.9501E-06	1.3772E+19	2.2860E+15
Te-129m	9.4349E+04	3.1319E-03	1.4621E+22	3.4909E+15
Te-131m	3.6997E+01	4.6396E-08	2.1329E+17	1.3689E+12
Te-132	1.1338E+05	3.7348E-04	1.7039E+21	4.1952E+15
I-131	5.3480E+06	4.3138E-02	1.9831E+23	1.9788E+17
I-132	1.1717E+05	1.1352E-05	5.1788E+19	4.3354E+15
I-133	6.9943E+01	6.1743E-08	2.7957E+17	2.5879E+12
Xe-133	1.0053E+06	5.3707E-03	2.4318E+22	3.7196E+16
Xe-135	5.1702E-06	2.0246E-15	9.0312E+09	1.9130E+05
Cs-134	1.7731E+06	1.3704E+00	6.1587E+24	6.5603E+16
Cs-136	3.1172E+05	4.2532E-03	1.8833E+22	1.1534E+16
Cs-137	1.5938E+06	1.8323E+01	8.0542E+25	5.8969E+16
Ba-140	8.1822E+05	1.1176E-02	4.8076E+22	3.0274E+16
La-140	9.4018E+05	1.6915E-03	7.2760E+21	3.4787E+16
Ce-141	3.4123E+04	1.1976E-03	5.1149E+21	1.2626E+15
Ce-143	9.7246E+00	1.4644E-08	6.1669E+16	3.5981E+11
Ce-144	3.5341E+04	1.1080E-02	4.6338E+22	1.3076E+15
Pr-143	9.7453E+03	1.4472E-04	6.0946E+20	3.6058E+14
Nd-147	2.6569E+03	3.2843E-05	1.3455E+20	9.8307E+13
Np-239	4.0500E+03	1.7458E-05	4.3988E+19	1.4985E+14
Pu-238	3.8791E+01	2.2659E-03	5.7334E+21	1.4353E+12
Pu-239	1.2151E+01	1.9549E-01	4.9259E+23	4.4959E+11
Pu-240	1.2168E+01	5.3402E-02	1.3400E+23	4.5023E+11
Pu-241	3.6670E+03	3.5597E-02	8.8951E+22	1.3568E+14
Am-241	1.5833E+00	4.6130E-04	1.1527E+21	5.8580E+10
Cm-242	2.1867E+02	6.5977E-05	1.6418E+20	8.0907E+12
Cm-244	5.5193E+00	6.8222E-05	1.6838E+20	2.0422E+11
I-130	7.8669E-05	4.0336E-14	1.8685E+11	2.9108E+06
Xe-131m	7.3778E+04	8.8081E-04	4.0491E+21	2.7298E+15
Xe-133m	4.3155E+03	9.6177E-06	4.3548E+19	1.5967E+14
Sb-124	2.1110E+03	1.2068E-04	5.8611E+20	7.8108E+13
Sb-125	3.5999E+04	3.4867E-02	1.6798E+23	1.3320E+15
Sb-126	1.0957E+03	1.3111E-05	6.2662E+19	4.0541E+13
Te-131	8.4683E+00	1.4750E-10	6.7805E+14	3.1333E+11
Te-125m	7.6779E+03	4.2630E-04	2.0538E+21	2.8408E+14
Ba-137m	1.7667E+06	3.2851E-06	1.4440E+19	6.5368E+16
Pd-109	3.5938E-05	1.6784E-14	9.2727E+10	1.3297E+06
Rh-106	1.2626E+05	3.5469E-08	2.0151E+17	4.6714E+15
Rh-103m	1.5858E+05	4.8750E-06	2.8503E+19	5.8674E+15
Eu-154	6.2858E+01	2.3828E-04	9.3180E+20	2.3258E+12
Eu-155	4.8102E+01	1.0344E-04	4.0191E+20	1.7798E+12
Eu-156	4.7052E+02	8.5388E-06	3.2963E+19	1.7409E+13
Nb-97	7.4523E-05	2.7719E-15	1.7209E+10	2.7573E+06
Nb-95m	1.2448E+02	3.2679E-07	2.0715E+18	4.6057E+12
Pm-147	1.9759E+03	2.1315E-03	8.7320E+21	7.3109E+13
Pm-148	3.5625E+02	2.1684E-06	8.8230E+18	1.3181E+13
Pm-149	3.2138E+01	8.1107E-08	3.2781E+17	1.1891E+12
Pm-151	1.1681E-01	1.5984E-10	6.3747E+14	4.3218E+09
Pm-148m	3.1808E+02	1.4890E-05	6.0586E+19	1.1769E+13
Pr-144	3.6199E+04	4.7905E-07	2.0034E+18	1.3394E+15
Pr-144m	6.6611E+02	3.6730E-09	1.5361E+16	2.4646E+13
Sm-153	9.8698E+00	2.2503E-08	8.8573E+16	3.6518E+11
Y-91m	1.6836E-07	4.0504E-18	2.6804E+07	6.2292E+03
Br-82	3.1772E+01	2.9347E-08	2.1552E+17	1.1756E+12
Am-242	1.4373E-05	1.7780E-14	4.4246E+10	5.3179E+05

Np-238	2.6219E+01	1.0117E-07	2.5600E+17	9.7011E+11

Containment Sump Transport Group Inventory:

Time (h) = 402.7800	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	2.8411E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9836E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.0738E+01	0.0000E+00	0.0000E+00

Time (h) = 402.7800	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Rb-86	3.5918E+03	4.4143E-05	3.0911E+20	1.3290E+14
Sr-89	2.7657E+05	9.5199E-03	6.4416E+22	1.0233E+16
Sr-90	2.3689E+04	1.7366E-01	1.1620E+24	8.7650E+14
Sr-91	7.3590E-08	2.0301E-17	1.3435E+08	2.7228E+03
Y-90	2.3394E+04	4.3000E-05	2.8772E+20	8.6559E+14
Y-91	5.8069E+03	2.3678E-04	1.5670E+21	2.1485E+14
Y-93	5.0991E-09	1.5284E-18	9.8968E+06	1.8867E+02
Zr-95	4.6883E+03	2.1823E-04	1.3834E+21	1.7347E+14
Zr-97	3.6245E-04	1.8960E-13	1.1771E+12	1.3411E+07
Nb-95	5.5065E+03	1.4082E-04	8.9268E+20	2.0374E+14
Mo-99	1.0734E+03	2.2380E-06	1.3614E+19	3.9715E+13
Tc-99m	1.0359E+03	1.9700E-07	1.1983E+18	3.8326E+13
Ru-103	4.4023E+04	1.3640E-03	7.9751E+21	1.6288E+15
Ru-106	1.7135E+04	5.1216E-03	2.9097E+22	6.3398E+14
Rh-105	1.5827E+01	1.8751E-08	1.0755E+17	5.8561E+11
Sb-127	4.0745E+03	1.5257E-05	7.2349E+19	1.5076E+14
Te-127	1.3806E+04	5.2314E-06	2.4807E+19	5.1083E+14
Te-127m	1.0274E+04	1.0892E-03	5.1649E+21	3.8014E+14
Te-129	1.7244E+04	8.2342E-07	3.8440E+18	6.3804E+14
Te-129m	2.6334E+04	8.7414E-04	4.0808E+21	9.7435E+14
Te-131m	1.0326E+01	1.2950E-08	5.9530E+16	3.8207E+11
Te-132	3.1647E+04	1.0424E-04	4.7557E+20	1.1709E+15
I-131	1.4931E+06	1.2044E-02	5.5366E+22	5.5245E+16
I-132	3.2704E+04	3.1683E-06	1.4455E+19	1.2101E+15
I-133	1.9527E+01	1.7238E-08	7.8052E+16	7.2251E+11
Cs-134	4.9506E+05	3.8264E-01	1.7196E+24	1.8317E+16
Cs-136	8.7037E+04	1.1876E-03	5.2586E+21	3.2204E+15
Cs-137	4.4500E+05	5.1160E+00	2.2489E+25	1.6465E+16
Ba-140	2.2837E+05	3.1195E-03	1.3418E+22	8.4498E+15
La-140	2.6241E+05	4.7211E-04	2.0308E+21	9.7093E+15
Ce-141	9.5242E+03	3.3426E-04	1.4276E+21	3.5239E+14
Ce-143	2.7142E+00	4.0872E-09	1.7212E+16	1.0043E+11
Ce-144	9.8639E+03	3.0926E-03	1.2934E+22	3.6496E+14
Pr-143	2.7200E+03	4.0393E-05	1.7011E+20	1.0064E+14
Nd-147	7.4158E+02	9.1668E-06	3.7553E+19	2.7438E+13
Np-239	1.1304E+03	4.8726E-06	1.2278E+19	4.1825E+13
Pu-238	1.0827E+01	6.3243E-04	1.6003E+21	4.0060E+11
Pu-239	3.3915E+00	5.4564E-02	1.3749E+23	1.2549E+11
Pu-240	3.3963E+00	1.4905E-02	3.7400E+22	1.2566E+11
Pu-241	1.0235E+03	9.9356E-03	2.4827E+22	3.7869E+13
Am-241	4.4190E-01	1.2875E-04	3.2173E+20	1.6350E+10
Cm-242	6.1032E+01	1.8415E-05	4.5825E+19	2.2582E+12
Cm-244	1.5405E+00	1.9041E-05	4.6996E+19	5.6999E+10
I-130	2.1964E-05	1.1261E-14	5.2168E+10	8.1265E+05
Sb-124	5.8921E+02	3.3684E-05	1.6359E+20	2.1801E+13
Sb-125	1.0048E+04	9.7316E-03	4.6884E+22	3.7177E+14
Sb-126	3.0582E+02	3.6593E-06	1.7490E+19	1.1315E+13
Te-131	2.3636E+00	4.1168E-11	1.8925E+14	8.7453E+10
Te-125m	2.1430E+03	1.1899E-04	5.7324E+20	7.9290E+13

Ba-137m	4.9330E+05	9.1724E-07	4.0320E+18	1.8252E+16
Pd-109	1.0031E-05	4.6845E-15	2.5881E+10	3.7113E+05
Rh-106	3.5239E+04	9.8998E-09	5.6244E+16	1.3038E+15
Rh-103m	4.4261E+04	1.3607E-06	7.9554E+18	1.6376E+15
Eu-154	1.7544E+01	6.6508E-05	2.6008E+20	6.4914E+11
Eu-155	1.3426E+01	2.8872E-05	1.1218E+20	4.9675E+11
Eu-156	1.3133E+02	2.3833E-06	9.2002E+18	4.8591E+12
Nb-97	2.0800E-05	7.7366E-16	4.8032E+09	7.6960E+05
Nb-95m	3.4743E+01	9.1210E-08	5.7819E+17	1.2855E+12
Pm-147	5.5150E+02	5.9491E-04	2.4372E+21	2.0405E+13
Pm-148	9.9433E+01	6.0521E-07	2.4626E+18	3.6790E+12
Pm-149	8.9699E+00	2.2638E-08	9.1495E+16	3.3189E+11
Pm-151	3.2602E-02	4.4613E-11	1.7793E+14	1.2063E+09
Pm-148m	8.8778E+01	4.1558E-06	1.6910E+19	3.2848E+12
Pr-144	1.0103E+04	1.3371E-07	5.5917E+17	3.7383E+14
Pr-144m	1.8592E+02	1.0252E-09	4.2873E+15	6.8790E+12
Sm-153	2.7548E+00	6.2809E-09	2.4722E+16	1.0193E+11
Y-91m	4.6990E-08	1.1305E-18	7.4813E+06	1.7386E+03
Br-82	8.8704E+00	8.1933E-09	6.0172E+16	3.2820E+11
Am-242	4.0116E-06	4.9627E-15	1.2350E+10	1.4843E+05
Np-238	7.3181E+00	2.8238E-08	7.1451E+16	2.7077E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	5.5380E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.7902E+00

Environment Integral Nuclide Release:

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Xe-133	2.8067E+05	1.4995E-03	6.7895E+21	1.0385E+16
Xe-135	1.4435E-06	5.6524E-16	2.5215E+09	5.3409E+04
Xe-131m	2.0598E+04	2.4591E-04	1.1305E+21	7.6212E+14
Xe-133m	1.2049E+03	2.6852E-06	1.2158E+19	4.4580E+13

Environment Transport Group Inventory:

Time (h) = 402.7800	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	3.4832E+17	4.8378E+15	7.9321E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Rb-86	3.5918E+03	4.4143E-05	3.0911E+20	1.3290E+14
Sr-89	2.7657E+05	9.5199E-03	6.4416E+22	1.0233E+16
Sr-90	2.3689E+04	1.7366E-01	1.1620E+24	8.7650E+14
Sr-91	7.3590E-08	2.0301E-17	1.3435E+08	2.7228E+03
Y-90	2.3394E+04	4.3000E-05	2.8772E+20	8.6559E+14
Y-91	5.8069E+03	2.3678E-04	1.5670E+21	2.1485E+14
Y-93	5.0991E-09	1.5284E-18	9.8968E+06	1.8867E+02
Zr-95	4.6883E+03	2.1823E-04	1.3834E+21	1.7347E+14
Zr-97	3.6245E-04	1.8960E-13	1.1771E+12	1.3411E+07
Nb-95	5.5065E+03	1.4082E-04	8.9268E+20	2.0374E+14
Mo-99	1.0734E+03	2.2380E-06	1.3614E+19	3.9715E+13
Tc-99m	1.0359E+03	1.9700E-07	1.1983E+18	3.8326E+13
Ru-103	4.4023E+04	1.3640E-03	7.9751E+21	1.6288E+15
Ru-106	1.7135E+04	5.1216E-03	2.9097E+22	6.3398E+14
Rh-105	1.5827E+01	1.8751E-08	1.0755E+17	5.8561E+11
Sb-127	4.0745E+03	1.5257E-05	7.2349E+19	1.5076E+14
Te-127	1.3806E+04	5.2314E-06	2.4807E+19	5.1083E+14
Te-127m	1.0274E+04	1.0892E-03	5.1649E+21	3.8014E+14
Te-129	1.7244E+04	8.2342E-07	3.8440E+18	6.3804E+14

Te-129m	2.6334E+04	8.7414E-04	4.0808E+21	9.7435E+14
Te-131m	1.0326E+01	1.2950E-08	5.9530E+16	3.8207E+11
Te-132	3.1647E+04	1.0424E-04	4.7557E+20	1.1709E+15
I-131	1.4931E+06	1.2044E-02	5.5366E+22	5.5245E+16
I-132	3.2704E+04	3.1683E-06	1.4455E+19	1.2101E+15
I-133	1.9527E+01	1.7238E-08	7.8052E+16	7.2251E+11
Cs-134	4.9506E+05	3.8264E-01	1.7196E+24	1.8317E+16
Cs-136	8.7037E+04	1.1876E-03	5.2586E+21	3.2204E+15
Cs-137	4.4500E+05	5.1160E+00	2.2489E+25	1.6465E+16
Ba-140	2.2837E+05	3.1195E-03	1.3418E+22	8.4498E+15
La-140	2.6241E+05	4.7211E-04	2.0308E+21	9.7093E+15
Ce-141	9.5242E+03	3.3426E-04	1.4276E+21	3.5239E+14
Ce-143	2.7142E+00	4.0872E-09	1.7212E+16	1.0043E+11
Ce-144	9.8639E+03	3.0926E-03	1.2934E+22	3.6496E+14
Pr-143	2.7200E+03	4.0393E-05	1.7011E+20	1.0064E+14
Nd-147	7.4158E+02	9.1668E-06	3.7553E+19	2.7438E+13
Np-239	1.1304E+03	4.8726E-06	1.2278E+19	4.1825E+13
Pu-238	1.0827E+01	6.3243E-04	1.6003E+21	4.0060E+11
Pu-239	3.3915E+00	5.4564E-02	1.3749E+23	1.2549E+11
Pu-240	3.3963E+00	1.4905E-02	3.7400E+22	1.2566E+11
Pu-241	1.0235E+03	9.9356E-03	2.4827E+22	3.7869E+13
Am-241	4.4190E-01	1.2875E-04	3.2173E+20	1.6350E+10
Cm-242	6.1032E+01	1.8415E-05	4.5825E+19	2.2582E+12
Cm-244	1.5405E+00	1.9041E-05	4.6996E+19	5.6999E+10
I-130	2.1964E-05	1.1261E-14	5.2168E+10	8.1265E+05
Sb-124	5.8921E+02	3.3684E-05	1.6359E+20	2.1801E+13
Sb-125	1.0048E+04	9.7316E-03	4.6884E+22	3.7177E+14
Sb-126	3.0582E+02	3.6593E-06	1.7490E+19	1.1315E+13
Te-131	2.3636E+00	4.1168E-11	1.8925E+14	8.7453E+10
Te-125m	2.1430E+03	1.1899E-04	5.7324E+20	7.9290E+13
Ba-137m	4.9330E+05	9.1724E-07	4.0320E+18	1.8252E+16
Pd-109	1.0031E-05	4.6845E-15	2.5881E+10	3.7113E+05
Rh-106	3.5239E+04	9.8998E-09	5.6244E+16	1.3038E+15
Rh-103m	4.4261E+04	1.3607E-06	7.9554E+18	1.6376E+15
Eu-154	1.7544E+01	6.6508E-05	2.6008E+20	6.4914E+11
Eu-155	1.3426E+01	2.8872E-05	1.1218E+20	4.9675E+11
Eu-156	1.3133E+02	2.3833E-06	9.2002E+18	4.8591E+12
Nb-97	2.0800E-05	7.7366E-16	4.8032E+09	7.6960E+05
Nb-95m	3.4743E+01	9.1210E-08	5.7819E+17	1.2855E+12
Pm-147	5.5150E+02	5.9491E-04	2.4372E+21	2.0405E+13
Pm-148	9.9433E+01	6.0521E-07	2.4626E+18	3.6790E+12
Pm-149	8.9699E+00	2.2638E-08	9.1495E+16	3.3189E+11
Pm-151	3.2602E-02	4.4613E-11	1.7793E+14	1.2063E+09
Pm-148m	8.8778E+01	4.1558E-06	1.6910E+19	3.2848E+12
Pr-144	1.0103E+04	1.3371E-07	5.5917E+17	3.7383E+14
Pr-144m	1.8592E+02	1.0252E-09	4.2873E+15	6.8790E+12
Sm-153	2.7548E+00	6.2809E-09	2.4722E+16	1.0193E+11
Y-91m	4.6990E-08	1.1305E-18	7.4813E+06	1.7386E+03
Br-82	8.8704E+00	8.1933E-09	6.0172E+16	3.2820E+11
Am-242	4.0116E-06	4.9627E-15	1.2350E+10	1.4843E+05
Np-238	7.3181E+00	2.8238E-08	7.1451E+16	2.7077E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	5.5380E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.7902E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Xe-133	1.8996E-01	1.0149E-09	4.5952E+15	7.0286E+09
Xe-131m	2.6631E-02	3.1794E-10	1.4616E+15	9.8534E+08
Xe-133m	8.1770E-04	1.8224E-12	8.2515E+12	3.0255E+07

Control Room Transport Group Inventory:

Time (h) = 402.7800	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	6.0650E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 402.7800	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 402.7800	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 402.7800	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 500.0000

EAB Doses:

Time (h) = 500.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.4420E-01	0.0000E+00	4.9066E-01	1.4420E-01
Accumulated dose (rem)	1.1583E+01	0.0000E+00	3.0268E+01	1.1583E+01

LPZ Doses:

Time (h) = 500.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.7951E-04	0.0000E+00	2.3122E-03	6.7951E-04
Accumulated dose (rem)	3.3851E-01	0.0000E+00	7.9999E-01	3.3851E-01

Control Room Doses:

Time (h) = 500.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.5155E-03	0.0000E+00	4.2540E-01	3.5155E-03
Accumulated dose (rem)	4.2139E+00	0.0000E+00	2.6455E+02	4.2139E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Rb-86	1.0426E+04	1.2814E-04	8.9730E+20	3.8578E+14
Sr-89	8.8310E+05	3.0397E-02	2.0568E+23	3.2675E+16
Sr-90	7.9943E+04	5.8606E-01	3.9215E+24	2.9579E+15
Sr-91	2.0631E-10	5.6913E-20	3.7664E+05	7.6334E+00
Y-90	7.9614E+04	1.4633E-04	9.7915E+20	2.9457E+15
Y-91	1.8683E+04	7.6182E-04	5.0415E+21	6.9126E+14
Zr-95	1.5146E+04	7.0503E-04	4.4692E+21	5.6040E+14
Zr-97	2.2692E-05	1.1870E-14	7.3695E+10	8.3960E+05
Nb-95	1.8349E+04	4.6926E-04	2.9747E+21	6.7893E+14
Mo-99	1.3052E+03	2.7213E-06	1.6554E+19	4.8292E+13
Tc-99m	1.2595E+03	2.3954E-07	1.4571E+18	4.6603E+13
Ru-103	1.3835E+05	4.2867E-03	2.5063E+22	5.1189E+15
Ru-106	5.7399E+04	1.7157E-02	9.7472E+22	2.1238E+15
Rh-105	7.9449E+00	9.4127E-09	5.3985E+16	2.9396E+11
Sb-127	6.6327E+03	2.4837E-05	1.1777E+20	2.4541E+14
Te-127	3.9254E+04	1.4874E-05	7.0530E+19	1.4524E+15
Te-127m	3.3842E+04	3.5878E-03	1.7013E+22	1.2522E+15
Te-129	5.3542E+04	2.5567E-06	1.1935E+19	1.9811E+15
Te-129m	8.1764E+04	2.7141E-03	1.2671E+22	3.0253E+15
Te-131m	3.6876E+00	4.6245E-09	2.1259E+16	1.3644E+11
Te-132	4.5126E+04	1.4864E-04	6.7813E+20	1.6697E+15
I-131	3.5534E+06	2.8662E-02	1.3176E+23	1.3148E+17
I-132	4.6634E+04	4.5178E-06	2.0611E+19	1.7254E+15
I-133	2.5813E+00	2.2787E-09	1.0318E+16	9.5508E+10
Xe-133	5.5543E+05	2.9673E-03	1.3436E+22	2.0551E+16
Xe-135	2.9379E-09	1.1504E-18	5.1318E+06	1.0870E+02
Cs-134	1.6643E+06	1.2863E+00	5.7808E+24	6.1578E+16
Cs-136	2.3703E+05	3.2341E-03	1.4321E+22	8.7700E+15
Cs-137	1.5012E+06	1.7258E+01	7.5863E+25	5.5543E+16
Ba-140	6.1840E+05	8.4471E-03	3.6336E+22	2.2881E+16
La-140	7.1192E+05	1.2808E-03	5.5095E+21	2.6341E+16

Ce-141	2.9488E+04	1.0349E-03	4.4202E+21	1.0911E+15
Ce-143	1.1889E+00	1.7903E-09	7.5393E+15	4.3989E+10
Ce-144	3.2969E+04	1.0337E-02	4.3229E+22	1.2198E+15
Pr-143	7.4650E+03	1.1086E-04	4.6685E+20	2.7620E+14
Nd-147	1.9384E+03	2.3961E-05	9.8160E+19	7.1721E+13
Np-239	1.1582E+03	4.9923E-06	1.2579E+19	4.2853E+13
Pu-238	3.6563E+01	2.1357E-03	5.4041E+21	1.3528E+12
Pu-239	1.1449E+01	1.8419E-01	4.6412E+23	4.2361E+11
Pu-240	1.1464E+01	5.0312E-02	1.2624E+23	4.2419E+11
Pu-241	3.4530E+03	3.3520E-02	8.3761E+22	1.2776E+14
Am-241	1.5531E+00	4.5250E-04	1.1307E+21	5.7464E+10
Cm-242	2.0249E+02	6.1097E-05	1.5204E+20	7.4923E+12
Cm-244	5.1978E+00	6.4248E-05	1.5857E+20	1.9232E+11
I-130	3.1777E-07	1.6293E-16	7.5476E+08	1.1758E+04
Xe-131m	6.4754E+04	7.7308E-04	3.5539E+21	2.3959E+15
Xe-133m	1.1271E+03	2.5118E-06	1.1373E+19	4.1701E+13
Sb-124	1.8983E+03	1.0852E-04	5.2704E+20	7.0236E+13
Sb-125	3.3823E+04	3.2759E-02	1.5782E+23	1.2514E+15
Sb-126	8.2314E+02	9.8493E-06	4.7074E+19	3.0456E+13
Te-131	8.4407E-01	1.4702E-11	6.7584E+13	3.1231E+10
Te-125m	7.2568E+03	4.0292E-04	1.9412E+21	2.6850E+14
Ba-137m	1.6641E+06	3.0942E-06	1.3601E+19	6.1571E+16
Pd-109	2.2388E-07	1.0456E-16	5.7767E+08	8.2837E+03
Rh-106	1.1805E+05	3.3164E-08	1.8841E+17	4.3678E+15
Rh-103m	1.3910E+05	4.2761E-06	2.5001E+19	5.1466E+15
Eu-154	5.9170E+01	2.2430E-04	8.7713E+20	2.1893E+12
Eu-155	4.5249E+01	9.7309E-05	3.7807E+20	1.6742E+12
Eu-156	3.6848E+02	6.6871E-06	2.5815E+19	1.3634E+13
Nb-97	1.3022E-06	4.8436E-17	3.0071E+08	4.8182E+04
Nb-95m	1.1231E+02	2.9484E-07	1.8690E+18	4.1554E+12
Pm-147	1.8626E+03	2.0093E-03	8.2313E+21	6.8917E+13
Pm-148	2.0438E+02	1.2440E-06	5.0619E+18	7.5622E+12
Pm-149	8.5070E+00	2.1469E-08	8.6773E+16	3.1476E+11
Pm-151	1.0259E-02	1.4038E-11	5.5987E+13	3.7957E+08
Pm-148m	2.7998E+02	1.3106E-05	5.3329E+19	1.0359E+13
Pr-144	3.3770E+04	4.4690E-07	1.8689E+18	1.2495E+15
Pr-144m	6.2141E+02	3.4265E-09	1.4330E+16	2.2992E+13
Sm-153	2.1966E+00	5.0082E-09	1.9712E+16	8.1273E+10
Br-82	4.4370E+00	4.0984E-09	3.0099E+16	1.6417E+11
Am-242	2.0175E-07	2.4958E-16	6.2108E+08	7.4647E+03
Np-238	6.5573E+00	2.5303E-08	6.4023E+16	2.4262E+11

Containment Sump Transport Group Inventory:

Time (h) = 500.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.7001E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3178E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	1.9522E+01	0.0000E+00	0.0000E+00

Time (h) = 500.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Rb-86	3.7302E+03	4.5844E-05	3.2102E+20	1.3802E+14
Sr-89	3.1584E+05	1.0871E-02	7.3561E+22	1.1686E+16
Sr-90	2.8591E+04	2.0960E-01	1.4025E+24	1.0579E+15
Sr-91	7.3786E-11	2.0355E-20	1.3470E+05	2.7301E+00
Y-90	2.8474E+04	5.2336E-05	3.5019E+20	1.0535E+15
Y-91	6.6819E+03	2.7247E-04	1.8031E+21	2.4723E+14
Zr-95	5.4170E+03	2.5215E-04	1.5984E+21	2.0043E+14
Zr-97	8.1158E-06	4.2454E-15	2.6357E+10	3.0028E+05
Nb-95	6.5627E+03	1.6783E-04	1.0639E+21	2.4282E+14

Mo-99	4.6680E+02	9.7328E-07	5.9204E+18	1.7272E+13
Tc-99m	4.5048E+02	8.5671E-08	5.2113E+17	1.6668E+13
Ru-103	4.9481E+04	1.5331E-03	8.9639E+21	1.8308E+15
Ru-106	2.0529E+04	6.1361E-03	3.4861E+22	7.5957E+14
Rh-105	2.8415E+00	3.3665E-09	1.9308E+16	1.0513E+11
Sb-127	2.3722E+03	8.8829E-06	4.2121E+19	8.7771E+13
Te-127	1.4039E+04	5.3196E-06	2.5225E+19	5.1945E+14
Te-127m	1.2104E+04	1.2832E-03	6.0846E+21	4.4784E+14
Te-129	1.9149E+04	9.1439E-07	4.2686E+18	7.0853E+14
Te-129m	2.9243E+04	9.7071E-04	4.5316E+21	1.0820E+15
Te-131m	1.3189E+00	1.6540E-09	7.6033E+15	4.8798E+10
Te-132	1.6139E+04	5.3161E-05	2.4253E+20	5.9715E+14
I-131	1.2712E+06	1.0254E-02	4.7136E+22	4.7034E+16
I-132	1.6679E+04	1.6158E-06	7.3716E+18	6.1710E+14
I-133	9.2341E-01	8.1515E-10	3.6909E+15	3.4166E+10
Cs-134	5.9541E+05	4.6019E-01	2.0682E+24	2.2030E+16
Cs-136	8.4800E+04	1.1570E-03	5.1234E+21	3.1376E+15
Cs-137	5.3706E+05	6.1744E+00	2.7141E+25	1.9871E+16
Ba-140	2.2117E+05	3.0211E-03	1.2995E+22	8.1834E+15
La-140	2.5462E+05	4.5809E-04	1.9705E+21	9.4209E+15
Ce-141	1.0547E+04	3.7014E-04	1.5809E+21	3.9022E+14
Ce-143	4.2520E-01	6.4029E-10	2.6964E+15	1.5733E+10
Ce-144	1.1791E+04	3.6969E-03	1.5461E+22	4.3628E+14
Pr-143	2.6698E+03	3.9648E-05	1.6697E+20	9.8784E+13
Nd-147	6.9327E+02	8.5696E-06	3.5107E+19	2.5651E+13
Np-239	4.1422E+02	1.7855E-06	4.4990E+18	1.5326E+13
Pu-238	1.3077E+01	7.6385E-04	1.9328E+21	4.8384E+11
Pu-239	4.0947E+00	6.5877E-02	1.6599E+23	1.5150E+11
Pu-240	4.1003E+00	1.7994E-02	4.5151E+22	1.5171E+11
Pu-241	1.2350E+03	1.1989E-02	2.9957E+22	4.5694E+13
Am-241	5.5546E-01	1.6184E-04	4.0440E+20	2.0552E+10
Cm-242	7.2422E+01	2.1852E-05	5.4377E+19	2.6796E+12
Cm-244	1.8590E+00	2.2978E-05	5.6712E+19	6.8783E+10
I-130	1.1368E-07	5.8286E-17	2.7000E+08	4.2061E+03
Sb-124	6.7892E+02	3.8813E-05	1.8850E+20	2.5120E+13
Sb-125	1.2097E+04	1.1716E-02	5.6445E+22	4.4758E+14
Sb-126	2.9440E+02	3.5226E-06	1.6836E+19	1.0893E+13
Te-131	3.0188E-01	5.2580E-12	2.4172E+13	1.1170E+10
Te-125m	2.5954E+03	1.4411E-04	6.9426E+20	9.6030E+13
Ba-137m	5.9535E+05	1.1070E-06	4.8661E+18	2.2028E+16
Pd-109	8.0072E-08	3.7395E-17	2.0660E+08	2.9627E+03
Rh-106	4.2220E+04	1.1861E-08	6.7385E+16	1.5621E+15
Rh-103m	4.9748E+04	1.5294E-06	8.9417E+18	1.8407E+15
Eu-154	2.1162E+01	8.0222E-05	3.1371E+20	7.8300E+11
Eu-155	1.6183E+01	3.4803E-05	1.3522E+20	5.9878E+11
Eu-156	1.3179E+02	2.3917E-06	9.2326E+18	4.8762E+12
Nb-97	4.6574E-07	1.7323E-17	1.0755E+08	1.7232E+04
Nb-95m	4.0167E+01	1.0545E-07	6.6844E+17	1.4862E+12
Pm-147	6.6617E+02	7.1861E-04	2.9439E+21	2.4648E+13
Pm-148	7.3098E+01	4.4492E-07	1.8104E+18	2.7046E+12
Pm-149	3.0425E+00	7.6785E-09	3.1034E+16	1.1257E+11
Pm-151	3.6690E-03	5.0208E-12	2.0024E+13	1.3575E+08
Pm-148m	1.0013E+02	4.6874E-06	1.9073E+19	3.7050E+12
Pr-144	1.2078E+04	1.5983E-07	6.6843E+17	4.4687E+14
Pr-144m	2.2225E+02	1.2255E-09	5.1250E+15	8.2231E+12
Sm-153	7.8560E-01	1.7912E-09	7.0501E+15	2.9067E+10
Br-82	1.5873E+00	1.4661E-09	1.0767E+16	5.8729E+10
Am-242	7.2155E-08	8.9263E-17	2.2213E+08	2.6697E+03
Np-238	2.3452E+00	9.0494E-09	2.2898E+16	8.6773E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.7143E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.9842E+00

Environment Integral Nuclide Release:

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Xe-133	1.9870E+05	1.0615E-03	4.8065E+21	7.3519E+15
Xe-131m	2.3165E+04	2.7656E-04	1.2714E+21	8.5710E+14
Xe-133m	4.0319E+02	8.9856E-07	4.0686E+18	1.4918E+13

Environment Transport Group Inventory:

Time (h) = 500.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	2.0844E+17	2.8951E+15	6.0820E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Rb-86	3.7302E+03	4.5844E-05	3.2102E+20	1.3802E+14
Sr-89	3.1584E+05	1.0871E-02	7.3561E+22	1.1686E+16
Sr-90	2.8591E+04	2.0960E-01	1.4025E+24	1.0579E+15
Sr-91	7.3786E-11	2.0355E-20	1.3470E+05	2.7301E+00
Y-90	2.8474E+04	5.2336E-05	3.5019E+20	1.0535E+15
Y-91	6.6819E+03	2.7247E-04	1.8031E+21	2.4723E+14
Zr-95	5.4170E+03	2.5215E-04	1.5984E+21	2.0043E+14
Zr-97	8.1158E-06	4.2454E-15	2.6357E+10	3.0028E+05
Nb-95	6.5627E+03	1.6783E-04	1.0639E+21	2.4282E+14
Mo-99	4.6680E+02	9.7328E-07	5.9204E+18	1.7272E+13
Tc-99m	4.5048E+02	8.5671E-08	5.2113E+17	1.6668E+13
Ru-103	4.9481E+04	1.5331E-03	8.9639E+21	1.8308E+15
Ru-106	2.0529E+04	6.1361E-03	3.4861E+22	7.5957E+14
Rh-105	2.8415E+00	3.3665E-09	1.9308E+16	1.0513E+11
Sb-127	2.3722E+03	8.8829E-06	4.2121E+19	8.7771E+13
Te-127	1.4039E+04	5.3196E-06	2.5225E+19	5.1945E+14
Te-127m	1.2104E+04	1.2832E-03	6.0846E+21	4.4784E+14
Te-129	1.9149E+04	9.1439E-07	4.2686E+18	7.0853E+14
Te-129m	2.9243E+04	9.7071E-04	4.5316E+21	1.0820E+15
Te-131m	1.3189E+00	1.6540E-09	7.6033E+15	4.8798E+10
Te-132	1.6139E+04	5.3161E-05	2.4253E+20	5.9715E+14
I-131	1.2712E+06	1.0254E-02	4.7136E+22	4.7034E+16
I-132	1.6679E+04	1.6158E-06	7.3716E+18	6.1710E+14
I-133	9.2341E-01	8.1515E-10	3.6909E+15	3.4166E+10
Cs-134	5.9541E+05	4.6019E-01	2.0682E+24	2.2030E+16
Cs-136	8.4800E+04	1.1570E-03	5.1234E+21	3.1376E+15
Cs-137	5.3706E+05	6.1744E+00	2.7141E+25	1.9871E+16
Ba-140	2.2117E+05	3.0211E-03	1.2995E+22	8.1834E+15
La-140	2.5462E+05	4.5809E-04	1.9705E+21	9.4209E+15
Ce-141	1.0547E+04	3.7014E-04	1.5809E+21	3.9022E+14
Ce-143	4.2520E-01	6.4029E-10	2.6964E+15	1.5733E+10
Ce-144	1.1791E+04	3.6969E-03	1.5461E+22	4.3628E+14
Pr-143	2.6698E+03	3.9648E-05	1.6697E+20	9.8784E+13
Nd-147	6.9327E+02	8.5696E-06	3.5107E+19	2.5651E+13
Np-239	4.1422E+02	1.7855E-06	4.4990E+18	1.5326E+13
Pu-238	1.3077E+01	7.6385E-04	1.9328E+21	4.8384E+11
Pu-239	4.0947E+00	6.5877E-02	1.6599E+23	1.5150E+11
Pu-240	4.1003E+00	1.7994E-02	4.5151E+22	1.5171E+11
Pu-241	1.2350E+03	1.1989E-02	2.9957E+22	4.5694E+13
Am-241	5.5546E-01	1.6184E-04	4.0440E+20	2.0552E+10
Cm-242	7.2422E+01	2.1852E-05	5.4377E+19	2.6796E+12
Cm-244	1.8590E+00	2.2978E-05	5.6712E+19	6.8783E+10
I-130	1.1368E-07	5.8286E-17	2.7000E+08	4.2061E+03
Sb-124	6.7892E+02	3.8813E-05	1.8850E+20	2.5120E+13
Sb-125	1.2097E+04	1.1716E-02	5.6445E+22	4.4758E+14
Sb-126	2.9440E+02	3.5226E-06	1.6836E+19	1.0893E+13
Te-131	3.0188E-01	5.2580E-12	2.4172E+13	1.1170E+10
Te-125m	2.5954E+03	1.4411E-04	6.9426E+20	9.6030E+13
Ba-137m	5.9535E+05	1.1070E-06	4.8661E+18	2.2028E+16
Pd-109	8.0072E-08	3.7395E-17	2.0660E+08	2.9627E+03
Rh-106	4.2220E+04	1.1861E-08	6.7385E+16	1.5621E+15
Rh-103m	4.9748E+04	1.5294E-06	8.9417E+18	1.8407E+15

Eu-154	2.1162E+01	8.0222E-05	3.1371E+20	7.8300E+11
Eu-155	1.6183E+01	3.4803E-05	1.3522E+20	5.9878E+11
Eu-156	1.3179E+02	2.3917E-06	9.2326E+18	4.8762E+12
Nb-97	4.6574E-07	1.7323E-17	1.0755E+08	1.7232E+04
Nb-95m	4.0167E+01	1.0545E-07	6.6844E+17	1.4862E+12
Pm-147	6.6617E+02	7.1861E-04	2.9439E+21	2.4648E+13
Pm-148	7.3098E+01	4.4492E-07	1.8104E+18	2.7046E+12
Pm-149	3.0425E+00	7.6785E-09	3.1034E+16	1.1257E+11
Pm-151	3.6690E-03	5.0208E-12	2.0024E+13	1.3575E+08
Pm-148m	1.0013E+02	4.6874E-06	1.9073E+19	3.7050E+12
Pr-144	1.2078E+04	1.5983E-07	6.6843E+17	4.4687E+14
Pr-144m	2.2225E+02	1.2255E-09	5.1250E+15	8.2231E+12
Sm-153	7.8560E-01	1.7912E-09	7.0501E+15	2.9067E+10
Br-82	1.5873E+00	1.4661E-09	1.0767E+16	5.8729E+10
Am-242	7.2155E-08	8.9263E-17	2.2213E+08	2.6697E+03
Np-238	2.3452E+00	9.0494E-09	2.2898E+16	8.6773E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.7143E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.9842E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Xe-133	1.0494E-01	5.6062E-10	2.5385E+15	3.8827E+09
Xe-131m	2.3044E-02	2.7511E-10	1.2647E+15	8.5262E+08
Xe-133m	2.1305E-04	4.7480E-13	2.1499E+12	7.8827E+06

Control Room Transport Group Inventory:

Time (h) = 500.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.8053E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 500.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 597.2200

EAB Doses:

Time (h) = 597.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.0511E-02	0.0000E+00	2.8239E-01	8.0511E-02
Accumulated dose (rem)	1.1663E+01	0.0000E+00	3.0550E+01	1.1663E+01

LPZ Doses:

Time (h) = 597.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.7940E-04	0.0000E+00	1.3307E-03	3.7940E-04
Accumulated dose (rem)	3.3889E-01	0.0000E+00	8.0133E-01	3.3889E-01

Control Room Doses:

Time (h) = 597.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.9813E-03	0.0000E+00	2.5212E-01	1.9813E-03
Accumulated dose (rem)	4.2159E+00	0.0000E+00	2.6480E+02	4.2159E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Rb-86	8.4510E+03	1.0386E-04	7.2729E+20	3.1269E+14
Sr-89	7.8701E+05	2.7090E-02	1.8330E+23	2.9119E+16
Sr-90	7.5298E+04	5.5201E-01	3.6936E+24	2.7860E+15
Y-90	7.5208E+04	1.3823E-04	9.2496E+20	2.7827E+15
Y-91	1.6777E+04	6.8412E-04	4.5273E+21	6.2075E+14
Zr-95	1.3657E+04	6.3572E-04	4.0299E+21	5.0531E+14
Zr-97	3.9652E-07	2.0742E-16	1.2878E+09	1.4671E+04
Nb-95	1.7033E+04	4.3558E-04	2.7612E+21	6.3021E+14
Mo-99	4.4296E+02	9.2358E-07	5.6181E+18	1.6390E+13
Tc-99m	4.2747E+02	8.1296E-08	4.9452E+17	1.5817E+13
Ru-103	1.2135E+05	3.7601E-03	2.1984E+22	4.4901E+15
Ru-106	5.3668E+04	1.6041E-02	9.1136E+22	1.9857E+15
Rh-105	1.1131E+00	1.3188E-09	7.5637E+15	4.1186E+10
Sb-127	3.0135E+03	1.1284E-05	5.3509E+19	1.1150E+14
Te-127	3.3241E+04	1.2596E-05	5.9727E+19	1.2299E+15
Te-127m	3.1094E+04	3.2964E-03	1.5631E+22	1.1505E+15
Te-129	4.6401E+04	2.2156E-06	1.0343E+19	1.7168E+15
Te-129m	7.0859E+04	2.3521E-03	1.0980E+22	2.6218E+15
Te-131m	3.6756E-01	4.6094E-10	2.1190E+15	1.3600E+10
Te-132	1.7960E+04	5.9157E-05	2.6989E+20	6.6451E+14
I-131	2.3610E+06	1.9044E-02	8.7547E+22	8.7357E+16
I-132	1.8560E+04	1.7981E-06	8.2031E+18	6.8671E+14
I-133	9.5264E-02	8.4096E-11	3.8078E+14	3.5248E+09
Xe-133	3.0661E+05	1.6381E-03	7.4170E+21	1.1345E+16
Cs-134	1.5622E+06	1.2074E+00	5.4262E+24	5.7800E+16
Cs-136	1.8023E+05	2.4591E-03	1.0889E+22	6.6686E+15
Cs-137	1.4140E+06	1.6256E+01	7.1456E+25	5.2317E+16
Ba-140	4.6739E+05	6.3843E-03	2.7462E+22	1.7293E+16
La-140	5.3830E+05	9.6847E-04	4.1659E+21	1.9917E+16
Ce-141	2.5483E+04	8.9435E-04	3.8198E+21	9.4288E+14
Ce-143	1.4535E-01	2.1887E-10	9.2172E+14	5.3778E+09
Ce-144	3.0756E+04	9.6430E-03	4.0328E+22	1.1380E+15
Pr-143	5.7178E+03	8.4911E-05	3.5758E+20	2.1156E+14
Nd-147	1.4142E+03	1.7481E-05	7.1614E+19	5.2325E+13
Np-239	3.3120E+02	1.4277E-06	3.5973E+18	1.2255E+13
Pu-238	3.4462E+01	2.0130E-03	5.0935E+21	1.2751E+12
Pu-239	1.0787E+01	1.7354E-01	4.3728E+23	3.9911E+11
Pu-240	1.0801E+01	4.7402E-02	1.1894E+23	3.9965E+11
Pu-241	3.2515E+03	3.1564E-02	7.8873E+22	1.2031E+14
Am-241	1.5210E+00	4.4317E-04	1.1074E+21	5.6279E+10
Cm-242	1.8752E+02	5.6579E-05	1.4080E+20	6.9382E+12
Cm-244	4.8951E+00	6.0506E-05	1.4933E+20	1.8112E+11
I-130	1.2836E-09	6.5813E-19	3.0487E+06	4.7492E+01
Xe-131m	5.4733E+04	6.5344E-04	3.0039E+21	2.0251E+15
Xe-133m	2.9428E+02	6.5584E-07	2.9696E+18	1.0888E+13
Sb-124	1.7070E+03	9.7584E-05	4.7392E+20	6.3157E+13
Sb-125	3.1778E+04	3.0778E-02	1.4828E+23	1.1758E+15
Sb-126	6.1838E+02	7.3992E-06	3.5364E+19	2.2880E+13
Te-131	8.4132E-02	1.4654E-12	6.7364E+12	3.1129E+09
Te-125m	6.8568E+03	3.8071E-04	1.8342E+21	2.5370E+14
Ba-137m	1.5674E+06	2.9145E-06	1.2811E+19	5.7994E+16
Pd-109	1.3947E-09	6.5137E-19	3.5987E+06	5.1605E+01
Rh-106	1.1037E+05	3.1008E-08	1.7616E+17	4.0838E+15
Rh-103m	1.2201E+05	3.7508E-06	2.1930E+19	4.5144E+15
Eu-154	5.5698E+01	2.1114E-04	8.2567E+20	2.0608E+12
Eu-155	4.2565E+01	9.1538E-05	3.5565E+20	1.5749E+12
Eu-156	2.8858E+02	5.2370E-06	2.0217E+19	1.0677E+13
Nb-97	2.2755E-08	8.4638E-19	5.2547E+06	8.4194E+02
Nb-95m	1.0130E+02	2.6593E-07	1.6857E+18	3.7480E+12
Pm-147	1.7544E+03	1.8926E-03	7.7533E+21	6.4915E+13
Pm-148	1.1892E+02	7.2379E-07	2.9451E+18	4.3999E+12
Pm-149	2.2518E+00	5.6830E-09	2.2969E+16	8.3318E+10
Pm-151	9.0097E-04	1.2329E-12	4.9171E+12	3.3336E+07
Pm-148m	2.4644E+02	1.1536E-05	4.6942E+19	9.1184E+12
Pr-144	3.1503E+04	4.1691E-07	1.7435E+18	1.1656E+15
Pr-144m	5.7971E+02	3.1965E-09	1.3368E+16	2.1449E+13

Sm-153	4.8885E-01	1.1146E-09	4.3871E+15	1.8088E+10
Br-82	6.1965E-01	5.7235E-10	4.2034E+15	2.2927E+10
Am-242	2.8319E-09	3.5034E-18	8.7180E+06	1.0478E+02
Np-238	1.6400E+00	6.3280E-09	1.6012E+16	6.0678E+10

Containment Sump Transport Group Inventory:

Time (h) = 597.2200	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.0424E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.7556E+22	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	1.8379E+01	0.0000E+00	0.0000E+00

Time (h) = 597.2200	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Rb-86	3.7280E+03	4.5817E-05	3.2083E+20	1.3794E+14
Sr-89	3.4708E+05	1.1947E-02	8.0838E+22	1.2842E+16
Sr-90	3.3207E+04	2.4344E-01	1.6289E+24	1.2287E+15
Y-90	3.3167E+04	6.0963E-05	4.0792E+20	1.2272E+15
Y-91	7.3990E+03	3.0171E-04	1.9966E+21	2.7376E+14
Zr-95	6.0230E+03	2.8036E-04	1.7772E+21	2.2285E+14
Zr-97	1.7487E-07	9.1476E-17	5.6792E+08	6.4703E+03
Nb-95	7.5116E+03	1.9210E-04	1.2177E+21	2.7793E+14
Mo-99	1.9535E+02	4.0731E-07	2.4777E+18	7.2280E+12
Tc-99m	1.8852E+02	3.5852E-08	2.1809E+17	6.9753E+12
Ru-103	5.3518E+04	1.6583E-03	9.6954E+21	1.9802E+15
Ru-106	2.3668E+04	7.0745E-03	4.0192E+22	8.7572E+14
Rh-105	4.9090E-01	5.8160E-10	3.3357E+15	1.8163E+10
Sb-127	1.3290E+03	4.9766E-06	2.3598E+19	4.9173E+13
Te-127	1.4660E+04	5.5549E-06	2.6340E+19	5.4241E+14
Te-127m	1.3713E+04	1.4538E-03	6.8935E+21	5.0737E+14
Te-129	2.0463E+04	9.7712E-07	4.5615E+18	7.5714E+14
Te-129m	3.1249E+04	1.0373E-03	4.8425E+21	1.1562E+15
Te-131m	1.6210E-01	2.0328E-10	9.3450E+14	5.9976E+09
Te-132	7.9204E+03	2.6089E-05	1.1902E+20	2.9306E+14
I-131	1.0414E+06	8.4004E-03	3.8617E+22	3.8533E+16
I-132	8.1851E+03	7.9296E-07	3.6177E+18	3.0285E+14
I-133	4.2021E-02	3.7095E-11	1.6796E+14	1.5548E+09
Cs-134	6.8911E+05	5.3262E-01	2.3936E+24	2.5497E+16
Cs-136	7.9506E+04	1.0848E-03	4.8036E+21	2.9417E+15
Cs-137	6.2374E+05	7.1710E+00	3.1522E+25	2.3079E+16
Ba-140	2.0612E+05	2.8155E-03	1.2111E+22	7.6265E+15
La-140	2.3740E+05	4.2711E-04	1.8372E+21	8.7838E+15
Ce-141	1.1238E+04	3.9442E-04	1.6846E+21	4.1582E+14
Ce-143	6.4100E-02	9.6524E-11	4.0649E+14	2.3717E+09
Ce-144	1.3564E+04	4.2527E-03	1.7785E+22	5.0187E+14
Pr-143	2.5216E+03	3.7447E-05	1.5770E+20	9.3299E+13
Nd-147	6.2367E+02	7.7093E-06	3.1583E+19	2.3076E+13
Np-239	1.4606E+02	6.2961E-07	1.5864E+18	5.4044E+12
Pu-238	1.5198E+01	8.8776E-04	2.2463E+21	5.6233E+11
Pu-239	4.7571E+00	7.6534E-02	1.9284E+23	1.7601E+11
Pu-240	4.7635E+00	2.0905E-02	5.2455E+22	1.7625E+11
Pu-241	1.4340E+03	1.3920E-02	3.4784E+22	5.3056E+13
Am-241	6.7080E-01	1.9545E-04	4.8838E+20	2.4820E+10
Cm-242	8.2698E+01	2.4952E-05	6.2092E+19	3.0598E+12
Cm-244	2.1588E+00	2.6684E-05	6.5858E+19	7.9875E+10
I-130	5.6619E-10	2.9030E-19	1.3448E+06	2.0949E+01
Sb-124	7.5279E+02	4.3036E-05	2.0901E+20	2.7853E+13
Sb-125	1.4014E+04	1.3573E-02	6.5393E+22	5.1853E+14
Sb-126	2.7271E+02	3.2631E-06	1.5596E+19	1.0090E+13
Te-131	3.7103E-02	6.4625E-13	2.9708E+12	1.3728E+09

Te-125m	3.0239E+03	1.6790E-04	8.0889E+20	1.1188E+14
Ba-137m	6.9144E+05	1.2857E-06	5.6515E+18	2.5583E+16
Pd-109	6.1510E-10	2.8726E-19	1.5871E+06	2.2759E+01
Rh-106	4.8676E+04	1.3675E-08	7.7690E+16	1.8010E+15
Rh-103m	5.3808E+04	1.6542E-06	9.6714E+18	1.9909E+15
Eu-154	2.4564E+01	9.3117E-05	3.6413E+20	9.0886E+11
Eu-155	1.8772E+01	4.0369E-05	1.5684E+20	6.9456E+11
Eu-156	1.2727E+02	2.3096E-06	8.9158E+18	4.7088E+12
Nb-97	1.0035E-08	3.7326E-19	2.3174E+06	3.7131E+02
Nb-95m	4.4673E+01	1.1728E-07	7.4343E+17	1.6529E+12
Pm-147	7.7373E+02	8.3465E-04	3.4193E+21	2.8628E+13
Pm-148	5.2443E+01	3.1920E-07	1.2988E+18	1.9404E+12
Pm-149	9.9308E-01	2.5063E-09	1.0130E+16	3.6744E+10
Pm-151	3.9734E-04	5.4373E-13	2.1685E+12	1.4702E+07
Pm-148m	1.0868E+02	5.0877E-06	2.0702E+19	4.0213E+12
Pr-144	1.3893E+04	1.8386E-07	7.6892E+17	5.1405E+14
Pr-144m	2.5566E+02	1.4097E-09	5.8955E+15	9.4593E+12
Sm-153	2.1559E-01	4.9155E-10	1.9348E+15	7.9768E+09
Br-82	2.7333E-01	2.5246E-10	1.8541E+15	1.0113E+10
Am-242	1.2489E-09	1.5450E-18	3.8448E+06	4.6209E+01
Np-238	7.2324E-01	2.7907E-09	7.0614E+15	2.6760E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 597.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.8621E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	8.1074E+00

Environment Integral Nuclide Release:

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Xe-133	1.3525E+05	7.2255E-04	3.2717E+21	5.0042E+15
Xe-131m	2.4143E+04	2.8824E-04	1.3250E+21	8.9329E+14
Xe-133m	1.2981E+02	2.8929E-07	1.3099E+18	4.8029E+12

Environment Transport Group Inventory:

Time (h) = 597.2200	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.2781E+17	1.7751E+15	4.5980E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Rb-86	3.7280E+03	4.5817E-05	3.2083E+20	1.3794E+14
Sr-89	3.4708E+05	1.1947E-02	8.0838E+22	1.2842E+16
Sr-90	3.3207E+04	2.4344E-01	1.6289E+24	1.2287E+15
Y-90	3.3167E+04	6.0963E-05	4.0792E+20	1.2272E+15
Y-91	7.3990E+03	3.0171E-04	1.9966E+21	2.7376E+14
Zr-95	6.0230E+03	2.8036E-04	1.7772E+21	2.2285E+14
Zr-97	1.7487E-07	9.1476E-17	5.6792E+08	6.4703E+03
Nb-95	7.5116E+03	1.9210E-04	1.2177E+21	2.7793E+14
Mo-99	1.9535E+02	4.0731E-07	2.4777E+18	7.2280E+12
Tc-99m	1.8852E+02	3.5852E-08	2.1809E+17	6.9753E+12
Ru-103	5.3518E+04	1.6583E-03	9.6954E+21	1.9802E+15
Ru-106	2.3668E+04	7.0745E-03	4.0192E+22	8.7572E+14
Rh-105	4.9090E-01	5.8160E-10	3.3357E+15	1.8163E+10
Sb-127	1.3290E+03	4.9766E-06	2.3598E+19	4.9173E+13
Te-127	1.4660E+04	5.5549E-06	2.6340E+19	5.4241E+14
Te-127m	1.3713E+04	1.4538E-03	6.8935E+21	5.0737E+14
Te-129	2.0463E+04	9.7712E-07	4.5615E+18	7.5714E+14
Te-129m	3.1249E+04	1.0373E-03	4.8425E+21	1.1562E+15
Te-131m	1.6210E-01	2.0328E-10	9.3450E+14	5.9976E+09
Te-132	7.9204E+03	2.6089E-05	1.1902E+20	2.9306E+14

I-131	1.0414E+06	8.4004E-03	3.8617E+22	3.8533E+16
I-132	8.1851E+03	7.9296E-07	3.6177E+18	3.0285E+14
I-133	4.2021E-02	3.7095E-11	1.6796E+14	1.5548E+09
Cs-134	6.8911E+05	5.3262E-01	2.3936E+24	2.5497E+16
Cs-136	7.9506E+04	1.0848E-03	4.8036E+21	2.9417E+15
Cs-137	6.2374E+05	7.1710E+00	3.1522E+25	2.3079E+16
Ba-140	2.0612E+05	2.8155E-03	1.2111E+22	7.6265E+15
La-140	2.3740E+05	4.2711E-04	1.8372E+21	8.7838E+15
Ce-141	1.1238E+04	3.9442E-04	1.6846E+21	4.1582E+14
Ce-143	6.4100E-02	9.6524E-11	4.0649E+14	2.3717E+09
Ce-144	1.3564E+04	4.2527E-03	1.7785E+22	5.0187E+14
Pr-143	2.5216E+03	3.7447E-05	1.5770E+20	9.3299E+13
Nd-147	6.2367E+02	7.7093E-06	3.1583E+19	2.3076E+13
Np-239	1.4606E+02	6.2961E-07	1.5864E+18	5.4044E+12
Pu-238	1.5198E+01	8.8776E-04	2.2463E+21	5.6233E+11
Pu-239	4.7571E+00	7.6534E-02	1.9284E+23	1.7601E+11
Pu-240	4.7635E+00	2.0905E-02	5.2455E+22	1.7625E+11
Pu-241	1.4340E+03	1.3920E-02	3.4784E+22	5.3056E+13
Am-241	6.7080E-01	1.9545E-04	4.8838E+20	2.4820E+10
Cm-242	8.2698E+01	2.4952E-05	6.2092E+19	3.0598E+12
Cm-244	2.1588E+00	2.6684E-05	6.5858E+19	7.9875E+10
I-130	5.6619E-10	2.9030E-19	1.3448E+06	2.0949E+01
Sb-124	7.5279E+02	4.3036E-05	2.0901E+20	2.7853E+13
Sb-125	1.4014E+04	1.3573E-02	6.5393E+22	5.1853E+14
Sb-126	2.7271E+02	3.2631E-06	1.5596E+19	1.0090E+13
Te-131	3.7103E-02	6.4625E-13	2.9708E+12	1.3728E+09
Te-125m	3.0239E+03	1.6790E-04	8.0889E+20	1.1188E+14
Ba-137m	6.9144E+05	1.2857E-06	5.6515E+18	2.5583E+16
Pd-109	6.1510E-10	2.8726E-19	1.5871E+06	2.2759E+01
Rh-106	4.8676E+04	1.3675E-08	7.7690E+16	1.8010E+15
Rh-103m	5.3808E+04	1.6542E-06	9.6714E+18	1.9909E+15
Eu-154	2.4564E+01	9.3117E-05	3.6413E+20	9.0886E+11
Eu-155	1.8772E+01	4.0369E-05	1.5684E+20	6.9456E+11
Eu-156	1.2727E+02	2.3096E-06	8.9158E+18	4.7088E+12
Nb-97	1.0035E-08	3.7326E-19	2.3174E+06	3.7131E+02
Nb-95m	4.4673E+01	1.1728E-07	7.4343E+17	1.6529E+12
Pm-147	7.7373E+02	8.3465E-04	3.4193E+21	2.8628E+13
Pm-148	5.2443E+01	3.1920E-07	1.2988E+18	1.9404E+12
Pm-149	9.9308E-01	2.5063E-09	1.0130E+16	3.6744E+10
Pm-151	3.9734E-04	5.4373E-13	2.1685E+12	1.4702E+07
Pm-148m	1.0868E+02	5.0877E-06	2.0702E+19	4.0213E+12
Pr-144	1.3893E+04	1.8386E-07	7.6892E+17	5.1405E+14
Pr-144m	2.5566E+02	1.4097E-09	5.8955E+15	9.4593E+12
Sm-153	2.1559E-01	4.9155E-10	1.9348E+15	7.9768E+09
Br-82	2.7333E-01	2.5246E-10	1.8541E+15	1.0113E+10
Am-242	1.2489E-09	1.5450E-18	3.8448E+06	4.6209E+01
Np-238	7.2324E-01	2.7907E-09	7.0614E+15	2.6760E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway
Time (h) = 597.2200	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.8621E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	8.1074E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway
Time (h) = 597.2200	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway
Time (h) = 597.2200	Filter

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Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                       Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                       Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 597.2200       Ci           kg         Atoms         Bq
Xe-133                 5.7928E-02  3.0948E-10  1.4013E+15  2.1433E+09
Xe-131m                1.9199E-02  2.2921E-10  1.0537E+15  7.1036E+08
Xe-133m                5.5603E-05  1.2392E-13  5.6109E+11  2.0573E+06

Control Room Transport Group Inventory:

                                                Overlying
Time (h) = 597.2200    Atmosphere     Sump        Pool
Noble gases (atoms)    2.4555E+15  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) = 597.2200     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                       Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
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Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 597.2200	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 694.4400

EAB Doses:

Time (h) = 694.4400	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.5186E-02	0.0000E+00	1.6530E-01	4.5186E-02
Accumulated dose (rem)	1.1708E+01	0.0000E+00	3.0715E+01	1.1708E+01

LPZ Doses:

Time (h) = 694.4400	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.1293E-04	0.0000E+00	7.7894E-04	2.1293E-04
Accumulated dose (rem)	3.3910E-01	0.0000E+00	8.0210E-01	3.3910E-01

Control Room Doses:

Time (h) = 694.4400	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.1258E-03	0.0000E+00	1.5282E-01	1.1258E-03
Accumulated dose (rem)	4.2170E+00	0.0000E+00	2.6495E+02	4.2170E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Rb-86	6.8498E+03	8.4184E-05	5.8950E+20	2.5344E+14
Sr-89	7.0138E+05	2.4142E-02	1.6336E+23	2.5951E+16
Sr-90	7.0923E+04	5.1994E-01	3.4790E+24	2.6242E+15
Y-90	7.0910E+04	1.3033E-04	8.7210E+20	2.6237E+15
Y-91	1.5066E+04	6.1434E-04	4.0655E+21	5.5744E+14
Zr-95	1.2315E+04	5.7323E-04	3.6337E+21	4.5564E+14
Zr-97	6.9289E-09	3.6245E-18	2.2502E+07	2.5637E+02
Nb-95	1.5782E+04	4.0360E-04	2.5584E+21	5.8393E+14
Mo-99	1.5034E+02	3.1345E-07	1.9067E+18	5.5624E+12
Tc-99m	1.4508E+02	2.7591E-08	1.6783E+17	5.3679E+12
Ru-103	1.0645E+05	3.2982E-03	1.9284E+22	3.9385E+15
Ru-106	5.0179E+04	1.4999E-02	8.5211E+22	1.8566E+15
Rh-105	1.5596E-01	1.8477E-10	1.0597E+15	5.7704E+09
Sb-127	1.3692E+03	5.1271E-06	2.4312E+19	5.0660E+13
Te-127	2.9249E+04	1.1083E-05	5.2554E+19	1.0822E+15
Te-127m	2.8559E+04	3.0277E-03	1.4357E+22	1.0567E+15
Te-129	4.0212E+04	1.9201E-06	8.9637E+18	1.4878E+15
Te-129m	6.1407E+04	2.0384E-03	9.5159E+21	2.2721E+15
Te-131m	3.6636E-02	4.5944E-11	2.1121E+14	1.3555E+09
Te-132	7.1478E+03	2.3544E-05	1.0741E+20	2.6447E+14
I-131	1.5687E+06	1.2654E-02	5.8169E+22	5.8043E+16
I-132	7.3866E+03	7.1561E-07	3.2648E+18	2.7330E+14
I-133	3.5158E-03	3.1036E-12	1.4053E+13	1.3008E+08
Xe-133	1.6919E+05	9.0389E-04	4.0927E+21	6.2601E+15
Cs-134	1.4663E+06	1.1333E+00	5.0932E+24	5.4253E+16
Cs-136	1.3705E+05	1.8699E-03	8.2800E+21	5.0707E+15
Cs-137	1.3318E+06	1.5312E+01	6.7305E+25	4.9278E+16
Ba-140	3.5325E+05	4.8252E-03	2.0756E+22	1.3070E+16
La-140	4.0689E+05	7.3204E-04	3.1489E+21	1.5055E+16
Ce-141	2.2022E+04	7.7287E-04	3.3010E+21	8.1481E+14
Ce-143	1.7769E-02	2.6758E-11	1.1269E+14	6.5747E+08
Ce-144	2.8692E+04	8.9959E-03	3.7621E+22	1.0616E+15
Pr-143	4.3795E+03	6.5036E-05	2.7389E+20	1.6204E+14
Nd-147	1.0317E+03	1.2753E-05	5.2247E+19	3.8174E+13
Np-239	9.4714E+01	4.0826E-07	1.0287E+18	3.5044E+12

Pu-238	3.2481E+01	1.8973E-03	4.8007E+21	1.2018E+12
Pu-239	1.0163E+01	1.6350E-01	4.1198E+23	3.7602E+11
Pu-240	1.0176E+01	4.4660E-02	1.1206E+23	3.7653E+11
Pu-241	3.0618E+03	2.9722E-02	7.4271E+22	1.1329E+14
Am-241	1.4875E+00	4.3340E-04	1.0830E+21	5.5038E+10
Cm-242	1.7365E+02	5.2394E-05	1.3038E+20	6.4250E+12
Cm-244	4.6099E+00	5.6981E-05	1.4063E+20	1.7057E+11
Xe-131m	4.5079E+04	5.3818E-04	2.4741E+21	1.6679E+15
Xe-133m	7.6835E+01	1.7124E-07	7.7535E+17	2.8429E+12
Sb-124	1.5349E+03	8.7749E-05	4.2616E+20	5.6792E+13
Sb-125	2.9856E+04	2.8917E-02	1.3931E+23	1.1047E+15
Sb-126	4.6455E+02	5.5586E-06	2.6567E+19	1.7188E+13
Te-131	8.3858E-03	1.4606E-13	6.7144E+11	3.1027E+08
Te-125m	6.4770E+03	3.5962E-04	1.7326E+21	2.3965E+14
Ba-137m	1.4764E+06	2.7452E-06	1.2067E+19	5.4625E+16
Rh-106	1.0320E+05	2.8992E-08	1.6471E+17	3.8184E+15
Rh-103m	1.0702E+05	3.2900E-06	1.9236E+19	3.9598E+15
Eu-154	5.2431E+01	1.9875E-04	7.7723E+20	1.9399E+12
Eu-155	4.0041E+01	8.6109E-05	3.3455E+20	1.4815E+12
Eu-156	2.2600E+02	4.1013E-06	1.5833E+19	8.3619E+12
Nb-95m	9.1351E+01	2.3982E-07	1.5202E+18	3.3800E+12
Pm-147	1.6516E+03	1.7816E-03	7.2986E+21	6.1108E+13
Pm-148	7.0609E+01	4.2977E-07	1.7487E+18	2.6125E+12
Pm-149	5.9607E-01	1.5043E-09	6.0800E+15	2.2055E+10
Pm-151	7.9128E-05	1.0828E-13	4.3185E+11	2.9277E+06
Pm-148m	2.1693E+02	1.0155E-05	4.1319E+19	8.0263E+12
Pr-144	2.9389E+04	3.8893E-07	1.6265E+18	1.0874E+15
Pr-144m	5.4080E+02	2.9820E-09	1.2471E+16	2.0010E+13
Sm-153	1.0880E-01	2.4806E-10	9.7636E+14	4.0255E+09
Br-82	8.6536E-02	7.9931E-11	5.8702E+14	3.2018E+09
Am-242	3.9751E-11	4.9176E-20	1.2237E+05	1.4708E+00
Np-238	4.1015E-01	1.5826E-09	4.0045E+15	1.5175E+10

Containment Sump Transport Group Inventory:

Time (h) = 694.4400	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	6.5676E+21	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.8173E+22	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	1.7303E+01	0.0000E+00	0.0000E+00

Time (h) = 694.4400	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Rb-86	3.6278E+03	4.4585E-05	3.1221E+20	1.3423E+14
Sr-89	3.7138E+05	1.2783E-02	8.6496E+22	1.3741E+16
Sr-90	3.7553E+04	2.7530E-01	1.8421E+24	1.3895E+15
Y-90	3.7546E+04	6.9011E-05	4.6177E+20	1.3892E+15
Y-91	7.9774E+03	3.2529E-04	2.1527E+21	2.9516E+14
Zr-95	6.5205E+03	3.0352E-04	1.9240E+21	2.4126E+14
Zr-97	3.6688E-09	1.9192E-18	1.1915E+07	1.3575E+02
Nb-95	8.3564E+03	2.1370E-04	1.3547E+21	3.0919E+14
Mo-99	7.9602E+01	1.6597E-07	1.0096E+18	2.9453E+12
Tc-99m	7.6818E+01	1.4609E-08	8.8867E+16	2.8423E+12
Ru-103	5.6362E+04	1.7464E-03	1.0211E+22	2.0854E+15
Ru-106	2.6569E+04	7.9417E-03	4.5119E+22	9.8307E+14
Rh-105	8.2578E-02	9.7834E-11	5.6112E+14	3.0554E+09
Sb-127	7.2498E+02	2.7147E-06	1.2873E+19	2.6824E+13
Te-127	1.5487E+04	5.8684E-06	2.7827E+19	5.7303E+14
Te-127m	1.5122E+04	1.6031E-03	7.6018E+21	5.5950E+14
Te-129	2.1292E+04	1.0167E-06	4.7462E+18	7.8779E+14
Te-129m	3.2515E+04	1.0793E-03	5.0386E+21	1.2030E+15

Te-131m	1.9399E-02	2.4327E-11	1.1183E+14	7.1775E+08
Te-132	3.7847E+03	1.2466E-05	5.6874E+19	1.4003E+14
I-131	8.3078E+05	6.7012E-03	3.0806E+22	3.0739E+16
I-132	3.9112E+03	3.7891E-07	1.7287E+18	1.4471E+14
I-133	1.8619E-03	1.6436E-12	7.4422E+12	6.8891E+07
Cs-134	7.7658E+05	6.0022E-01	2.6975E+24	2.8734E+16
Cs-136	7.2583E+04	9.9034E-04	4.3852E+21	2.6856E+15
Cs-137	7.0536E+05	8.1093E+00	3.5646E+25	2.6098E+16
Ba-140	1.8704E+05	2.5549E-03	1.0990E+22	6.9206E+15
La-140	2.1545E+05	3.8761E-04	1.6673E+21	7.9715E+15
Ce-141	1.1660E+04	4.0923E-04	1.7478E+21	4.3143E+14
Ce-143	9.4088E-03	1.4168E-11	5.9666E+13	3.4813E+08
Ce-144	1.5192E+04	4.7633E-03	1.9920E+22	5.6212E+14
Pr-143	2.3189E+03	3.4436E-05	1.4502E+20	8.5799E+13
Nd-147	5.4629E+02	6.7528E-06	2.7664E+19	2.0213E+13
Np-239	5.0150E+01	2.1617E-07	5.4470E+17	1.8556E+12
Pu-238	1.7198E+01	1.0046E-03	2.5419E+21	6.3634E+11
Pu-239	5.3811E+00	8.6574E-02	2.1814E+23	1.9910E+11
Pu-240	5.3883E+00	2.3647E-02	5.9335E+22	1.9937E+11
Pu-241	1.6212E+03	1.5738E-02	3.9326E+22	5.9984E+13
Am-241	7.8762E-01	2.2948E-04	5.7343E+20	2.9142E+10
Cm-242	9.1946E+01	2.7742E-05	6.9036E+19	3.4020E+12
Cm-244	2.4409E+00	3.0171E-05	7.4465E+19	9.0314E+10
Sb-124	8.1273E+02	4.6463E-05	2.2565E+20	3.0071E+13
Sb-125	1.5809E+04	1.5311E-02	7.3766E+22	5.8492E+14
Sb-126	2.4598E+02	2.9432E-06	1.4067E+19	9.1011E+12
Te-131	4.4402E-03	7.7338E-14	3.5553E+11	1.6429E+08
Te-125m	3.4295E+03	1.9042E-04	9.1738E+20	1.2689E+14
Ba-137m	7.8191E+05	1.4539E-06	6.3909E+18	2.8931E+16
Rh-106	5.4643E+04	1.5351E-08	8.7213E+16	2.0218E+15
Rh-103m	5.6667E+04	1.7421E-06	1.0185E+19	2.0967E+15
Eu-154	2.7762E+01	1.0524E-04	4.1154E+20	1.0272E+12
Eu-155	2.1201E+01	4.5594E-05	1.7714E+20	7.8445E+11
Eu-156	1.1966E+02	2.1716E-06	8.3832E+18	4.4276E+12
Nb-95m	4.8369E+01	1.2698E-07	8.0495E+17	1.7897E+12
Pm-147	8.7449E+02	9.4333E-04	3.8645E+21	3.2356E+13
Pm-148	3.7387E+01	2.2756E-07	9.2594E+17	1.3833E+12
Pm-149	3.1561E-01	7.9653E-10	3.2193E+15	1.1678E+10
Pm-151	4.1898E-05	5.7334E-14	2.2866E+11	1.5502E+06
Pm-148m	1.1486E+02	5.3768E-06	2.1878E+19	4.2499E+12
Pr-144	1.5561E+04	2.0594E-07	8.6123E+17	5.7577E+14
Pr-144m	2.8635E+02	1.5790E-09	6.6033E+15	1.0595E+13
Sm-153	5.7607E-02	1.3134E-10	5.1698E+14	2.1315E+09
Br-82	4.5828E-02	4.2330E-11	3.1088E+14	1.6956E+09
Np-238	2.1717E-01	8.3798E-10	2.1204E+15	8.0353E+09

SIRWT Backleakage Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.0807E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	9.1640E+00

Environment Integral Nuclide Release:

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Xe-133	8.9602E+04	4.7869E-04	2.1675E+21	3.3153E+15
Xe-131m	2.3873E+04	2.8502E-04	1.3102E+21	8.8331E+14
Xe-133m	4.0691E+01	9.0686E-08	4.1062E+17	1.5056E+12

Environment Transport Group Inventory:

Time (h) = 694.4400	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.0530E+16	1.1185E+15	3.4781E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Rb-86	3.6278E+03	4.4585E-05	3.1221E+20	1.3423E+14
Sr-89	3.7138E+05	1.2783E-02	8.6496E+22	1.3741E+16
Sr-90	3.7553E+04	2.7530E-01	1.8421E+24	1.3895E+15
Y-90	3.7546E+04	6.9011E-05	4.6177E+20	1.3892E+15
Y-91	7.9774E+03	3.2529E-04	2.1527E+21	2.9516E+14
Zr-95	6.5205E+03	3.0352E-04	1.9240E+21	2.4126E+14
Zr-97	3.6688E-09	1.9192E-18	1.1915E+07	1.3575E+02
Nb-95	8.3564E+03	2.1370E-04	1.3547E+21	3.0919E+14
Mo-99	7.9602E+01	1.6597E-07	1.0096E+18	2.9453E+12
Tc-99m	7.6818E+01	1.4609E-08	8.8867E+16	2.8423E+12
Ru-103	5.6362E+04	1.7464E-03	1.0211E+22	2.0854E+15
Ru-106	2.6569E+04	7.9417E-03	4.5119E+22	9.8307E+14
Rh-105	8.2578E-02	9.7834E-11	5.6112E+14	3.0554E+09
Sb-127	7.2498E+02	2.7147E-06	1.2873E+19	2.6824E+13
Te-127	1.5487E+04	5.8684E-06	2.7827E+19	5.7303E+14
Te-127m	1.5122E+04	1.6031E-03	7.6018E+21	5.5950E+14
Te-129	2.1292E+04	1.0167E-06	4.7462E+18	7.8779E+14
Te-129m	3.2515E+04	1.0793E-03	5.0386E+21	1.2030E+15
Te-131m	1.9399E-02	2.4327E-11	1.1183E+14	7.1775E+08
Te-132	3.7847E+03	1.2466E-05	5.6874E+19	1.4003E+14
I-131	8.3078E+05	6.7012E-03	3.0806E+22	3.0739E+16
I-132	3.9112E+03	3.7891E-07	1.7287E+18	1.4471E+14
I-133	1.8619E-03	1.6436E-12	7.4422E+12	6.8891E+07
Cs-134	7.7658E+05	6.0022E-01	2.6975E+24	2.8734E+16
Cs-136	7.2583E+04	9.9034E-04	4.3852E+21	2.6856E+15
Cs-137	7.0536E+05	8.1093E+00	3.5646E+25	2.6098E+16
Ba-140	1.8704E+05	2.5549E-03	1.0990E+22	6.9206E+15
La-140	2.1545E+05	3.8761E-04	1.6673E+21	7.9715E+15
Ce-141	1.1660E+04	4.0923E-04	1.7478E+21	4.3143E+14
Ce-143	9.4088E-03	1.4168E-11	5.9666E+13	3.4813E+08
Ce-144	1.5192E+04	4.7633E-03	1.9920E+22	5.6212E+14
Pr-143	2.3189E+03	3.4436E-05	1.4502E+20	8.5799E+13
Nd-147	5.4629E+02	6.7528E-06	2.7664E+19	2.0213E+13
Np-239	5.0150E+01	2.1617E-07	5.4470E+17	1.8556E+12
Pu-238	1.7198E+01	1.0046E-03	2.5419E+21	6.3634E+11
Pu-239	5.3811E+00	8.6574E-02	2.1814E+23	1.9910E+11
Pu-240	5.3883E+00	2.3647E-02	5.9335E+22	1.9937E+11
Pu-241	1.6212E+03	1.5738E-02	3.9326E+22	5.9984E+13
Am-241	7.8762E-01	2.2948E-04	5.7343E+20	2.9142E+10
Cm-242	9.1946E+01	2.7742E-05	6.9036E+19	3.4020E+12
Cm-244	2.4409E+00	3.0171E-05	7.4465E+19	9.0314E+10
Sb-124	8.1273E+02	4.6463E-05	2.2565E+20	3.0071E+13
Sb-125	1.5809E+04	1.5311E-02	7.3766E+22	5.8492E+14
Sb-126	2.4598E+02	2.9432E-06	1.4067E+19	9.1011E+12
Te-131	4.4402E-03	7.7338E-14	3.5553E+11	1.6429E+08
Te-125m	3.4295E+03	1.9042E-04	9.1738E+20	1.2689E+14
Ba-137m	7.8191E+05	1.4539E-06	6.3909E+18	2.8931E+16
Rh-106	5.4643E+04	1.5351E-08	8.7213E+16	2.0218E+15
Rh-103m	5.6667E+04	1.7421E-06	1.0185E+19	2.0967E+15
Eu-154	2.7762E+01	1.0524E-04	4.1154E+20	1.0272E+12
Eu-155	2.1201E+01	4.5594E-05	1.7714E+20	7.8445E+11
Eu-156	1.1966E+02	2.1716E-06	8.3832E+18	4.4276E+12
Nb-95m	4.8369E+01	1.2698E-07	8.0495E+17	1.7897E+12
Pm-147	8.7449E+02	9.4333E-04	3.8645E+21	3.2356E+13
Pm-148	3.7387E+01	2.2756E-07	9.2594E+17	1.3833E+12
Pm-149	3.1561E-01	7.9653E-10	3.2193E+15	1.1678E+10
Pm-151	4.1898E-05	5.7334E-14	2.2866E+11	1.5502E+06
Pm-148m	1.1486E+02	5.3768E-06	2.1878E+19	4.2499E+12
Pr-144	1.5561E+04	2.0594E-07	8.6123E+17	5.7577E+14
Pr-144m	2.8635E+02	1.5790E-09	6.6033E+15	1.0595E+13
Sm-153	5.7607E-02	1.3134E-10	5.1698E+14	2.1315E+09
Br-82	4.5828E-02	4.2330E-11	3.1088E+14	1.6956E+09
Np-238	2.1717E-01	8.3798E-10	2.1204E+15	8.0353E+09

SIRWT Backleakage Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.0807E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	9.1640E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Xe-133	3.1965E-02	1.7077E-10	7.7323E+14	1.1827E+09
Xe-131m	1.5585E-02	1.8606E-10	8.5532E+14	5.7663E+08
Xe-133m	1.4517E-05	3.2352E-14	1.4649E+11	5.3711E+05

Control Room Transport Group Inventory:

Time (h) = 694.4400	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.6287E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 694.4400	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter

Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 694.4400	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 694.4400	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 694.4400	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 720.0000

EAB Doses:

Time (h) = 720.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.1711E-03	0.0000E+00	3.0957E-02	8.1711E-03
Accumulated dose (rem)	1.1717E+01	0.0000E+00	3.0746E+01	1.1717E+01

LPZ Doses:

Time (h) = 720.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.8506E-05	0.0000E+00	1.4588E-04	3.8506E-05
Accumulated dose (rem)	3.3914E-01	0.0000E+00	8.0225E-01	3.3914E-01

Control Room Doses:

Time (h) = 720.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.0567E-04	0.0000E+00	2.9370E-02	2.0567E-04
Accumulated dose (rem)	4.2172E+00	0.0000E+00	2.6498E+02	4.2172E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	6.4818E+03	7.9661E-05	5.5782E+20	2.3983E+14
Sr-89	6.8046E+05	2.3422E-02	1.5848E+23	2.5177E+16
Sr-90	6.9816E+04	5.1182E-01	3.4247E+24	2.5832E+15
Y-90	6.9812E+04	1.2832E-04	8.5860E+20	2.5831E+15
Y-91	1.4646E+04	5.9721E-04	3.9522E+21	5.4190E+14
Zr-95	1.1984E+04	5.5784E-04	3.5362E+21	4.4341E+14
Zr-97	2.3910E-09	1.2507E-18	7.7650E+06	8.8466E+01
Nb-95	1.5464E+04	3.9548E-04	2.5070E+21	5.7218E+14
Mo-99	1.1316E+02	2.3593E-07	1.4352E+18	4.1868E+12
Tc-99m	1.0920E+02	2.0767E-08	1.2633E+17	4.0404E+12
Ru-103	1.0284E+05	3.1865E-03	1.8630E+22	3.8051E+15
Ru-106	4.9300E+04	1.4736E-02	8.3718E+22	1.8241E+15
Rh-105	9.3025E-02	1.1021E-10	6.3210E+14	3.4419E+09
Sb-127	1.1127E+03	4.1667E-06	1.9758E+19	4.1171E+13
Te-127	2.8394E+04	1.0759E-05	5.1018E+19	1.0506E+15

Te-127m	2.7927E+04	2.9606E-03	1.4039E+22	1.0333E+15
Te-129	3.8726E+04	1.8492E-06	8.6326E+18	1.4329E+15
Te-129m	5.9139E+04	1.9631E-03	9.1644E+21	2.1881E+15
Te-131m	1.9982E-02	2.5058E-11	1.1519E+14	7.3932E+08
Te-132	5.6102E+03	1.8479E-05	8.4306E+19	2.0758E+14
I-131	1.4089E+06	1.1364E-02	5.2241E+22	5.2128E+16
I-132	5.7976E+03	5.6167E-07	2.5624E+18	2.1451E+14
I-133	1.4767E-03	1.3036E-12	5.9026E+12	5.4639E+07
Xe-133	1.4470E+05	7.7305E-04	3.5003E+21	5.3540E+15
Cs-134	1.4421E+06	1.1146E+00	5.0091E+24	5.3358E+16
Cs-136	1.2752E+05	1.7400E-03	7.7047E+21	4.7184E+15
Cs-137	1.3110E+06	1.5073E+01	6.6255E+25	4.8508E+16
Ba-140	3.2818E+05	4.4828E-03	1.9283E+22	1.2143E+16
La-140	3.7802E+05	6.8010E-04	2.9255E+21	1.3987E+16
Ce-141	2.1193E+04	7.4377E-04	3.1767E+21	7.8413E+14
Ce-143	1.0226E-02	1.5399E-11	6.4849E+13	3.7836E+08
Ce-144	2.8173E+04	8.8331E-03	3.6940E+22	1.0424E+15
Pr-143	4.0829E+03	6.0633E-05	2.5534E+20	1.5107E+14
Nd-147	9.4965E+02	1.1739E-05	4.8090E+19	3.5137E+13
Np-239	6.8151E+01	2.9377E-07	7.4021E+17	2.5216E+12
Pu-238	3.1979E+01	1.8680E-03	4.7266E+21	1.1832E+12
Pu-239	1.0005E+01	1.6096E-01	4.0558E+23	3.7018E+11
Pu-240	1.0018E+01	4.3965E-02	1.1032E+23	3.7067E+11
Pu-241	3.0138E+03	2.9256E-02	7.3106E+22	1.1151E+14
Am-241	1.4785E+00	4.3077E-04	1.0764E+21	5.4703E+10
Cm-242	1.7018E+02	5.1346E-05	1.2777E+20	6.2965E+12
Cm-244	4.5378E+00	5.6089E-05	1.3843E+20	1.6790E+11
Xe-131m	4.2694E+04	5.0971E-04	2.3432E+21	1.5797E+15
Xe-133m	5.3980E+01	1.2030E-07	5.4471E+17	1.9973E+12
Sb-124	1.4926E+03	8.5332E-05	4.1442E+20	5.5228E+13
Sb-125	2.9371E+04	2.8447E-02	1.3705E+23	1.0867E+15
Sb-126	4.3090E+02	5.1559E-06	2.4643E+19	1.5943E+13
Te-131	4.5736E-03	7.9662E-14	3.6621E+11	1.6922E+08
Te-125m	6.3804E+03	3.5426E-04	1.7067E+21	2.3607E+14
Ba-137m	1.4533E+06	2.7023E-06	1.1879E+19	5.3773E+16
Rh-106	1.0139E+05	2.8484E-08	1.6183E+17	3.7515E+15
Rh-103m	1.0340E+05	3.1786E-06	1.8584E+19	3.8256E+15
Eu-154	5.1604E+01	1.9562E-04	7.6497E+20	1.9093E+12
Eu-155	3.9402E+01	8.4736E-05	3.2922E+20	1.4579E+12
Eu-156	2.1193E+02	3.8460E-06	1.4847E+19	7.8414E+12
Nb-95m	8.8901E+01	2.3339E-07	1.4795E+18	3.2893E+12
Pm-147	1.6254E+03	1.7533E-03	7.1829E+21	6.0139E+13
Pm-148	6.1834E+01	3.7636E-07	1.5314E+18	2.2879E+12
Pm-149	4.2028E-01	1.0607E-09	4.2869E+15	1.5550E+10
Pm-151	4.1745E-05	5.7125E-14	2.2782E+11	1.5446E+06
Pm-148m	2.0977E+02	9.8197E-06	3.9956E+19	7.7615E+12
Pr-144	2.8857E+04	3.8189E-07	1.5971E+18	1.0677E+15
Pr-144m	5.3102E+02	2.9281E-09	1.2245E+16	1.9648E+13
Sm-153	7.3291E-02	1.6710E-10	6.5773E+14	2.7118E+09
Br-82	5.1573E-02	4.7636E-11	3.4984E+14	1.9082E+09
Np-238	2.8490E-01	1.0993E-09	2.7817E+15	1.0541E+10

Containment Sump Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.8440E+21	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.2244E+22	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	1.7031E+01	0.0000E+00	0.0000E+00

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	3.5894E+03	4.4114E-05	3.0891E+20	1.3281E+14
Sr-89	3.7673E+05	1.2967E-02	8.7743E+22	1.3939E+16
Sr-90	3.8653E+04	2.8337E-01	1.8961E+24	1.4302E+15
Y-90	3.8651E+04	7.1042E-05	4.7536E+20	1.4301E+15
Y-91	8.1086E+03	3.3064E-04	2.1881E+21	3.0002E+14
Zr-95	6.6349E+03	3.0885E-04	1.9578E+21	2.4549E+14
Zr-97	1.3238E-09	6.9246E-19	4.2990E+06	4.8979E+01
Nb-95	8.5617E+03	2.1895E-04	1.3880E+21	3.1678E+14
Mo-99	6.2648E+01	1.3062E-07	7.9457E+17	2.3180E+12
Tc-99m	6.0457E+01	1.1498E-08	6.9940E+16	2.2369E+12
Ru-103	5.6937E+04	1.7642E-03	1.0315E+22	2.1067E+15
Ru-106	2.7295E+04	8.1584E-03	4.6350E+22	1.0099E+15
Rh-105	5.1503E-02	6.1018E-11	3.4996E+14	1.9056E+09
Sb-127	6.1605E+02	2.3069E-06	1.0939E+19	2.2794E+13
Te-127	1.5720E+04	5.9567E-06	2.8246E+19	5.8166E+14
Te-127m	1.5461E+04	1.6391E-03	7.7726E+21	5.7207E+14
Te-129	2.1441E+04	1.0238E-06	4.7794E+18	7.9330E+14
Te-129m	3.2742E+04	1.0869E-03	5.0738E+21	1.2115E+15
Te-131m	1.1063E-02	1.3873E-11	6.3776E+13	4.0932E+08
Te-132	3.1060E+03	1.0231E-05	4.6676E+19	1.1492E+14
I-131	7.8014E+05	6.2928E-03	2.8928E+22	2.8865E+16
I-132	3.2098E+03	3.1096E-07	1.4187E+18	1.1876E+14
I-133	8.1772E-04	7.2185E-13	3.2685E+12	3.0256E+07
Cs-134	7.9859E+05	6.1723E-01	2.7739E+24	2.9548E+16
Cs-136	7.0619E+04	9.6355E-04	4.2666E+21	2.6129E+15
Cs-137	7.2602E+05	8.3467E+00	3.6690E+25	2.6863E+16
Ba-140	1.8169E+05	2.4819E-03	1.0676E+22	6.7227E+15
La-140	2.0929E+05	3.7653E-04	1.6197E+21	7.7436E+15
Ce-141	1.1733E+04	4.1179E-04	1.7587E+21	4.3413E+14
Ce-143	5.6616E-03	8.5254E-12	3.5903E+13	2.0948E+08
Ce-144	1.5598E+04	4.8904E-03	2.0452E+22	5.7712E+14
Pr-143	2.2605E+03	3.3569E-05	1.4137E+20	8.3638E+13
Nd-147	5.2577E+02	6.4991E-06	2.6625E+19	1.9453E+13
Np-239	3.7732E+01	1.6264E-07	4.0981E+17	1.3961E+12
Pu-238	1.7705E+01	1.0342E-03	2.6168E+21	6.5509E+11
Pu-239	5.5391E+00	8.9116E-02	2.2455E+23	2.0495E+11
Pu-240	5.5465E+00	2.4341E-02	6.1077E+22	2.0522E+11
Pu-241	1.6686E+03	1.6198E-02	4.0475E+22	6.1736E+13
Am-241	8.1855E-01	2.3849E-04	5.9595E+20	3.0286E+10
Cm-242	9.4217E+01	2.8428E-05	7.0742E+19	3.4860E+12
Cm-244	2.5123E+00	3.1053E-05	7.6643E+19	9.2955E+10
Sb-124	8.2639E+02	4.7244E-05	2.2944E+20	3.0577E+13
Sb-125	1.6261E+04	1.5749E-02	7.5876E+22	6.0165E+14
Sb-126	2.3856E+02	2.8545E-06	1.3643E+19	8.8269E+12
Te-131	2.5322E-03	4.4104E-14	2.0275E+11	9.3690E+07
Te-125m	3.5324E+03	1.9613E-04	9.4492E+20	1.3070E+14
Ba-137m	8.0481E+05	1.4965E-06	6.5781E+18	2.9778E+16
Rh-106	5.6135E+04	1.5770E-08	8.9594E+16	2.0770E+15
Rh-103m	5.7245E+04	1.7598E-06	1.0289E+19	2.1180E+15
Eu-154	2.8570E+01	1.0830E-04	4.2352E+20	1.0571E+12
Eu-155	2.1815E+01	4.6913E-05	1.8227E+20	8.0715E+11
Eu-156	1.1733E+02	2.1293E-06	8.2200E+18	4.3414E+12
Nb-95m	4.9219E+01	1.2921E-07	8.1909E+17	1.8211E+12
Pm-147	8.9989E+02	9.7073E-04	3.9768E+21	3.3296E+13
Pm-148	3.4234E+01	2.0837E-07	8.4785E+17	1.2667E+12
Pm-149	2.3268E-01	5.8723E-10	2.3734E+15	8.6093E+09
Pm-151	2.3112E-05	3.1627E-14	1.2613E+11	8.5513E+05
Pm-148m	1.1614E+02	5.4366E-06	2.2122E+19	4.2971E+12
Pr-144	1.5977E+04	2.1143E-07	8.8421E+17	5.9114E+14
Pr-144m	2.9399E+02	1.6211E-09	6.7795E+15	1.0878E+13
Sm-153	4.0577E-02	9.2516E-11	3.6415E+14	1.5014E+09
Br-82	2.8558E-02	2.6378E-11	1.9372E+14	1.0566E+09
Np-238	1.5773E-01	6.0864E-10	1.5401E+15	5.8362E+09

SIRWT Backleakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00

Elemental I (atoms)	2.8930E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	9.4312E+00

Environment Integral Nuclide Release:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Xe-133	8.0128E+04	4.2807E-04	1.9383E+21	2.9647E+15
Xe-131m	2.3641E+04	2.8225E-04	1.2975E+21	8.7472E+14
Xe-133m	2.9891E+01	6.6616E-08	3.0163E+17	1.1060E+12

Environment Transport Group Inventory:

Time (h) = 720.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	7.1659E+16	9.9526E+14	3.2361E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	3.5894E+03	4.4114E-05	3.0891E+20	1.3281E+14
Sr-89	3.7673E+05	1.2967E-02	8.7743E+22	1.3939E+16
Sr-90	3.8653E+04	2.8337E-01	1.8961E+24	1.4302E+15
Y-90	3.8651E+04	7.1042E-05	4.7536E+20	1.4301E+15
Y-91	8.1086E+03	3.3064E-04	2.1881E+21	3.0002E+14
Zr-95	6.6349E+03	3.0885E-04	1.9578E+21	2.4549E+14
Zr-97	1.3238E-09	6.9246E-19	4.2990E+06	4.8979E+01
Nb-95	8.5617E+03	2.1895E-04	1.3880E+21	3.1678E+14
Mo-99	6.2648E+01	1.3062E-07	7.9457E+17	2.3180E+12
Tc-99m	6.0457E+01	1.1498E-08	6.9940E+16	2.2369E+12
Ru-103	5.6937E+04	1.7642E-03	1.0315E+22	2.1067E+15
Ru-106	2.7295E+04	8.1584E-03	4.6350E+22	1.0099E+15
Rh-105	5.1503E-02	6.1018E-11	3.4996E+14	1.9056E+09
Sb-127	6.1605E+02	2.3069E-06	1.0939E+19	2.2794E+13
Te-127	1.5720E+04	5.9567E-06	2.8246E+19	5.8166E+14
Te-127m	1.5461E+04	1.6391E-03	7.7726E+21	5.7207E+14
Te-129	2.1441E+04	1.0238E-06	4.7794E+18	7.9330E+14
Te-129m	3.2742E+04	1.0869E-03	5.0738E+21	1.2115E+15
Te-131m	1.1063E-02	1.3873E-11	6.3776E+13	4.0932E+08
Te-132	3.1060E+03	1.0231E-05	4.6676E+19	1.1492E+14
I-131	7.8014E+05	6.2928E-03	2.8928E+22	2.8865E+16
I-132	3.2098E+03	3.1096E-07	1.4187E+18	1.1876E+14
I-133	8.1772E-04	7.2185E-13	3.2685E+12	3.0256E+07
Cs-134	7.9859E+05	6.1723E-01	2.7739E+24	2.9548E+16
Cs-136	7.0619E+04	9.6355E-04	4.2666E+21	2.6129E+15
Cs-137	7.2602E+05	8.3467E+00	3.6690E+25	2.6863E+16
Ba-140	1.8169E+05	2.4819E-03	1.0676E+22	6.7227E+15
La-140	2.0929E+05	3.7653E-04	1.6197E+21	7.7436E+15
Ce-141	1.1733E+04	4.1179E-04	1.7587E+21	4.3413E+14
Ce-143	5.6616E-03	8.5254E-12	3.5903E+13	2.0948E+08
Ce-144	1.5598E+04	4.8904E-03	2.0452E+22	5.7712E+14
Pr-143	2.2605E+03	3.3569E-05	1.4137E+20	8.3638E+13
Nd-147	5.2577E+02	6.4991E-06	2.6625E+19	1.9453E+13
Np-239	3.7732E+01	1.6264E-07	4.0981E+17	1.3961E+12
Pu-238	1.7705E+01	1.0342E-03	2.6168E+21	6.5509E+11
Pu-239	5.5391E+00	8.9116E-02	2.2455E+23	2.0495E+11
Pu-240	5.5465E+00	2.4341E-02	6.1077E+22	2.0522E+11
Pu-241	1.6686E+03	1.6198E-02	4.0475E+22	6.1736E+13
Am-241	8.1855E-01	2.3849E-04	5.9595E+20	3.0286E+10
Cm-242	9.4217E+01	2.8428E-05	7.0742E+19	3.4860E+12
Cm-244	2.5123E+00	3.1053E-05	7.6643E+19	9.2955E+10
Sb-124	8.2639E+02	4.7244E-05	2.2944E+20	3.0577E+13
Sb-125	1.6261E+04	1.5749E-02	7.5876E+22	6.0165E+14
Sb-126	2.3856E+02	2.8545E-06	1.3643E+19	8.8269E+12
Te-131	2.5322E-03	4.4104E-14	2.0275E+11	9.3690E+07
Te-125m	3.5324E+03	1.9613E-04	9.4492E+20	1.3070E+14
Ba-137m	8.0481E+05	1.4965E-06	6.5781E+18	2.9778E+16

Rh-106	5.6135E+04	1.5770E-08	8.9594E+16	2.0770E+15
Rh-103m	5.7245E+04	1.7598E-06	1.0289E+19	2.1180E+15
Eu-154	2.8570E+01	1.0830E-04	4.2352E+20	1.0571E+12
Eu-155	2.1815E+01	4.6913E-05	1.8227E+20	8.0715E+11
Eu-156	1.1733E+02	2.1293E-06	8.2200E+18	4.3414E+12
Nb-95m	4.9219E+01	1.2921E-07	8.1909E+17	1.8211E+12
Pm-147	8.9989E+02	9.7073E-04	3.9768E+21	3.3296E+13
Pm-148	3.4234E+01	2.0837E-07	8.4785E+17	1.2667E+12
Pm-149	2.3268E-01	5.8723E-10	2.3734E+15	8.6093E+09
Pm-151	2.3112E-05	3.1627E-14	1.2613E+11	8.5513E+05
Pm-148m	1.1614E+02	5.4366E-06	2.2122E+19	4.2971E+12
Pr-144	1.5977E+04	2.1143E-07	8.8421E+17	5.9114E+14
Pr-144m	2.9399E+02	1.6211E-09	6.7795E+15	1.0878E+13
Sm-153	4.0577E-02	9.2516E-11	3.6415E+14	1.5014E+09
Br-82	2.8558E-02	2.6378E-11	1.9372E+14	1.0566E+09
Np-238	1.5773E-01	6.0864E-10	1.5401E+15	5.8362E+09

SIRWT Backleakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.8930E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	9.4312E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Xe-133	2.7338E-02	1.4605E-10	6.6131E+14	1.0115E+09
Xe-131m	1.4703E-02	1.7554E-10	8.0696E+14	5.4402E+08
Xe-133m	1.0198E-05	2.2728E-14	1.0291E+11	3.7734E+05

Control Room Transport Group Inventory:

```
                                                  Overlying
Time (h) = 720.0000    Atmosphere     Sump         Pool
Noble gases (atoms)    1.4684E+15  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                      Deposition Recirculating
Time (h) = 720.0000    Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

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Transport Group Totals in Model:
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Noble Gases (atoms)    9.0801E+21
Elemental I (atoms)    8.1173E+22
Organic I   (atoms)    0.0000E+00
Aerosols    (kg)       2.6462E+01
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  37010

#####################################################################
                              I-131 Summary
#####################################################################

             Containment Sump         Environment          Control Room
Time (hr)    I-131 (Curies)         I-131 (Curies)       I-131 (Curies)
   0.000       0.0000E+00             0.0000E+00           0.0000E+00
   0.008       0.0000E+00             0.0000E+00           0.0000E+00
```

0.025	3.6151E+04	0.0000E+00	0.0000E+00
0.300	2.0233E+06	0.0000E+00	0.0000E+00
0.317	2.1437E+06	0.0000E+00	0.0000E+00
0.508	3.5267E+06	0.0000E+00	0.0000E+00
0.780	8.6615E+06	0.0000E+00	0.0000E+00
1.040	1.3704E+07	0.0000E+00	0.0000E+00
1.300	1.8738E+07	0.0000E+00	0.0000E+00
1.560	2.3762E+07	0.0000E+00	0.0000E+00
1.808	2.8553E+07	0.0000E+00	0.0000E+00
2.000	2.8757E+07	0.0000E+00	0.0000E+00
2.260	2.8726E+07	0.0000E+00	0.0000E+00
2.520	2.8695E+07	0.0000E+00	0.0000E+00
2.780	2.8664E+07	0.0000E+00	0.0000E+00
3.040	2.8633E+07	0.0000E+00	0.0000E+00
3.300	2.8602E+07	0.0000E+00	0.0000E+00
3.560	2.8572E+07	0.0000E+00	0.0000E+00
3.820	2.8541E+07	0.0000E+00	0.0000E+00
4.080	2.8510E+07	0.0000E+00	0.0000E+00
4.170	2.8499E+07	0.0000E+00	0.0000E+00
4.440	2.8467E+07	0.0000E+00	0.0000E+00
4.700	2.8437E+07	0.0000E+00	0.0000E+00
4.960	2.8406E+07	0.0000E+00	0.0000E+00
5.220	2.8376E+07	0.0000E+00	0.0000E+00
5.480	2.8345E+07	0.0000E+00	0.0000E+00
5.740	2.8314E+07	0.0000E+00	0.0000E+00
6.000	2.8284E+07	0.0000E+00	0.0000E+00
6.260	2.8253E+07	0.0000E+00	0.0000E+00
6.520	2.8223E+07	0.0000E+00	0.0000E+00
6.780	2.8193E+07	0.0000E+00	0.0000E+00
7.040	2.8162E+07	0.0000E+00	0.0000E+00
7.300	2.8132E+07	0.0000E+00	0.0000E+00
7.560	2.8101E+07	0.0000E+00	0.0000E+00
7.820	2.8071E+07	0.0000E+00	0.0000E+00
8.000	2.8050E+07	0.0000E+00	0.0000E+00
8.260	2.8020E+07	0.0000E+00	0.0000E+00
8.520	2.7990E+07	0.0000E+00	0.0000E+00
8.780	2.7960E+07	0.0000E+00	0.0000E+00
9.040	2.7929E+07	0.0000E+00	0.0000E+00
9.300	2.7899E+07	0.0000E+00	0.0000E+00
9.560	2.7869E+07	0.0000E+00	0.0000E+00
9.820	2.7839E+07	0.0000E+00	0.0000E+00
10.080	2.7809E+07	0.0000E+00	0.0000E+00
11.110	2.7690E+07	0.0000E+00	0.0000E+00
22.220	2.6440E+07	0.0000E+00	0.0000E+00
24.000	2.6245E+07	0.0000E+00	0.0000E+00
96.000	1.9419E+07	0.0000E+00	0.0000E+00
111.110	1.8226E+07	0.0000E+00	0.0000E+00
305.560	8.0490E+06	0.0000E+00	0.0000E+00
402.780	5.3480E+06	0.0000E+00	0.0000E+00
500.000	3.5534E+06	0.0000E+00	0.0000E+00
597.220	2.3610E+06	0.0000E+00	0.0000E+00
694.440	1.5687E+06	0.0000E+00	0.0000E+00
720.000	1.4089E+06	0.0000E+00	0.0000E+00

```
#####################################################################
                        Cumulative Dose Summary
#####################################################################
```

	EAB		LPZ		Control Room	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.008	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.025	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.317	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.508	0.0000E+00	1.7437E-03	0.0000E+00	2.1545E-04	0.0000E+00	1.4031E-04
0.780	0.0000E+00	7.6705E-03	0.0000E+00	9.4778E-04	0.0000E+00	1.2768E-03
1.040	0.0000E+00	2.0153E-02	0.0000E+00	2.4902E-03	0.0000E+00	4.5711E-03
1.300	0.0000E+00	4.1366E-02	0.0000E+00	5.1113E-03	0.0000E+00	1.1548E-02

1.560	0.0000E+00	7.2339E-02	0.0000E+00	8.9384E-03	0.0000E+00	2.3607E-02
1.808	0.0000E+00	1.1153E-01	0.0000E+00	1.3781E-02	0.0000E+00	4.1016E-02
2.000	0.0000E+00	1.4803E-01	0.0000E+00	1.8291E-02	0.0000E+00	5.8957E-02
2.260	0.0000E+00	2.0365E-01	0.0000E+00	2.1417E-02	0.0000E+00	8.6935E-02
2.520	0.0000E+00	2.6377E-01	0.0000E+00	2.4797E-02	0.0000E+00	1.1836E-01
2.780	0.0000E+00	3.2693E-01	0.0000E+00	2.8348E-02	0.0000E+00	1.5437E-01
3.040	0.0000E+00	3.9234E-01	0.0000E+00	3.2025E-02	0.0000E+00	1.9503E-01
3.300	0.0000E+00	4.5957E-01	0.0000E+00	3.5804E-02	0.0000E+00	2.4017E-01
3.560	0.0000E+00	5.2835E-01	0.0000E+00	3.9671E-02	0.0000E+00	2.8952E-01
3.820	0.0000E+00	5.9850E-01	0.0000E+00	4.3614E-02	0.0000E+00	3.4285E-01
4.080	0.0000E+00	6.6989E-01	0.0000E+00	4.7627E-02	0.0000E+00	3.9991E-01
4.170	0.0000E+00	6.9486E-01	0.0000E+00	4.9031E-02	0.0000E+00	4.2051E-01
4.440	0.0000E+00	7.7053E-01	0.0000E+00	5.3285E-02	0.0000E+00	4.8462E-01
4.700	0.0000E+00	8.4442E-01	0.0000E+00	5.7438E-02	0.0000E+00	5.4963E-01
4.960	0.0000E+00	9.1921E-01	0.0000E+00	6.1643E-02	0.0000E+00	6.1763E-01
5.220	0.0000E+00	9.9482E-01	0.0000E+00	6.5893E-02	0.0000E+00	6.8842E-01
5.480	0.0000E+00	1.0712E+00	0.0000E+00	7.0186E-02	0.0000E+00	7.6179E-01
5.740	0.0000E+00	1.1482E+00	0.0000E+00	7.4515E-02	0.0000E+00	8.3756E-01
6.000	0.0000E+00	1.2258E+00	0.0000E+00	7.8878E-02	0.0000E+00	9.1556E-01
6.260	0.0000E+00	1.3040E+00	0.0000E+00	8.3271E-02	0.0000E+00	9.9561E-01
6.520	0.0000E+00	1.3826E+00	0.0000E+00	8.7690E-02	0.0000E+00	1.0776E+00
6.780	0.0000E+00	1.4616E+00	0.0000E+00	9.2131E-02	0.0000E+00	1.1612E+00
7.040	0.0000E+00	1.5409E+00	0.0000E+00	9.6592E-02	0.0000E+00	1.2465E+00
7.300	0.0000E+00	1.6205E+00	0.0000E+00	1.0107E-01	0.0000E+00	1.3332E+00
7.560	0.0000E+00	1.7004E+00	0.0000E+00	1.0556E-01	0.0000E+00	1.4213E+00
7.820	0.0000E+00	1.7804E+00	0.0000E+00	1.1006E-01	0.0000E+00	1.5105E+00
8.000	0.0000E+00	1.8359E+00	0.0000E+00	1.1318E-01	0.0000E+00	1.5729E+00
8.260	0.0000E+00	1.9160E+00	0.0000E+00	1.1621E-01	0.0000E+00	1.6425E+00
8.520	0.0000E+00	1.9959E+00	0.0000E+00	1.1923E-01	0.0000E+00	1.6896E+00
8.780	0.0000E+00	2.0757E+00	0.0000E+00	1.2225E-01	0.0000E+00	1.7296E+00
9.040	0.0000E+00	2.1554E+00	0.0000E+00	1.2527E-01	0.0000E+00	1.7671E+00
9.300	0.0000E+00	2.2350E+00	0.0000E+00	1.2828E-01	0.0000E+00	1.8038E+00
9.560	0.0000E+00	2.3145E+00	0.0000E+00	1.3129E-01	0.0000E+00	1.8401E+00
9.820	0.0000E+00	2.3938E+00	0.0000E+00	1.3429E-01	0.0000E+00	1.8764E+00
10.080	0.0000E+00	2.4729E+00	0.0000E+00	1.3729E-01	0.0000E+00	1.9126E+00
11.110	0.0000E+00	2.7840E+00	0.0000E+00	1.4906E-01	0.0000E+00	2.0565E+00
22.220	0.0000E+00	5.6253E+00	0.0000E+00	2.5659E-01	0.0000E+00	3.4040E+00
24.000	0.0000E+00	5.9742E+00	0.0000E+00	2.6980E-01	0.0000E+00	3.5653E+00
96.000	0.0000E+00	9.6919E+00	0.0000E+00	3.2960E-01	0.0000E+00	4.1657E+00
111.110	0.0000E+00	9.8753E+00	0.0000E+00	3.3047E-01	0.0000E+00	4.1711E+00
305.560	0.0000E+00	1.1179E+01	0.0000E+00	3.3661E-01	0.0000E+00	4.2041E+00
402.780	0.0000E+00	1.1439E+01	0.0000E+00	3.3783E-01	0.0000E+00	4.2104E+00
500.000	0.0000E+00	1.1583E+01	0.0000E+00	3.3851E-01	0.0000E+00	4.2139E+00
597.220	0.0000E+00	1.1663E+01	0.0000E+00	3.3889E-01	0.0000E+00	4.2159E+00
694.440	0.0000E+00	1.1708E+01	0.0000E+00	3.3910E-01	0.0000E+00	4.2170E+00
720.000	0.0000E+00	1.1717E+01	0.0000E+00	3.3914E-01	0.0000E+00	4.2172E+00

```
#####################################################################
                        Worst Two-Hour Dose
                    (Provided for Dose Location 1)
#####################################################################
```

EAB

Time (hr)	Whole Body (rem)	Thyroid (rem)	Skin (rem)	TEDE (rem)
7.1	6.1448E-01	0.0000E+00	1.3860E+00	6.1448E-01

```
#####################################################################
                     30 Day Control Room Skin Dose
#####################################################################
```

Control Room

Time (hr)	Skin (rem)
720.0	2.6498E+02

ATTACHMENT B

RADTRAD-NAI Output for Nuclide Source with 50% Backleakage

pal_sirwt_db_ast_shield_50bl.out

```
#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on May 18, 2005 at 13:18:33
#######################################################################

#######################################################################
                    File information
#######################################################################

Plant file name           = pal/newLOCA/db/pal_sirwt_db_ast_shield_50bl.psf
Inventory file name       = pal/newLOCA/palisades_loca_be_ast.nif
Scenario file name        = pal/newLOCA/db/pal_sirwt_db_ast_shield_50bl.psf
Release file name         = pal/newLOCA/pal_loca_eccs_ast.rft
Dose conversion file name = pal/newLOCA/nai-1101-001rev0.dcf
```

```
     #####    ####   #####    #  #     #  #####   #    #  #####
     #    #  #       #        #  ##    #  #    #  #    #    #
     #    #  #       #        #  # #   #  #    #  #    #    #
     #####    ####   ####     #  #  #  #  #####   #    #    #
     #            #  #        #  #   # #  #       #    #    #
     #            #  #        #  #    ##  #       #    #    #
     #        ####   #        #  #     #  #        ####     #
```

```
*RADTRAD-NAI 1.1a(QA)
*18 May 2005 13:18:29
** Palisades LOCA Design Basis AST
** SIRWT Backleakage Dose
** Modified for SIRWT source activity for shielded dose
** 50% backleakage
**
*Nuclide inventory file
pal/newLOCA/palisades_loca_be_ast.nif
*Plant power
2703
*Compartments
3
*Compartment 1:
Containment Sump
   3
57577
   0
   0
   0
   0
*Compartment 2:
Environment
   2
2e+20
   0
   0
   0
   0
*Compartment 3:
Control Room
   1
35923
   0
   1
   0
   0
*Pathways
   5
*Pathway 1:
SIRWT Backleakage
   1
```

```
   2
   2
*Pathway 2:
Control Room Unfiltered Makeup
   2
   3
   2
*Pathway 3:
Control Room Filtered Makeup
   2
   3
   2
*Pathway 4:
Control Room Unfiltered Inleakage
   2
   3
   2
*Pathway 5:
Control Room Exhaust
   3
   2
   2
*Sources
   3
   1 1
   2 0
   3 0
*dose conversion factors filename
pal/newLOCA/nai-1101-001rev0.dcf
*release fraction and timing filename
pal/newLOCA/pal_loca_eccs_ast.rft
0.008333
   1
   1
*Iodine
0 1 0
*Overlying pool
*aerosol model
   0
*elemental model
   0
*organic model
   0
*pH tracking
   0
*Compartment detail
*Compartment 1:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Compartment 2:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Compartment 3:
   1
```

```
*spray model
0
0
0
*filter model
   1
   3
0 0 99 99 99
0.025 1413.6 99 99 99
720 1413.6 99 99 99
*deposition model
0
0
*Pathways:
*Pathway 1
*filter efficiency model
   1
  10
0.316667 0.294096 100 100 100
4.17 0.294096 100 100 100
11.11 0.294096 100 100 100
22.22 0.294096 100 100 100
111.11 0.294096 100 100 100
305.56 0.294096 100 100 100
402.78 0.294096 100 100 100
500 0.294096 100 100 100
597.22 0.294096 100 100 100
694.44 0.294096 100 100 100
*Pathway 2
*filter efficiency model
   1
   3
0 384.2 0 0 0
0.025 0 0 0 0
720 0 0 0 0
*Pathway 3
*filter efficiency model
   1
   3
0 0 99 99 99
0.025 1413.6 99 99 99
720 1413.6 99 99 99
*Pathway 4
*filter efficiency model
   1
   3
0 0 0 0 0
0.025 85 0 0 0
720 85 0 0 0
*Pathway 5
*filter efficiency model
   1
   3
0 384.2 0 0 0
0.025 1498.6 0 0 0
720 1498.6 0 0 0
*x/q tables
   4
EAB
   2
0 0.000539
720 0.000539
LPZ
   6
0 6.66e-05
2 3.03e-05
8 2.04e-05
24 8.67e-06
96 2.54e-06
720 2.54e-06
```

```
Control Room-Normal
   6
0 0.0957
2 0.0759
8 0.0287
24 0.0219
96 0.0165
720 0.0165
Control Room-Emergency
   6
0 0.000966
2 0.000792
8 0.000313
24 0.00022
96 0.000164
720 0.000164
*dose locations
   3
*location name, compartment number and x/q table
EAB
   2
   1
*br model
   1
   4
0 0.00035
8 0.00018
24 0.00023
720 0.00023
*of model
   0
*location x/q input to be included
   0
*location name, compartment number and x/q table
LPZ
   2
   2
*br model
   1
   4
0 0.00035
8 0.00018
24 0.00023
720 0.00023
*of model
   0
*location x/q input to be included
   0
*location name, compartment number and x/q table
Control Room
   3
   0
*br model
   1
   2
0 0.00035
720 0.00035
*of model
   1
   4
0 1
24 0.6
96 0.4
720 0.4
*location x/q input to be included
   1
*number of intake combinations
   3
*intake combinations
2 1 3
```

```
3 1 4
4 1 3
*time step count
   3
0 1e-06
0.001 0.02
720 0.02
*show plant, scenario, event, step, model
   1
   1
   1
   0
   1

 ######################################################################
       RADTRAD-NAI Version 1.1a(QA) run on May 18, 2005 at 13:18:33
 ######################################################################

 ######################################################################
                     Plant Description
 ######################################################################

 Number of Nuclides = 107

 Inventory Power =   2.5806E+03 MWth
 Plant Power Level =   2.7030E+03 MWth

 Number of compartments    =   3

 Compartment information

 Compartment number  1  (Source term fraction =   1.0000E+00)
 Name: Containment Sump
 Compartment volume =   5.7577E+04 (Cubic feet)
 Pathways into and out of compartment  1
     Pathway to compartment number   2: SIRWT Backleakage

 Compartment number  2
 Name: Environment
 Pathways into and out of compartment  2
     Pathway to compartment number   3: Control Room Unfiltered Makeup
     Pathway to compartment number   3: Control Room Filtered Makeup
     Pathway to compartment number   3: Control Room Unfiltered Inleakage
     Pathway from compartment number 1: SIRWT Backleakage
     Pathway from compartment number 3: Control Room Exhaust

 Compartment number  3
 Name: Control Room
 Compartment volume =   3.5923E+04 (Cubic feet)
 Removal devices within compartment:
      Filter(s)
 Pathways into and out of compartment  3
     Pathway to compartment number   2: Control Room Exhaust
     Pathway from compartment number 2: Control Room Unfiltered Makeup
     Pathway from compartment number 2: Control Room Filtered Makeup
     Pathway from compartment number 2: Control Room Unfiltered Inleakage

 Total number of pathways =   5


 ######################################################################
       RADTRAD-NAI Version 1.1a(QA) run on May 18, 2005 at 13:18:33
 ######################################################################

 ######################################################################
                     Scenario Description
 ######################################################################


 Time between shutdown and first release =   8.3330E-03 (Hours)
```

```
Radioactive Decay is enabled
Calculation of Daughters is enabled

Iodine fractions
     Aerosol     =   0.0000E+00
     Elemental   =   1.0000E+00
     Organic     =   0.0000E+00

COMPARTMENT DATA

Compartment number   1: Containment Sump

Compartment number   2: Environment

Compartment number   3: Control Room

     Compartment Filter Data

      Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
       0.0000E+00    0.0000E+00   9.9000E+01   9.9000E+01   9.9000E+01
       2.5000E-02    1.4136E+03   9.9000E+01   9.9000E+01   9.9000E+01
       7.2000E+02    1.4136E+03   9.9000E+01   9.9000E+01   9.9000E+01

PATHWAY DATA

Pathway number  1: SIRWT Backleakage

     Pathway Filter: Removal Data

       Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
       3.1667E-01    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       4.1700E+00    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       1.1110E+01    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       2.2220E+01    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       1.1111E+02    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       3.0556E+02    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       4.0278E+02    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       5.0000E+02    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       5.9722E+02    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02
       6.9444E+02    2.9410E-01   1.0000E+02   1.0000E+02   1.0000E+02

Pathway number  2: Control Room Unfiltered Makeup

     Pathway Filter: Removal Data

       Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
       0.0000E+00    3.8420E+02   0.0000E+00   0.0000E+00   0.0000E+00
       2.5000E-02    0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
       7.2000E+02    0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00

Pathway number  3: Control Room Filtered Makeup

     Pathway Filter: Removal Data

       Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
       0.0000E+00    0.0000E+00   9.9000E+01   9.9000E+01   9.9000E+01
       2.5000E-02    1.4136E+03   9.9000E+01   9.9000E+01   9.9000E+01
       7.2000E+02    1.4136E+03   9.9000E+01   9.9000E+01   9.9000E+01

Pathway number  4: Control Room Unfiltered Inleakage

     Pathway Filter: Removal Data

       Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
```

```
       0.0000E+00    0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
       2.5000E-02    8.5000E+01   0.0000E+00   0.0000E+00   0.0000E+00
       7.2000E+02    8.5000E+01   0.0000E+00   0.0000E+00   0.0000E+00

Pathway number  5: Control Room Exhaust

     Pathway Filter: Removal Data

       Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
       0.0000E+00    3.8420E+02   0.0000E+00   0.0000E+00   0.0000E+00
       2.5000E-02    1.4986E+03   0.0000E+00   0.0000E+00   0.0000E+00
       7.2000E+02    1.4986E+03   0.0000E+00   0.0000E+00   0.0000E+00

X/Q DATA

X/Q table   1: EAB
      Time (hr)         X/Q (s * m^-3)
       0.0000E+00          5.3900E-04
       7.2000E+02          5.3900E-04

X/Q table   2: LPZ
      Time (hr)         X/Q (s * m^-3)
       0.0000E+00          6.6600E-05
       2.0000E+00          3.0300E-05
       8.0000E+00          2.0400E-05
       2.4000E+01          8.6700E-06
       9.6000E+01          2.5400E-06
       7.2000E+02          2.5400E-06

X/Q table   3: Control Room-Normal
      Time (hr)         X/Q (s * m^-3)
       0.0000E+00          9.5700E-02
       2.0000E+00          7.5900E-02
       8.0000E+00          2.8700E-02
       2.4000E+01          2.1900E-02
       9.6000E+01          1.6500E-02
       7.2000E+02          1.6500E-02

X/Q table   4: Control Room-Emergency
      Time (hr)         X/Q (s * m^-3)
       0.0000E+00          9.6600E-04
       2.0000E+00          7.9200E-04
       8.0000E+00          3.1300E-04
       2.4000E+01          2.2000E-04
       9.6000E+01          1.6400E-04
       7.2000E+02          1.6400E-04

LOCATION DATA

     Location EAB is in compartment   2

     Using X/Q Table   1

     Location Breathing Rate Data
      Time (hr)         Breathing Rate (m^3 * sec^-1)
       0.0000E+00                3.5000E-04
       8.0000E+00                1.8000E-04
       2.4000E+01                2.3000E-04
       7.2000E+02                2.3000E-04

     Location LPZ is in compartment   2

     Using X/Q Table   2

     Location Breathing Rate Data
      Time (hr)         Breathing Rate (m^3 * sec^-1)
       0.0000E+00                3.5000E-04
       8.0000E+00                1.8000E-04
       2.4000E+01                2.3000E-04
```

```
       7.2000E+02                 2.3000E-04

     Location Control Room is in compartment   3

     Inleakage X/Q Table Assignments
     Inleakage Path   Source Path  X/Q Table
            2              1           3
            3              1           4
            4              1           3

     Location Breathing Rate Data
      Time (hr)         Breathing Rate (m^3 * sec^-1)
       0.0000E+00                3.5000E-04
       7.2000E+02                3.5000E-04

     Location Occupancy Factor Data
      Time (hr)         Occupancy Factor
       0.0000E+00           1.0000E+00
       2.4000E+01           6.0000E-01
       9.6000E+01           4.0000E-01
       7.2000E+02           4.0000E-01

USER SPECIFIED TIME STEP DATA - SUPPLEMENTAL TIME STEPS
     Time            Time step
      0.0000E+00       1.0000E-06
      1.0000E-03       2.0000E-02
      7.2000E+02       2.0000E-02

#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on May 18, 2005 at 13:18:33
#######################################################################




     ####   #    #  #####  #####   #    #  #####
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #####   #    #    #
    #    #  #    #    #    #       #    #    #
    #    #  #    #    #    #       #    #    #
     ####    ####     #    #        ####     #


#################################################################
            Dose, Detailed Model and Detailed Inventory Output
#################################################################

Detailed model information at time (H) =    0.0083

EAB Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Control Room Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Containment Sump Transport Group Inventory:
```

Time (h) = 0.0083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 0.0083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.0083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

```
                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   0.0083    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0083     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.0250

EAB Doses:

Time (h) =   0.0250     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:
```

Time (h) = 0.0250	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Doses:

Time (h) = 0.0250	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.0250	Ci	kg	Atoms	Bq
Rb-86	5.1155E+01	6.2869E-07	4.4024E+18	1.8927E+12
Sr-89	9.3140E-02	3.2059E-09	2.1693E+16	3.4462E+09
I-131	3.6151E+04	2.9160E-04	1.3405E+21	1.3376E+15
I-132	5.2223E+04	5.0593E-06	2.3082E+19	1.9322E+15
I-133	7.4351E+04	6.5634E-05	2.9719E+20	2.7510E+15
I-134	8.1376E+04	3.0505E-06	1.3709E+19	3.0109E+15
I-135	6.9158E+04	1.9693E-05	8.7847E+19	2.5589E+15
Xe-133	1.7915E+00	9.5709E-09	4.3336E+16	6.6285E+10
Xe-135	2.0109E+01	7.8745E-09	3.5127E+16	7.4405E+11
Cs-134	3.8388E+03	2.9670E-03	1.3334E+22	1.4204E+14
Cs-136	1.6150E+03	2.2036E-05	9.7577E+19	5.9757E+13
Cs-137	3.4015E+03	3.9106E-02	1.7190E+23	1.2586E+14
I-130	8.1062E+02	4.1563E-07	1.9254E+18	2.9993E+13
Kr-83m	8.3150E+00	4.0302E-10	2.9241E+15	3.0766E+11
Xe-131m	4.3886E-03	5.2394E-11	2.4086E+14	1.6238E+08
Xe-133m	1.2826E-01	2.8585E-10	1.2943E+15	4.7456E+09
Xe-135m	1.3055E+02	1.4332E-09	6.3931E+15	4.8303E+12
Cs-138	6.8679E+04	1.6231E-06	7.0829E+18	2.5411E+15
Cs-134m	1.2375E+03	1.5345E-07	6.8961E+17	4.5786E+13
Rb-88	2.9501E+04	2.4576E-07	1.6818E+18	1.0915E+15
Rb-89	3.5919E+04	2.5842E-07	1.7486E+18	1.3290E+15
Ba-137m	2.3608E+02	4.3897E-10	1.9296E+15	8.7348E+12
Br-82	1.3819E+02	1.2764E-07	9.3743E+17	5.1131E+12
Br-83	4.8686E+03	3.0819E-07	2.2361E+18	1.8014E+14
Br-84	8.4191E+03	1.1960E-07	8.5747E+17	3.1151E+14

Containment Sump Transport Group Inventory:

Time (h) = 0.0250	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	8.9316E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7683E+21	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	4.2098E-02	0.0000E+00	0.0000E+00

Time (h) = 0.0250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0250	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.0250	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00

```
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

SIRWT Backleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   0.0250    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0250     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
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Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.3167

EAB Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Control Room Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) =   0.3167       Ci           kg          Atoms         Bq
Rb-86                  3.0338E+03  3.7285E-05  2.6109E+20  1.1225E+14
Sr-89                  1.1688E+02  4.0232E-06  2.7223E+19  4.3247E+12
I-131                  2.1437E+06  1.7291E-02  7.9488E+22  7.9315E+16
I-132                  2.9579E+06  2.8656E-04  1.3073E+21  1.0944E+17
I-133                  4.3835E+06  3.8695E-03  1.7521E+22  1.6219E+17
I-134                  4.1521E+06  1.5564E-04  6.9948E+20  1.5363E+17
I-135                  3.9798E+06  1.1332E-03  5.0552E+21  1.4725E+17
Xe-133                 3.7096E+03  1.9818E-05  8.9736E+19  1.3726E+14
Xe-135                 4.2257E+04  1.6547E-05  7.3814E+19  1.5635E+15
Cs-134                 2.2777E+05  1.7604E-01  7.9116E+23  8.4275E+15
Cs-136                 9.5765E+04  1.3066E-03  5.7858E+21  3.5433E+15
Cs-137                 2.0182E+05  2.3203E+00  1.0199E+25  7.4675E+15
I-130                  4.7317E+04  2.4261E-05  1.1239E+20  1.7507E+15
Kr-83m                 1.5799E+04  7.6576E-07  5.5560E+18  5.8457E+14
Xe-131m                9.1232E+00  1.0892E-07  5.0071E+17  3.3756E+11
Xe-133m                2.6539E+02  5.9146E-07  2.6781E+18  9.8194E+12
Xe-135m                2.1068E+05  2.3128E-06  1.0317E+19  7.7951E+15
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Cs-138	3.1681E+06	7.4871E-05	3.2673E+20	1.1722E+17
Cs-134m	6.8478E+04	8.4915E-06	3.8162E+19	2.5337E+15
Rb-88	1.2396E+06	1.0326E-05	7.0668E+19	4.5864E+16
Rb-89	9.5949E+05	6.9032E-06	4.6710E+19	3.5501E+16
Ba-137m	1.8326E+05	3.4076E-07	1.4979E+18	6.7806E+15
Br-82	8.1526E+03	7.5303E-06	5.5303E+19	3.0165E+14
Br-83	2.6544E+05	1.6803E-05	1.2191E+20	9.8214E+15
Br-84	3.4112E+05	4.8460E-06	3.4742E+19	1.2621E+16

Containment Sump Transport Group Inventory:

Time (h) = 0.3167	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.8260E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0440E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.4978E+00	0.0000E+00	0.0000E+00

Time (h) = 0.3167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.3167	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Transport Group Inventory:

Time (h) = 0.3167	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 0.3167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 0.5083

EAB Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.7186E-04	0.0000E+00	1.3866E-03	8.7186E-04
Accumulated dose (rem)	8.7186E-04	0.0000E+00	1.3866E-03	8.7186E-04

LPZ Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.0773E-04	0.0000E+00	1.7133E-04	1.0773E-04
Accumulated dose (rem)	1.0773E-04	0.0000E+00	1.7133E-04	1.0773E-04

Control Room Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	7.0156E-05	0.0000E+00	3.7831E-03	7.0156E-05
Accumulated dose (rem)	7.0156E-05	0.0000E+00	3.7831E-03	7.0156E-05

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	4.9921E+03	6.1353E-05	4.2962E+20	1.8471E+14
Sr-89	2.2551E+02	7.7624E-06	5.2524E+19	8.3440E+12
I-131	3.5268E+06	2.8448E-02	1.3078E+23	1.3049E+17
I-132	4.7309E+06	4.5832E-04	2.0910E+21	1.7504E+17
I-133	7.1817E+06	6.3397E-03	2.8706E+22	2.6572E+17
I-134	6.1756E+06	2.3150E-04	1.0404E+21	2.2850E+17
I-135	6.4203E+06	1.8282E-03	8.1553E+21	2.3755E+17
Xe-133	9.7771E+03	5.2233E-05	2.3651E+20	3.6175E+14
Xe-135	1.1181E+05	4.3784E-05	1.9532E+20	4.1371E+15
Cs-134	3.7490E+05	2.8976E-01	1.3022E+24	1.3871E+16
Cs-136	1.5756E+05	2.1498E-03	9.5194E+21	5.8298E+15
Cs-137	3.3220E+05	3.8192E+00	1.6788E+25	1.2291E+16
I-130	7.7050E+04	3.9506E-05	1.8301E+20	2.8508E+15
Kr-83m	3.9294E+04	1.9045E-06	1.3818E+19	1.4539E+15
Xe-131m	2.4114E+01	2.8789E-07	1.3234E+18	8.9220E+11
Xe-133m	6.9910E+02	1.5580E-06	7.0546E+18	2.5867E+13
Xe-135m	4.7433E+05	5.2071E-06	2.3228E+19	1.7550E+16
Cs-138	4.3299E+06	1.0233E-04	4.4654E+20	1.6021E+17
Cs-134m	1.0767E+05	1.3351E-05	6.0001E+19	3.9837E+15
Rb-88	1.6663E+06	1.3882E-05	9.4998E+19	6.1655E+16
Rb-89	9.3479E+05	6.7255E-06	4.5508E+19	3.4587E+16
Ba-137m	3.2437E+05	6.0314E-07	2.6512E+18	1.2002E+16
Br-82	1.3369E+04	1.2348E-05	9.0687E+19	4.9464E+14
Br-83	4.1329E+05	2.6161E-05	1.8982E+20	1.5292E+16
Br-84	4.3699E+05	6.2080E-06	4.4506E+19	1.6168E+16

Containment Sump Transport Group Inventory:

Time (h) = 0.5083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.7725E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7128E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	4.1113E+00	0.0000E+00	0.0000E+00

Time (h) = 0.5083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	2.3570E-01	2.8967E-09	2.0284E+16	8.7208E+09
Sr-89	1.2722E-02	4.3789E-10	2.9629E+15	4.7070E+08

I-131	1.6650E+02	1.3430E-06	6.1738E+18	6.1604E+12
I-132	2.2041E+02	2.1353E-08	9.7417E+16	8.1551E+12
I-133	3.3881E+02	2.9909E-07	1.3543E+18	1.2536E+13
I-134	2.8506E+02	1.0686E-08	4.8022E+16	1.0547E+13
I-135	3.0313E+02	8.6316E-08	3.8504E+17	1.1216E+13
Cs-134	1.7701E+01	1.3681E-05	6.1483E+19	6.5492E+11
Cs-136	7.4390E+00	1.0150E-07	4.4945E+17	2.7524E+11
Cs-137	1.5684E+01	1.8032E-04	7.9263E+20	5.8032E+11
I-130	3.6378E+00	1.8652E-09	8.6405E+15	1.3460E+11
Cs-138	1.9903E+02	4.7035E-09	2.0526E+16	7.3640E+12
Cs-134m	5.0834E+00	6.3035E-10	2.8329E+15	1.8808E+11
Rb-88	7.0416E+01	5.8661E-10	4.0144E+15	2.6054E+12
Rb-89	4.4135E+01	3.1754E-10	2.1486E+15	1.6330E+12
Ba-137m	1.6476E+01	3.0635E-11	1.3466E+14	6.0959E+11
Br-82	6.3119E-01	5.8301E-10	4.2817E+15	2.3354E+10
Br-83	1.9513E+01	1.2352E-09	8.9619E+15	7.2198E+11
Br-84	2.0632E+01	2.9310E-10	2.1013E+15	7.6337E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	8.0825E+18
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.9411E-04

Environment Integral Nuclide Release:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Xe-133	5.3951E-01	2.8823E-09	1.3051E+16	1.9962E+10
Xe-135	6.1854E+00	2.4221E-09	1.0805E+16	2.2886E+11
Kr-83m	2.1671E+00	1.0503E-10	7.6209E+14	8.0182E+10
Xe-131m	1.3307E-03	1.5886E-11	7.3030E+13	4.9234E+07
Xe-133m	3.8575E-02	8.5969E-11	3.8926E+14	1.4273E+09
Xe-135m	2.5703E+01	2.8216E-10	1.2587E+15	9.5100E+11

Environment Transport Group Inventory:

Time (h) = 0.5083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.1757E+15	1.6329E+13	2.6338E+16
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	2.3570E-01	2.8967E-09	2.0284E+16	8.7208E+09
Sr-89	1.2722E-02	4.3789E-10	2.9629E+15	4.7070E+08
I-131	1.6650E+02	1.3430E-06	6.1738E+18	6.1604E+12
I-132	2.2041E+02	2.1353E-08	9.7417E+16	8.1551E+12
I-133	3.3881E+02	2.9909E-07	1.3543E+18	1.2536E+13
I-134	2.8506E+02	1.0686E-08	4.8022E+16	1.0547E+13
I-135	3.0313E+02	8.6316E-08	3.8504E+17	1.1216E+13
Cs-134	1.7701E+01	1.3681E-05	6.1483E+19	6.5492E+11
Cs-136	7.4390E+00	1.0150E-07	4.4945E+17	2.7524E+11
Cs-137	1.5684E+01	1.8032E-04	7.9263E+20	5.8032E+11
I-130	3.6378E+00	1.8652E-09	8.6405E+15	1.3460E+11
Cs-138	1.9903E+02	4.7035E-09	2.0526E+16	7.3640E+12
Cs-134m	5.0834E+00	6.3035E-10	2.8329E+15	1.8808E+11
Rb-88	7.0416E+01	5.8661E-10	4.0144E+15	2.6054E+12
Rb-89	4.4135E+01	3.1754E-10	2.1486E+15	1.6330E+12
Ba-137m	1.6476E+01	3.0635E-11	1.3466E+14	6.0959E+11
Br-82	6.3119E-01	5.8301E-10	4.2817E+15	2.3354E+10
Br-83	1.9513E+01	1.2352E-09	8.9619E+15	7.2198E+11
Br-84	2.0632E+01	2.9310E-10	2.1013E+15	7.6337E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	8.0825E+18
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.9411E-04

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Xe-133	2.0440E-03	1.0920E-11	4.9445E+13	7.5629E+07
Xe-135	2.3380E-02	9.1552E-12	4.0840E+13	8.6505E+08
Kr-83m	8.2166E-03	3.9824E-13	2.8895E+12	3.0401E+08
Xe-131m	5.0421E-06	6.0196E-14	2.7673E+11	1.8656E+05
Xe-133m	1.4615E-04	3.2573E-13	1.4749E+12	5.4077E+06
Xe-135m	9.9212E-02	1.0891E-12	4.8585E+12	3.6708E+09

Control Room Transport Group Inventory:

Time (h) = 0.5083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.9784E+13	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 0.5083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 1.8083

EAB Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	5.4906E-02	0.0000E+00	9.1386E-02	5.4906E-02
Accumulated dose (rem)	5.5777E-02	0.0000E+00	9.2773E-02	5.5777E-02

LPZ Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.7842E-03	0.0000E+00	1.1292E-02	6.7842E-03
Accumulated dose (rem)	6.8920E-03	0.0000E+00	1.1463E-02	6.8920E-03

Control Room Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.0440E-02	0.0000E+00	1.1450E+00	2.0440E-02
Accumulated dose (rem)	2.0511E-02	0.0000E+00	1.1488E+00	2.0511E-02

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	3.0372E+04	3.7327E-04	2.6138E+21	1.1238E+15
Sr-89	1.5795E+06	5.4368E-02	3.6788E+23	5.8442E+16
Sr-90	1.0768E+05	7.8943E-01	5.2823E+24	3.9843E+15
Sr-91	1.6970E+06	4.6815E-04	3.0981E+21	6.2790E+16
Sr-92	1.2985E+06	1.0331E-04	6.7624E+20	4.8045E+16
Y-90	1.8585E+03	3.4160E-06	2.2858E+19	6.8766E+13
Y-91	2.0341E+04	8.2944E-04	5.4890E+21	7.5262E+14
Y-92	1.8872E+05	1.9613E-05	1.2838E+20	6.9827E+15
Y-93	2.0681E+04	6.1987E-06	4.0139E+19	7.6519E+14
Zr-95	2.5513E+04	1.1876E-03	7.5281E+21	9.4396E+14
Zr-97	2.2838E+04	1.1947E-05	7.4170E+19	8.4501E+14

Nb-95	2.5696E+04	6.5714E-04	4.1657E+21	9.5076E+14
Mo-99	3.2866E+05	6.8525E-04	4.1684E+21	1.2160E+16
Tc-99m	2.9275E+05	5.5675E-05	3.3867E+20	1.0832E+16
Ru-103	2.6844E+05	8.3175E-03	4.8630E+22	9.9323E+15
Ru-105	1.3390E+05	1.9919E-05	1.1424E+20	4.9542E+15
Ru-106	8.0290E+04	2.3999E-02	1.3634E+23	2.9707E+15
Rh-105	1.6703E+05	1.9789E-04	1.1350E+21	6.1801E+15
Sb-127	3.7457E+05	1.4026E-03	6.6510E+21	1.3859E+16
Sb-129	8.5449E+05	1.5195E-04	7.0936E+20	3.1616E+16
Te-127	3.7365E+05	1.4158E-04	6.7135E+20	1.3825E+16
Te-127m	4.9601E+04	5.2584E-03	2.4935E+22	1.8352E+15
Te-129	9.5145E+05	4.5432E-05	2.1209E+20	3.5204E+16
Te-129m	1.6775E+05	5.5683E-03	2.5995E+22	6.2066E+15
Te-131m	4.9494E+05	6.2069E-04	2.8533E+21	1.8313E+16
Te-132	5.0234E+06	1.6546E-02	7.5489E+22	1.8587E+17
I-131	2.8560E+07	2.3037E-01	1.0590E+24	1.0567E+18
I-132	3.3966E+07	3.2906E-03	1.5013E+22	1.2568E+18
I-133	5.6360E+07	4.9752E-02	2.2527E+23	2.0853E+18
I-134	2.5091E+07	9.4056E-04	4.2270E+21	9.2837E+17
I-135	4.5519E+07	1.2962E-02	5.7820E+22	1.6842E+18
Xe-133	2.3391E+05	1.2496E-03	5.6583E+21	8.6547E+15
Xe-135	2.5528E+06	9.9963E-04	4.4592E+21	9.4453E+16
Cs-134	2.2854E+06	1.7664E+00	7.9384E+24	8.4560E+16
Cs-136	9.5778E+05	1.3068E-02	5.7866E+22	3.5438E+16
Cs-137	2.0252E+06	2.3283E+01	1.0234E+26	7.4931E+16
Ba-139	1.0759E+06	6.5779E-05	2.8499E+20	3.9810E+16
Ba-140	2.5736E+06	3.5154E-02	1.5122E+23	9.5224E+16
La-140	5.4867E+04	9.8713E-05	4.2462E+20	2.0301E+15
La-141	3.3316E+04	5.8911E-06	2.5161E+19	1.2327E+15
La-142	1.0559E+04	7.3761E-07	3.1281E+18	3.9068E+14
Ce-141	6.1576E+04	2.1610E-03	9.2299E+21	2.2783E+15
Ce-143	5.6038E+04	8.4384E-05	3.5537E+20	2.0734E+15
Ce-144	4.6652E+04	1.4627E-02	6.1170E+22	1.7261E+15
Pr-143	2.2693E+04	3.3700E-04	1.4192E+21	8.3965E+14
Nd-147	9.6680E+03	1.1951E-04	4.8958E+20	3.5771E+14
Np-239	7.0141E+05	3.0234E-03	7.6182E+21	2.5952E+16
Pu-238	4.8558E+01	2.8364E-03	7.1770E+21	1.7967E+12
Pu-239	1.5214E+01	2.4476E-01	6.1673E+23	5.6290E+11
Pu-240	1.5422E+01	6.7680E-02	1.6983E+23	5.7062E+11
Pu-241	4.6577E+03	4.5215E-02	1.1298E+23	1.7234E+14
Am-241	1.6654E+00	4.8524E-04	1.2125E+21	6.1620E+10
Cm-242	2.9544E+02	8.9142E-05	2.2183E+20	1.0931E+13
Cm-244	7.0073E+00	8.6615E-05	2.1377E+20	2.5927E+11
I-130	5.8204E+05	2.9843E-04	1.3824E+21	2.1535E+16
Kr-83m	6.4140E+05	3.1087E-05	2.2556E+20	2.3732E+16
Xe-131m	5.9002E+02	7.0441E-06	3.2382E+19	2.1831E+13
Xe-133m	1.6677E+04	3.7167E-05	1.6829E+20	6.1705E+14
Xe-135m	5.6424E+06	6.1941E-05	2.7631E+20	2.0877E+17
Cs-138	6.1168E+06	1.4456E-04	6.3082E+20	2.2632E+17
Cs-134m	4.8106E+05	5.9653E-05	2.6809E+20	1.7799E+16
Rb-88	3.6856E+06	3.0703E-05	2.1011E+20	1.3637E+17
Rb-89	1.6256E+05	1.1696E-06	7.9138E+18	6.0148E+15
Sb-124	3.2430E+03	1.8540E-04	9.0039E+20	1.1999E+14
Sb-125	4.6150E+04	4.4698E-02	2.1534E+23	1.7075E+15
Sb-126	3.5334E+03	4.2279E-05	2.0207E+20	1.3074E+14
Te-131	2.6440E+05	4.6052E-06	2.1170E+19	9.7827E+15
Te-133	1.3452E+05	1.1846E-06	5.3640E+18	4.9773E+15
Te-134	1.0499E+06	3.1275E-05	1.4055E+20	3.8846E+16
Te-125m	9.5696E+03	5.3134E-04	2.5598E+21	3.5408E+14
Te-133m	7.2392E+05	2.8368E-05	1.2845E+20	2.6785E+16
Ba-141	3.9660E+04	5.4336E-07	2.3207E+18	1.4674E+15
Ba-137m	2.1499E+06	3.9975E-06	1.7572E+19	7.9545E+16
Pd-109	4.4478E+04	2.0772E-05	1.1476E+20	1.6457E+15
Rh-106	1.3821E+05	3.8828E-08	2.2059E+17	5.1138E+15
Rh-103m	2.6251E+05	8.0701E-06	4.7184E+19	9.7129E+15
Tc-101	1.5236E+03	1.1621E-08	6.9292E+16	5.6373E+13
Eu-154	7.9953E+01	3.0309E-04	1.1852E+21	2.9583E+12
Eu-155	6.1354E+01	1.3194E-04	5.1263E+20	2.2701E+12
Eu-156	1.2781E+03	2.3195E-05	8.9542E+19	4.7291E+13
La-143	1.1653E+02	1.2611E-09	5.3107E+15	4.3114E+12

Nb-97	9.5459E+03	3.5506E-07	2.2044E+18	3.5320E+14
Nb-95m	1.8491E+02	4.8544E-07	3.0772E+18	6.8417E+12
Pm-147	2.4621E+03	2.6560E-03	1.0881E+22	9.1098E+13
Pm-148	3.7455E+03	2.2797E-05	9.2762E+19	1.3858E+14
Pm-149	7.6547E+03	1.9319E-05	7.8080E+19	2.8323E+14
Pm-151	2.6335E+03	3.6037E-06	1.4372E+19	9.7439E+13
Pm-148m	5.3360E+02	2.4978E-05	1.0164E+20	1.9743E+13
Pr-144	3.9076E+04	5.1712E-07	2.1626E+18	1.4458E+15
Pr-144m	8.1100E+02	4.4719E-09	1.8702E+16	3.0007E+13
Sm-153	4.8072E+03	1.0960E-05	4.3141E+19	1.7787E+14
Y-94	4.5405E+02	4.3356E-09	2.7776E+16	1.6800E+13
Y-95	2.1888E+01	1.1833E-10	7.5009E+14	8.0985E+11
Y-91m	4.0576E+05	9.7617E-06	6.4601E+19	1.5013E+16
Br-82	1.0589E+05	9.7805E-05	7.1829E+20	3.9178E+15
Br-83	2.3033E+06	1.4580E-04	1.0579E+21	8.5223E+16
Br-84	6.4853E+05	9.2133E-06	6.6052E+19	2.3996E+16
Am-242	6.2382E+02	7.7173E-07	1.9204E+18	2.3081E+13
Np-238	7.8927E+03	3.0455E-05	7.7061E+19	2.9203E+14
Pu-243	4.0457E+03	1.5547E-06	3.8530E+18	1.4969E+14

Containment Sump Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.0820E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3646E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6438E+01	0.0000E+00	0.0000E+00

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	7.2566E+00	8.9184E-08	6.2451E+17	2.6850E+11
Sr-89	3.1198E+02	1.0739E-05	7.2662E+19	1.1543E+13
Sr-90	2.1260E+01	1.5586E-04	1.0429E+21	7.8663E+11
Sr-91	3.3505E+02	9.2427E-08	6.1166E+17	1.2397E+13
Sr-92	2.5637E+02	2.0396E-08	1.3351E+17	9.4857E+12
Y-90	4.1555E-01	7.6378E-10	5.1107E+15	1.5375E+10
Y-91	4.0401E+00	1.6474E-07	1.0902E+18	1.4948E+11
Y-92	4.8382E+01	5.0281E-09	3.2913E+16	1.7901E+12
Y-93	4.0830E+00	1.2238E-09	7.9247E+15	1.5107E+11
Zr-95	5.0370E+00	2.3447E-07	1.4863E+18	1.8637E+11
Zr-97	4.5090E+00	2.3587E-09	1.4644E+16	1.6683E+11
Nb-95	5.0733E+00	1.2974E-07	8.2244E+17	1.8771E+11
Mo-99	6.4887E+01	1.3529E-07	8.2297E+17	2.4008E+12
Tc-99m	5.7799E+01	1.0992E-08	6.6864E+16	2.1386E+12
Ru-103	5.2999E+01	1.6422E-06	9.6012E+18	1.9609E+12
Ru-105	2.6436E+01	3.9327E-09	2.2555E+16	9.7812E+11
Ru-106	1.5852E+01	4.7382E-06	2.6919E+19	5.8652E+11
Rh-105	3.2977E+01	3.9070E-08	2.2408E+17	1.2202E+12
Sb-127	7.3953E+01	2.7692E-07	1.3131E+18	2.7363E+12
Sb-129	1.6870E+02	3.0000E-08	1.4005E+17	6.2420E+12
Te-127	7.3770E+01	2.7953E-08	1.3255E+17	2.7295E+12
Te-127m	9.7927E+00	1.0382E-06	4.9229E+18	3.6233E+11
Te-129	1.8785E+02	8.9697E-09	4.1873E+16	6.9503E+12
Te-129m	3.3119E+01	1.0994E-06	5.1322E+18	1.2254E+12
Te-131m	9.7717E+01	1.2254E-07	5.6334E+17	3.6155E+12
Te-132	9.9178E+02	3.2668E-06	1.4904E+19	3.6696E+13
I-131	6.5256E+03	5.2637E-05	2.4197E+20	2.4145E+14
I-132	7.1939E+03	6.9694E-07	3.1796E+18	2.6617E+14
I-133	1.2855E+04	1.1348E-05	5.1384E+19	4.7565E+14
I-134	5.2680E+03	1.9748E-07	8.8748E+17	1.9492E+14
I-135	1.0404E+04	2.9626E-06	1.3215E+19	3.8495E+14

Cs-134	5.4604E+02	4.2204E-04	1.8967E+21	2.0204E+13
Cs-136	2.2884E+02	3.1223E-06	1.3826E+19	8.4670E+12
Cs-137	4.8386E+02	5.5628E-03	2.4453E+22	1.7903E+13
Ba-139	2.1243E+02	1.2987E-08	5.6265E+16	7.8598E+12
Ba-140	5.0811E+02	6.9406E-06	2.9855E+19	1.8800E+13
La-140	1.2674E+01	2.2802E-08	9.8084E+16	4.6894E+11
La-141	7.9661E+00	1.4086E-09	6.0161E+15	2.9474E+11
La-142	2.0847E+00	1.4563E-10	6.1760E+14	7.7133E+10
Ce-141	1.2157E+01	4.2666E-07	1.8223E+18	4.4981E+11
Ce-143	1.1062E+01	1.6658E-08	7.0151E+16	4.0930E+11
Ce-144	9.2106E+00	2.8878E-06	1.2077E+19	3.4079E+11
Pr-143	4.4834E+00	6.6581E-08	2.8039E+17	1.6589E+11
Nd-147	1.9088E+00	2.3595E-08	9.6660E+16	7.0624E+10
Np-239	1.3848E+02	5.9692E-07	1.5041E+18	5.1238E+12
Pu-238	9.5869E-03	5.5999E-07	1.4170E+18	3.5472E+08
Pu-239	3.0036E-03	4.8324E-05	1.2176E+20	1.1113E+08
Pu-240	3.0448E-03	1.3362E-05	3.3529E+19	1.1266E+08
Pu-241	9.1958E-01	8.9269E-06	2.2307E+19	3.4025E+10
Am-241	3.2883E-04	9.5808E-08	2.3941E+17	1.2167E+07
Cm-242	5.8330E-02	1.7599E-08	4.3796E+16	2.1582E+09
Cm-244	1.3835E-03	1.7101E-08	4.2206E+16	5.1189E+07
I-130	1.3303E+02	6.8210E-08	3.1598E+17	4.9222E+12
Cs-138	1.3835E+03	3.2696E-08	1.4268E+17	5.1190E+13
Cs-134m	1.1494E+02	1.4253E-08	6.4053E+16	4.2527E+12
Rb-88	4.5892E+02	3.8231E-09	2.6163E+16	1.6980E+13
Rb-89	3.8840E+01	2.7944E-10	1.8908E+15	1.4371E+12
Sb-124	6.4027E-01	3.6603E-08	1.7777E+17	2.3690E+10
Sb-125	9.1114E+00	8.8248E-06	4.2515E+19	3.3712E+11
Sb-126	6.9761E-01	8.3473E-09	3.9896E+16	2.5812E+10
Te-131	5.2201E+01	9.0921E-10	4.1797E+15	1.9314E+12
Te-133	2.6559E+01	2.3389E-10	1.0590E+15	9.8267E+11
Te-134	2.0728E+02	6.1747E-09	2.7750E+16	7.6694E+12
Te-125m	1.8893E+00	1.0490E-07	5.0539E+17	6.9906E+10
Te-133m	1.4293E+02	5.6008E-09	2.5360E+16	5.2882E+12
Ba-141	7.8302E+00	1.0728E-10	4.5818E+14	2.8972E+11
Ba-137m	5.2911E+02	9.8384E-10	4.3247E+15	1.9577E+13
Pd-109	8.7813E+00	4.1010E-09	2.2658E+16	3.2491E+11
Rh-106	2.7287E+01	7.6659E-12	4.3552E+13	1.0096E+12
Rh-103m	5.1828E+01	1.5933E-09	9.3156E+15	1.9176E+12
Tc-101	3.0081E-01	2.2944E-12	1.3681E+13	1.1130E+10
Eu-154	1.5785E-02	5.9839E-08	2.3400E+17	5.8405E+08
Eu-155	1.2113E-02	2.6050E-08	1.0121E+17	4.4819E+08
Eu-156	2.5235E-01	4.5795E-09	1.7678E+16	9.3368E+09
La-143	2.3006E-02	2.4898E-13	1.0485E+12	8.5122E+08
Nb-97	1.8847E+00	7.0100E-11	4.3521E+14	6.9733E+10
Nb-95m	3.6508E-02	9.5841E-11	6.0755E+14	1.3508E+09
Pm-147	4.8610E-01	5.2437E-07	2.1482E+18	1.7986E+10
Pm-148	7.3948E-01	4.5009E-09	1.8314E+16	2.7361E+10
Pm-149	1.5113E+00	3.8141E-09	1.5416E+16	5.5918E+10
Pm-151	5.1993E-01	7.1149E-10	2.8376E+15	1.9238E+10
Pm-148m	1.0535E-01	4.9315E-09	2.0067E+16	3.8979E+09
Pr-144	8.4829E+00	1.1226E-10	4.6948E+14	3.1387E+11
Pr-144m	1.6980E-01	9.3630E-13	3.9156E+12	6.2827E+09
Sm-153	9.4910E-01	2.1639E-09	8.5174E+15	3.5117E+10
Y-94	8.9645E-02	8.5598E-13	5.4839E+12	3.3169E+09
Y-95	4.3214E-03	2.3362E-14	1.4809E+11	1.5989E+08
Y-91m	1.0170E+02	2.4467E-09	1.6192E+16	3.7630E+12
Br-82	2.4202E+01	2.2355E-08	1.6417E+17	8.9548E+11
Br-83	5.2646E+02	3.3325E-08	2.4179E+17	1.9479E+13
Br-84	1.4823E+02	2.1058E-09	1.5097E+16	5.4846E+12
Am-242	1.2316E-01	1.5236E-10	3.7916E+14	4.5570E+09
Np-238	1.5583E+00	6.0129E-09	1.5214E+16	5.7656E+10
Pu-243	7.9874E-01	3.0695E-10	7.6071E+14	2.9553E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.1138E+20

Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.2597E-03

Environment Integral Nuclide Release:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Xe-133	7.2171E+01	3.8557E-07	1.7458E+18	2.6703E+12
Xe-135	7.9551E+02	3.1151E-07	1.3896E+18	2.9434E+13
Kr-83m	1.9646E+02	9.5222E-09	6.9089E+16	7.2691E+12
Xe-131m	1.8190E-01	2.1716E-09	9.9830E+15	6.7302E+09
Xe-133m	5.1425E+00	1.1461E-08	5.1893E+16	1.9027E+11
Xe-135m	1.5110E+03	1.6587E-08	7.3993E+16	5.5906E+13

Environment Transport Group Inventory:

Time (h) = 1.8083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	2.7362E+16	3.8003E+14	3.3404E+18
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	7.2566E+00	8.9184E-08	6.2451E+17	2.6850E+11
Sr-89	3.1198E+02	1.0739E-05	7.2662E+19	1.1543E+13
Sr-90	2.1260E+01	1.5586E-04	1.0429E+21	7.8663E+11
Sr-91	3.3505E+02	9.2427E-08	6.1166E+17	1.2397E+13
Sr-92	2.5637E+02	2.0396E-08	1.3351E+17	9.4857E+12
Y-90	4.1555E-01	7.6378E-10	5.1107E+15	1.5375E+10
Y-91	4.0401E+00	1.6474E-07	1.0902E+18	1.4948E+11
Y-92	4.8382E+01	5.0281E-09	3.2913E+16	1.7901E+12
Y-93	4.0830E+00	1.2238E-09	7.9247E+15	1.5107E+11
Zr-95	5.0370E+00	2.3447E-07	1.4863E+18	1.8637E+11
Zr-97	4.5090E+00	2.3587E-09	1.4644E+16	1.6683E+11
Nb-95	5.0733E+00	1.2974E-07	8.2244E+17	1.8771E+11
Mo-99	6.4887E+01	1.3529E-07	8.2297E+17	2.4008E+12
Tc-99m	5.7799E+01	1.0992E-08	6.6864E+16	2.1386E+12
Ru-103	5.2999E+01	1.6422E-06	9.6012E+18	1.9609E+12
Ru-105	2.6436E+01	3.9327E-09	2.2555E+16	9.7812E+11
Ru-106	1.5852E+01	4.7382E-06	2.6919E+19	5.8652E+11
Rh-105	3.2977E+01	3.9070E-08	2.2408E+17	1.2202E+12
Sb-127	7.3953E+01	2.7692E-07	1.3131E+18	2.7363E+12
Sb-129	1.6870E+02	3.0000E-08	1.4005E+17	6.2420E+12
Te-127	7.3770E+01	2.7953E-08	1.3255E+17	2.7295E+12
Te-127m	9.7927E+00	1.0382E-06	4.9229E+18	3.6233E+11
Te-129	1.8785E+02	8.9697E-09	4.1873E+16	6.9503E+12
Te-129m	3.3119E+01	1.0994E-06	5.1322E+18	1.2254E+12
Te-131m	9.7717E+01	1.2254E-07	5.6334E+17	3.6155E+12
Te-132	9.9178E+02	3.2668E-06	1.4904E+19	3.6696E+13
I-131	6.5256E+03	5.2637E-05	2.4197E+20	2.4145E+14
I-132	7.1939E+03	6.9694E-07	3.1796E+18	2.6617E+14
I-133	1.2855E+04	1.1348E-05	5.1384E+19	4.7565E+14
I-134	5.2680E+03	1.9748E-07	8.8748E+17	1.9492E+14
I-135	1.0404E+04	2.9626E-06	1.3215E+19	3.8495E+14
Cs-134	5.4604E+02	4.2204E-04	1.8967E+21	2.0204E+13
Cs-136	2.2884E+02	3.1223E-06	1.3826E+19	8.4670E+12
Cs-137	4.8386E+02	5.5628E-03	2.4453E+22	1.7903E+13
Ba-139	2.1243E+02	1.2987E-08	5.6265E+16	7.8598E+12
Ba-140	5.0811E+02	6.9406E-06	2.9855E+19	1.8800E+13
La-140	1.2674E+01	2.2802E-08	9.8084E+16	4.6894E+11
La-141	7.9661E+00	1.4086E-09	6.0161E+15	2.9474E+11
La-142	2.0847E+00	1.4563E-10	6.1760E+14	7.7133E+10
Ce-141	1.2157E+01	4.2666E-07	1.8223E+18	4.4981E+11
Ce-143	1.1062E+01	1.6658E-08	7.0151E+16	4.0930E+11
Ce-144	9.2106E+00	2.8878E-06	1.2077E+19	3.4079E+11
Pr-143	4.4834E+00	6.6581E-08	2.8039E+17	1.6589E+11
Nd-147	1.9088E+00	2.3595E-08	9.6660E+16	7.0624E+10
Np-239	1.3848E+02	5.9692E-07	1.5041E+18	5.1238E+12

Pu-238	9.5869E-03	5.5999E-07	1.4170E+18	3.5472E+08
Pu-239	3.0036E-03	4.8324E-05	1.2176E+20	1.1113E+08
Pu-240	3.0448E-03	1.3362E-05	3.3529E+19	1.1266E+08
Pu-241	9.1958E-01	8.9269E-06	2.2307E+19	3.4025E+10
Am-241	3.2883E-04	9.5808E-08	2.3941E+17	1.2167E+07
Cm-242	5.8330E-02	1.7599E-08	4.3796E+16	2.1582E+09
Cm-244	1.3835E-03	1.7101E-08	4.2206E+16	5.1189E+07
I-130	1.3303E+02	6.8210E-08	3.1598E+17	4.9222E+12
Cs-138	1.3835E+03	3.2696E-08	1.4268E+17	5.1190E+13
Cs-134m	1.1494E+02	1.4253E-08	6.4053E+16	4.2527E+12
Rb-88	4.5892E+02	3.8231E-09	2.6163E+16	1.6980E+13
Rb-89	3.8840E+01	2.7944E-10	1.8908E+15	1.4371E+12
Sb-124	6.4027E-01	3.6603E-08	1.7777E+17	2.3690E+10
Sb-125	9.1114E+00	8.8248E-06	4.2515E+19	3.3712E+11
Sb-126	6.9761E-01	8.3473E-09	3.9896E+16	2.5812E+10
Te-131	5.2201E+01	9.0921E-10	4.1797E+15	1.9314E+12
Te-133	2.6559E+01	2.3389E-10	1.0590E+15	9.8267E+11
Te-134	2.0728E+02	6.1747E-09	2.7750E+16	7.6694E+12
Te-125m	1.8893E+00	1.0490E-07	5.0539E+17	6.9906E+10
Te-133m	1.4293E+02	5.6008E-09	2.5360E+16	5.2882E+12
Ba-141	7.8302E+00	1.0728E-10	4.5818E+14	2.8972E+11
Ba-137m	5.2911E+02	9.8384E-10	4.3247E+15	1.9577E+13
Pd-109	8.7813E+00	4.1010E-09	2.2658E+16	3.2491E+11
Rh-106	2.7287E+01	7.6659E-12	4.3552E+13	1.0096E+12
Rh-103m	5.1828E+01	1.5933E-09	9.3156E+15	1.9176E+12
Tc-101	3.0081E-01	2.2944E-12	1.3681E+13	1.1130E+10
Eu-154	1.5785E-02	5.9839E-08	2.3400E+17	5.8405E+08
Eu-155	1.2113E-02	2.6050E-08	1.0121E+17	4.4819E+08
Eu-156	2.5235E-01	4.5795E-09	1.7678E+16	9.3368E+09
La-143	2.3006E-02	2.4898E-13	1.0485E+12	8.5122E+08
Nb-97	1.8847E+00	7.0100E-11	4.3521E+14	6.9733E+10
Nb-95m	3.6508E-02	9.5841E-11	6.0755E+14	1.3508E+09
Pm-147	4.8610E-01	5.2437E-07	2.1482E+18	1.7986E+10
Pm-148	7.3948E-01	4.5009E-09	1.8314E+16	2.7361E+10
Pm-149	1.5113E+00	3.8141E-09	1.5416E+16	5.5918E+10
Pm-151	5.1993E-01	7.1149E-10	2.8376E+15	1.9238E+10
Pm-148m	1.0535E-01	4.9315E-09	2.0067E+16	3.8979E+09
Pr-144	8.4829E+00	1.1226E-10	4.6948E+14	3.1387E+11
Pr-144m	1.6980E-01	9.3630E-13	3.9156E+12	6.2827E+09
Sm-153	9.4910E-01	2.1639E-09	8.5174E+15	3.5117E+10
Y-94	8.9645E-02	8.5598E-13	5.4839E+12	3.3169E+09
Y-95	4.3214E-03	2.3362E-14	1.4809E+11	1.5989E+08
Y-91m	1.0170E+02	2.4467E-09	1.6192E+16	3.7630E+12
Br-82	2.4202E+01	2.2355E-08	1.6417E+17	8.9548E+11
Br-83	5.2646E+02	3.3325E-08	2.4179E+17	1.9479E+13
Br-84	1.4823E+02	2.1058E-09	1.5097E+16	5.4846E+12
Am-242	1.2316E-01	1.5236E-10	3.7916E+14	4.5570E+09
Np-238	1.5583E+00	6.0129E-09	1.5214E+16	5.7656E+10
Pu-243	7.9874E-01	3.0695E-10	7.6071E+14	2.9553E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.1138E+20
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.2597E-03

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Xe-133	1.5577E-01	8.3219E-10	3.7681E+15	5.7635E+09
Xe-135	1.6836E+00	6.5929E-10	2.9410E+15	6.2295E+10
Kr-83m	4.3085E-01	2.0882E-11	1.5151E+14	1.5941E+10
Xe-131m	3.9387E-04	4.7023E-12	2.1617E+13	1.4573E+07
Xe-133m	1.1112E-02	2.4765E-11	1.1213E+14	4.1115E+08
Xe-135m	4.3642E+00	4.7910E-11	2.1372E+14	1.6148E+11

Control Room Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.2081E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 2.0000

EAB Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.8253E-02	0.0000E+00	3.1274E-02	1.8253E-02
Accumulated dose (rem)	7.4030E-02	0.0000E+00	1.2405E-01	7.4030E-02

LPZ Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.2553E-03	0.0000E+00	3.8643E-03	2.2553E-03
Accumulated dose (rem)	9.1473E-03	0.0000E+00	1.5328E-02	9.1473E-03

Control Room Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.9723E-03	0.0000E+00	5.1007E-01	8.9723E-03
Accumulated dose (rem)	2.9483E-02	0.0000E+00	1.6589E+00	2.9483E-02

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	3.0590E+04	3.7595E-04	2.6326E+21	1.1318E+15
Sr-89	1.5936E+06	5.4852E-02	3.7115E+23	5.8962E+16
Sr-90	1.0865E+05	7.9654E-01	5.3298E+24	4.0202E+15
Sr-91	1.6885E+06	4.6580E-04	3.0825E+21	6.2475E+16
Sr-92	1.2475E+06	9.9251E-05	6.4968E+20	4.6159E+16
Y-90	2.0899E+03	3.8413E-06	2.5703E+19	7.7327E+13
Y-91	2.0629E+04	8.4117E-04	5.5667E+21	7.6327E+14
Y-92	2.2911E+05	2.3810E-05	1.5586E+20	8.4770E+15
Y-93	2.0594E+04	6.1727E-06	3.9971E+19	7.6198E+14
Zr-95	2.5740E+04	1.1982E-03	7.5952E+21	9.5238E+14
Zr-97	2.2863E+04	1.1960E-05	7.4251E+19	8.4594E+14
Nb-95	2.5928E+04	6.6305E-04	4.2032E+21	9.5932E+14
Mo-99	3.3095E+05	6.9003E-04	4.1974E+21	1.2245E+16
Tc-99m	2.9528E+05	5.6156E-05	3.4160E+20	1.0925E+16
Ru-103	2.7082E+05	8.3912E-03	4.9061E+22	1.0020E+16
Ru-105	1.3112E+05	1.9506E-05	1.1187E+20	4.8514E+15
Ru-106	8.1012E+04	2.4215E-02	1.3757E+23	2.9974E+15
Rh-105	1.6840E+05	1.9951E-04	1.1443E+21	6.2308E+15
Sb-127	3.7740E+05	1.4132E-03	6.7012E+21	1.3964E+16
Sb-129	8.3606E+05	1.4868E-04	6.9407E+20	3.0934E+16
Te-127	3.7677E+05	1.4277E-04	6.7697E+20	1.3941E+16
Te-127m	5.0048E+04	5.3058E-03	2.5159E+22	1.8518E+15
Te-129	9.3970E+05	4.4871E-05	2.0947E+20	3.4769E+16
Te-129m	1.6926E+05	5.6185E-03	2.6229E+22	6.2626E+15
Te-131m	4.9719E+05	6.2351E-04	2.8663E+21	1.8396E+16
Te-132	5.0600E+06	1.6667E-02	7.6039E+22	1.8722E+17
I-131	2.8765E+07	2.3202E-01	1.0666E+24	1.0643E+18
I-132	3.2651E+07	3.1632E-03	1.4431E+22	1.2081E+18
I-133	5.6447E+07	4.9830E-02	2.2562E+23	2.0886E+18
I-134	2.1903E+07	8.2107E-04	3.6900E+21	8.1043E+17

I-135	4.4964E+07	1.2804E-02	5.7114E+22	1.6637E+18
Xe-133	2.9167E+05	1.5582E-03	7.0555E+21	1.0792E+16
Xe-135	3.1577E+06	1.2365E-03	5.5159E+21	1.1684E+17
Cs-134	2.3025E+06	1.7796E+00	7.9977E+24	8.5192E+16
Cs-136	9.6453E+05	1.3160E-02	5.8275E+22	3.5688E+16
Cs-137	2.0403E+06	2.3457E+01	1.0311E+26	7.5491E+16
Ba-139	9.8587E+05	6.0272E-05	2.6113E+20	3.6477E+16
Ba-140	2.5956E+06	3.5455E-02	1.5251E+23	9.6039E+16
La-140	6.3474E+04	1.1420E-04	4.9122E+20	2.3485E+15
La-141	3.3454E+04	5.9154E-06	2.5265E+19	1.2378E+15
La-142	9.7742E+03	6.8279E-07	2.8957E+18	3.6165E+14
Ce-141	6.2125E+04	2.1803E-03	9.3122E+21	2.2986E+15
Ce-143	5.6316E+04	8.4802E-05	3.5713E+20	2.0837E+15
Ce-144	4.7071E+04	1.4758E-02	6.1719E+22	1.7416E+15
Pr-143	2.2911E+04	3.4023E-04	1.4328E+21	8.4770E+14
Nd-147	9.7500E+03	1.2052E-04	4.9374E+20	3.6075E+14
Np-239	7.0606E+05	3.0435E-03	7.6687E+21	2.6124E+16
Pu-238	4.8997E+01	2.8620E-03	7.2417E+21	1.8129E+12
Pu-239	1.5351E+01	2.4697E-01	6.2230E+23	5.6798E+11
Pu-240	1.5561E+01	6.8289E-02	1.7135E+23	5.7575E+11
Pu-241	4.6996E+03	4.5622E-02	1.1400E+23	1.7389E+14
Am-241	1.6806E+00	4.8965E-04	1.2235E+21	6.2181E+10
Cm-242	2.9811E+02	8.9946E-05	2.2383E+20	1.1030E+13
Cm-244	7.0704E+00	8.7394E-05	2.1570E+20	2.6160E+11
I-130	5.8034E+05	2.9756E-04	1.3784E+21	2.1473E+16
Kr-83m	7.5510E+05	3.6599E-05	2.6554E+20	2.7939E+16
Xe-131m	7.3825E+02	8.8138E-06	4.0517E+19	2.7315E+13
Xe-133m	2.0784E+04	4.6320E-05	2.0973E+20	7.6900E+14
Xe-135m	6.2654E+06	6.8781E-05	3.0682E+20	2.3182E+17
Cs-138	4.8147E+06	1.1378E-04	4.9654E+20	1.7814E+17
Cs-134m	4.6296E+05	5.7408E-05	2.5800E+20	1.7129E+16
Rb-88	2.4168E+06	2.0134E-05	1.3778E+20	8.9423E+16
Rb-89	9.6939E+04	6.9744E-07	4.7192E+18	3.5867E+15
Sb-124	3.2719E+03	1.8705E-04	9.0841E+20	1.2106E+14
Sb-125	4.6565E+04	4.5100E-02	2.1728E+23	1.7229E+15
Sb-126	3.5636E+03	4.2641E-05	2.0380E+20	1.3185E+14
Te-131	2.2463E+05	3.9126E-06	1.7986E+19	8.3115E+15
Te-133	1.1443E+05	1.0077E-06	4.5628E+18	4.2339E+15
Te-134	8.7541E+05	2.6078E-05	1.1720E+20	3.2390E+16
Te-125m	9.6558E+03	5.3613E-04	2.5829E+21	3.5727E+14
Te-133m	6.3255E+05	2.4787E-05	1.1224E+20	2.3404E+16
Ba-141	2.5868E+04	3.5440E-07	1.5137E+18	9.5712E+14
Ba-137m	2.2555E+06	4.1940E-06	1.8436E+19	8.3455E+16
Pd-109	4.4436E+04	2.0752E-05	1.1465E+20	1.6441E+15
Rh-106	1.6661E+05	4.6806E-08	2.6592E+17	6.1646E+15
Rh-103m	2.6581E+05	8.1717E-06	4.7778E+19	9.8351E+15
Tc-101	8.7693E+02	6.6889E-09	3.9883E+16	3.2447E+13
Eu-154	8.0672E+01	3.0581E-04	1.1959E+21	2.9849E+12
Eu-155	6.1906E+01	1.3313E-04	5.1725E+20	2.2905E+12
Eu-156	1.2892E+03	2.3396E-05	9.0315E+19	4.7699E+13
La-143	6.7148E+01	7.2669E-10	3.0603E+15	2.4845E+12
Nb-97	8.7518E+03	3.2552E-07	2.0210E+18	3.2382E+14
Nb-95m	1.8657E+02	4.8978E-07	3.1048E+18	6.9029E+12
Pm-147	2.4843E+03	2.6799E-03	1.0979E+22	9.1920E+13
Pm-148	3.7753E+03	2.2979E-05	9.3501E+19	1.3969E+14
Pm-149	7.7043E+03	1.9444E-05	7.8586E+19	2.8506E+14
Pm-151	2.6448E+03	3.6192E-06	1.4434E+19	9.7857E+13
Pm-148m	5.3833E+02	2.5200E-05	1.0254E+20	1.9918E+13
Pr-144	4.2535E+04	5.6290E-07	2.3541E+18	1.5738E+15
Pr-144m	8.6257E+02	4.7563E-09	1.9891E+16	3.1915E+13
Sm-153	4.8367E+03	1.1028E-05	4.3405E+19	1.7896E+14
Y-94	3.0182E+02	2.8820E-09	1.8463E+16	1.1167E+13
Y-95	1.0485E+01	5.6681E-11	3.5931E+14	3.8793E+11
Y-91m	4.9248E+05	1.1848E-05	7.8408E+19	1.8222E+16
Br-82	1.0632E+05	9.8203E-05	7.2121E+20	3.9338E+15
Br-83	2.1959E+06	1.3900E-04	1.0085E+21	8.1249E+16
Br-84	5.0871E+05	7.2269E-06	5.1811E+19	1.8822E+16
Am-242	6.2423E+02	7.7224E-07	1.9217E+18	2.3097E+13
Np-238	7.9429E+03	3.0649E-05	7.7552E+19	2.9389E+14
Pu-243	3.9741E+03	1.5272E-06	3.7848E+18	1.4704E+14

Containment Sump Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3394E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3706E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6638E+01	0.0000E+00	0.0000E+00

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	9.0510E+00	1.1124E-07	7.7893E+17	3.3489E+11
Sr-89	4.0553E+02	1.3959E-05	9.4451E+19	1.5005E+13
Sr-90	2.7641E+01	2.0264E-04	1.3559E+21	1.0227E+12
Sr-91	4.2955E+02	1.1850E-07	7.8419E+17	1.5894E+13
Sr-92	3.1737E+02	2.5249E-08	1.6528E+17	1.1743E+13
Y-90	5.8152E-01	1.0688E-09	7.1519E+15	2.1516E+10
Y-91	5.2746E+00	2.1508E-07	1.4233E+18	1.9516E+11
Y-92	6.9288E+01	7.2008E-09	4.7135E+16	2.5637E+12
Y-93	5.2391E+00	1.5703E-09	1.0169E+16	1.9385E+11
Zr-95	6.5482E+00	3.0481E-07	1.9322E+18	2.4228E+11
Zr-97	5.8164E+00	3.0426E-09	1.8889E+16	2.1521E+11
Nb-95	6.5959E+00	1.6868E-07	1.0693E+18	2.4405E+11
Mo-99	8.4192E+01	1.7554E-07	1.0678E+18	3.1151E+12
Tc-99m	7.5119E+01	1.4286E-08	8.6901E+16	2.7794E+12
Ru-103	6.8895E+01	2.1347E-06	1.2481E+19	2.5491E+12
Ru-105	3.3356E+01	4.9623E-09	2.8460E+16	1.2342E+12
Ru-106	2.0609E+01	6.1601E-06	3.4997E+19	7.6254E+11
Rh-105	4.2841E+01	5.0756E-08	2.9110E+17	1.5851E+12
Sb-127	9.6010E+01	3.5952E-07	1.7048E+18	3.5524E+12
Sb-129	2.1269E+02	3.7823E-08	1.7657E+17	7.8696E+12
Te-127	9.5850E+01	3.6319E-08	1.7222E+17	3.5464E+12
Te-127m	1.2732E+01	1.3498E-06	6.4005E+18	4.7108E+11
Te-129	2.3906E+02	1.1415E-08	5.3289E+16	8.8451E+12
Te-129m	4.3059E+01	1.4293E-06	6.6726E+18	1.5932E+12
Te-131m	1.2648E+02	1.5862E-07	7.2918E+17	4.6799E+12
Te-132	1.2872E+03	4.2400E-06	1.9344E+19	4.7628E+13
I-131	8.2105E+03	6.6227E-05	3.0445E+20	3.0379E+14
I-132	8.7634E+03	8.4899E-07	3.8733E+18	3.2424E+14
I-133	1.6089E+04	1.4203E-05	6.4311E+19	5.9531E+14
I-134	5.8402E+03	2.1892E-07	9.8387E+17	2.1609E+14
I-135	1.2838E+04	3.6555E-06	1.6307E+19	4.7500E+14
Cs-134	6.8126E+02	5.2655E-04	2.3664E+21	2.5207E+13
Cs-136	2.8539E+02	3.8939E-06	1.7242E+19	1.0559E+13
Cs-137	6.0369E+02	6.9404E-03	3.0508E+22	2.2336E+13
Ba-139	2.5080E+02	1.5333E-08	6.6430E+16	9.2797E+12
Ba-140	6.6033E+02	9.0198E-06	3.8799E+19	2.4432E+13
La-140	1.8034E+01	3.2445E-08	1.3956E+17	6.6725E+11
La-141	9.8771E+00	1.7465E-09	7.4594E+15	3.6545E+11
La-142	2.4865E+00	1.7370E-10	7.3666E+14	9.2002E+10
Ce-141	1.5805E+01	5.5467E-07	2.3690E+18	5.8477E+11
Ce-143	1.4325E+01	2.1571E-08	9.0843E+16	5.3003E+11
Ce-144	1.1975E+01	3.7544E-06	1.5701E+19	4.4307E+11
Pr-143	5.8316E+00	8.6601E-08	3.6470E+17	2.1577E+11
Nd-147	2.4804E+00	3.0660E-08	1.2561E+17	9.1774E+10
Np-239	1.7962E+02	7.7425E-07	1.9509E+18	6.6459E+12
Pu-238	1.2465E-02	7.2809E-07	1.8423E+18	4.6119E+08
Pu-239	3.9052E-03	6.2829E-05	1.5831E+20	1.4449E+08
Pu-240	3.9586E-03	1.7373E-05	4.3592E+19	1.4647E+08
Pu-241	1.1956E+00	1.1606E-05	2.9001E+19	4.4236E+10
Am-241	4.2755E-04	1.2457E-07	3.1128E+17	1.5819E+07

Cm-242	7.5838E-02	2.2882E-08	5.6942E+16	2.8060E+09
Cm-244	1.7987E-03	2.2233E-08	5.4873E+16	6.6552E+07
I-130	1.6569E+02	8.4956E-08	3.9355E+17	6.1306E+12
Cs-138	1.3629E+03	3.2208E-08	1.4055E+17	5.0427E+13
Cs-134m	1.3698E+02	1.6986E-08	7.6337E+16	5.0683E+12
Rb-88	4.3512E+02	3.6248E-09	2.4806E+16	1.6099E+13
Rb-89	2.8682E+01	2.0636E-10	1.3963E+15	1.0612E+12
Sb-124	8.3236E-01	4.7585E-08	2.3110E+17	3.0797E+10
Sb-125	1.1846E+01	1.1473E-05	5.5275E+19	4.3830E+11
Sb-126	9.0658E-01	1.0848E-08	5.1846E+16	3.3543E+10
Te-131	5.7147E+01	9.9536E-10	4.5757E+15	2.1144E+12
Te-133	2.9111E+01	2.5636E-10	1.1608E+15	1.0771E+12
Te-134	2.2270E+02	6.6341E-09	2.9815E+16	8.2400E+12
Te-125m	2.4564E+00	1.3639E-07	6.5708E+17	9.0887E+10
Te-133m	1.6092E+02	6.3059E-09	2.8553E+16	5.9540E+12
Ba-141	6.5808E+00	9.0160E-11	3.8507E+14	2.4349E+11
Ba-137m	6.6821E+02	1.2425E-09	5.4616E+15	2.4724E+13
Pd-109	1.1304E+01	5.2794E-09	2.9168E+16	4.1826E+11
Rh-106	4.2385E+01	1.1907E-11	6.7649E+13	1.5682E+12
Rh-103m	6.7623E+01	2.0789E-09	1.2155E+16	2.5020E+12
Tc-101	2.2309E-01	1.7016E-12	1.0146E+13	8.2543E+09
Eu-154	2.0523E-02	7.7798E-08	3.0423E+17	7.5934E+08
Eu-155	1.5749E-02	3.3868E-08	1.3159E+17	5.8271E+08
Eu-156	3.2796E-01	5.9518E-09	2.2976E+16	1.2135E+10
La-143	1.7082E-02	1.8487E-13	7.7853E+11	6.3204E+08
Nb-97	2.2264E+00	8.2812E-11	5.1413E+14	8.2378E+10
Nb-95m	4.7462E-02	1.2460E-10	7.8985E+14	1.7561E+09
Pm-147	6.3200E-01	6.8176E-07	2.7930E+18	2.3384E+10
Pm-148	9.6043E-01	5.8458E-09	2.3786E+16	3.5536E+10
Pm-149	1.9600E+00	4.9464E-09	1.9992E+16	7.2519E+10
Pm-151	6.7283E-01	9.2072E-10	3.6720E+15	2.4895E+10
Pm-148m	1.3695E-01	6.4108E-09	2.6086E+16	5.0671E+09
Pr-144	1.1330E+01	1.4994E-10	6.2705E+14	4.1921E+11
Pr-144m	2.2291E-01	1.2291E-12	5.1403E+12	8.2476E+09
Sm-153	1.2304E+00	2.8054E-09	1.1042E+16	4.5526E+10
Y-94	7.6783E-02	7.3316E-13	4.6970E+12	2.8410E+09
Y-95	2.6673E-03	1.4420E-14	9.1407E+10	9.8689E+07
Y-91m	1.4428E+02	3.4711E-09	2.2971E+16	5.3384E+12
Br-82	3.0355E+01	2.8038E-08	2.0591E+17	1.1231E+12
Br-83	6.2695E+02	3.9686E-08	2.8795E+17	2.3197E+13
Br-84	1.4524E+02	2.0634E-09	1.4793E+16	5.3739E+12
Am-242	1.5880E-01	1.9646E-10	4.8888E+14	5.8757E+09
Np-238	2.0207E+00	7.7971E-09	1.9729E+16	7.4765E+10
Pu-243	1.0110E+00	3.8852E-10	9.6286E+14	3.7407E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.9083E+20
Organic I (atoms)	0.0000E+00
Aerosols (kg)	7.8241E-03

Environment Integral Nuclide Release:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Xe-133	1.0231E+02	5.4658E-07	2.4749E+18	3.7854E+12
Xe-135	1.1172E+03	4.3747E-07	1.9515E+18	4.1336E+13
Kr-83m	2.6290E+02	1.2742E-08	9.2453E+16	9.7273E+12
Xe-131m	2.5872E-01	3.0888E-09	1.4199E+16	9.5728E+09
Xe-133m	7.2858E+00	1.6237E-08	7.3522E+16	2.6958E+11
Xe-135m	1.9235E+03	2.1116E-08	9.4194E+16	7.1169E+13

Environment Transport Group Inventory:

Time (h) = 2.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.0499E+16	1.1180E+15	4.7007E+18
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00

Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	9.0510E+00	1.1124E-07	7.7893E+17	3.3489E+11
Sr-89	4.0553E+02	1.3959E-05	9.4451E+19	1.5005E+13
Sr-90	2.7641E+01	2.0264E-04	1.3559E+21	1.0227E+12
Sr-91	4.2955E+02	1.1850E-07	7.8419E+17	1.5894E+13
Sr-92	3.1737E+02	2.5249E-08	1.6528E+17	1.1743E+13
Y-90	5.8152E-01	1.0688E-09	7.1519E+15	2.1516E+10
Y-91	5.2746E+00	2.1508E-07	1.4233E+18	1.9516E+11
Y-92	6.9288E+01	7.2008E-09	4.7135E+16	2.5637E+12
Y-93	5.2391E+00	1.5703E-09	1.0169E+16	1.9385E+11
Zr-95	6.5482E+00	3.0481E-07	1.9322E+18	2.4228E+11
Zr-97	5.8164E+00	3.0426E-09	1.8889E+16	2.1521E+11
Nb-95	6.5959E+00	1.6868E-07	1.0693E+18	2.4405E+11
Mo-99	8.4192E+01	1.7554E-07	1.0678E+18	3.1151E+12
Tc-99m	7.5119E+01	1.4286E-08	8.6901E+16	2.7794E+12
Ru-103	6.8895E+01	2.1347E-06	1.2481E+19	2.5491E+12
Ru-105	3.3356E+01	4.9623E-09	2.8460E+16	1.2342E+12
Ru-106	2.0609E+01	6.1601E-06	3.4997E+19	7.6254E+11
Rh-105	4.2841E+01	5.0756E-08	2.9110E+17	1.5851E+12
Sb-127	9.6010E+01	3.5952E-07	1.7048E+18	3.5524E+12
Sb-129	2.1269E+02	3.7823E-08	1.7657E+17	7.8696E+12
Te-127	9.5850E+01	3.6319E-08	1.7222E+17	3.5464E+12
Te-127m	1.2732E+01	1.3498E-06	6.4005E+18	4.7108E+11
Te-129	2.3906E+02	1.1415E-08	5.3289E+16	8.8451E+12
Te-129m	4.3059E+01	1.4293E-06	6.6726E+18	1.5932E+12
Te-131m	1.2648E+02	1.5862E-07	7.2918E+17	4.6799E+12
Te-132	1.2872E+03	4.2400E-06	1.9344E+19	4.7628E+13
I-131	8.2105E+03	6.6227E-05	3.0445E+20	3.0379E+14
I-132	8.7634E+03	8.4899E-07	3.8733E+18	3.2424E+14
I-133	1.6089E+04	1.4203E-05	6.4311E+19	5.9531E+14
I-134	5.8402E+03	2.1892E-07	9.8387E+17	2.1609E+14
I-135	1.2838E+04	3.6555E-06	1.6307E+19	4.7500E+14
Cs-134	6.8126E+02	5.2655E-04	2.3664E+21	2.5207E+13
Cs-136	2.8539E+02	3.8939E-06	1.7242E+19	1.0559E+13
Cs-137	6.0369E+02	6.9404E-03	3.0508E+22	2.2336E+13
Ba-139	2.5080E+02	1.5333E-08	6.6430E+16	9.2797E+12
Ba-140	6.6033E+02	9.0198E-06	3.8799E+19	2.4432E+13
La-140	1.8034E+01	3.2445E-08	1.3956E+17	6.6725E+11
La-141	9.8771E+00	1.7465E-09	7.4594E+15	3.6545E+11
La-142	2.4865E+00	1.7370E-10	7.3666E+14	9.2002E+10
Ce-141	1.5805E+01	5.5467E-07	2.3690E+18	5.8477E+11
Ce-143	1.4325E+01	2.1571E-08	9.0843E+16	5.3003E+11
Ce-144	1.1975E+01	3.7544E-06	1.5701E+19	4.4307E+11
Pr-143	5.8316E+00	8.6601E-08	3.6470E+17	2.1577E+11
Nd-147	2.4804E+00	3.0660E-08	1.2561E+17	9.1774E+10
Np-239	1.7962E+02	7.7425E-07	1.9509E+18	6.6459E+12
Pu-238	1.2465E-02	7.2809E-07	1.8423E+18	4.6119E+08
Pu-239	3.9052E-03	6.2829E-05	1.5831E+20	1.4449E+08
Pu-240	3.9586E-03	1.7373E-05	4.3592E+19	1.4647E+08
Pu-241	1.1956E+00	1.1606E-05	2.9001E+19	4.4236E+10
Am-241	4.2755E-04	1.2457E-07	3.1128E+17	1.5819E+07
Cm-242	7.5838E-02	2.2882E-08	5.6942E+16	2.8060E+09
Cm-244	1.7987E-03	2.2233E-08	5.4873E+16	6.6552E+07
I-130	1.6569E+02	8.4956E-08	3.9355E+17	6.1306E+12
Cs-138	1.3629E+03	3.2208E-08	1.4055E+17	5.0427E+13
Cs-134m	1.3698E+02	1.6986E-08	7.6337E+16	5.0683E+12
Rb-88	4.3512E+02	3.6248E-09	2.4806E+16	1.6099E+13
Rb-89	2.8682E+01	2.0636E-10	1.3963E+15	1.0612E+12
Sb-124	8.3236E-01	4.7585E-08	2.3110E+17	3.0797E+10
Sb-125	1.1846E+01	1.1473E-05	5.5275E+19	4.3830E+11
Sb-126	9.0658E-01	1.0848E-08	5.1846E+16	3.3543E+10
Te-131	5.7147E+01	9.9536E-10	4.5757E+15	2.1144E+12
Te-133	2.9111E+01	2.5636E-10	1.1608E+15	1.0771E+12
Te-134	2.2270E+02	6.6341E-09	2.9815E+16	8.2400E+12
Te-125m	2.4564E+00	1.3639E-07	6.5708E+17	9.0887E+10

Te-133m	1.6092E+02	6.3059E-09	2.8553E+16	5.9540E+12
Ba-141	6.5808E+00	9.0160E-11	3.8507E+14	2.4349E+11
Ba-137m	6.6821E+02	1.2425E-09	5.4616E+15	2.4724E+13
Pd-109	1.1304E+01	5.2794E-09	2.9168E+16	4.1826E+11
Rh-106	4.2385E+01	1.1907E-11	6.7649E+13	1.5682E+12
Rh-103m	6.7623E+01	2.0789E-09	1.2155E+16	2.5020E+12
Tc-101	2.2309E-01	1.7016E-12	1.0146E+13	8.2543E+09
Eu-154	2.0523E-02	7.7798E-08	3.0423E+17	7.5934E+08
Eu-155	1.5749E-02	3.3868E-08	1.3159E+17	5.8271E+08
Eu-156	3.2796E-01	5.9518E-09	2.2976E+16	1.2135E+10
La-143	1.7082E-02	1.8487E-13	7.7853E+11	6.3204E+08
Nb-97	2.2264E+00	8.2812E-11	5.1413E+14	8.2378E+10
Nb-95m	4.7462E-02	1.2460E-10	7.8985E+14	1.7561E+09
Pm-147	6.3200E-01	6.8176E-07	2.7930E+18	2.3384E+10
Pm-148	9.6043E-01	5.8458E-09	2.3786E+16	3.5536E+10
Pm-149	1.9600E+00	4.9464E-09	1.9992E+16	7.2519E+10
Pm-151	6.7283E-01	9.2072E-10	3.6720E+15	2.4895E+10
Pm-148m	1.3695E-01	6.4108E-09	2.6086E+16	5.0671E+09
Pr-144	1.1330E+01	1.4994E-10	6.2705E+14	4.1921E+11
Pr-144m	2.2291E-01	1.2291E-12	5.1403E+12	8.2476E+09
Sm-153	1.2304E+00	2.8054E-09	1.1042E+16	4.5526E+10
Y-94	7.6783E-02	7.3316E-13	4.6970E+12	2.8410E+09
Y-95	2.6673E-03	1.4420E-14	9.1407E+10	9.8689E+07
Y-91m	1.4428E+02	3.4711E-09	2.2971E+16	5.3384E+12
Br-82	3.0355E+01	2.8038E-08	2.0591E+17	1.1231E+12
Br-83	6.2695E+02	3.9686E-08	2.8795E+17	2.3197E+13
Br-84	1.4524E+02	2.0634E-09	1.4793E+16	5.3739E+12
Am-242	1.5880E-01	1.9646E-10	4.8888E+14	5.8757E+09
Np-238	2.0207E+00	7.7971E-09	1.9729E+16	7.4765E+10
Pu-243	1.0110E+00	3.8852E-10	9.6286E+14	3.7407E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.9083E+20
Organic I (atoms)	0.0000E+00
Aerosols (kg)	7.8241E-03

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 2.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Pathway

Time (h) = 2.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Xe-133	2.0636E-01	1.1025E-09	4.9918E+15	7.6353E+09
Xe-135	2.2063E+00	8.6393E-10	3.8539E+15	8.1631E+10
Kr-83m	5.4047E-01	2.6195E-11	1.9006E+14	1.9997E+10
Xe-131m	5.2390E-04	6.2547E-12	2.8753E+13	1.9384E+07
Xe-133m	1.4716E-02	3.2797E-11	1.4850E+14	5.4449E+08
Xe-135m	5.4399E+00	5.9718E-11	2.6639E+14	2.0128E+11

Control Room Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.4794E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 4.1700

EAB Doses:

Time (h) = 4.1700	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.7359E-01	0.0000E+00	5.1440E-01	2.7359E-01
Accumulated dose (rem)	3.4762E-01	0.0000E+00	6.3844E-01	3.4762E-01

LPZ Doses:

Time (h) = 4.1700	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.5380E-02	0.0000E+00	2.8917E-02	1.5380E-02
Accumulated dose (rem)	2.4527E-02	0.0000E+00	4.4244E-02	2.4527E-02

Control Room Doses:

Time (h) = 4.1700	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.8085E-01	0.0000E+00	1.0635E+01	1.8085E-01
Accumulated dose (rem)	2.1033E-01	0.0000E+00	1.2294E+01	2.1033E-01

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Rb-86	3.0467E+04	3.7444E-04	2.6220E+21	1.1273E+15
Sr-89	1.5906E+06	5.4748E-02	3.7045E+23	5.8850E+16
Sr-90	1.0858E+05	7.9600E-01	5.3263E+24	4.0175E+15
Sr-91	1.4403E+06	3.9733E-04	2.6294E+21	5.3291E+16
Sr-92	7.1567E+05	5.6938E-05	3.7270E+20	2.6480E+16
Y-90	4.5624E+03	8.3858E-06	5.6111E+19	1.6881E+14
Y-91	2.2068E+04	8.9985E-04	5.9550E+21	8.1651E+14
Y-92	4.7509E+05	4.9374E-05	3.2319E+20	1.7579E+16
Y-93	1.7733E+04	5.3151E-06	3.4417E+19	6.5612E+14
Zr-95	2.5698E+04	1.1962E-03	7.5827E+21	9.5081E+14
Zr-97	2.0902E+04	1.0934E-05	6.7883E+19	7.7339E+14
Nb-95	2.5910E+04	6.6260E-04	4.2003E+21	9.5867E+14
Mo-99	3.2328E+05	6.7403E-04	4.1001E+21	1.1961E+16
Tc-99m	2.9322E+05	5.5763E-05	3.3921E+20	1.0849E+16
Ru-103	2.7021E+05	8.3723E-03	4.8950E+22	9.9976E+15
Ru-105	9.3380E+04	1.3892E-05	7.9673E+19	3.4550E+15
Ru-106	8.0944E+04	2.4194E-02	1.3745E+23	2.9949E+15
Rh-105	1.6590E+05	1.9656E-04	1.1273E+21	6.1385E+15
Sb-127	3.7106E+05	1.3895E-03	6.5886E+21	1.3729E+16
Sb-129	5.8985E+05	1.0489E-04	4.8967E+20	2.1824E+16
Te-127	3.7366E+05	1.4159E-04	6.7138E+20	1.3825E+16
Te-127m	5.0024E+04	5.3033E-03	2.5147E+22	1.8509E+15
Te-129	7.2231E+05	3.4490E-05	1.6101E+20	2.6725E+16
Te-129m	1.6913E+05	5.6141E-03	2.6209E+22	6.2577E+15
Te-131m	4.7256E+05	5.9262E-04	2.7243E+21	1.7485E+16
Te-132	4.9603E+06	1.6339E-02	7.4540E+22	1.8353E+17
I-131	2.8526E+07	2.3010E-01	1.0578E+24	1.0555E+18
I-132	1.9375E+07	1.8770E-03	8.5635E+21	7.1688E+17
I-133	5.2497E+07	4.6342E-02	2.0983E+23	1.9424E+18
I-134	4.1561E+06	1.5579E-04	7.0016E+20	1.5377E+17
I-135	3.5789E+07	1.0191E-02	4.5460E+22	1.3242E+18
Xe-133	9.1631E+05	4.8953E-03	2.2166E+22	3.3903E+16
Xe-135	8.8000E+06	3.4459E-03	1.5372E+22	3.2560E+17
Cs-134	2.3008E+06	1.7783E+00	7.9918E+24	8.5129E+16
Cs-136	9.5929E+05	1.3089E-02	5.7958E+22	3.5494E+16
Cs-137	2.0389E+06	2.3441E+01	1.0304E+26	7.5441E+16
Ba-139	3.3083E+05	2.0225E-05	8.7626E+19	1.2241E+16
Ba-140	2.5812E+06	3.5258E-02	1.5166E+23	9.5504E+16
La-140	1.5598E+05	2.8063E-04	1.2071E+21	5.7713E+15
La-141	2.4268E+04	4.2911E-06	1.8327E+19	8.9791E+14
La-142	3.6819E+03	2.5721E-07	1.0908E+18	1.3623E+14
Ce-141	6.2020E+04	2.1766E-03	9.2965E+21	2.2947E+15
Ce-143	5.3771E+04	8.0970E-05	3.4099E+20	1.9895E+15
Ce-144	4.7029E+04	1.4745E-02	6.1665E+22	1.7401E+15
Pr-143	2.3044E+04	3.4220E-04	1.4411E+21	8.5261E+14
Nd-147	9.6881E+03	1.1976E-04	4.9060E+20	3.5846E+14
Np-239	6.8706E+05	2.9616E-03	7.4623E+21	2.5421E+16
Pu-238	4.8980E+01	2.8610E-03	7.2393E+21	1.8123E+12
Pu-239	1.5346E+01	2.4689E-01	6.2209E+23	5.6779E+11

Pu-240	1.5551E+01	6.8244E-02	1.7124E+23	5.7537E+11
Pu-241	4.6964E+03	4.5591E-02	1.1392E+23	1.7377E+14
Am-241	1.6813E+00	4.8987E-04	1.2241E+21	6.2208E+10
Cm-242	2.9799E+02	8.9909E-05	2.2374E+20	1.1025E+13
Cm-244	7.0656E+00	8.7335E-05	2.1555E+20	2.6143E+11
I-130	5.1350E+05	2.6329E-04	1.2197E+21	1.9000E+16
Kr-83m	1.2094E+06	5.8617E-05	4.2530E+20	4.4747E+16
Xe-131m	2.4035E+03	2.8695E-05	1.3191E+20	8.8931E+13
Xe-133m	6.4756E+04	1.4432E-04	6.5345E+20	2.3960E+15
Xe-135m	5.8848E+06	6.4603E-05	2.8818E+20	2.1774E+17
Cs-138	2.9179E+05	6.8958E-06	3.0092E+19	1.0796E+16
Cs-134m	2.7542E+05	3.4153E-05	1.5349E+20	1.0191E+16
Rb-88	1.5172E+04	1.2639E-07	8.6495E+17	5.6136E+14
Rb-89	2.5565E+02	1.8393E-09	1.2446E+16	9.4591E+12
Sb-124	3.2663E+03	1.8673E-04	9.0686E+20	1.2085E+14
Sb-125	4.6531E+04	4.5067E-02	2.1712E+23	1.7216E+15
Sb-126	3.5433E+03	4.2397E-05	2.0264E+20	1.3110E+14
Te-131	1.1115E+05	1.9359E-06	8.8996E+18	4.1125E+15
Te-133	2.1487E+04	1.8922E-07	8.5677E+17	7.9501E+14
Te-134	1.0099E+05	3.0083E-06	1.3520E+19	3.7365E+15
Te-125m	9.6504E+03	5.3583E-04	2.5815E+21	3.5707E+14
Te-133m	1.2397E+05	4.8581E-06	2.1997E+19	4.5870E+15
Ba-141	1.8501E+02	2.5348E-09	1.0826E+16	6.8455E+12
Ba-137m	2.2347E+06	4.1552E-06	1.8265E+19	8.2682E+16
Pd-109	3.9700E+04	1.8541E-05	1.0244E+20	1.4689E+15
Rh-106	1.3981E+05	3.9278E-08	2.2315E+17	5.1730E+15
Rh-103m	2.7036E+05	8.3115E-06	4.8595E+19	1.0003E+16
Tc-101	1.5224E+00	1.1612E-11	6.9238E+13	5.6329E+10
Eu-154	8.0617E+01	3.0560E-04	1.1951E+21	2.9828E+12
Eu-155	6.1863E+01	1.3304E-04	5.1688E+20	2.2889E+12
Eu-156	1.2830E+03	2.3284E-05	8.9883E+19	4.7471E+13
La-143	1.1814E-01	1.2786E-12	5.3845E+12	4.3714E+09
Nb-97	3.3260E+03	1.2371E-07	7.6804E+17	1.2306E+14
Nb-95m	1.8633E+02	4.8916E-07	3.1009E+18	6.8942E+12
Pm-147	2.4831E+03	2.6786E-03	1.0973E+22	9.1876E+13
Pm-148	3.7293E+03	2.2699E-05	9.2362E+19	1.3798E+14
Pm-149	7.4841E+03	1.8888E-05	7.6339E+19	2.7691E+14
Pm-151	2.5067E+03	3.4302E-06	1.3680E+19	9.2747E+13
Pm-148m	5.3715E+02	2.5145E-05	1.0231E+20	1.9875E+13
Pr-144	4.8128E+04	6.3691E-07	2.6636E+18	1.7807E+15
Pr-144m	8.8503E+02	4.8801E-09	2.0409E+16	3.2746E+13
Sm-153	4.6803E+03	1.0671E-05	4.2002E+19	1.7317E+14
Y-94	2.6756E+00	2.5548E-11	1.6367E+14	9.8995E+10
Y-95	2.2765E-03	1.2307E-14	7.8015E+10	8.4230E+07
Y-91m	8.2440E+05	1.9833E-05	1.3125E+20	3.0503E+16
Br-82	1.0182E+05	9.4044E-05	6.9067E+20	3.7672E+15
Br-83	1.1695E+06	7.4030E-05	5.3713E+20	4.3272E+16
Br-84	2.9762E+04	4.2281E-07	3.0312E+18	1.1012E+15
Am-242	5.6791E+02	7.0257E-07	1.7483E+18	2.1013E+13
Np-238	7.7061E+03	2.9735E-05	7.5240E+19	2.8513E+14
Pu-243	2.9319E+03	1.1267E-06	2.7922E+18	1.0848E+14

Containment Sump Transport Group Inventory:

Time (h) = 4.1700	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.9036E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3248E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6619E+01	0.0000E+00	0.0000E+00

Time (h) = 4.1700	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Rb-86	2.9289E+01	3.5997E-07	2.5207E+18	1.0837E+12
Sr-89	1.4632E+03	5.0364E-05	3.4078E+20	5.4137E+13
Sr-90	9.9876E+01	7.3219E-04	4.8993E+21	3.6954E+12
Sr-91	1.3248E+03	3.6547E-07	2.4186E+18	4.9019E+13
Sr-92	6.5830E+02	5.2373E-08	3.4283E+17	2.4357E+13
Y-90	4.2453E+00	7.8030E-09	5.2212E+16	1.5708E+11
Y-91	2.0335E+01	8.2918E-07	5.4873E+18	7.5239E+11
Y-92	4.4420E+02	4.6164E-08	3.0218E+17	1.6436E+13
Y-93	1.6311E+01	4.8890E-09	3.1658E+16	6.0352E+11
Zr-95	2.3638E+01	1.1003E-06	6.9749E+18	8.7459E+11
Zr-97	1.9227E+01	1.0058E-08	6.2441E+16	7.1139E+11
Nb-95	2.3833E+01	6.0949E-07	3.8636E+18	8.8181E+11
Mo-99	2.9736E+02	6.2000E-07	3.7714E+18	1.1002E+13
Tc-99m	2.6971E+02	5.1293E-08	3.1201E+17	9.9793E+12
Ru-103	2.4854E+02	7.7011E-06	4.5026E+19	9.1961E+12
Ru-105	8.5894E+01	1.2778E-08	7.3286E+16	3.1781E+12
Ru-106	7.4455E+01	2.2255E-05	1.2644E+20	2.7548E+12
Rh-105	1.5260E+02	1.8080E-07	1.0370E+18	5.6464E+12
Sb-127	3.4131E+02	1.2781E-06	6.0604E+18	1.2629E+13
Sb-129	5.4256E+02	9.6483E-08	4.5041E+17	2.0075E+13
Te-127	3.4371E+02	1.3024E-07	6.1756E+17	1.2717E+13
Te-127m	4.6013E+01	4.8781E-06	2.3131E+19	1.7025E+12
Te-129	6.6440E+02	3.1725E-08	1.4810E+17	2.4583E+13
Te-129m	1.5557E+02	5.1641E-06	2.4108E+19	5.7561E+12
Te-131m	4.3468E+02	5.4511E-07	2.5059E+18	1.6083E+13
Te-132	4.5626E+03	1.5029E-05	6.8565E+19	1.6882E+14
I-131	2.7125E+04	2.1880E-04	1.0058E+21	1.0036E+15
I-132	1.8060E+04	1.7496E-06	7.9820E+18	6.6820E+14
I-133	4.9897E+04	4.4047E-05	1.9944E+20	1.8462E+15
I-134	3.8711E+03	1.4511E-07	6.5215E+17	1.4323E+14
I-135	3.4034E+04	9.6913E-06	4.3231E+19	1.2593E+15
Cs-134	2.2119E+03	1.7095E-03	7.6829E+21	8.1839E+13
Cs-136	9.2221E+02	1.2583E-05	5.5717E+19	3.4122E+13
Cs-137	1.9601E+03	2.2535E-02	9.9057E+22	7.2524E+13
Ba-139	3.0431E+02	1.8604E-08	8.0601E+16	1.1259E+13
Ba-140	2.3743E+03	3.2431E-05	1.3950E+20	8.7848E+13
La-140	1.4529E+02	2.6140E-07	1.1244E+18	5.3759E+12
La-141	2.3254E+01	4.1119E-09	1.7562E+16	8.6041E+11
La-142	3.3868E+00	2.3659E-10	1.0033E+15	1.2531E+11
Ce-141	5.7051E+01	2.0022E-06	8.5516E+18	2.1109E+12
Ce-143	4.9459E+01	7.4477E-08	3.1364E+17	1.8300E+12
Ce-144	4.3259E+01	1.3563E-05	5.6721E+19	1.6006E+12
Pr-143	2.1199E+01	3.1482E-07	1.3258E+18	7.8438E+11
Nd-147	8.9114E+00	1.1016E-07	4.5127E+17	3.2972E+11
Np-239	6.3198E+02	2.7242E-06	6.8641E+18	2.3383E+13
Pu-238	4.5053E-02	2.6317E-06	6.6589E+18	1.6670E+09
Pu-239	1.4115E-02	2.2710E-04	5.7222E+20	5.2227E+08
Pu-240	1.4304E-02	6.2773E-05	1.5751E+20	5.2924E+08
Pu-241	4.3199E+00	4.1936E-05	1.0479E+20	1.5984E+11
Am-241	1.5465E-03	4.5060E-07	1.1260E+18	5.7222E+07
Cm-242	2.7410E-01	8.2701E-08	2.0580E+17	1.0142E+10
Cm-244	6.4992E-03	8.0334E-08	1.9827E+17	2.4047E+08
I-130	4.8832E+02	2.5038E-07	1.1599E+18	1.8068E+13
Cs-138	2.7677E+02	6.5408E-09	2.8543E+16	1.0241E+13
Cs-134m	2.6478E+02	3.2833E-08	1.4755E+17	9.7967E+12
Rb-88	1.2827E+01	1.0686E-10	7.3125E+14	4.7459E+11
Rb-89	2.4577E-01	1.7682E-12	1.1965E+13	9.0935E+09
Sb-124	3.0044E+00	1.7176E-07	8.3416E+17	1.1116E+11
Sb-125	4.2801E+01	4.1454E-05	1.9971E+20	1.5836E+12
Sb-126	3.2592E+00	3.8998E-08	1.8639E+17	1.2059E+11
Te-131	1.0224E+02	1.7807E-09	8.1861E+15	3.7828E+12
Te-133	1.9764E+01	1.7405E-10	7.8809E+14	7.3127E+11
Te-134	9.2891E+01	2.7671E-09	1.2436E+16	3.4370E+12
Te-125m	8.8768E+00	4.9287E-07	2.3745E+18	3.2844E+11
Te-133m	1.1404E+02	4.4687E-09	2.0234E+16	4.2193E+12
Ba-141	1.7018E-01	2.3316E-12	9.9582E+12	6.2967E+09
Ba-137m	2.1483E+03	3.9946E-09	1.7559E+16	7.9486E+13
Pd-109	3.6518E+01	1.7054E-08	9.4224E+16	1.3512E+12
Rh-106	1.2860E+02	3.6129E-11	2.0526E+14	4.7583E+12

Rh-103m	2.4869E+02	7.6452E-09	4.4700E+16	9.2015E+12
Tc-101	1.4004E-03	1.0681E-14	6.3688E+10	5.1813E+07
Eu-154	7.4154E-02	2.8110E-07	1.0993E+18	2.7437E+09
Eu-155	5.6904E-02	1.2237E-07	4.7545E+17	2.1054E+09
Eu-156	1.1802E+00	2.1417E-08	8.2678E+16	4.3666E+10
La-143	1.0867E-04	1.1761E-15	4.9529E+09	4.0209E+06
Nb-97	3.0593E+00	1.1379E-10	7.0647E+14	1.1320E+11
Nb-95m	1.7139E-01	4.4995E-10	2.8523E+15	6.3415E+09
Pm-147	2.2841E+00	2.4639E-06	1.0094E+19	8.4511E+10
Pm-148	3.4303E+00	2.0879E-08	8.4958E+16	1.2692E+11
Pm-149	6.8841E+00	1.7374E-08	7.0219E+16	2.5471E+11
Pm-151	2.3057E+00	3.1552E-09	1.2584E+16	8.5312E+10
Pm-148m	4.9409E-01	2.3129E-08	9.4113E+16	1.8281E+10
Pr-144	4.4272E+01	5.8589E-10	2.4502E+15	1.6381E+12
Pr-144m	8.1408E-01	4.4889E-12	1.8773E+13	3.0121E+10
Sm-153	4.3051E+00	9.8156E-09	3.8634E+16	1.5929E+11
Y-94	2.4611E-03	2.3500E-14	1.5055E+11	9.1059E+07
Y-95	2.0940E-06	1.1320E-17	7.1761E+07	7.7478E+04
Y-91m	7.6140E+02	1.8318E-08	1.2122E+17	2.8172E+13
Br-82	9.6824E+01	8.9433E-08	6.5680E+17	3.5825E+12
Br-83	1.1122E+03	7.0400E-08	5.1080E+17	4.1150E+13
Br-84	2.8303E+01	4.0208E-10	2.8826E+15	1.0472E+12
Am-242	5.2238E-01	6.4624E-10	1.6082E+15	1.9328E+10
Np-238	7.0883E+00	2.7352E-08	6.9208E+16	2.6227E+11
Pu-243	2.6968E+00	1.0364E-09	2.5684E+15	9.9782E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 4.1700	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.2595E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	2.5533E-02

Environment Integral Nuclide Release:

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Xe-133	8.8941E+02	4.7516E-06	2.1515E+19	3.2908E+13
Xe-135	8.5500E+03	3.3481E-06	1.4935E+19	3.1635E+14
Kr-83m	1.1701E+03	5.6715E-08	4.1150E+17	4.3295E+13
Xe-131m	2.3319E+00	2.7840E-08	1.2798E+17	8.6281E+10
Xe-133m	6.2838E+01	1.4004E-07	6.3410E+17	2.3250E+12
Xe-135m	5.5856E+03	6.1318E-08	2.7353E+17	2.0667E+14

Environment Transport Group Inventory:

Time (h) = 4.1700	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.1958E+17	1.6608E+15	3.7897E+19
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Rb-86	2.9289E+01	3.5997E-07	2.5207E+18	1.0837E+12
Sr-89	1.4632E+03	5.0364E-05	3.4078E+20	5.4137E+13
Sr-90	9.9876E+01	7.3219E-04	4.8993E+21	3.6954E+12
Sr-91	1.3248E+03	3.6547E-07	2.4186E+18	4.9019E+13
Sr-92	6.5830E+02	5.2373E-08	3.4283E+17	2.4357E+13
Y-90	4.2453E+00	7.8030E-09	5.2212E+16	1.5708E+11
Y-91	2.0335E+01	8.2918E-07	5.4873E+18	7.5239E+11
Y-92	4.4420E+02	4.6164E-08	3.0218E+17	1.6436E+13
Y-93	1.6311E+01	4.8890E-09	3.1658E+16	6.0352E+11
Zr-95	2.3638E+01	1.1003E-06	6.9749E+18	8.7459E+11
Zr-97	1.9227E+01	1.0058E-08	6.2441E+16	7.1139E+11
Nb-95	2.3833E+01	6.0949E-07	3.8636E+18	8.8181E+11
Mo-99	2.9736E+02	6.2000E-07	3.7714E+18	1.1002E+13

Tc-99m	2.6971E+02	5.1293E-08	3.1201E+17	9.9793E+12
Ru-103	2.4854E+02	7.7011E-06	4.5026E+19	9.1961E+12
Ru-105	8.5894E+01	1.2778E-08	7.3286E+16	3.1781E+12
Ru-106	7.4455E+01	2.2255E-05	1.2644E+20	2.7548E+12
Rh-105	1.5260E+02	1.8080E-07	1.0370E+18	5.6464E+12
Sb-127	3.4131E+02	1.2781E-06	6.0604E+18	1.2629E+13
Sb-129	5.4256E+02	9.6483E-08	4.5041E+17	2.0075E+13
Te-127	3.4371E+02	1.3024E-07	6.1756E+17	1.2717E+13
Te-127m	4.6013E+01	4.8781E-06	2.3131E+19	1.7025E+12
Te-129	6.6440E+02	3.1725E-08	1.4810E+17	2.4583E+13
Te-129m	1.5557E+02	5.1641E-06	2.4108E+19	5.7561E+12
Te-131m	4.3468E+02	5.4511E-07	2.5059E+18	1.6083E+13
Te-132	4.5626E+03	1.5029E-05	6.8565E+19	1.6882E+14
I-131	2.7125E+04	2.1880E-04	1.0058E+21	1.0036E+15
I-132	1.8060E+04	1.7496E-06	7.9820E+18	6.6820E+14
I-133	4.9897E+04	4.4047E-05	1.9944E+20	1.8462E+15
I-134	3.8711E+03	1.4511E-07	6.5215E+17	1.4323E+14
I-135	3.4034E+04	9.6913E-06	4.3231E+19	1.2593E+15
Cs-134	2.2119E+03	1.7095E-03	7.6829E+21	8.1839E+13
Cs-136	9.2221E+02	1.2583E-05	5.5717E+19	3.4122E+13
Cs-137	1.9601E+03	2.2535E-02	9.9057E+22	7.2524E+13
Ba-139	3.0431E+02	1.8604E-08	8.0601E+16	1.1259E+13
Ba-140	2.3743E+03	3.2431E-05	1.3950E+20	8.7848E+13
La-140	1.4529E+02	2.6140E-07	1.1244E+18	5.3759E+12
La-141	2.3254E+01	4.1119E-09	1.7562E+16	8.6041E+11
La-142	3.3868E+00	2.3659E-10	1.0033E+15	1.2531E+11
Ce-141	5.7051E+01	2.0022E-06	8.5516E+18	2.1109E+12
Ce-143	4.9459E+01	7.4477E-08	3.1364E+17	1.8300E+12
Ce-144	4.3259E+01	1.3563E-05	5.6721E+19	1.6006E+12
Pr-143	2.1199E+01	3.1482E-07	1.3258E+18	7.8438E+11
Nd-147	8.9114E+00	1.1016E-07	4.5127E+17	3.2972E+11
Np-239	6.3198E+02	2.7242E-06	6.8641E+18	2.3383E+13
Pu-238	4.5053E-02	2.6317E-06	6.6589E+18	1.6670E+09
Pu-239	1.4115E-02	2.2710E-04	5.7222E+20	5.2227E+08
Pu-240	1.4304E-02	6.2773E-05	1.5751E+20	5.2924E+08
Pu-241	4.3199E+00	4.1936E-05	1.0479E+20	1.5984E+11
Am-241	1.5465E-03	4.5060E-07	1.1260E+18	5.7222E+07
Cm-242	2.7410E-01	8.2701E-08	2.0580E+17	1.0142E+10
Cm-244	6.4992E-03	8.0334E-08	1.9827E+17	2.4047E+08
I-130	4.8832E+02	2.5038E-07	1.1599E+18	1.8068E+13
Cs-138	2.7677E+02	6.5408E-09	2.8543E+16	1.0241E+13
Cs-134m	2.6478E+02	3.2833E-08	1.4755E+17	9.7967E+12
Rb-88	1.2827E+01	1.0686E-10	7.3125E+14	4.7459E+11
Rb-89	2.4577E-01	1.7682E-12	1.1965E+13	9.0935E+09
Sb-124	3.0044E+00	1.7176E-07	8.3416E+17	1.1116E+11
Sb-125	4.2801E+01	4.1454E-05	1.9971E+20	1.5836E+12
Sb-126	3.2592E+00	3.8998E-08	1.8639E+17	1.2059E+11
Te-131	1.0224E+02	1.7807E-09	8.1861E+15	3.7828E+12
Te-133	1.9764E+01	1.7405E-10	7.8809E+14	7.3127E+11
Te-134	9.2891E+01	2.7671E-09	1.2436E+16	3.4370E+12
Te-125m	8.8768E+00	4.9287E-07	2.3745E+18	3.2844E+11
Te-133m	1.1404E+02	4.4687E-09	2.0234E+16	4.2193E+12
Ba-141	1.7018E-01	2.3316E-12	9.9582E+12	6.2967E+09
Ba-137m	2.1483E+03	3.9946E-09	1.7559E+16	7.9486E+13
Pd-109	3.6518E+01	1.7054E-08	9.4224E+16	1.3512E+12
Rh-106	1.2860E+02	3.6129E-11	2.0526E+14	4.7583E+12
Rh-103m	2.4869E+02	7.6452E-09	4.4700E+16	9.2015E+12
Tc-101	1.4004E-03	1.0681E-14	6.3688E+10	5.1813E+07
Eu-154	7.4154E-02	2.8110E-07	1.0993E+18	2.7437E+09
Eu-155	5.6904E-02	1.2237E-07	4.7545E+17	2.1054E+09
Eu-156	1.1802E+00	2.1417E-08	8.2678E+16	4.3666E+10
La-143	1.0867E-04	1.1761E-15	4.9529E+09	4.0209E+06
Nb-97	3.0593E+00	1.1379E-10	7.0647E+14	1.1320E+11
Nb-95m	1.7139E-01	4.4995E-10	2.8523E+15	6.3415E+09
Pm-147	2.2841E+00	2.4639E-06	1.0094E+19	8.4511E+10
Pm-148	3.4303E+00	2.0879E-08	8.4958E+16	1.2692E+11
Pm-149	6.8841E+00	1.7374E-08	7.0219E+16	2.5471E+11
Pm-151	2.3057E+00	3.1552E-09	1.2584E+16	8.5312E+10
Pm-148m	4.9409E-01	2.3129E-08	9.4113E+16	1.8281E+10
Pr-144	4.4272E+01	5.8589E-10	2.4502E+15	1.6381E+12

Pr-144m	8.1408E-01	4.4889E-12	1.8773E+13	3.0121E+10
Sm-153	4.3051E+00	9.8156E-09	3.8634E+16	1.5929E+11
Y-94	2.4611E-03	2.3500E-14	1.5055E+11	9.1059E+07
Y-95	2.0940E-06	1.1320E-17	7.1761E+07	7.7478E+04
Y-91m	7.6140E+02	1.8318E-08	1.2122E+17	2.8172E+13
Br-82	9.6824E+01	8.9433E-08	6.5680E+17	3.5825E+12
Br-83	1.1122E+03	7.0400E-08	5.1080E+17	4.1150E+13
Br-84	2.8303E+01	4.0208E-10	2.8826E+15	1.0472E+12
Am-242	5.2238E-01	6.4624E-10	1.6082E+15	1.9328E+10
Np-238	7.0883E+00	2.7352E-08	6.9208E+16	2.6227E+11
Pu-243	2.6968E+00	1.0364E-09	2.5684E+15	9.9782E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 4.1700	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.2595E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	2.5533E-02

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 4.1700	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 4.1700	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 4.1700	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 4.1700	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 4.1700	Ci	kg	Atoms	Bq
Xe-133	6.9491E-01	3.7125E-09	1.6810E+16	2.5712E+10
Xe-135	6.4811E+00	2.5379E-09	1.1321E+16	2.3980E+11
Kr-83m	9.7754E-01	4.7380E-11	3.4377E+14	3.6169E+10
Xe-131m	1.8498E-03	2.2084E-11	1.0152E+14	6.8441E+07
Xe-133m	4.9326E-02	1.0993E-10	4.9775E+14	1.8251E+09
Xe-135m	1.1068E+01	1.2150E-10	5.4199E+14	4.0950E+11

Control Room Transport Group Inventory:

Overlying

```
Time (h) =   4.1700    Atmosphere     Sump        Pool
Noble gases (atoms)    2.9616E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   4.1700     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   4.1700      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   4.1700      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   4.1700      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   4.1700      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    8.0000

EAB Doses:

Time (h) =   8.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        5.7141E-01  0.0000E+00  1.2273E+00  5.7141E-01
Accumulated dose (rem)  9.1904E-01  0.0000E+00  1.8657E+00  9.1904E-01

LPZ Doses:

Time (h) =   8.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        3.2122E-02  0.0000E+00  6.8992E-02  3.2122E-02
Accumulated dose (rem)  5.6650E-02  0.0000E+00  1.1324E-01  5.6650E-02

Control Room Doses:

Time (h) =   8.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        5.7672E-01  0.0000E+00  3.4815E+01  5.7672E-01
Accumulated dose (rem)  7.8705E-01  0.0000E+00  4.7109E+01  7.8705E-01

Containment Sump Compartment Atmosphere Nuclide Inventory:
```

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	3.0252E+04	3.7179E-04	2.6035E+21	1.1193E+15
Sr-89	1.5852E+06	5.4564E-02	3.6921E+23	5.8653E+16
Sr-90	1.0845E+05	7.9506E-01	5.3200E+24	4.0127E+15
Sr-91	1.0879E+06	3.0011E-04	1.9860E+21	4.0252E+16
Sr-92	2.6839E+05	2.1353E-05	1.3977E+20	9.9304E+15
Y-90	8.7790E+03	1.6136E-05	1.0797E+20	3.2482E+14
Y-91	2.4449E+04	9.9695E-04	6.5975E+21	9.0461E+14
Y-92	4.5088E+05	4.6857E-05	3.0672E+20	1.6682E+16
Y-93	1.3618E+04	4.0818E-06	2.6431E+19	5.0387E+14
Zr-95	2.5623E+04	1.1927E-03	7.5608E+21	9.4806E+14
Zr-97	1.7843E+04	9.3337E-06	5.7947E+19	6.6019E+14
Nb-95	2.5879E+04	6.6181E-04	4.1953E+21	9.5752E+14
Mo-99	3.1017E+05	6.4670E-04	3.9338E+21	1.1476E+16
Tc-99m	2.8727E+05	5.4632E-05	3.3232E+20	1.0629E+16
Ru-103	2.6913E+05	8.3389E-03	4.8755E+22	9.9578E+15
Ru-105	5.1294E+04	7.6308E-06	4.3765E+19	1.8979E+15
Ru-106	8.0825E+04	2.4159E-02	1.3725E+23	2.9905E+15
Rh-105	1.5878E+05	1.8812E-04	1.0789E+21	5.8750E+15
Sb-127	3.6013E+05	1.3485E-03	6.3945E+21	1.3325E+16
Sb-129	3.1867E+05	5.6669E-05	2.6455E+20	1.1791E+16
Te-127	3.6745E+05	1.3923E-04	6.6022E+20	1.3596E+16
Te-127m	4.9979E+04	5.2986E-03	2.5125E+22	1.8492E+15
Te-129	4.4831E+05	2.1407E-05	9.9935E+19	1.6588E+16
Te-129m	1.6870E+05	5.5999E-03	2.6142E+22	6.2419E+15
Te-131m	4.3203E+05	5.4180E-04	2.4907E+21	1.5985E+16
Te-132	4.7891E+06	1.5775E-02	7.1968E+22	1.7720E+17
I-131	2.8110E+07	2.2674E-01	1.0423E+24	1.0401E+18
I-132	9.4365E+06	9.1420E-04	4.1708E+21	3.4915E+17
I-133	4.6157E+07	4.0746E-02	1.8449E+23	1.7078E+18
I-134	2.1126E+05	7.9192E-06	3.5590E+19	7.8165E+15
I-135	2.3923E+07	6.8121E-03	3.0388E+22	8.8516E+17
Xe-133	1.8956E+06	1.0127E-02	4.5855E+22	7.0138E+16
Xe-135	1.4000E+07	5.4821E-03	2.4455E+22	5.1799E+17
Cs-134	2.2978E+06	1.7760E+00	7.9814E+24	8.5018E+16
Cs-136	9.5011E+05	1.2964E-02	5.7403E+22	3.5154E+16
Cs-137	2.0365E+06	2.3413E+01	1.0292E+26	7.5351E+16
Ba-139	4.8152E+04	2.9438E-06	1.2754E+19	1.7816E+15
Ba-140	2.5559E+06	3.4912E-02	1.5018E+23	9.4567E+16
La-140	3.0964E+05	5.5708E-04	2.3963E+21	1.1457E+16
La-141	1.2343E+04	2.1826E-06	9.3218E+18	4.5670E+14
La-142	6.5722E+02	4.5911E-08	1.9471E+17	2.4317E+13
Ce-141	6.1797E+04	2.1688E-03	9.2630E+21	2.2865E+15
Ce-143	4.9557E+04	7.4624E-05	3.1426E+20	1.8336E+15
Ce-144	4.6956E+04	1.4722E-02	6.1568E+22	1.7374E+15
Pr-143	2.3249E+04	3.4525E-04	1.4540E+21	8.6021E+14
Nd-147	9.5797E+03	1.1842E-04	4.8512E+20	3.5445E+14
Np-239	6.5477E+05	2.8224E-03	7.1116E+21	2.4226E+16
Pu-238	4.8949E+01	2.8592E-03	7.2347E+21	1.8111E+12
Pu-239	1.5336E+01	2.4673E-01	6.2170E+23	5.6744E+11
Pu-240	1.5532E+01	6.8164E-02	1.7104E+23	5.7469E+11
Pu-241	4.6908E+03	4.5536E-02	1.1379E+23	1.7356E+14
Am-241	1.6826E+00	4.9025E-04	1.2250E+21	6.2257E+10
Cm-242	2.9773E+02	8.9831E-05	2.2354E+20	1.1016E+13
Cm-244	7.0572E+00	8.7231E-05	2.1529E+20	2.6112E+11
I-130	4.1376E+05	2.1215E-04	9.8277E+20	1.5309E+16
Kr-83m	7.5804E+05	3.6741E-05	2.6658E+20	2.8048E+16
Xe-131m	5.2851E+03	6.3097E-05	2.9006E+20	1.9555E+14
Xe-133m	1.3185E+05	2.9384E-04	1.3305E+21	4.8783E+15
Xe-135m	3.9371E+06	4.3221E-05	1.9280E+20	1.4567E+17
Cs-138	2.0712E+03	4.8948E-08	2.1360E+17	7.6634E+13
Cs-134m	1.1013E+05	1.3657E-05	6.1376E+19	4.0750E+15
Rb-88	1.9688E+00	1.6401E-11	1.1224E+14	7.2846E+10
Rb-89	7.1786E-03	5.1648E-14	3.4947E+11	2.6561E+08
Sb-124	3.2565E+03	1.8617E-04	9.0413E+20	1.2049E+14
Sb-125	4.6471E+04	4.5009E-02	2.1684E+23	1.7194E+15
Sb-126	3.5077E+03	4.1972E-05	2.0060E+20	1.2979E+14
Te-131	9.8894E+04	1.7225E-06	7.9184E+18	3.6591E+15
Te-133	1.2109E+03	1.0663E-08	4.8283E+16	4.4802E+13

Te-134	2.2326E+03	6.6507E-08	2.9889E+17	8.2606E+13
Te-125m	9.6409E+03	5.3530E-04	2.5789E+21	3.5671E+14
Te-133m	6.9846E+03	2.7370E-07	1.2393E+18	2.5843E+14
Ba-141	3.0223E-02	4.1407E-13	1.7685E+12	1.1183E+09
Ba-137m	2.2575E+06	4.1977E-06	1.8452E+19	8.3529E+16
Pd-109	3.2540E+04	1.5197E-05	8.3961E+19	1.2040E+15
Rh-106	1.6623E+05	4.6698E-08	2.6530E+17	6.1503E+15
Rh-103m	2.7051E+05	8.3159E-06	4.8621E+19	1.0009E+16
Tc-101	2.0437E-05	1.5589E-16	9.2948E+08	7.5618E+05
Eu-154	8.0520E+01	3.0524E-04	1.1936E+21	2.9792E+12
Eu-155	6.1787E+01	1.3287E-04	5.1625E+20	2.2861E+12
Eu-156	1.2722E+03	2.3088E-05	8.9126E+19	4.7072E+13
La-143	1.6240E-06	1.7575E-17	7.4013E+07	6.0087E+04
Nb-97	1.2571E+03	4.6759E-08	2.9030E+17	4.6514E+13
Nb-95m	1.8591E+02	4.8807E-07	3.0939E+18	6.8788E+12
Pm-147	2.4810E+03	2.6764E-03	1.0964E+22	9.1799E+13
Pm-148	3.6495E+03	2.2213E-05	9.0385E+19	1.3503E+14
Pm-149	7.1106E+03	1.7945E-05	7.2530E+19	2.6309E+14
Pm-151	2.2803E+03	3.1204E-06	1.2445E+19	8.4371E+13
Pm-148m	5.3509E+02	2.5048E-05	1.0192E+20	1.9798E+13
Pr-144	4.8096E+04	6.3649E-07	2.6618E+18	1.7796E+15
Pr-144m	8.8504E+02	4.8802E-09	2.0409E+16	3.2746E+13
Sm-153	4.4164E+03	1.0070E-05	3.9634E+19	1.6341E+14
Y-94	6.3839E-04	6.0957E-15	3.9052E+10	2.3621E+07
Y-91m	6.9079E+05	1.6619E-05	1.0998E+20	2.5559E+16
Br-82	9.4329E+04	8.7129E-05	6.3988E+20	3.4902E+15
Br-83	3.8467E+05	2.4350E-05	1.7667E+20	1.4233E+16
Br-84	1.9851E+02	2.8201E-09	2.0218E+16	7.3449E+12
Am-242	4.8062E+02	5.9458E-07	1.4796E+18	1.7783E+13
Np-238	7.3052E+03	2.8188E-05	7.1325E+19	2.7029E+14
Pu-243	1.7139E+03	6.5866E-07	1.6323E+18	6.3416E+13

Containment Sump Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.2390E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2632E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6586E+01	0.0000E+00	0.0000E+00

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	6.4646E+01	7.9450E-07	5.5634E+18	2.3919E+12
Sr-89	3.3218E+03	1.1434E-04	7.7366E+20	1.2291E+14
Sr-90	2.2725E+02	1.6660E-03	1.1147E+22	8.4082E+12
Sr-91	2.2795E+03	6.2884E-07	4.1615E+18	8.4343E+13
Sr-92	5.6238E+02	4.4742E-08	2.9287E+17	2.0808E+13
Y-90	1.8442E+01	3.3897E-08	2.2681E+17	6.8236E+11
Y-91	5.1268E+01	2.0905E-06	1.3835E+19	1.8969E+12
Y-92	9.4817E+02	9.8538E-08	6.4501E+17	3.5082E+13
Y-93	2.8535E+01	8.5529E-09	5.5384E+16	1.0558E+12
Zr-95	5.3690E+01	2.4992E-06	1.5843E+19	1.9865E+12
Zr-97	3.7388E+01	1.9558E-08	1.2142E+17	1.3834E+12
Nb-95	5.4226E+01	1.3867E-06	8.7907E+18	2.0064E+12
Mo-99	6.4992E+02	1.3551E-06	8.2429E+18	2.4047E+13
Tc-99m	6.0194E+02	1.1448E-07	6.9635E+17	2.2272E+13
Ru-103	5.6393E+02	1.7473E-05	1.0216E+20	2.0865E+13
Ru-105	1.0748E+02	1.5990E-08	9.1706E+16	3.9768E+12
Ru-106	1.6936E+02	5.0622E-05	2.8760E+20	6.2663E+12
Rh-105	3.3272E+02	3.9419E-07	2.2608E+18	1.2310E+13
Sb-127	7.5461E+02	2.8257E-06	1.3399E+19	2.7920E+13

Sb-129	6.6774E+02	1.1874E-07	5.5433E+17	2.4706E+13
Te-127	7.6996E+02	2.9175E-07	1.3834E+18	2.8488E+13
Te-127m	1.0473E+02	1.1103E-05	5.2647E+19	3.8749E+12
Te-129	9.3939E+02	4.4856E-08	2.0940E+17	3.4757E+13
Te-129m	3.5349E+02	1.1734E-05	5.4778E+19	1.3079E+13
Te-131m	9.0528E+02	1.1353E-06	5.2189E+18	3.3495E+13
Te-132	1.0035E+04	3.3054E-05	1.5080E+20	3.7130E+14
I-131	5.9775E+04	4.8215E-04	2.2165E+21	2.2117E+15
I-132	1.9848E+04	1.9229E-06	8.7726E+18	7.3438E+14
I-133	9.8134E+04	8.6629E-05	3.9225E+20	3.6310E+15
I-134	4.4500E+02	1.6681E-08	7.4968E+16	1.6465E+13
I-135	5.0874E+04	1.4486E-05	6.4621E+19	1.8823E+15
Cs-134	4.9103E+03	3.7951E-03	1.7056E+22	1.8168E+14
Cs-136	2.0303E+03	2.7702E-05	1.2267E+20	7.5123E+13
Cs-137	4.3520E+03	5.0033E-02	2.1993E+23	1.6102E+14
Ba-139	1.0090E+02	6.1684E-09	2.6725E+16	3.7332E+12
Ba-140	5.3556E+03	7.3155E-05	3.1468E+20	1.9816E+14
La-140	6.5052E+02	1.1704E-06	5.0343E+18	2.4069E+13
La-141	2.6338E+01	4.6572E-09	1.9891E+16	9.7452E+11
La-142	1.3771E+00	9.6201E-11	4.0798E+14	5.0954E+10
Ce-141	1.2949E+02	4.5447E-06	1.9410E+19	4.7912E+12
Ce-143	1.0384E+02	1.5636E-07	6.5850E+17	3.8420E+12
Ce-144	9.8391E+01	3.0848E-05	1.2901E+20	3.6405E+12
Pr-143	4.8718E+01	7.2348E-07	3.0468E+18	1.8026E+12
Nd-147	2.0073E+01	2.4813E-07	1.0165E+18	7.4271E+11
Np-239	1.3720E+03	5.9140E-06	1.4902E+19	5.0764E+13
Pu-238	1.0257E-01	5.9912E-06	1.5160E+19	3.7950E+09
Pu-239	3.2135E-02	5.1700E-04	1.3027E+21	1.1890E+09
Pu-240	3.2546E-02	1.4283E-04	3.5839E+20	1.2042E+09
Pu-241	9.8291E+00	9.5417E-05	2.3843E+20	3.6368E+11
Am-241	3.5258E-03	1.0273E-06	2.5670E+18	1.3045E+08
Cm-242	6.2386E-01	1.8823E-07	4.6841E+17	2.3083E+10
Cm-244	1.4788E-02	1.8278E-07	4.5113E+17	5.4714E+08
I-130	8.7990E+02	4.5115E-07	2.0899E+18	3.2556E+13
Cs-138	4.3994E+00	1.0397E-10	4.5371E+14	1.6278E+11
Cs-134m	2.3535E+02	2.9184E-08	1.3116E+17	8.7080E+12
Rb-88	3.9787E-03	3.3146E-14	2.2683E+11	1.4721E+08
Rb-89	1.5340E-05	1.1037E-16	7.4681E+08	5.6759E+05
Sb-124	6.8236E+00	3.9009E-07	1.8945E+18	2.5247E+11
Sb-125	9.7375E+01	9.4312E-05	4.5437E+20	3.6029E+12
Sb-126	7.3500E+00	8.7947E-08	4.2034E+17	2.7195E+11
Te-131	2.0722E+02	3.6093E-09	1.6592E+16	7.6672E+12
Te-133	2.5372E+00	2.2344E-11	1.0117E+14	9.3878E+10
Te-134	4.6782E+00	1.3936E-10	6.2629E+14	1.7309E+11
Te-125m	2.0202E+01	1.1217E-06	5.4038E+18	7.4746E+11
Te-133m	1.4636E+01	5.7352E-10	2.5968E+15	5.4152E+11
Ba-141	6.3329E-05	8.6764E-16	3.7057E+09	2.3432E+06
Ba-137m	4.8243E+03	8.9703E-09	3.9431E+16	1.7850E+14
Pd-109	6.8184E+01	3.1843E-08	1.7593E+17	2.5228E+12
Rh-106	3.4831E+02	9.7851E-11	5.5592E+14	1.2887E+13
Rh-103m	5.6682E+02	1.7425E-08	1.0188E+17	2.0972E+13
Tc-101	4.2824E-08	3.2664E-19	1.9476E+06	1.5845E+03
Eu-154	1.6872E-01	6.3959E-07	2.5011E+18	6.2426E+09
Eu-155	1.2947E-01	2.7842E-07	1.0817E+18	4.7903E+09
Eu-156	2.6658E+00	4.8378E-08	1.8675E+17	9.8634E+10
La-143	3.4028E-09	3.6826E-20	1.5509E+05	1.2591E+02
Nb-97	2.6342E+00	9.7978E-11	6.0828E+14	9.7464E+10
Nb-95m	3.8956E-01	1.0227E-09	6.4830E+15	1.4414E+10
Pm-147	5.1988E+00	5.6080E-06	2.2974E+19	1.9235E+11
Pm-148	7.6471E+00	4.6545E-08	1.8939E+17	2.8294E+11
Pm-149	1.4900E+01	3.7603E-08	1.5198E+17	5.5128E+11
Pm-151	4.7781E+00	6.5385E-09	2.6077E+16	1.7679E+11
Pm-148m	1.1212E+00	5.2486E-08	2.1357E+17	4.1485E+10
Pr-144	1.0078E+02	1.3337E-09	5.5776E+15	3.7289E+12
Pr-144m	1.8545E+00	1.0226E-11	4.2765E+13	6.8617E+10
Sm-153	9.2542E+00	2.1100E-08	8.3049E+16	3.4240E+11
Y-94	1.3377E-06	1.2773E-17	8.1830E+07	4.9494E+04
Y-91m	1.4476E+03	3.4827E-08	2.3047E+17	5.3561E+13
Br-82	2.0060E+02	1.8528E-07	1.3607E+18	7.4221E+12
Br-83	8.1803E+02	5.1781E-08	3.7571E+17	3.0267E+13

Br-84	4.2214E-01	5.9971E-12	4.2995E+13	1.5619E+10
Am-242	1.0071E+00	1.2459E-09	3.1003E+15	3.7262E+10
Np-238	1.5307E+01	5.9066E-08	1.4945E+17	5.6637E+11
Pu-243	3.5914E+00	1.3802E-09	3.4204E+15	1.3288E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.6860E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.6756E-02

Environment Integral Nuclide Release:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Xe-133	4.0475E+03	2.1623E-05	9.7909E+19	1.4976E+14
Xe-135	2.9901E+04	1.1709E-05	5.2231E+19	1.1063E+15
Kr-83m	1.6162E+03	7.8336E-08	5.6837E+17	5.9801E+13
Xe-131m	1.1282E+01	1.3469E-07	6.1919E+17	4.1744E+11
Xe-133m	2.8148E+02	6.2731E-07	2.8404E+18	1.0415E+13
Xe-135m	8.3564E+03	9.1736E-08	4.0922E+17	3.0919E+14

Environment Transport Group Inventory:

Time (h) = 8.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	4.4384E+17	6.1644E+15	1.5458E+20
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	6.4646E+01	7.9450E-07	5.5634E+18	2.3919E+12
Sr-89	3.3218E+03	1.1434E-04	7.7366E+20	1.2291E+14
Sr-90	2.2725E+02	1.6660E-03	1.1147E+22	8.4082E+12
Sr-91	2.2795E+03	6.2884E-07	4.1615E+18	8.4343E+13
Sr-92	5.6238E+02	4.4742E-08	2.9287E+17	2.0808E+13
Y-90	1.8442E+01	3.3897E-08	2.2681E+17	6.8236E+11
Y-91	5.1268E+01	2.0905E-06	1.3835E+19	1.8969E+12
Y-92	9.4817E+02	9.8538E-08	6.4501E+17	3.5082E+13
Y-93	2.8535E+01	8.5529E-09	5.5384E+16	1.0558E+12
Zr-95	5.3690E+01	2.4992E-06	1.5843E+19	1.9865E+12
Zr-97	3.7388E+01	1.9558E-08	1.2142E+17	1.3834E+12
Nb-95	5.4226E+01	1.3867E-06	8.7907E+18	2.0064E+12
Mo-99	6.4992E+02	1.3551E-06	8.2429E+18	2.4047E+13
Tc-99m	6.0194E+02	1.1448E-07	6.9635E+17	2.2272E+13
Ru-103	5.6393E+02	1.7473E-05	1.0216E+20	2.0865E+13
Ru-105	1.0748E+02	1.5990E-08	9.1706E+16	3.9768E+12
Ru-106	1.6936E+02	5.0622E-05	2.8760E+20	6.2663E+12
Rh-105	3.3272E+02	3.9419E-07	2.2608E+18	1.2310E+13
Sb-127	7.5461E+02	2.8257E-06	1.3399E+19	2.7920E+13
Sb-129	6.6774E+02	1.1874E-07	5.5433E+17	2.4706E+13
Te-127	7.6996E+02	2.9175E-07	1.3834E+18	2.8488E+13
Te-127m	1.0473E+02	1.1103E-05	5.2647E+19	3.8749E+12
Te-129	9.3939E+02	4.4856E-08	2.0940E+17	3.4757E+13
Te-129m	3.5349E+02	1.1734E-05	5.4778E+19	1.3079E+13
Te-131m	9.0528E+02	1.1353E-06	5.2189E+18	3.3495E+13
Te-132	1.0035E+04	3.3054E-05	1.5080E+20	3.7130E+14
I-131	5.9775E+04	4.8215E-04	2.2165E+21	2.2117E+15
I-132	1.9848E+04	1.9229E-06	8.7726E+18	7.3438E+14
I-133	9.8134E+04	8.6629E-05	3.9225E+20	3.6310E+15
I-134	4.4500E+02	1.6681E-08	7.4968E+16	1.6465E+13
I-135	5.0874E+04	1.4486E-05	6.4621E+19	1.8823E+15
Cs-134	4.9103E+03	3.7951E-03	1.7056E+22	1.8168E+14
Cs-136	2.0303E+03	2.7702E-05	1.2267E+20	7.5123E+13
Cs-137	4.3520E+03	5.0033E-02	2.1993E+23	1.6102E+14

Ba-139	1.0090E+02	6.1684E-09	2.6725E+16	3.7332E+12
Ba-140	5.3556E+03	7.3155E-05	3.1468E+20	1.9816E+14
La-140	6.5052E+02	1.1704E-06	5.0343E+18	2.4069E+13
La-141	2.6338E+01	4.6572E-09	1.9891E+16	9.7452E+11
La-142	1.3771E+00	9.6201E-11	4.0798E+14	5.0954E+10
Ce-141	1.2949E+02	4.5447E-06	1.9410E+19	4.7912E+12
Ce-143	1.0384E+02	1.5636E-07	6.5850E+17	3.8420E+12
Ce-144	9.8391E+01	3.0848E-05	1.2901E+20	3.6405E+12
Pr-143	4.8718E+01	7.2348E-07	3.0468E+18	1.8026E+12
Nd-147	2.0073E+01	2.4813E-07	1.0165E+18	7.4271E+11
Np-239	1.3720E+03	5.9140E-06	1.4902E+19	5.0764E+13
Pu-238	1.0257E-01	5.9912E-06	1.5160E+19	3.7950E+09
Pu-239	3.2135E-02	5.1700E-04	1.3027E+21	1.1890E+09
Pu-240	3.2546E-02	1.4283E-04	3.5839E+20	1.2042E+09
Pu-241	9.8291E+00	9.5417E-05	2.3843E+20	3.6368E+11
Am-241	3.5258E-03	1.0273E-06	2.5670E+18	1.3045E+08
Cm-242	6.2386E-01	1.8823E-07	4.6841E+17	2.3083E+10
Cm-244	1.4788E-02	1.8278E-07	4.5113E+17	5.4714E+08
I-130	8.7990E+02	4.5115E-07	2.0899E+18	3.2556E+13
Cs-138	4.3994E+00	1.0397E-10	4.5371E+14	1.6278E+11
Cs-134m	2.3535E+02	2.9184E-08	1.3116E+17	8.7080E+12
Rb-88	3.9787E-03	3.3146E-14	2.2683E+11	1.4721E+08
Rb-89	1.5340E-05	1.1037E-16	7.4681E+08	5.6759E+05
Sb-124	6.8236E+00	3.9009E-07	1.8945E+18	2.5247E+11
Sb-125	9.7375E+01	9.4312E-05	4.5437E+20	3.6029E+12
Sb-126	7.3500E+00	8.7947E-08	4.2034E+17	2.7195E+11
Te-131	2.0722E+02	3.6093E-09	1.6592E+16	7.6672E+12
Te-133	2.5372E+00	2.2344E-11	1.0117E+14	9.3878E+10
Te-134	4.6782E+00	1.3936E-10	6.2629E+14	1.7309E+11
Te-125m	2.0202E+01	1.1217E-06	5.4038E+18	7.4746E+11
Te-133m	1.4636E+01	5.7352E-10	2.5968E+15	5.4152E+11
Ba-141	6.3329E-05	8.6764E-16	3.7057E+09	2.3432E+06
Ba-137m	4.8243E+03	8.9703E-09	3.9431E+16	1.7850E+14
Pd-109	6.8184E+01	3.1843E-08	1.7593E+17	2.5228E+12
Rh-106	3.4831E+02	9.7851E-11	5.5592E+14	1.2887E+13
Rh-103m	5.6682E+02	1.7425E-08	1.0188E+17	2.0972E+13
Tc-101	4.2824E-08	3.2664E-19	1.9476E+06	1.5845E+03
Eu-154	1.6872E-01	6.3959E-07	2.5011E+18	6.2426E+09
Eu-155	1.2947E-01	2.7842E-07	1.0817E+18	4.7903E+09
Eu-156	2.6658E+00	4.8378E-08	1.8675E+17	9.8634E+10
La-143	3.4028E-09	3.6826E-20	1.5509E+05	1.2591E+02
Nb-97	2.6342E+00	9.7978E-11	6.0828E+14	9.7464E+10
Nb-95m	3.8956E-01	1.0227E-09	6.4830E+15	1.4414E+10
Pm-147	5.1988E+00	5.6080E-06	2.2974E+19	1.9235E+11
Pm-148	7.6471E+00	4.6545E-08	1.8939E+17	2.8294E+11
Pm-149	1.4900E+01	3.7603E-08	1.5198E+17	5.5128E+11
Pm-151	4.7781E+00	6.5385E-09	2.6077E+16	1.7679E+11
Pm-148m	1.1212E+00	5.2486E-08	2.1357E+17	4.1485E+10
Pr-144	1.0078E+02	1.3337E-09	5.5776E+15	3.7289E+12
Pr-144m	1.8545E+00	1.0226E-11	4.2765E+13	6.8617E+10
Sm-153	9.2542E+00	2.1100E-08	8.3049E+16	3.4240E+11
Y-94	1.3377E-06	1.2773E-17	8.1830E+07	4.9494E+04
Y-91m	1.4476E+03	3.4827E-08	2.3047E+17	5.3561E+13
Br-82	2.0060E+02	1.8528E-07	1.3607E+18	7.4221E+12
Br-83	8.1803E+02	5.1781E-08	3.7571E+17	3.0267E+13
Br-84	4.2214E-01	5.9971E-12	4.2995E+13	1.5619E+10
Am-242	1.0071E+00	1.2459E-09	3.1003E+15	3.7262E+10
Np-238	1.5307E+01	5.9066E-08	1.4945E+17	5.6637E+11
Pu-243	3.5914E+00	1.3802E-09	3.4204E+15	1.3288E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway
Time (h) = 8.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.6860E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.6756E-02

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Xe-133	1.5173E+00	8.1059E-09	3.6703E+16	5.6139E+10
Xe-135	1.0825E+01	4.2389E-09	1.8909E+16	4.0052E+11
Kr-83m	7.2216E-01	3.5002E-11	2.5396E+14	2.6720E+10
Xe-131m	4.4021E-03	5.2556E-11	2.4160E+14	1.6288E+08
Xe-133m	1.0679E-01	2.3799E-10	1.0776E+15	3.9512E+09
Xe-135m	1.6070E+01	1.7641E-10	7.8693E+14	5.9457E+11

Control Room Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.7972E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 11.1100

EAB Doses:

Time (h) = 11.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.7525E-01	0.0000E+00	1.0976E+00	4.7525E-01
Accumulated dose (rem)	1.3943E+00	0.0000E+00	2.9633E+00	1.3943E+00

LPZ Doses:

Time (h) = 11.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.7987E-02	0.0000E+00	4.1542E-02	1.7987E-02
Accumulated dose (rem)	7.4637E-02	0.0000E+00	1.5478E-01	7.4637E-02

Control Room Doses:

Time (h) = 11.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.4214E-01	0.0000E+00	1.4963E+01	2.4214E-01
Accumulated dose (rem)	1.0292E+00	0.0000E+00	6.2072E+01	1.0292E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Rb-86	3.0078E+04	3.6965E-04	2.5885E+21	1.1129E+15
Sr-89	1.5809E+06	5.4415E-02	3.6820E+23	5.8493E+16
Sr-90	1.0835E+05	7.9430E-01	5.3148E+24	4.0089E+15
Sr-91	8.6621E+05	2.3895E-04	1.5813E+21	3.2050E+16
Sr-92	1.2103E+05	9.6288E-06	6.3028E+19	4.4781E+15
Y-90	1.2069E+04	2.2183E-05	1.4844E+20	4.4656E+14
Y-91	2.5961E+04	1.0586E-03	7.0055E+21	9.6055E+14
Y-92	3.2619E+05	3.3899E-05	2.2190E+20	1.2069E+16
Y-93	1.0990E+04	3.2941E-06	2.1331E+19	4.0664E+14
Zr-95	2.5563E+04	1.1899E-03	7.5430E+21	9.4582E+14
Zr-97	1.5691E+04	8.2081E-06	5.0959E+19	5.8057E+14
Nb-95	2.5853E+04	6.6116E-04	4.1912E+21	9.5658E+14
Mo-99	2.9991E+05	6.2532E-04	3.8038E+21	1.1097E+16
Tc-99m	2.8101E+05	5.3442E-05	3.2508E+20	1.0397E+16
Ru-103	2.6826E+05	8.3119E-03	4.8598E+22	9.9256E+15
Ru-105	3.1535E+04	4.6914E-06	2.6907E+19	1.1668E+15
Ru-106	8.0728E+04	2.4130E-02	1.3709E+23	2.9869E+15
Rh-105	1.5165E+05	1.7966E-04	1.0304E+21	5.6109E+15
Sb-127	3.5149E+05	1.3162E-03	6.2411E+21	1.3005E+16
Sb-129	1.9329E+05	3.4373E-05	1.6046E+20	7.1518E+15

Te-127	3.6191E+05	1.3713E-04	6.5027E+20	1.3391E+16
Te-127m	4.9942E+04	5.2946E-03	2.5106E+22	1.8479E+15
Te-129	3.1586E+05	1.5082E-05	7.0409E+19	1.1687E+16
Te-129m	1.6824E+05	5.5847E-03	2.6071E+22	6.2249E+15
Te-131m	4.0169E+05	5.0375E-04	2.3158E+21	1.4863E+16
Te-132	4.6544E+06	1.5331E-02	6.9944E+22	1.7221E+17
I-131	2.7776E+07	2.2404E-01	1.0299E+24	1.0277E+18
I-132	6.5660E+06	6.3611E-04	2.9021E+21	2.4294E+17
I-133	4.1574E+07	3.6700E-02	1.6617E+23	1.5382E+18
I-134	1.8400E+04	6.8975E-07	3.0998E+18	6.8081E+14
I-135	1.7249E+07	4.9117E-03	2.1910E+22	6.3822E+17
Xe-133	2.5864E+06	1.3818E-02	6.2566E+22	9.5698E+16
Xe-135	1.5342E+07	6.0078E-03	2.6800E+22	5.6766E+17
Cs-134	2.2953E+06	1.7741E+00	7.9729E+24	8.4927E+16
Cs-136	9.4272E+05	1.2863E-02	5.6957E+22	3.4881E+16
Cs-137	2.0346E+06	2.3391E+01	1.0282E+26	7.5279E+16
Ba-139	1.0069E+04	6.1556E-07	2.6669E+18	3.7254E+14
Ba-140	2.5355E+06	3.4634E-02	1.4898E+23	9.3813E+16
La-140	4.2586E+05	7.6617E-04	3.2957E+21	1.5757E+16
La-141	7.1252E+03	1.2599E-06	5.3811E+18	2.6363E+14
La-142	1.6219E+02	1.1330E-08	4.8050E+16	6.0011E+12
Ce-141	6.1594E+04	2.1617E-03	9.2326E+21	2.2790E+15
Ce-143	4.6379E+04	6.9839E-05	2.9411E+20	1.7160E+15
Ce-144	4.6896E+04	1.4703E-02	6.1490E+22	1.7352E+15
Pr-143	2.3390E+04	3.4734E-04	1.4628E+21	8.6542E+14
Nd-147	9.4926E+03	1.1734E-04	4.8071E+20	3.5123E+14
Np-239	6.2966E+05	2.7142E-03	6.8389E+21	2.3298E+16
Pu-238	4.8923E+01	2.8577E-03	7.2309E+21	1.8102E+12
Pu-239	1.5328E+01	2.4660E-01	6.2137E+23	5.6714E+11
Pu-240	1.5517E+01	6.8099E-02	1.7088E+23	5.7415E+11
Pu-241	4.6863E+03	4.5492E-02	1.1368E+23	1.7339E+14
Am-241	1.6837E+00	4.9056E-04	1.2258E+21	6.2296E+10
Cm-242	2.9748E+02	8.9758E-05	2.2336E+20	1.1007E+13
Cm-244	7.0504E+00	8.7147E-05	2.1509E+20	2.6086E+11
I-130	3.4721E+05	1.7803E-04	8.2469E+20	1.2847E+16
Kr-83m	3.9431E+05	1.9112E-05	1.3867E+20	1.4590E+16
Xe-131m	7.5715E+03	9.0394E-05	4.1555E+20	2.8015E+14
Xe-133m	1.7750E+05	3.9559E-04	1.7912E+21	6.5677E+15
Xe-135m	2.8378E+06	3.1153E-05	1.3897E+20	1.0500E+17
Cs-138	3.7267E+01	8.8072E-10	3.8434E+15	1.3789E+12
Cs-134m	5.2321E+04	6.4880E-06	2.9158E+19	1.9359E+15
Rb-88	1.3742E-03	1.1448E-14	7.8342E+10	5.0845E+07
Rb-89	1.4457E-06	1.0402E-17	7.0382E+07	5.3492E+04
Sb-124	3.2485E+03	1.8571E-04	9.0193E+20	1.2020E+14
Sb-125	4.6423E+04	4.4963E-02	2.1662E+23	1.7176E+15
Sb-126	3.4791E+03	4.1629E-05	1.9896E+20	1.2873E+14
Te-131	9.1933E+04	1.6012E-06	7.3610E+18	3.4015E+15
Te-133	1.1710E+02	1.0312E-09	4.6694E+15	4.3327E+12
Te-134	1.0106E+02	3.0104E-09	1.3529E+16	3.7391E+12
Te-125m	9.6332E+03	5.3487E-04	2.5769E+21	3.5643E+14
Te-133m	6.7576E+02	2.6481E-08	1.1990E+17	2.5003E+13
Ba-141	2.5431E-05	3.4842E-16	1.4881E+09	9.4095E+05
Ba-137m	2.2299E+06	4.1463E-06	1.8226E+19	8.2505E+16
Pd-109	2.7687E+04	1.2930E-05	7.1439E+19	1.0244E+15
Rh-106	1.3944E+05	3.9173E-08	2.2255E+17	5.1592E+15
Rh-103m	2.6969E+05	8.2909E-06	4.8475E+19	9.9787E+15
Tc-101	2.2606E-09	1.7243E-20	1.0281E+05	8.3641E+01
Eu-154	8.0441E+01	3.0494E-04	1.1924E+21	2.9763E+12
Eu-155	6.1725E+01	1.3274E-04	5.1573E+20	2.2838E+12
Eu-156	1.2635E+03	2.2930E-05	8.8517E+19	4.6750E+13
Nb-97	9.3919E+02	3.4933E-08	2.1688E+17	3.4750E+13
Nb-95m	1.8557E+02	4.8717E-07	3.0882E+18	6.8662E+12
Pm-147	2.4793E+03	2.6745E-03	1.0957E+22	9.1736E+13
Pm-148	3.5859E+03	2.1826E-05	8.8811E+19	1.3268E+14
Pm-149	6.8211E+03	1.7215E-05	6.9577E+19	2.5238E+14
Pm-151	2.1116E+03	2.8896E-06	1.1524E+19	7.8130E+13
Pm-148m	5.3342E+02	2.4970E-05	1.0160E+20	1.9736E+13
Pr-144	4.8022E+04	6.3551E-07	2.6577E+18	1.7768E+15
Pr-144m	8.8252E+02	4.8663E-09	2.0351E+16	3.2653E+13
Sm-153	4.2132E+03	9.6061E-06	3.7810E+19	1.5589E+14

Y-94	7.3067E-07	6.9768E-18	4.4697E+07	2.7035E+04
Y-91m	5.5280E+05	1.3299E-05	8.8012E+19	2.0454E+16
Br-82	8.8656E+04	8.1889E-05	6.0140E+20	3.2803E+15
Br-83	1.5594E+05	9.8711E-06	7.1621E+19	5.7698E+15
Br-84	3.3958E+00	4.8243E-11	3.4586E+14	1.2565E+11
Am-242	4.1971E+02	5.1922E-07	1.2921E+18	1.5529E+13
Np-238	6.9951E+03	2.6992E-05	6.8297E+19	2.5882E+14
Pu-243	1.1084E+03	4.2594E-07	1.0556E+18	4.1009E+13

Containment Sump Transport Group Inventory:

Time (h) = 11.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.1850E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2224E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6560E+01	0.0000E+00	0.0000E+00

Time (h) = 11.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Rb-86	9.3017E+01	1.1432E-06	8.0051E+18	3.4416E+12
Sr-89	4.8234E+03	1.6602E-04	1.1234E+21	1.7846E+14
Sr-90	3.3057E+02	2.4234E-03	1.6215E+22	1.2231E+13
Sr-91	2.6428E+03	7.2904E-07	4.8246E+18	9.7782E+13
Sr-92	3.6926E+02	2.9377E-08	1.9230E+17	1.3662E+13
Y-90	3.6868E+01	6.7764E-08	4.5343E+17	1.3641E+12
Y-91	7.9243E+01	3.2313E-06	2.1384E+19	2.9320E+12
Y-92	9.9704E+02	1.0362E-07	6.7826E+17	3.6891E+13
Y-93	3.3531E+01	1.0050E-08	6.5080E+16	1.2406E+12
Zr-95	7.7991E+01	3.6304E-06	2.3013E+19	2.8857E+12
Zr-97	4.7873E+01	2.5043E-08	1.5547E+17	1.7713E+12
Nb-95	7.8878E+01	2.0172E-06	1.2787E+19	2.9185E+12
Mo-99	9.1503E+02	1.9078E-06	1.1605E+19	3.3856E+13
Tc-99m	8.5735E+02	1.6305E-07	9.9182E+17	3.1722E+13
Ru-103	8.1845E+02	2.5360E-05	1.4827E+20	3.0283E+13
Ru-105	9.6214E+01	1.4313E-08	8.2092E+16	3.5599E+12
Ru-106	2.4630E+02	7.3619E-05	4.1825E+20	9.1131E+12
Rh-105	4.6267E+02	5.4815E-07	3.1439E+18	1.7119E+13
Sb-127	1.0724E+03	4.0156E-06	1.9041E+19	3.9678E+13
Sb-129	5.8973E+02	1.0487E-07	4.8957E+17	2.1820E+13
Te-127	1.1042E+03	4.1839E-07	1.9839E+18	4.0855E+13
Te-127m	1.5237E+02	1.6154E-05	7.6599E+19	5.6378E+12
Te-129	9.6368E+02	4.6016E-08	2.1482E+17	3.5656E+13
Te-129m	5.1329E+02	1.7039E-05	7.9542E+19	1.8992E+13
Te-131m	1.2256E+03	1.5369E-06	7.0654E+18	4.5346E+13
Te-132	1.4201E+04	4.6775E-05	2.1340E+20	5.2542E+14
I-131	8.5607E+04	6.9052E-04	3.1744E+21	3.1675E+15
I-132	2.0062E+04	1.9436E-06	8.8671E+18	7.4229E+14
I-133	1.2812E+05	1.1310E-04	5.1210E+20	4.7403E+15
I-134	5.6338E+01	2.1119E-09	9.4911E+15	2.0845E+12
I-135	5.3165E+04	1.5139E-05	6.7532E+19	1.9671E+15
Cs-134	7.0985E+03	5.4864E-03	2.4657E+22	2.6264E+14
Cs-136	2.9154E+03	3.9779E-05	1.7614E+20	1.0787E+14
Cs-137	6.2920E+03	7.2337E-02	3.1798E+23	2.3281E+14
Ba-139	3.0719E+01	1.8780E-09	8.1366E+15	1.1366E+12
Ba-140	7.7357E+03	1.0567E-04	4.5453E+20	2.8622E+14
La-140	1.3009E+03	2.3405E-06	1.0068E+19	4.8133E+13
La-141	2.2013E+01	3.8924E-09	1.6624E+16	8.1447E+11
La-142	4.9484E-01	3.4568E-11	1.4660E+14	1.8309E+10
Ce-141	1.8793E+02	6.5954E-06	2.8169E+19	6.9533E+12
Ce-143	1.4150E+02	2.1307E-07	8.9731E+17	5.2354E+12
Ce-144	1.4308E+02	4.4860E-05	1.8760E+20	5.2939E+12

Pr-143	7.1364E+01	1.0598E-06	4.4630E+18	2.6405E+12
Nd-147	2.8962E+01	3.5800E-07	1.4666E+18	1.0716E+12
Np-239	1.9211E+03	8.2808E-06	2.0865E+19	7.1080E+13
Pu-238	1.4926E-01	8.7188E-06	2.2061E+19	5.5227E+09
Pu-239	4.6765E-02	7.5238E-04	1.8958E+21	1.7303E+09
Pu-240	4.7343E-02	2.0777E-04	5.2134E+20	1.7517E+09
Pu-241	1.4298E+01	1.3880E-04	3.4682E+20	5.2902E+11
Am-241	5.1369E-03	1.4967E-06	3.7400E+18	1.9007E+08
Cm-242	9.0762E-01	2.7385E-07	6.8147E+17	3.3582E+10
Cm-244	2.1511E-02	2.6588E-07	6.5622E+17	7.9589E+08
I-130	1.0702E+03	5.4871E-07	2.5418E+18	3.9596E+13
Cs-138	1.1477E-01	2.7124E-12	1.1836E+13	4.2466E+09
Cs-134m	1.6181E+02	2.0065E-08	9.0173E+16	5.9869E+12
Rb-88	4.0901E-06	3.4074E-17	2.3318E+08	1.5134E+05
Rb-89	4.4710E-09	3.2168E-20	2.1766E+05	1.6543E+02
Sb-124	9.9111E+00	5.6661E-07	2.7518E+18	3.6671E+11
Sb-125	1.4163E+02	1.3718E-04	6.6089E+20	5.2405E+12
Sb-126	1.0615E+01	1.2701E-07	6.0703E+17	3.9274E+11
Te-131	2.8048E+02	4.8854E-09	2.2458E+16	1.0378E+13
Te-133	3.5727E-01	3.1463E-12	1.4246E+13	1.3219E+10
Te-134	3.0832E-01	9.1846E-12	4.1277E+13	1.1408E+10
Te-125m	2.9391E+01	1.6319E-06	7.8619E+18	1.0875E+12
Te-133m	2.0617E+00	8.0792E-11	3.6582E+14	7.6284E+10
Ba-141	7.7590E-08	1.0630E-18	4.5402E+06	2.8708E+03
Ba-137m	6.8960E+03	1.2823E-08	5.6365E+16	2.5515E+14
Pd-109	8.4473E+01	3.9450E-08	2.1796E+17	3.1255E+12
Rh-106	4.2542E+02	1.1952E-10	6.7900E+14	1.5741E+13
Rh-103m	8.2283E+02	2.5295E-08	1.4790E+17	3.0445E+13
Eu-154	2.4542E-01	9.3035E-07	3.6381E+18	9.0806E+09
Eu-155	1.8832E-01	4.0499E-07	1.5735E+18	6.9679E+09
Eu-156	3.8549E+00	6.9958E-08	2.7006E+17	1.4263E+11
Nb-97	2.8655E+00	1.0658E-10	6.6169E+14	1.0602E+11
Nb-95m	5.6618E-01	1.4864E-09	9.4221E+15	2.0949E+10
Pm-147	7.5644E+00	8.1599E-06	3.3429E+19	2.7988E+11
Pm-148	1.0941E+01	6.6591E-08	2.7096E+17	4.0480E+11
Pm-149	2.0811E+01	5.2522E-08	2.1228E+17	7.7001E+11
Pm-151	6.4425E+00	8.8161E-09	3.5160E+16	2.3837E+11
Pm-148m	1.6274E+00	7.6183E-08	3.0999E+17	6.0215E+10
Pr-144	1.4651E+02	1.9389E-09	8.1087E+15	5.4210E+12
Pr-144m	2.6926E+00	1.4847E-11	6.2090E+13	9.9624E+10
Sm-153	1.2854E+01	2.9308E-08	1.1536E+17	4.7561E+11
Y-94	2.2293E-09	2.1286E-20	1.3637E+05	8.2482E+01
Y-91m	1.6866E+03	4.0576E-08	2.6852E+17	6.2404E+13
Br-82	2.7325E+02	2.5240E-07	1.8536E+18	1.0110E+13
Br-83	4.8064E+02	3.0424E-08	2.2075E+17	1.7784E+13
Br-84	1.0467E-02	1.4869E-13	1.0660E+12	3.8726E+08
Am-242	1.2805E+00	1.5841E-09	3.9421E+15	4.7379E+10
Np-238	2.1342E+01	8.2351E-08	2.0837E+17	7.8965E+11
Pu-243	3.3816E+00	1.2995E-09	3.2205E+15	1.2512E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway
Time (h) = 11.1100	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.7675E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	8.2080E-02

Environment Integral Nuclide Release:

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Xe-133	7.9883E+03	4.2677E-05	1.9324E+20	2.9557E+14
Xe-135	4.7394E+04	1.8559E-05	8.2787E+19	1.7536E+15
Kr-83m	1.2167E+03	5.8971E-08	4.2787E+17	4.5018E+13
Xe-131m	2.3381E+01	2.7914E-07	1.2832E+18	8.6510E+11
Xe-133m	5.4818E+02	1.2217E-06	5.5317E+18	2.0283E+13
Xe-135m	8.7402E+03	9.5949E-08	4.2801E+17	3.2339E+14

Environment Transport Group Inventory:

Time (h) = 11.1100	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	2.8157E+17	3.9106E+15	2.8369E+20
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Rb-86	9.3017E+01	1.1432E-06	8.0051E+18	3.4416E+12
Sr-89	4.8234E+03	1.6602E-04	1.1234E+21	1.7846E+14
Sr-90	3.3057E+02	2.4234E-03	1.6215E+22	1.2231E+13
Sr-91	2.6428E+03	7.2904E-07	4.8246E+18	9.7782E+13
Sr-92	3.6926E+02	2.9377E-08	1.9230E+17	1.3662E+13
Y-90	3.6868E+01	6.7764E-08	4.5343E+17	1.3641E+12
Y-91	7.9243E+01	3.2313E-06	2.1384E+19	2.9320E+12
Y-92	9.9704E+02	1.0362E-07	6.7826E+17	3.6891E+13
Y-93	3.3531E+01	1.0050E-08	6.5080E+16	1.2406E+12
Zr-95	7.7991E+01	3.6304E-06	2.3013E+19	2.8857E+12
Zr-97	4.7873E+01	2.5043E-08	1.5547E+17	1.7713E+12
Nb-95	7.8878E+01	2.0172E-06	1.2787E+19	2.9185E+12
Mo-99	9.1503E+02	1.9078E-06	1.1605E+19	3.3856E+13
Tc-99m	8.5735E+02	1.6305E-07	9.9182E+17	3.1722E+13
Ru-103	8.1845E+02	2.5360E-05	1.4827E+20	3.0283E+13
Ru-105	9.6214E+01	1.4313E-08	8.2092E+16	3.5599E+12
Ru-106	2.4630E+02	7.3619E-05	4.1825E+20	9.1131E+12
Rh-105	4.6267E+02	5.4815E-07	3.1439E+18	1.7119E+13
Sb-127	1.0724E+03	4.0156E-06	1.9041E+19	3.9678E+13
Sb-129	5.8973E+02	1.0487E-07	4.8957E+17	2.1820E+13
Te-127	1.1042E+03	4.1839E-07	1.9839E+18	4.0855E+13
Te-127m	1.5237E+02	1.6154E-05	7.6599E+19	5.6378E+12
Te-129	9.6368E+02	4.6016E-08	2.1482E+17	3.5656E+13
Te-129m	5.1329E+02	1.7039E-05	7.9542E+19	1.8992E+13
Te-131m	1.2256E+03	1.5369E-06	7.0654E+18	4.5346E+13
Te-132	1.4201E+04	4.6775E-05	2.1340E+20	5.2542E+14
I-131	8.5607E+04	6.9052E-04	3.1744E+21	3.1675E+15
I-132	2.0062E+04	1.9436E-06	8.8671E+18	7.4229E+14
I-133	1.2812E+05	1.1310E-04	5.1210E+20	4.7403E+15
I-134	5.6338E+01	2.1119E-09	9.4911E+15	2.0845E+12
I-135	5.3165E+04	1.5139E-05	6.7532E+19	1.9671E+15
Cs-134	7.0985E+03	5.4864E-03	2.4657E+22	2.6264E+14
Cs-136	2.9154E+03	3.9779E-05	1.7614E+20	1.0787E+14
Cs-137	6.2920E+03	7.2337E-02	3.1798E+23	2.3281E+14
Ba-139	3.0719E+01	1.8780E-09	8.1366E+15	1.1366E+12
Ba-140	7.7357E+03	1.0567E-04	4.5453E+20	2.8622E+14
La-140	1.3009E+03	2.3405E-06	1.0068E+19	4.8133E+13
La-141	2.2013E+01	3.8924E-09	1.6624E+16	8.1447E+11
La-142	4.9484E-01	3.4568E-11	1.4660E+14	1.8309E+10
Ce-141	1.8793E+02	6.5954E-06	2.8169E+19	6.9533E+12
Ce-143	1.4150E+02	2.1307E-07	8.9731E+17	5.2354E+12
Ce-144	1.4308E+02	4.4860E-05	1.8760E+20	5.2939E+12
Pr-143	7.1364E+01	1.0598E-06	4.4630E+18	2.6405E+12
Nd-147	2.8962E+01	3.5800E-07	1.4666E+18	1.0716E+12
Np-239	1.9211E+03	8.2808E-06	2.0865E+19	7.1080E+13
Pu-238	1.4926E-01	8.7188E-06	2.2061E+19	5.5227E+09
Pu-239	4.6765E-02	7.5238E-04	1.8958E+21	1.7303E+09
Pu-240	4.7343E-02	2.0777E-04	5.2134E+20	1.7517E+09
Pu-241	1.4298E+01	1.3880E-04	3.4682E+20	5.2902E+11
Am-241	5.1369E-03	1.4967E-06	3.7400E+18	1.9007E+08
Cm-242	9.0762E-01	2.7385E-07	6.8147E+17	3.3582E+10
Cm-244	2.1511E-02	2.6588E-07	6.5622E+17	7.9589E+08
I-130	1.0702E+03	5.4871E-07	2.5418E+18	3.9596E+13
Cs-138	1.1477E-01	2.7124E-12	1.1836E+13	4.2466E+09
Cs-134m	1.6181E+02	2.0065E-08	9.0173E+16	5.9869E+12
Rb-88	4.0901E-06	3.4074E-17	2.3318E+08	1.5134E+05
Rb-89	4.4710E-09	3.2168E-20	2.1766E+05	1.6543E+02
Sb-124	9.9111E+00	5.6661E-07	2.7518E+18	3.6671E+11
Sb-125	1.4163E+02	1.3718E-04	6.6089E+20	5.2405E+12

Sb-126	1.0615E+01	1.2701E-07	6.0703E+17	3.9274E+11
Te-131	2.8048E+02	4.8854E-09	2.2458E+16	1.0378E+13
Te-133	3.5727E-01	3.1463E-12	1.4246E+13	1.3219E+10
Te-134	3.0832E-01	9.1846E-12	4.1277E+13	1.1408E+10
Te-125m	2.9391E+01	1.6319E-06	7.8619E+18	1.0875E+12
Te-133m	2.0617E+00	8.0792E-11	3.6582E+14	7.6284E+10
Ba-141	7.7590E-08	1.0630E-18	4.5402E+06	2.8708E+03
Ba-137m	6.8960E+03	1.2823E-08	5.6365E+16	2.5515E+14
Pd-109	8.4473E+01	3.9450E-08	2.1796E+17	3.1255E+12
Rh-106	4.2542E+02	1.1952E-10	6.7900E+14	1.5741E+13
Rh-103m	8.2283E+02	2.5295E-08	1.4790E+17	3.0445E+13
Eu-154	2.4542E-01	9.3035E-07	3.6381E+18	9.0806E+09
Eu-155	1.8832E-01	4.0499E-07	1.5735E+18	6.9679E+09
Eu-156	3.8549E+00	6.9958E-08	2.7006E+17	1.4263E+11
Nb-97	2.8655E+00	1.0658E-10	6.6169E+14	1.0602E+11
Nb-95m	5.6618E-01	1.4864E-09	9.4221E+15	2.0949E+10
Pm-147	7.5644E+00	8.1599E-06	3.3429E+19	2.7988E+11
Pm-148	1.0941E+01	6.6591E-08	2.7096E+17	4.0480E+11
Pm-149	2.0811E+01	5.2522E-08	2.1228E+17	7.7001E+11
Pm-151	6.4425E+00	8.8161E-09	3.5160E+16	2.3837E+11
Pm-148m	1.6274E+00	7.6183E-08	3.0999E+17	6.0215E+10
Pr-144	1.4651E+02	1.9389E-09	8.1087E+15	5.4210E+12
Pr-144m	2.6926E+00	1.4847E-11	6.2090E+13	9.9624E+10
Sm-153	1.2854E+01	2.9308E-08	1.1536E+17	4.7561E+11
Y-94	2.2293E-09	2.1286E-20	1.3637E+05	8.2482E+01
Y-91m	1.6866E+03	4.0576E-08	2.6852E+17	6.2404E+13
Br-82	2.7325E+02	2.5240E-07	1.8536E+18	1.0110E+13
Br-83	4.8064E+02	3.0424E-08	2.2075E+17	1.7784E+13
Br-84	1.0467E-02	1.4869E-13	1.0660E+12	3.8726E+08
Am-242	1.2805E+00	1.5841E-09	3.9421E+15	4.7379E+10
Np-238	2.1342E+01	8.2351E-08	2.0837E+17	7.8965E+11
Pu-243	3.3816E+00	1.2995E-09	3.2205E+15	1.2512E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.7675E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	8.2080E-02

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 11.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 11.1100	Ci	kg	Atoms	Bq
Xe-133	7.8658E-01	4.2022E-09	1.9027E+16	2.9103E+10
Xe-135	4.5032E+00	1.7634E-09	7.8662E+15	1.6662E+11
Kr-83m	1.5644E-01	7.5821E-12	5.5013E+13	5.7881E+09
Xe-131m	2.4463E-03	2.9206E-11	1.3426E+14	9.0514E+07
Xe-133m	5.4959E-02	1.2248E-10	5.5459E+14	2.0335E+09
Xe-135m	6.3350E+00	6.9545E-11	3.1023E+14	2.3439E+11

Control Room Transport Group Inventory:

Time (h) = 11.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	2.7948E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 11.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 11.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 22.2200

EAB Doses:

Time (h) = 22.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.4273E+00	0.0000E+00	3.4977E+00	1.4273E+00
Accumulated dose (rem)	2.8216E+00	0.0000E+00	6.4610E+00	2.8216E+00

LPZ Doses:

Time (h) = 22.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	5.4020E-02	0.0000E+00	1.3238E-01	5.4020E-02
Accumulated dose (rem)	1.2866E-01	0.0000E+00	2.8716E-01	1.2866E-01

Control Room Doses:

Time (h) = 22.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.7562E-01	0.0000E+00	4.1944E+01	6.7562E-01
Accumulated dose (rem)	1.7048E+00	0.0000E+00	1.0402E+02	1.7048E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Rb-86	2.9464E+04	3.6211E-04	2.5357E+21	1.0902E+15
Sr-89	1.5655E+06	5.3887E-02	3.6462E+23	5.7925E+16
Sr-90	1.0798E+05	7.9157E-01	5.2966E+24	3.9951E+15
Sr-91	3.8379E+05	1.0587E-04	7.0064E+20	1.4200E+16
Sr-92	7.0355E+03	5.5974E-07	3.6639E+18	2.6032E+14
Y-90	2.2907E+04	4.2104E-05	2.8173E+20	8.4756E+14
Y-91	2.9145E+04	1.1884E-03	7.8646E+21	1.0783E+15
Y-92	5.8713E+04	6.1017E-06	3.9941E+19	2.1724E+15
Y-93	5.1097E+03	1.5315E-06	9.9174E+18	1.8906E+14
Zr-95	2.5348E+04	1.1799E-03	7.4797E+21	9.3789E+14
Zr-97	9.9147E+03	5.1864E-06	3.2199E+19	3.6684E+14
Nb-95	2.5762E+04	6.5883E-04	4.1764E+21	9.5321E+14
Mo-99	2.6598E+05	5.5456E-04	3.3734E+21	9.8411E+15
Tc-99m	2.5434E+05	4.8370E-05	2.9423E+20	9.4106E+15
Ru-103	2.6517E+05	8.2163E-03	4.8039E+22	9.8114E+15
Ru-105	5.5471E+03	8.2522E-07	4.7329E+18	2.0524E+14
Ru-106	8.0384E+04	2.4027E-02	1.3650E+23	2.9742E+15
Rh-105	1.2439E+05	1.4737E-04	8.4522E+20	4.6024E+15
Sb-127	3.2228E+05	1.2068E-03	5.7225E+21	1.1924E+16
Sb-129	3.2401E+04	5.7618E-06	2.6898E+19	1.1988E+15
Te-127	3.4021E+05	1.2891E-04	6.1128E+20	1.2588E+16
Te-127m	4.9800E+04	5.2796E-03	2.5035E+22	1.8426E+15
Te-129	1.4340E+05	6.8475E-06	3.1966E+19	5.3058E+15
Te-129m	1.6627E+05	5.5191E-03	2.5765E+22	6.1518E+15
Te-131m	3.0970E+05	3.8838E-04	1.7854E+21	1.1459E+16
Te-132	4.2036E+06	1.3846E-02	6.3169E+22	1.5553E+17
I-131	2.6612E+07	2.1466E-01	9.8679E+23	9.8465E+17
I-132	4.4056E+06	4.2681E-04	1.9472E+21	1.6301E+17
I-133	2.8612E+07	2.5258E-02	1.1437E+23	1.0587E+18
I-134	2.8619E+00	1.0728E-10	4.8214E+14	1.0589E+11
I-135	5.3620E+06	1.5268E-03	6.8109E+21	1.9839E+17
Xe-133	4.4305E+06	2.3670E-02	1.0717E+23	1.6393E+17
Xe-135	1.1939E+07	4.6752E-03	2.0855E+22	4.4175E+17
Cs-134	2.2866E+06	1.7673E+00	7.9424E+24	8.4603E+16
Cs-136	9.1678E+05	1.2509E-02	5.5389E+22	3.3921E+16
Cs-137	2.0276E+06	2.3311E+01	1.0247E+26	7.5021E+16
Ba-139	3.7588E+01	2.2980E-09	9.9560E+15	1.3908E+12
Ba-140	2.4640E+06	3.3658E-02	1.4478E+23	9.1169E+16
La-140	7.8476E+05	1.4119E-03	6.0732E+21	2.9036E+16
La-141	1.0007E+03	1.7695E-07	7.5576E+17	3.7027E+13
La-142	1.0944E+00	7.6452E-11	3.2423E+14	4.0493E+10
Ce-141	6.0812E+04	2.1342E-03	9.1154E+21	2.2500E+15
Ce-143	3.6601E+04	5.5115E-05	2.3210E+20	1.3542E+15
Ce-144	4.6684E+04	1.4637E-02	6.1212E+22	1.7273E+15
Pr-143	2.3729E+04	3.5238E-04	1.4840E+21	8.7796E+14
Nd-147	9.1879E+03	1.1357E-04	4.6527E+20	3.3995E+14
Np-239	5.4759E+05	2.3604E-03	5.9475E+21	2.0261E+16

Pu-238	4.8824E+01	2.8519E-03	7.2163E+21	1.8065E+12
Pu-239	1.5297E+01	2.4611E-01	6.2013E+23	5.6600E+11
Pu-240	1.5465E+01	6.7867E-02	1.7029E+23	5.7220E+11
Pu-241	4.6701E+03	4.5335E-02	1.1328E+23	1.7279E+14
Am-241	1.6875E+00	4.9166E-04	1.2286E+21	6.2436E+10
Cm-242	2.9643E+02	8.9440E-05	2.2257E+20	1.0968E+13
Cm-244	7.0261E+00	8.6846E-05	2.1434E+20	2.5997E+11
I-130	1.8558E+05	9.5152E-05	4.4079E+20	6.8664E+15
Kr-83m	2.2487E+04	1.0899E-06	7.9081E+18	8.3203E+14
Xe-131m	1.5360E+04	1.8338E-04	8.4300E+20	5.6832E+14
Xe-133m	2.8915E+05	6.4441E-04	2.9178E+21	1.0698E+16
Xe-135m	8.8243E+05	9.6872E-06	4.3213E+19	3.2650E+16
Cs-138	2.1775E-05	5.1461E-16	2.2457E+09	8.0569E+05
Cs-134m	3.6639E+03	4.5433E-07	2.0418E+18	1.3556E+14
Sb-124	3.2203E+03	1.8410E-04	8.9408E+20	1.1915E+14
Sb-125	4.6250E+04	4.4796E-02	2.1581E+23	1.7113E+15
Sb-126	3.3787E+03	4.0428E-05	1.9322E+20	1.2501E+14
Te-131	7.0887E+04	1.2347E-06	5.6759E+18	2.6228E+15
Te-133	2.7869E-02	2.4543E-13	1.1113E+12	1.0312E+09
Te-134	1.5939E-03	4.7479E-14	2.1338E+11	5.8972E+07
Te-125m	9.6057E+03	5.3334E-04	2.5695E+21	3.5541E+14
Te-133m	1.6076E-01	6.2996E-12	2.8524E+13	5.9480E+09
Ba-137m	2.2476E+06	4.1793E-06	1.8371E+19	8.3163E+16
Pd-109	1.5549E+04	7.2619E-06	4.0121E+19	5.7533E+14
Rh-106	1.6532E+05	4.6443E-08	2.6386E+17	6.1168E+15
Rh-103m	2.6661E+05	8.1960E-06	4.7920E+19	9.8644E+15
Eu-154	8.0159E+01	3.0387E-04	1.1883E+21	2.9659E+12
Eu-155	6.1504E+01	1.3227E-04	5.1389E+20	2.2757E+12
Eu-156	1.2329E+03	2.2374E-05	8.6372E+19	4.5617E+13
Nb-97	5.6904E+02	2.1165E-08	1.3140E+17	2.1054E+13
Nb-95m	1.8434E+02	4.8394E-07	3.0678E+18	6.8207E+12
Pm-147	2.4732E+03	2.6679E-03	1.0930E+22	9.1509E+13
Pm-148	3.3679E+03	2.0499E-05	8.3411E+19	1.2461E+14
Pm-149	5.8799E+03	1.4839E-05	5.9976E+19	2.1756E+14
Pm-151	1.6046E+03	2.1958E-06	8.7573E+18	5.9371E+13
Pm-148m	5.2749E+02	2.4692E-05	1.0047E+20	1.9517E+13
Pr-144	4.7818E+04	6.3281E-07	2.6464E+18	1.7693E+15
Pr-144m	8.7992E+02	4.8519E-09	2.0291E+16	3.2557E+13
Sm-153	3.5605E+03	8.1181E-06	3.1953E+19	1.3174E+14
Y-91m	2.4507E+05	5.8958E-06	3.9017E+19	9.0674E+15
Br-82	7.1037E+04	6.5615E-05	4.8188E+20	2.6284E+15
Br-83	6.1963E+03	3.9223E-07	2.8458E+18	2.2926E+14
Br-84	1.6565E-06	2.3533E-17	1.6872E+08	6.1292E+04
Am-242	2.5864E+02	3.1997E-07	7.9624E+17	9.5699E+12
Np-238	5.9909E+03	2.3117E-05	5.8493E+19	2.2166E+14
Pu-243	2.3355E+02	8.9751E-08	2.2242E+17	8.6412E+12

Containment Sump Transport Group Inventory:

Time (h) = 22.2200	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3184E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1108E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6465E+01	0.0000E+00	0.0000E+00

Time (h) = 22.2200	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Rb-86	1.9193E+02	2.3588E-06	1.6517E+19	7.1013E+12
Sr-89	1.0132E+04	3.4877E-04	2.3599E+21	3.7490E+14
Sr-90	6.9883E+02	5.1231E-03	3.4280E+22	2.5857E+13
Sr-91	2.4839E+03	6.8522E-07	4.5346E+18	9.1906E+13

Sr-92	4.5535E+01	3.6227E-09	2.3713E+16	1.6848E+12
Y-90	1.4830E+02	2.7257E-07	1.8239E+18	5.4870E+12
Y-91	1.8866E+02	7.6931E-06	5.0911E+19	6.9806E+12
Y-92	3.8020E+02	3.9513E-08	2.5864E+17	1.4068E+13
Y-93	3.3071E+01	9.9123E-09	6.4186E+16	1.2236E+12
Zr-95	1.6406E+02	7.6367E-06	4.8409E+19	6.0701E+12
Zr-97	6.4169E+01	3.3567E-08	2.0840E+17	2.3742E+12
Nb-95	1.6674E+02	4.2640E-06	2.7030E+19	6.1693E+12
Mo-99	1.7214E+03	3.5892E-06	2.1833E+19	6.3693E+13
Tc-99m	1.6461E+03	3.1306E-07	1.9043E+18	6.0906E+13
Ru-103	1.7162E+03	5.3177E-05	3.1091E+20	6.3500E+13
Ru-105	3.5901E+01	5.3409E-09	3.0632E+16	1.3284E+12
Ru-106	5.2025E+02	1.5550E-04	8.8346E+20	1.9249E+13
Rh-105	8.0505E+02	9.5379E-07	5.4704E+18	2.9787E+13
Sb-127	2.0858E+03	7.8106E-06	3.7037E+19	7.7176E+13
Sb-129	2.0970E+02	3.7291E-08	1.7409E+17	7.7590E+12
Te-127	2.2019E+03	8.3434E-07	3.9563E+18	8.1470E+13
Te-127m	3.2231E+02	3.4170E-05	1.6203E+20	1.1925E+13
Te-129	9.2811E+02	4.4317E-08	2.0689E+17	3.4340E+13
Te-129m	1.0761E+03	3.5720E-05	1.6675E+20	3.9815E+13
Te-131m	2.0044E+03	2.5136E-06	1.1555E+19	7.4162E+13
Te-132	2.7206E+04	8.9614E-05	4.0884E+20	1.0066E+15
I-131	1.7307E+05	1.3960E-03	6.4174E+21	6.4035E+15
I-132	2.8514E+04	2.7624E-06	1.2603E+19	1.0550E+15
I-133	1.8606E+05	1.6425E-04	7.4371E+20	6.8843E+15
I-134	1.8553E-02	6.9548E-13	3.1256E+12	6.8646E+08
I-135	3.4871E+04	9.9295E-06	4.4294E+19	1.2902E+15
Cs-134	1.4894E+04	1.1512E-02	5.1736E+22	5.5109E+14
Cs-136	5.9718E+03	8.1480E-05	3.6080E+20	2.2096E+14
Cs-137	1.3207E+04	1.5184E-01	6.6745E+23	4.8867E+14
Ba-139	2.4327E-01	1.4873E-11	6.4436E+13	9.0012E+09
Ba-140	1.5947E+04	2.1784E-04	9.3702E+20	5.9006E+14
La-140	5.0803E+03	9.1401E-06	3.9317E+19	1.8797E+14
La-141	6.5154E+00	1.1521E-09	4.9205E+15	2.4107E+11
La-142	7.0831E-03	4.9480E-13	2.0984E+12	2.6208E+08
Ce-141	3.9359E+02	1.3813E-05	5.8997E+19	1.4563E+13
Ce-143	2.3688E+02	3.5671E-07	1.5022E+18	8.7647E+12
Ce-144	3.0214E+02	9.4731E-05	3.9617E+20	1.1179E+13
Pr-143	1.5358E+02	2.2807E-06	9.6045E+18	5.6824E+12
Nd-147	5.9465E+01	7.3506E-07	3.0113E+18	2.2002E+12
Np-239	3.5441E+03	1.5277E-05	3.8493E+19	1.3113E+14
Pu-238	3.1599E-01	1.8458E-05	4.6704E+19	1.1692E+10
Pu-239	9.9006E-02	1.5928E-03	4.0135E+21	3.6632E+09
Pu-240	1.0009E-01	4.3924E-04	1.1022E+21	3.7033E+09
Pu-241	3.0225E+01	2.9341E-04	7.3318E+20	1.1183E+12
Am-241	1.0921E-02	3.1821E-06	7.9514E+18	4.0409E+08
Cm-242	1.9185E+00	5.7886E-07	1.4405E+18	7.0985E+10
Cm-244	4.5474E-02	5.6208E-07	1.3873E+18	1.6825E+09
I-130	1.2069E+03	6.1881E-07	2.8666E+18	4.4655E+13
Cs-138	1.4156E-07	3.3455E-18	1.4599E+07	5.2377E+03
Cs-134m	2.3866E+01	2.9594E-09	1.3300E+16	8.8304E+11
Sb-124	2.0842E+01	1.1915E-06	5.7866E+18	7.7115E+11
Sb-125	2.9934E+02	2.8992E-04	1.3968E+21	1.1075E+13
Sb-126	2.1867E+01	2.6165E-07	1.2506E+18	8.0908E+11
Te-131	4.5879E+02	7.9910E-09	3.6735E+16	1.6975E+13
Te-133	1.8037E-04	1.5884E-15	7.1923E+09	6.6738E+06
Te-134	1.0316E-05	3.0729E-16	1.3810E+09	3.8168E+05
Te-125m	6.2169E+01	3.4518E-06	1.6630E+19	2.3003E+12
Te-133m	1.0404E-03	4.0771E-14	1.8461E+11	3.8496E+07
Ba-137m	1.4641E+04	2.7223E-08	1.1967E+17	5.4171E+14
Pd-109	1.0064E+02	4.7000E-08	2.5967E+17	3.7236E+12
Rh-106	1.0700E+03	3.0058E-10	1.7077E+15	3.9588E+13
Rh-103m	1.7255E+03	5.3045E-08	3.1014E+17	6.3843E+13
Eu-154	5.1880E-01	1.9667E-06	7.6906E+18	1.9196E+10
Eu-155	3.9806E-01	8.5604E-07	3.3259E+18	1.4728E+10
Eu-156	7.9794E+00	1.4481E-07	5.5901E+17	2.9524E+11
Nb-97	3.6829E+00	1.3698E-10	8.5045E+14	1.3627E+11
Nb-95m	1.1931E+00	3.1321E-09	1.9855E+16	4.4144E+10
Pm-147	1.6007E+01	1.7267E-05	7.0738E+19	5.9225E+11
Pm-148	2.1797E+01	1.3267E-07	5.3984E+17	8.0650E+11

Pm-149	3.8055E+01	9.6042E-08	3.8817E+17	1.4080E+12
Pm-151	1.0385E+01	1.4212E-08	5.6678E+16	3.8425E+11
Pm-148m	3.4140E+00	1.5981E-07	6.5028E+17	1.2632E+11
Pr-144	3.0948E+02	4.0956E-09	1.7128E+16	1.1451E+13
Pr-144m	5.6949E+00	3.1402E-11	1.3132E+14	2.1071E+11
Sm-153	2.3044E+01	5.2541E-08	2.0680E+17	8.5264E+11
Y-91m	1.5861E+03	3.8158E-08	2.5252E+17	5.8685E+13
Br-82	4.6198E+02	4.2672E-07	3.1339E+18	1.7093E+13
Br-83	4.0297E+01	2.5508E-09	1.8508E+16	1.4910E+12
Br-84	1.0773E-08	1.5305E-19	1.0972E+06	3.9860E+02
Am-242	1.6740E+00	2.0709E-09	5.1533E+15	6.1937E+10
Np-238	3.8773E+01	1.4961E-07	3.7857E+17	1.4346E+12
Pu-243	1.5115E+00	5.8088E-10	1.4396E+15	5.5927E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 22.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.2240E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7233E-01

Environment Integral Nuclide Release:

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Xe-133	2.8828E+04	1.5401E-04	6.9734E+20	1.0666E+15
Xe-135	7.7689E+04	3.0422E-05	1.3571E+20	2.8745E+15
Kr-83m	1.4626E+02	7.0888E-09	5.1433E+16	5.4115E+12
Xe-131m	9.9932E+01	1.1931E-06	5.4845E+18	3.6975E+12
Xe-133m	1.8813E+03	4.1927E-06	1.8984E+19	6.9607E+13
Xe-135m	5.7347E+03	6.2955E-08	2.8083E+17	2.1218E+14

Environment Transport Group Inventory:

Time (h) = 22.2200	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.0835E+17	1.1227E+16	8.5785E+20
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 22.2200	Ci	kg	Atoms	Bq
Rb-86	1.9193E+02	2.3588E-06	1.6517E+19	7.1013E+12
Sr-89	1.0132E+04	3.4877E-04	2.3599E+21	3.7490E+14
Sr-90	6.9883E+02	5.1231E-03	3.4280E+22	2.5857E+13
Sr-91	2.4839E+03	6.8522E-07	4.5346E+18	9.1906E+13
Sr-92	4.5535E+01	3.6227E-09	2.3713E+16	1.6848E+12
Y-90	1.4830E+02	2.7257E-07	1.8239E+18	5.4870E+12
Y-91	1.8866E+02	7.6931E-06	5.0911E+19	6.9806E+12
Y-92	3.8020E+02	3.9513E-08	2.5864E+17	1.4068E+13
Y-93	3.3071E+01	9.9123E-09	6.4186E+16	1.2236E+12
Zr-95	1.6406E+02	7.6367E-06	4.8409E+19	6.0701E+12
Zr-97	6.4169E+01	3.3567E-08	2.0840E+17	2.3742E+12
Nb-95	1.6674E+02	4.2640E-06	2.7030E+19	6.1693E+12
Mo-99	1.7214E+03	3.5892E-06	2.1833E+19	6.3693E+13
Tc-99m	1.6461E+03	3.1306E-07	1.9043E+18	6.0906E+13
Ru-103	1.7162E+03	5.3177E-05	3.1091E+20	6.3500E+13
Ru-105	3.5901E+01	5.3409E-09	3.0632E+16	1.3284E+12
Ru-106	5.2025E+02	1.5550E-04	8.8346E+20	1.9249E+13
Rh-105	8.0505E+02	9.5379E-07	5.4704E+18	2.9787E+13
Sb-127	2.0858E+03	7.8106E-06	3.7037E+19	7.7176E+13
Sb-129	2.0970E+02	3.7291E-08	1.7409E+17	7.7590E+12
Te-127	2.2019E+03	8.3434E-07	3.9563E+18	8.1470E+13
Te-127m	3.2231E+02	3.4170E-05	1.6203E+20	1.1925E+13
Te-129	9.2811E+02	4.4317E-08	2.0689E+17	3.4340E+13
Te-129m	1.0761E+03	3.5720E-05	1.6675E+20	3.9815E+13
Te-131m	2.0044E+03	2.5136E-06	1.1555E+19	7.4162E+13

Te-132	2.7206E+04	8.9614E-05	4.0884E+20	1.0066E+15
I-131	1.7307E+05	1.3960E-03	6.4174E+21	6.4035E+15
I-132	2.8514E+04	2.7624E-06	1.2603E+19	1.0550E+15
I-133	1.8606E+05	1.6425E-04	7.4371E+20	6.8843E+15
I-134	1.8553E-02	6.9548E-13	3.1256E+12	6.8646E+08
I-135	3.4871E+04	9.9295E-06	4.4294E+19	1.2902E+15
Cs-134	1.4894E+04	1.1512E-02	5.1736E+22	5.5109E+14
Cs-136	5.9718E+03	8.1480E-05	3.6080E+20	2.2096E+14
Cs-137	1.3207E+04	1.5184E-01	6.6745E+23	4.8867E+14
Ba-139	2.4327E-01	1.4873E-11	6.4436E+13	9.0012E+09
Ba-140	1.5947E+04	2.1784E-04	9.3702E+20	5.9006E+14
La-140	5.0803E+03	9.1401E-06	3.9317E+19	1.8797E+14
La-141	6.5154E+00	1.1521E-09	4.9205E+15	2.4107E+11
La-142	7.0831E-03	4.9480E-13	2.0984E+12	2.6208E+08
Ce-141	3.9359E+02	1.3813E-05	5.8997E+19	1.4563E+13
Ce-143	2.3688E+02	3.5671E-07	1.5022E+18	8.7647E+12
Ce-144	3.0214E+02	9.4731E-05	3.9617E+20	1.1179E+13
Pr-143	1.5358E+02	2.2807E-06	9.6045E+18	5.6824E+12
Nd-147	5.9465E+01	7.3506E-07	3.0113E+18	2.2002E+12
Np-239	3.5441E+03	1.5277E-05	3.8493E+19	1.3113E+14
Pu-238	3.1599E-01	1.8458E-05	4.6704E+19	1.1692E+10
Pu-239	9.9006E-02	1.5928E-03	4.0135E+21	3.6632E+09
Pu-240	1.0009E-01	4.3924E-04	1.1022E+21	3.7033E+09
Pu-241	3.0225E+01	2.9341E-04	7.3318E+20	1.1183E+12
Am-241	1.0921E-02	3.1821E-06	7.9514E+18	4.0409E+08
Cm-242	1.9185E+00	5.7886E-07	1.4405E+18	7.0985E+10
Cm-244	4.5474E-02	5.6208E-07	1.3873E+18	1.6825E+09
I-130	1.2069E+03	6.1881E-07	2.8666E+18	4.4655E+13
Cs-138	1.4156E-07	3.3455E-18	1.4599E+07	5.2377E+03
Cs-134m	2.3866E+01	2.9594E-09	1.3300E+16	8.8304E+11
Sb-124	2.0842E+01	1.1915E-06	5.7866E+18	7.7115E+11
Sb-125	2.9934E+02	2.8992E-04	1.3968E+21	1.1075E+13
Sb-126	2.1867E+01	2.6165E-07	1.2506E+18	8.0908E+11
Te-131	4.5879E+02	7.9910E-09	3.6735E+16	1.6975E+13
Te-133	1.8037E-04	1.5884E-15	7.1923E+09	6.6738E+06
Te-134	1.0316E-05	3.0729E-16	1.3810E+09	3.8168E+05
Te-125m	6.2169E+01	3.4518E-06	1.6630E+19	2.3003E+12
Te-133m	1.0404E-03	4.0771E-14	1.8461E+11	3.8496E+07
Ba-137m	1.4641E+04	2.7223E-08	1.1967E+17	5.4171E+14
Pd-109	1.0064E+02	4.7000E-08	2.5967E+17	3.7236E+12
Rh-106	1.0700E+03	3.0058E-10	1.7077E+15	3.9588E+13
Rh-103m	1.7255E+03	5.3045E-08	3.1014E+17	6.3843E+13
Eu-154	5.1880E-01	1.9667E-06	7.6906E+18	1.9196E+10
Eu-155	3.9806E-01	8.5604E-07	3.3259E+18	1.4728E+10
Eu-156	7.9794E+00	1.4481E-07	5.5901E+17	2.9524E+11
Nb-97	3.6829E+00	1.3698E-10	8.5045E+14	1.3627E+11
Nb-95m	1.1931E+00	3.1321E-09	1.9855E+16	4.4144E+10
Pm-147	1.6007E+01	1.7267E-05	7.0738E+19	5.9225E+11
Pm-148	2.1797E+01	1.3267E-07	5.3984E+17	8.0650E+11
Pm-149	3.8055E+01	9.6042E-08	3.8817E+17	1.4080E+12
Pm-151	1.0385E+01	1.4212E-08	5.6678E+16	3.8425E+11
Pm-148m	3.4140E+00	1.5981E-07	6.5028E+17	1.2632E+11
Pr-144	3.0948E+02	4.0956E-09	1.7128E+16	1.1451E+13
Pr-144m	5.6949E+00	3.1402E-11	1.3132E+14	2.1071E+11
Sm-153	2.3044E+01	5.2541E-08	2.0680E+17	8.5264E+11
Y-91m	1.5861E+03	3.8158E-08	2.5252E+17	5.8685E+13
Br-82	4.6198E+02	4.2672E-07	3.1339E+18	1.7093E+13
Br-83	4.0297E+01	2.5508E-09	1.8508E+16	1.4910E+12
Br-84	1.0773E-08	1.5305E-19	1.0972E+06	3.9860E+02
Am-242	1.6740E+00	2.0709E-09	5.1533E+15	6.1937E+10
Np-238	3.8773E+01	1.4961E-07	3.7857E+17	1.4346E+12
Pu-243	1.5115E+00	5.8088E-10	1.4396E+15	5.5927E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 22.2200	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.2240E+21
Organic I (atoms)	0.0000E+00

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Aerosols (kg)          1.7233E-01

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =  22.2200       Ci           kg         Atoms         Bq
Xe-133                1.2775E+00  6.8251E-09  3.0904E+16  4.7269E+10
Xe-135                3.3239E+00  1.3016E-09  5.8062E+15  1.2299E+11
Kr-83m                1.1687E-02  5.6647E-13  4.1101E+12  4.3244E+08
Xe-131m               5.0603E-03  6.0413E-11  2.7772E+14  1.8723E+08
Xe-133m               8.6672E-02  1.9316E-10  8.7461E+14  3.2069E+09
Xe-135m               4.1223E+00  4.5254E-11  2.0187E+14  1.5252E+11

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =  22.2200    Atmosphere     Sump        Pool
Noble gases (atoms)    3.8068E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =  22.2200     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
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Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  22.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =   24.0000

EAB Doses:

Time (h) =  24.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.7567E-01  0.0000E+00  4.4555E-01  1.7567E-01
Accumulated dose (rem)  2.9972E+00  0.0000E+00  6.9066E+00  2.9972E+00

LPZ Doses:

Time (h) =  24.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        6.6486E-03  0.0000E+00  1.6863E-02  6.6486E-03
Accumulated dose (rem)  1.3531E-01  0.0000E+00  3.0402E-01  1.3531E-01

Control Room Doses:

Time (h) =  24.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        8.0992E-02  0.0000E+00  5.1105E+00  8.0992E-02
Accumulated dose (rem)  1.7858E+00  0.0000E+00  1.0913E+02  1.7858E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) =  24.0000       Ci           kg         Atoms         Bq
Rb-86                  2.9367E+04  3.6092E-04  2.5273E+21  1.0866E+15
Sr-89                  1.5631E+06  5.3803E-02  3.6405E+23  5.7834E+16
Sr-90                  1.0792E+05  7.9114E-01  5.2937E+24  3.9929E+15
Sr-91                  3.3686E+05  9.2928E-05  6.1497E+20  1.2464E+16
Sr-92                  4.4600E+03  3.5483E-07  2.3227E+18  1.6502E+14
Y-90                   2.4518E+04  4.5065E-05  3.0154E+20  9.0718E+14
Y-91                   2.9437E+04  1.2003E-03  7.9434E+21  1.0892E+15
Y-92                   4.3056E+04  4.4746E-06  2.9290E+19  1.5931E+15
Y-93                   4.5197E+03  1.3547E-06  8.7722E+18  1.6723E+14
Zr-95                  2.5314E+04  1.1783E-03  7.4696E+21  9.3663E+14
Zr-97                  9.2116E+03  4.8186E-06  2.9916E+19  3.4083E+14
Nb-95                  2.5748E+04  6.5846E-04  4.1740E+21  9.5267E+14
Mo-99                  2.6091E+05  5.4399E-04  3.3091E+21  9.6536E+15
Tc-99m                 2.4988E+05  4.7522E-05  2.8908E+20  9.2457E+15
Ru-103                 2.6468E+05  8.2011E-03  4.7950E+22  9.7932E+15
Ru-105                 4.1990E+03  6.2467E-07  3.5827E+18  1.5536E+14
Ru-106                 8.0329E+04  2.4010E-02  1.3641E+23  2.9722E+15
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Rh-105	1.2022E+05	1.4244E-04	8.1692E+20	4.4483E+15
Sb-127	3.1783E+05	1.1902E-03	5.6435E+21	1.1760E+16
Sb-129	2.4338E+04	4.3280E-06	2.0205E+19	9.0051E+14
Te-127	3.3662E+05	1.2755E-04	6.0482E+20	1.2455E+16
Te-127m	4.9776E+04	5.2770E-03	2.5023E+22	1.8417E+15
Te-129	1.3459E+05	6.4267E-06	3.0002E+19	4.9799E+15
Te-129m	1.6593E+05	5.5080E-03	2.5713E+22	6.1395E+15
Te-131m	2.9706E+05	3.7253E-04	1.7125E+21	1.0991E+16
Te-132	4.1355E+06	1.3622E-02	6.2147E+22	1.5301E+17
I-131	2.6430E+07	2.1319E-01	9.8004E+23	9.7791E+17
I-132	4.3097E+06	4.1752E-04	1.9048E+21	1.5946E+17
I-133	2.6950E+07	2.3790E-02	1.0772E+23	9.9714E+17
I-134	7.0063E-01	2.6264E-11	1.1803E+14	2.5923E+10
I-135	4.4465E+06	1.2662E-03	5.6481E+21	1.6452E+17
Xe-133	4.6508E+06	2.4846E-02	1.1250E+23	1.7208E+17
Xe-135	1.1042E+07	4.3237E-03	1.9288E+22	4.0854E+17
Cs-134	2.2852E+06	1.7662E+00	7.9375E+24	8.4551E+16
Cs-136	9.1269E+05	1.2453E-02	5.5142E+22	3.3770E+16
Cs-137	2.0265E+06	2.3298E+01	1.0241E+26	7.4980E+16
Ba-139	1.5348E+01	9.3833E-10	4.0653E+15	5.6789E+11
Ba-140	2.4528E+06	3.3504E-02	1.4412E+23	9.0753E+16
La-140	8.3483E+05	1.5020E-03	6.4607E+21	3.0889E+16
La-141	7.3069E+02	1.2920E-07	5.5183E+17	2.7036E+13
La-142	4.9133E-01	3.4323E-11	1.4556E+14	1.8179E+10
Ce-141	6.0684E+04	2.1298E-03	9.0962E+21	2.2453E+15
Ce-143	3.5239E+04	5.3063E-05	2.2347E+20	1.3038E+15
Ce-144	4.6650E+04	1.4626E-02	6.1168E+22	1.7261E+15
Pr-143	2.3762E+04	3.5287E-04	1.4860E+21	8.7919E+14
Nd-147	9.1400E+03	1.1298E-04	4.6285E+20	3.3818E+14
Np-239	5.3547E+05	2.3082E-03	5.8159E+21	1.9813E+16
Pu-238	4.8807E+01	2.8509E-03	7.2138E+21	1.8059E+12
Pu-239	1.5292E+01	2.4603E-01	6.1992E+23	5.6581E+11
Pu-240	1.5456E+01	6.7830E-02	1.7020E+23	5.7188E+11
Pu-241	4.6675E+03	4.5310E-02	1.1322E+23	1.7270E+14
Am-241	1.6881E+00	4.9183E-04	1.2290E+21	6.2458E+10
Cm-242	2.9624E+02	8.9383E-05	2.2243E+20	1.0961E+13
Cm-244	7.0222E+00	8.6798E-05	2.1423E+20	2.5982E+11
I-130	1.6786E+05	8.6066E-05	3.9869E+20	6.2107E+15
Kr-83m	1.3766E+04	6.6722E-07	4.8410E+18	5.0934E+14
Xe-131m	1.6554E+04	1.9764E-04	9.0854E+20	6.1250E+14
Xe-133m	3.0098E+05	6.7077E-04	3.0372E+21	1.1136E+16
Xe-135m	7.3178E+05	8.0334E-06	3.5836E+19	2.7076E+16
Cs-138	2.1842E-06	5.1617E-17	2.2525E+08	8.0814E+04
Cs-134m	2.3930E+03	2.9673E-07	1.3336E+18	8.8540E+13
Sb-124	3.2158E+03	1.8384E-04	8.9283E+20	1.1898E+14
Sb-125	4.6223E+04	4.4769E-02	2.1568E+23	1.7102E+15
Sb-126	3.3629E+03	4.0238E-05	1.9232E+20	1.2443E+14
Te-131	6.7994E+04	1.1843E-06	5.4442E+18	2.5158E+15
Te-133	7.3209E-03	6.4470E-14	2.9192E+11	2.7087E+08
Te-134	2.7106E-04	8.0748E-15	3.6289E+10	1.0029E+07
Te-125m	9.6013E+03	5.3310E-04	2.5683E+21	3.5525E+14
Te-133m	4.2229E-02	1.6548E-12	7.4929E+12	1.5625E+09
Ba-137m	2.2464E+06	4.1770E-06	1.8361E+19	8.3117E+16
Pd-109	1.4177E+04	6.6207E-06	3.6579E+19	5.2453E+14
Rh-106	1.6520E+05	4.6411E-08	2.6368E+17	6.1126E+15
Rh-103m	2.6611E+05	8.1808E-06	4.7831E+19	9.8461E+15
Eu-154	8.0114E+01	3.0370E-04	1.1876E+21	2.9642E+12
Eu-155	6.1469E+01	1.3219E-04	5.1359E+20	2.2743E+12
Eu-156	1.2281E+03	2.2286E-05	8.6033E+19	4.5438E+13
Nb-97	5.2865E+02	1.9663E-08	1.2208E+17	1.9560E+13
Nb-95m	1.8414E+02	4.8342E-07	3.0644E+18	6.8133E+12
Pm-147	2.4722E+03	2.6669E-03	1.0925E+22	9.1472E+13
Pm-148	3.3342E+03	2.0294E-05	8.2577E+19	1.2337E+14
Pm-149	5.7417E+03	1.4491E-05	5.8566E+19	2.1244E+14
Pm-151	1.5356E+03	2.1013E-06	8.3804E+18	5.6816E+13
Pm-148m	5.2655E+02	2.4648E-05	1.0029E+20	1.9482E+13
Pr-144	4.7783E+04	6.3235E-07	2.6445E+18	1.7680E+15
Pr-144m	8.7928E+02	4.8484E-09	2.0276E+16	3.2533E+13
Sm-153	3.4658E+03	7.9021E-06	3.1103E+19	1.2824E+14
Y-91m	2.1510E+05	5.1749E-06	3.4246E+19	7.9587E+15

Br-82	6.8560E+04	6.3327E-05	4.6508E+20	2.5367E+15
Br-83	3.6957E+03	2.3394E-07	1.6974E+18	1.3674E+14
Br-84	1.6142E-07	2.2932E-18	1.6440E+07	5.9725E+03
Am-242	2.3934E+02	2.9609E-07	7.3682E+17	8.8557E+12
Np-238	5.8439E+03	2.2550E-05	5.7058E+19	2.1623E+14
Pu-243	1.8198E+02	6.9933E-08	1.7331E+17	6.7332E+12

Containment Sump Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3578E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0962E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6450E+01	0.0000E+00	0.0000E+00

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	2.0742E+02	2.5492E-06	1.7851E+19	7.6746E+12
Sr-89	1.0975E+04	3.7777E-04	2.5562E+21	4.0608E+14
Sr-90	7.5771E+02	5.5548E-03	3.7169E+22	2.8035E+13
Sr-91	2.3652E+03	6.5248E-07	4.3179E+18	8.7513E+13
Sr-92	3.1315E+01	2.4914E-09	1.6308E+16	1.1587E+12
Y-90	1.7219E+02	3.1649E-07	2.1177E+18	6.3710E+12
Y-91	2.0672E+02	8.4294E-06	5.5783E+19	7.6487E+12
Y-92	3.0246E+02	3.1433E-08	2.0575E+17	1.1191E+13
Y-93	3.1734E+01	9.5117E-09	6.1592E+16	1.1742E+12
Zr-95	1.7774E+02	8.2735E-06	5.2447E+19	6.5763E+12
Zr-97	6.4678E+01	3.3833E-08	2.1005E+17	2.3931E+12
Nb-95	1.8078E+02	4.6232E-06	2.9307E+19	6.6890E+12
Mo-99	1.8319E+03	3.8195E-06	2.3234E+19	6.7781E+13
Tc-99m	1.7545E+03	3.3367E-07	2.0297E+18	6.4917E+13
Ru-103	1.8584E+03	5.7582E-05	3.3667E+20	6.8761E+13
Ru-105	2.9483E+01	4.3860E-09	2.5155E+16	1.0909E+12
Ru-106	5.6401E+02	1.6858E-04	9.5777E+20	2.0868E+13
Rh-105	8.4412E+02	1.0001E-06	5.7358E+18	3.1233E+13
Sb-127	2.2316E+03	8.3564E-06	3.9625E+19	8.2569E+13
Sb-129	1.7089E+02	3.0388E-08	1.4186E+17	6.3228E+12
Te-127	2.3635E+03	8.9556E-07	4.2466E+18	8.7449E+13
Te-127m	3.4949E+02	3.7052E-05	1.7569E+20	1.2931E+13
Te-129	9.4500E+02	4.5124E-08	2.1065E+17	3.4965E+13
Te-129m	1.1651E+03	3.8673E-05	1.8054E+20	4.3107E+13
Te-131m	2.0857E+03	2.6156E-06	1.2024E+19	7.7171E+13
Te-132	2.9037E+04	9.5644E-05	4.3635E+20	1.0744E+15
I-131	1.8640E+05	1.5035E-03	6.9118E+21	6.8967E+15
I-132	3.0260E+04	2.9316E-06	1.3374E+19	1.1196E+15
I-133	1.9005E+05	1.6777E-04	7.5965E+20	7.0319E+15
I-134	4.9268E-03	1.8469E-13	8.3000E+11	1.8229E+08
I-135	3.1360E+04	8.9297E-06	3.9834E+19	1.1603E+15
Cs-134	1.6140E+04	1.2475E-02	5.6063E+22	5.9719E+14
Cs-136	6.4464E+03	8.7956E-05	3.8947E+20	2.3852E+14
Cs-137	1.4313E+04	1.6455E-01	7.2333E+23	5.2959E+14
Ba-139	1.0776E-01	6.5883E-12	2.8544E+13	3.9873E+09
Ba-140	1.7222E+04	2.3524E-04	1.0119E+21	6.3720E+14
La-140	5.8629E+03	1.0548E-05	4.5373E+19	2.1693E+14
La-141	5.1586E+00	9.1216E-10	3.8959E+15	1.9087E+11
La-142	3.4498E-03	2.4099E-13	1.0220E+12	1.2764E+08
Ce-141	4.2609E+02	1.4954E-05	6.3868E+19	1.5765E+13
Ce-143	2.4742E+02	3.7257E-07	1.5690E+18	9.1545E+12
Ce-144	3.2755E+02	1.0270E-04	4.2948E+20	1.2119E+13
Pr-143	1.6684E+02	2.4777E-06	1.0434E+19	6.1732E+12
Nd-147	6.4175E+01	7.9327E-07	3.2498E+18	2.3745E+12

Np-239	3.7597E+03	1.6206E-05	4.0835E+19	1.3911E+14
Pu-238	3.4269E-01	2.0017E-05	5.0650E+19	1.2680E+10
Pu-239	1.0737E-01	1.7274E-03	4.3526E+21	3.9727E+09
Pu-240	1.0852E-01	4.7626E-04	1.1950E+21	4.0154E+09
Pu-241	3.2772E+01	3.1813E-04	7.9495E+20	1.2126E+12
Am-241	1.1852E-02	3.4533E-06	8.6292E+18	4.3854E+08
Cm-242	2.0800E+00	6.2758E-07	1.5617E+18	7.6960E+10
Cm-244	4.9305E-02	6.0944E-07	1.5041E+18	1.8243E+09
I-130	1.1838E+03	6.0699E-07	2.8118E+18	4.3802E+13
Cs-138	1.5399E-08	3.6391E-19	1.5881E+06	5.6975E+02
Cs-134m	1.6902E+01	2.0958E-09	9.4190E+15	6.2536E+11
Sb-124	2.2579E+01	1.2908E-06	6.2688E+18	8.3542E+11
Sb-125	3.2454E+02	3.1433E-04	1.5144E+21	1.2008E+13
Sb-126	2.3612E+01	2.8253E-07	1.3503E+18	8.7363E+11
Te-131	4.7740E+02	8.3152E-09	3.8226E+16	1.7664E+13
Te-133	5.1402E-05	4.5267E-16	2.0496E+09	1.9019E+06
Te-134	1.9032E-06	5.6695E-17	2.5480E+08	7.0419E+04
Te-125m	6.7413E+01	3.7430E-06	1.8033E+19	2.4943E+12
Te-133m	2.9650E-04	1.1619E-14	5.2609E+10	1.0971E+07
Ba-137m	1.5866E+04	2.9502E-08	1.2968E+17	5.8706E+14
Pd-109	9.9538E+01	4.6486E-08	2.5683E+17	3.6829E+12
Rh-106	1.1599E+03	3.2587E-10	1.8513E+15	4.2918E+13
Rh-103m	1.8684E+03	5.7440E-08	3.3583E+17	6.9132E+13
Eu-154	5.6250E-01	2.1324E-06	8.3385E+18	2.0813E+10
Eu-155	4.3159E-01	9.2814E-07	3.6061E+18	1.5969E+10
Eu-156	8.6225E+00	1.5648E-07	6.0406E+17	3.1903E+11
Nb-97	3.7118E+00	1.3806E-10	8.5713E+14	1.3734E+11
Nb-95m	1.2929E+00	3.3942E-09	2.1516E+16	4.7838E+10
Pm-147	1.7358E+01	1.8725E-05	7.6710E+19	6.4225E+11
Pm-148	2.3410E+01	1.4249E-07	5.7979E+17	8.6619E+11
Pm-149	4.0314E+01	1.0174E-07	4.1121E+17	1.4916E+12
Pm-151	1.0782E+01	1.4754E-08	5.8841E+16	3.9892E+11
Pm-148m	3.6970E+00	1.7306E-07	7.0420E+17	1.3679E+11
Pr-144	3.3550E+02	4.4399E-09	1.8568E+16	1.2413E+13
Pr-144m	6.1737E+00	3.4042E-11	1.4236E+14	2.2843E+11
Sm-153	2.4335E+01	5.5483E-08	2.1838E+17	9.0038E+11
Y-91m	1.5103E+03	3.6335E-08	2.4045E+17	5.5880E+13
Br-82	4.8353E+02	4.4662E-07	3.2800E+18	1.7891E+13
Br-83	2.6065E+01	1.6499E-09	1.1971E+16	9.6439E+11
Br-84	1.1384E-09	1.6173E-20	1.1595E+05	4.2122E+01
Am-242	1.6805E+00	2.0789E-09	5.1734E+15	6.2178E+10
Np-238	4.1032E+01	1.5833E-07	4.0062E+17	1.5182E+12
Pu-243	1.2777E+00	4.9102E-10	1.2169E+15	4.7276E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.7307E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.8676E-01

Environment Integral Nuclide Release:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Xe-133	3.2814E+04	1.7530E-04	7.9376E+20	1.2141E+15
Xe-135	7.7911E+04	3.0509E-05	1.3609E+20	2.8827E+15
Kr-83m	9.7091E+01	4.7058E-09	3.4143E+16	3.5923E+12
Xe-131m	1.1679E+02	1.3943E-06	6.4097E+18	4.3212E+12
Xe-133m	2.1235E+03	4.7324E-06	2.1428E+19	7.8569E+13
Xe-135m	5.1573E+03	5.6616E-08	2.5255E+17	1.9082E+14

Environment Transport Group Inventory:

Time (h) = 24.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.3251E+17	1.1563E+16	9.5798E+20
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00

Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00	

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	2.0742E+02	2.5492E-06	1.7851E+19	7.6746E+12
Sr-89	1.0975E+04	3.7777E-04	2.5562E+21	4.0608E+14
Sr-90	7.5771E+02	5.5548E-03	3.7169E+22	2.8035E+13
Sr-91	2.3652E+03	6.5248E-07	4.3179E+18	8.7513E+13
Sr-92	3.1315E+01	2.4914E-09	1.6308E+16	1.1587E+12
Y-90	1.7219E+02	3.1649E-07	2.1177E+18	6.3710E+12
Y-91	2.0672E+02	8.4294E-06	5.5783E+19	7.6487E+12
Y-92	3.0246E+02	3.1433E-08	2.0575E+17	1.1191E+13
Y-93	3.1734E+01	9.5117E-09	6.1592E+16	1.1742E+12
Zr-95	1.7774E+02	8.2735E-06	5.2447E+19	6.5763E+12
Zr-97	6.4678E+01	3.3833E-08	2.1005E+17	2.3931E+12
Nb-95	1.8078E+02	4.6232E-06	2.9307E+19	6.6890E+12
Mo-99	1.8319E+03	3.8195E-06	2.3234E+19	6.7781E+13
Tc-99m	1.7545E+03	3.3367E-07	2.0297E+18	6.4917E+13
Ru-103	1.8584E+03	5.7582E-05	3.3667E+20	6.8761E+13
Ru-105	2.9483E+01	4.3860E-09	2.5155E+16	1.0909E+12
Ru-106	5.6401E+02	1.6858E-04	9.5777E+20	2.0868E+13
Rh-105	8.4412E+02	1.0001E-06	5.7358E+18	3.1233E+13
Sb-127	2.2316E+03	8.3564E-06	3.9625E+19	8.2569E+13
Sb-129	1.7089E+02	3.0388E-08	1.4186E+17	6.3228E+12
Te-127	2.3635E+03	8.9556E-07	4.2466E+18	8.7449E+13
Te-127m	3.4949E+02	3.7052E-05	1.7569E+20	1.2931E+13
Te-129	9.4500E+02	4.5124E-08	2.1065E+17	3.4965E+13
Te-129m	1.1651E+03	3.8673E-05	1.8054E+20	4.3107E+13
Te-131m	2.0857E+03	2.6156E-06	1.2024E+19	7.7171E+13
Te-132	2.9037E+04	9.5644E-05	4.3635E+20	1.0744E+15
I-131	1.8640E+05	1.5035E-03	6.9118E+21	6.8967E+15
I-132	3.0260E+04	2.9316E-06	1.3374E+19	1.1196E+15
I-133	1.9005E+05	1.6777E-04	7.5965E+20	7.0319E+15
I-134	4.9268E-03	1.8469E-13	8.3000E+11	1.8229E+08
I-135	3.1360E+04	8.9297E-06	3.9834E+19	1.1603E+15
Cs-134	1.6140E+04	1.2475E-02	5.6063E+22	5.9719E+14
Cs-136	6.4464E+03	8.7956E-05	3.8947E+20	2.3852E+14
Cs-137	1.4313E+04	1.6455E-01	7.2333E+23	5.2959E+14
Ba-139	1.0776E-01	6.5883E-12	2.8544E+13	3.9873E+09
Ba-140	1.7222E+04	2.3524E-04	1.0119E+21	6.3720E+14
La-140	5.8629E+03	1.0548E-05	4.5373E+19	2.1693E+14
La-141	5.1586E+00	9.1216E-10	3.8959E+15	1.9087E+11
La-142	3.4498E-03	2.4099E-13	1.0220E+12	1.2764E+08
Ce-141	4.2609E+02	1.4954E-05	6.3868E+19	1.5765E+13
Ce-143	2.4742E+02	3.7257E-07	1.5690E+18	9.1545E+12
Ce-144	3.2755E+02	1.0270E-04	4.2948E+20	1.2119E+13
Pr-143	1.6684E+02	2.4777E-06	1.0434E+19	6.1732E+12
Nd-147	6.4175E+01	7.9327E-07	3.2498E+18	2.3745E+12
Np-239	3.7597E+03	1.6206E-05	4.0835E+19	1.3911E+14
Pu-238	3.4269E-01	2.0017E-05	5.0650E+19	1.2680E+10
Pu-239	1.0737E-01	1.7274E-03	4.3526E+21	3.9727E+09
Pu-240	1.0852E-01	4.7626E-04	1.1950E+21	4.0154E+09
Pu-241	3.2772E+01	3.1813E-04	7.9495E+20	1.2126E+12
Am-241	1.1852E-02	3.4533E-06	8.6292E+18	4.3854E+08
Cm-242	2.0800E+00	6.2758E-07	1.5617E+18	7.6960E+10
Cm-244	4.9305E-02	6.0944E-07	1.5041E+18	1.8243E+09
I-130	1.1838E+03	6.0699E-07	2.8118E+18	4.3802E+13
Cs-138	1.5399E-08	3.6391E-19	1.5881E+06	5.6975E+02
Cs-134m	1.6902E+01	2.0958E-09	9.4190E+15	6.2536E+11
Sb-124	2.2579E+01	1.2908E-06	6.2688E+18	8.3542E+11
Sb-125	3.2454E+02	3.1433E-04	1.5144E+21	1.2008E+13
Sb-126	2.3612E+01	2.8253E-07	1.3503E+18	8.7363E+11
Te-131	4.7740E+02	8.3152E-09	3.8226E+16	1.7664E+13
Te-133	5.1402E-05	4.5267E-16	2.0496E+09	1.9019E+06
Te-134	1.9032E-06	5.6695E-17	2.5480E+08	7.0419E+04
Te-125m	6.7413E+01	3.7430E-06	1.8033E+19	2.4943E+12
Te-133m	2.9650E-04	1.1619E-14	5.2609E+10	1.0971E+07
Ba-137m	1.5866E+04	2.9502E-08	1.2968E+17	5.8706E+14
Pd-109	9.9538E+01	4.6486E-08	2.5683E+17	3.6829E+12

Rh-106	1.1599E+03	3.2587E-10	1.8513E+15	4.2918E+13
Rh-103m	1.8684E+03	5.7440E-08	3.3583E+17	6.9132E+13
Eu-154	5.6250E-01	2.1324E-06	8.3385E+18	2.0813E+10
Eu-155	4.3159E-01	9.2814E-07	3.6061E+18	1.5969E+10
Eu-156	8.6225E+00	1.5648E-07	6.0406E+17	3.1903E+11
Nb-97	3.7118E+00	1.3806E-10	8.5713E+14	1.3734E+11
Nb-95m	1.2929E+00	3.3942E-09	2.1516E+16	4.7838E+10
Pm-147	1.7358E+01	1.8725E-05	7.6710E+19	6.4225E+11
Pm-148	2.3410E+01	1.4249E-07	5.7979E+17	8.6619E+11
Pm-149	4.0314E+01	1.0174E-07	4.1121E+17	1.4916E+12
Pm-151	1.0782E+01	1.4754E-08	5.8841E+16	3.9892E+11
Pm-148m	3.6970E+00	1.7306E-07	7.0420E+17	1.3679E+11
Pr-144	3.3550E+02	4.4399E-09	1.8568E+16	1.2413E+13
Pr-144m	6.1737E+00	3.4042E-11	1.4236E+14	2.2843E+11
Sm-153	2.4335E+01	5.5483E-08	2.1838E+17	9.0038E+11
Y-91m	1.5103E+03	3.6335E-08	2.4045E+17	5.5880E+13
Br-82	4.8353E+02	4.4662E-07	3.2800E+18	1.7891E+13
Br-83	2.6065E+01	1.6499E-09	1.1971E+16	9.6439E+11
Br-84	1.1384E-09	1.6173E-20	1.1595E+05	4.2122E+01
Am-242	1.6805E+00	2.0789E-09	5.1734E+15	6.2178E+10
Np-238	4.1032E+01	1.5833E-07	4.0062E+17	1.5182E+12
Pu-243	1.2777E+00	4.9102E-10	1.2169E+15	4.7276E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.7307E+21
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.8676E-01

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Xe-133	1.3275E+00	7.0918E-09	3.2111E+16	4.9116E+10
Xe-135	3.0437E+00	1.1919E-09	5.3167E+15	1.1262E+11
Kr-83m	7.4449E-03	3.6084E-13	2.6181E+12	2.7546E+08
Xe-131m	5.4600E-03	6.5186E-11	2.9966E+14	2.0202E+08
Xe-133m	8.9587E-02	1.9966E-10	9.0403E+14	3.3147E+09
Xe-135m	3.7048E+00	4.0671E-11	1.8143E+14	1.3708E+11

Control Room Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.8816E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 96.0000

EAB Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.8832E+00	0.0000E+00	5.1743E+00	1.8832E+00
Accumulated dose (rem)	4.8805E+00	0.0000E+00	1.2081E+01	4.8805E+00

LPZ Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.0292E-02	0.0000E+00	8.3231E-02	3.0292E-02
Accumulated dose (rem)	1.6560E-01	0.0000E+00	3.8725E-01	1.6560E-01

Control Room Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.0248E-01	0.0000E+00	2.0774E+01	3.0248E-01
Accumulated dose (rem)	2.0883E+00	0.0000E+00	1.2990E+02	2.0883E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	2.5697E+04	3.1581E-04	2.2115E+21	9.5079E+14
Sr-89	1.4673E+06	5.0505E-02	3.4174E+23	5.4290E+16
Sr-90	1.0554E+05	7.7372E-01	5.1772E+24	3.9050E+15
Sr-91	1.7234E+03	4.7542E-07	3.1462E+18	6.3765E+13
Sr-92	4.3844E-05	3.4881E-15	2.2833E+10	1.6222E+06
Y-90	6.8158E+04	1.2527E-04	8.3825E+20	2.5218E+15
Y-91	3.0063E+04	1.2259E-03	8.1125E+21	1.1123E+15
Y-92	4.2372E-02	4.4035E-12	2.8825E+13	1.5678E+09
Y-93	3.1591E+01	9.4689E-09	6.1315E+16	1.1689E+12
Zr-95	2.3970E+04	1.1158E-03	7.0730E+21	8.8689E+14
Zr-97	4.7017E+02	2.4595E-07	1.5269E+18	1.7396E+13
Nb-95	2.5139E+04	6.4289E-04	4.0753E+21	9.3014E+14
Mo-99	1.1981E+05	2.4981E-04	1.5196E+21	4.4331E+15
Tc-99m	1.1562E+05	2.1989E-05	1.3376E+20	4.2781E+15
Ru-103	2.4555E+05	7.6085E-03	4.4485E+22	9.0855E+15
Ru-105	5.3951E-02	8.0260E-12	4.6032E+13	1.9962E+09
Ru-106	7.8133E+04	2.3354E-02	1.3268E+23	2.8909E+15
Rh-105	2.8815E+04	3.4139E-05	1.9580E+20	1.0662E+15
Sb-127	1.8115E+05	6.7835E-04	3.2166E+21	6.7027E+15
Sb-129	2.2884E-01	4.0695E-11	1.8998E+14	8.4672E+09
Te-127	2.1367E+05	8.0962E-05	3.8391E+20	7.9056E+15
Te-127m	4.8568E+04	5.1489E-03	2.4415E+22	1.7970E+15
Te-129	9.9925E+04	4.7715E-06	2.2275E+19	3.6972E+15
Te-129m	1.5260E+05	5.0654E-03	2.3647E+22	5.6461E+15
Te-131m	5.5053E+04	6.9040E-05	3.1738E+20	2.0370E+15
Te-132	2.1369E+06	7.0387E-03	3.2112E+22	7.9066E+16
I-131	1.9993E+07	1.6126E-01	7.4134E+23	7.3973E+17
I-132	2.2083E+06	2.1394E-04	9.7603E+20	8.1707E+16
I-133	2.3930E+06	2.1125E-03	9.5650E+21	8.8541E+16
I-135	2.2879E+03	6.5149E-07	2.9062E+18	8.4654E+13
Xe-133	6.1141E+06	3.2664E-02	1.4790E+23	2.2622E+17
Xe-135	8.6610E+04	3.3915E-05	1.5129E+20	3.2046E+15
Cs-134	2.2291E+06	1.7229E+00	7.7429E+24	8.2478E+16
Cs-136	7.6173E+05	1.0393E-02	4.6022E+22	2.8184E+16
Cs-137	1.9819E+06	2.2785E+01	1.0016E+26	7.3329E+16
Ba-140	2.0379E+06	2.7837E-02	1.1974E+23	7.5403E+16
La-140	1.7836E+06	3.2089E-03	1.3803E+22	6.5993E+16
La-141	2.1832E-03	3.8604E-13	1.6488E+12	8.0779E+07
Ce-141	5.5684E+04	1.9543E-03	8.3468E+21	2.0603E+15
Ce-143	7.5970E+03	1.1440E-05	4.8176E+19	2.8109E+14
Ce-144	4.5300E+04	1.4203E-02	5.9397E+22	1.6761E+15
Pr-143	2.2418E+04	3.3292E-04	1.4020E+21	8.2947E+14
Nd-147	7.3980E+03	9.1448E-05	3.7463E+20	2.7373E+14
Np-239	2.1661E+05	9.3370E-04	2.3527E+21	8.0146E+15
Pu-238	4.7994E+01	2.8034E-03	7.0936E+21	1.7758E+12
Pu-239	1.5041E+01	2.4198E-01	6.0973E+23	5.5651E+11
Pu-240	1.5119E+01	6.6350E-02	1.6649E+23	5.5940E+11
Pu-241	4.5638E+03	4.4303E-02	1.1071E+23	1.6886E+14
Am-241	1.7113E+00	4.9861E-04	1.2459E+21	6.3319E+10
Cm-242	2.8685E+02	8.6549E-05	2.1538E+20	1.0613E+13
Cm-244	6.8668E+00	8.4877E-05	2.0948E+20	2.5407E+11
I-130	2.8959E+03	1.4848E-06	6.8783E+18	1.0715E+14
Kr-83m	1.3219E-05	6.4069E-16	4.6486E+09	4.8909E+05
Xe-131m	5.4025E+04	6.4498E-04	2.9650E+21	1.9989E+15
Xe-133m	2.6217E+05	5.8427E-04	2.6455E+21	9.7002E+15
Xe-135m	3.7653E+02	4.1335E-09	1.8439E+16	1.3932E+13
Cs-134m	7.8615E-05	9.7485E-15	4.3811E+10	2.9088E+06

Sb-124	3.0388E+03	1.7372E-04	8.4369E+20	1.1243E+14
Sb-125	4.5121E+04	4.3702E-02	2.1054E+23	1.6695E+15
Sb-126	2.7816E+03	3.3283E-05	1.5908E+20	1.0292E+14
Te-131	1.2601E+04	2.1948E-07	1.0090E+18	4.6625E+14
Te-125m	9.4237E+03	5.2324E-04	2.5208E+21	3.4868E+14
Ba-137m	2.1970E+06	4.0851E-06	1.7957E+19	8.1287E+16
Pd-109	3.3711E+02	1.5743E-07	8.6981E+17	1.2473E+13
Rh-106	1.6069E+05	4.5143E-08	2.5647E+17	5.9455E+15
Rh-103m	2.4688E+05	7.5896E-06	4.4375E+19	9.1346E+15
Eu-154	7.8315E+01	2.9688E-04	1.1609E+21	2.8977E+12
Eu-155	6.0058E+01	1.2916E-04	5.0181E+20	2.2222E+12
Eu-156	1.0476E+03	1.9011E-05	7.3389E+19	3.8760E+13
Nb-97	2.6982E+01	1.0036E-09	6.2307E+15	9.9833E+11
Nb-95m	1.7582E+02	4.6157E-07	2.9259E+18	6.5053E+12
Pm-147	2.4307E+03	2.6220E-03	1.0742E+22	8.9935E+13
Pm-148	2.2217E+03	1.3523E-05	5.5024E+19	8.2203E+13
Pm-149	2.1934E+03	5.5357E-06	2.2374E+19	8.1157E+13
Pm-151	2.5913E+02	3.5460E-07	1.4142E+18	9.5877E+12
Pm-148m	4.8976E+02	2.2927E-05	9.3288E+19	1.8121E+13
Pr-144	4.6400E+04	6.1404E-07	2.5680E+18	1.7168E+15
Pr-144m	8.5382E+02	4.7080E-09	1.9689E+16	3.1591E+13
Sm-153	1.1644E+03	2.6549E-06	1.0450E+19	4.3083E+13
Y-91m	1.1004E+03	2.6475E-08	1.7520E+17	4.0716E+13
Br-82	1.6311E+04	1.5066E-05	1.1065E+20	6.0352E+14
Br-83	3.0862E-06	1.9536E-16	1.4174E+09	1.1419E+05
Am-242	1.0387E+01	1.2850E-08	3.1977E+16	3.8432E+11
Np-238	2.1406E+03	8.2598E-06	2.0900E+19	7.9202E+13
Pu-243	7.5356E-03	2.8959E-12	7.1768E+12	2.7882E+08

Containment Sump Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.5366E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.5200E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.5847E+01	0.0000E+00	0.0000E+00

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	7.5888E+02	9.3266E-06	6.5309E+19	2.8079E+13
Sr-89	4.3269E+04	1.4894E-03	1.0078E+22	1.6010E+15
Sr-90	3.1123E+03	2.2816E-02	1.5267E+23	1.1516E+14
Sr-91	5.0821E+01	1.4020E-08	9.2778E+16	1.8804E+12
Sr-92	1.2929E-06	1.0286E-16	6.7332E+08	4.7838E+04
Y-90	2.0099E+03	3.6943E-06	2.4719E+19	7.4367E+13
Y-91	8.8657E+02	3.6151E-05	2.3924E+20	3.2803E+13
Y-92	1.2496E-03	1.2987E-13	8.5009E+11	4.6236E+07
Y-93	9.3160E-01	2.7923E-10	1.8081E+15	3.4469E+10
Zr-95	7.0686E+02	3.2903E-05	2.0858E+20	2.6154E+13
Zr-97	1.3865E+01	7.2529E-09	4.5029E+16	5.1301E+11
Nb-95	7.4133E+02	1.8958E-05	1.2018E+20	2.7429E+13
Mo-99	3.5332E+03	7.3668E-06	4.4812E+19	1.3073E+14
Tc-99m	3.4097E+03	6.4844E-07	3.9444E+18	1.2616E+14
Ru-103	7.2412E+03	2.2437E-04	1.3118E+21	2.6793E+14
Ru-105	1.5910E-03	2.3668E-13	1.3574E+12	5.8866E+07
Ru-106	2.3041E+03	6.8869E-04	3.9126E+21	8.5251E+13
Rh-105	8.4974E+02	1.0067E-06	5.7740E+18	3.1440E+13
Sb-127	5.3421E+03	2.0004E-05	9.4855E+19	1.9766E+14
Sb-129	6.7484E-03	1.2001E-12	5.6023E+12	2.4969E+08
Te-127	6.3008E+03	2.3875E-06	1.1321E+19	2.3313E+14
Te-127m	1.4322E+03	1.5184E-04	7.1999E+20	5.2992E+13

Te-129	2.9467E+03	1.4071E-07	6.5687E+17	1.0903E+14
Te-129m	4.4999E+03	1.4937E-04	6.9733E+20	1.6650E+14
Te-131m	1.6235E+03	2.0359E-06	9.3593E+18	6.0069E+13
Te-132	6.3016E+04	2.0757E-04	9.4697E+20	2.3316E+15
I-131	5.9020E+05	4.7607E-03	2.1885E+22	2.1838E+16
I-132	6.5121E+04	6.3089E-06	2.8782E+19	2.4095E+15
I-133	7.0643E+04	6.2361E-05	2.8237E+20	2.6138E+15
I-135	6.7543E+01	1.9233E-08	8.5794E+16	2.4991E+12
Cs-134	6.5830E+04	5.0880E-02	2.2866E+23	2.4357E+15
Cs-136	2.2495E+04	3.0693E-04	1.3591E+21	8.3233E+14
Cs-137	5.8529E+04	6.7288E-01	2.9578E+24	2.1656E+15
Ba-140	6.0097E+04	8.2090E-04	3.5311E+21	2.2236E+15
La-140	5.2597E+04	9.4628E-05	4.0705E+20	1.9461E+15
La-141	6.4467E-05	1.1399E-14	4.8687E+10	2.3853E+06
Ce-141	1.6421E+03	5.7630E-05	2.4614E+20	6.0757E+13
Ce-143	2.2403E+02	3.3735E-07	1.4207E+18	8.2891E+12
Ce-144	1.3358E+03	4.1883E-04	1.7516E+21	4.9426E+13
Pr-143	6.6110E+02	9.8175E-06	4.1344E+19	2.4461E+13
Nd-147	2.1816E+02	2.6967E-06	1.1048E+19	8.0720E+12
Np-239	6.3877E+03	2.7534E-05	6.9378E+19	2.3634E+14
Pu-238	1.4153E+00	8.2671E-05	2.0918E+20	5.2366E+10
Pu-239	4.4354E-01	7.1358E-03	1.7980E+22	1.6411E+10
Pu-240	4.4585E-01	1.9566E-03	4.9096E+21	1.6496E+10
Pu-241	1.3458E+02	1.3065E-03	3.2646E+21	4.9796E+12
Am-241	5.0465E-02	1.4704E-05	3.6742E+19	1.8672E+09
Cm-242	8.4589E+00	2.5523E-06	6.3513E+18	3.1298E+11
Cm-244	2.0250E-01	2.5030E-06	6.1775E+18	7.4924E+09
I-130	8.5491E+01	4.3834E-08	2.0306E+17	3.1632E+12
Cs-134m	2.3216E-06	2.8789E-16	1.2938E+09	8.5901E+04
Sb-124	8.9611E+01	5.1229E-06	2.4880E+19	3.3156E+12
Sb-125	1.3306E+03	1.2887E-03	6.2087E+21	4.9232E+13
Sb-126	8.2027E+01	9.8150E-07	4.6911E+18	3.0350E+12
Te-131	3.7160E+02	6.4724E-09	2.9754E+16	1.3749E+13
Te-125m	2.7790E+02	1.5430E-05	7.4336E+19	1.0282E+13
Ba-137m	6.4880E+04	1.2064E-07	5.3030E+17	2.4006E+15
Pd-109	9.9410E+00	4.6426E-09	2.5650E+16	3.6782E+11
Rh-106	4.7386E+03	1.3312E-09	7.5630E+15	1.7533E+14
Rh-103m	7.2804E+03	2.2381E-07	1.3086E+18	2.6937E+14
Eu-154	2.3094E+00	8.7547E-06	3.4235E+19	8.5450E+10
Eu-155	1.7711E+00	3.8087E-06	1.4798E+19	6.5530E+10
Eu-156	3.0892E+01	5.6062E-07	2.1642E+18	1.1430E+12
Nb-97	7.9567E-01	2.9595E-11	1.8374E+14	2.9440E+10
Nb-95m	5.1848E+00	1.3611E-08	8.6283E+16	1.9184E+11
Pm-147	7.1679E+01	7.7322E-05	3.1676E+20	2.6521E+12
Pm-148	6.5516E+01	3.9877E-07	1.6226E+18	2.4241E+12
Pm-149	6.4683E+01	1.6324E-07	6.5978E+17	2.3933E+12
Pm-151	7.6414E+00	1.0457E-08	4.1703E+16	2.8273E+11
Pm-148m	1.4443E+01	6.7608E-07	2.7510E+18	5.3438E+11
Pr-144	1.3683E+03	1.8108E-08	7.5727E+16	5.0627E+13
Pr-144m	2.5178E+01	1.3884E-10	5.8062E+14	9.3160E+11
Sm-153	3.4338E+01	7.8290E-08	3.0815E+17	1.2705E+12
Y-91m	3.2451E+01	7.8072E-10	5.1666E+15	1.2007E+12
Br-82	4.8153E+02	4.4477E-07	3.2665E+18	1.7817E+13
Br-83	9.1110E-08	5.7672E-18	4.1845E+07	3.3711E+03
Am-242	3.0631E-01	3.7893E-10	9.4297E+14	1.1333E+10
Np-238	6.3124E+01	2.4358E-07	6.1632E+17	2.3356E+12
Pu-243	2.2222E-04	8.5398E-14	2.1164E+11	8.2221E+06

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.2200E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	7.6327E-01

Environment Integral Nuclide Release:

Time (h) = 96.0000	Ci	kg	Atoms	Bq

Xe-133	1.8050E+05	9.6433E-04	4.3664E+21	6.6787E+15
Xe-135	2.5570E+03	1.0013E-06	4.4666E+18	9.4609E+13
Xe-131m	1.5949E+03	1.9041E-05	8.7532E+19	5.9011E+13
Xe-133m	7.7397E+03	1.7249E-05	7.8102E+19	2.8637E+14
Xe-135m	1.1110E+01	1.2196E-10	5.4405E+14	4.1106E+11

Environment Transport Group Inventory:

Time (h) = 96.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	9.4204E+17	1.3084E+16	4.5365E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	7.5888E+02	9.3266E-06	6.5309E+19	2.8079E+13
Sr-89	4.3269E+04	1.4894E-03	1.0078E+22	1.6010E+15
Sr-90	3.1123E+03	2.2816E-02	1.5267E+23	1.1516E+14
Sr-91	5.0821E+01	1.4020E-08	9.2778E+16	1.8804E+12
Sr-92	1.2929E-06	1.0286E-16	6.7332E+08	4.7838E+04
Y-90	2.0099E+03	3.6943E-06	2.4719E+19	7.4367E+13
Y-91	8.8657E+02	3.6151E-05	2.3924E+20	3.2803E+13
Y-92	1.2496E-03	1.2987E-13	8.5009E+11	4.6236E+07
Y-93	9.3160E-01	2.7923E-10	1.8081E+15	3.4469E+10
Zr-95	7.0686E+02	3.2903E-05	2.0858E+20	2.6154E+13
Zr-97	1.3865E+01	7.2529E-09	4.5029E+16	5.1301E+11
Nb-95	7.4133E+02	1.8958E-05	1.2018E+20	2.7429E+13
Mo-99	3.5332E+03	7.3668E-06	4.4812E+19	1.3073E+14
Tc-99m	3.4097E+03	6.4844E-07	3.9444E+18	1.2616E+14
Ru-103	7.2412E+03	2.2437E-04	1.3118E+21	2.6793E+14
Ru-105	1.5910E-03	2.3668E-13	1.3574E+12	5.8866E+07
Ru-106	2.3041E+03	6.8869E-04	3.9126E+21	8.5251E+13
Rh-105	8.4974E+02	1.0067E-06	5.7740E+18	3.1440E+13
Sb-127	5.3421E+03	2.0004E-05	9.4855E+19	1.9766E+14
Sb-129	6.7484E-03	1.2001E-12	5.6023E+12	2.4969E+08
Te-127	6.3008E+03	2.3875E-06	1.1321E+19	2.3313E+14
Te-127m	1.4322E+03	1.5184E-04	7.1999E+20	5.2992E+13
Te-129	2.9467E+03	1.4071E-07	6.5687E+17	1.0903E+14
Te-129m	4.4999E+03	1.4937E-04	6.9733E+20	1.6650E+14
Te-131m	1.6235E+03	2.0359E-06	9.3593E+18	6.0069E+13
Te-132	6.3016E+04	2.0757E-04	9.4697E+20	2.3316E+15
I-131	5.9020E+05	4.7607E-03	2.1885E+22	2.1838E+16
I-132	6.5121E+04	6.3089E-06	2.8782E+19	2.4095E+15
I-133	7.0643E+04	6.2361E-05	2.8237E+20	2.6138E+15
I-135	6.7543E+01	1.9233E-08	8.5794E+16	2.4991E+12
Cs-134	6.5830E+04	5.0880E-02	2.2866E+23	2.4357E+15
Cs-136	2.2495E+04	3.0693E-04	1.3591E+21	8.3233E+14
Cs-137	5.8529E+04	6.7288E-01	2.9578E+24	2.1656E+15
Ba-140	6.0097E+04	8.2090E-04	3.5311E+21	2.2236E+15
La-140	5.2597E+04	9.4628E-05	4.0705E+20	1.9461E+15
La-141	6.4467E-05	1.1399E-14	4.8687E+10	2.3853E+06
Ce-141	1.6421E+03	5.7630E-05	2.4614E+20	6.0757E+13
Ce-143	2.2403E+02	3.3735E-07	1.4207E+18	8.2891E+12
Ce-144	1.3358E+03	4.1883E-04	1.7516E+21	4.9426E+13
Pr-143	6.6110E+02	9.8175E-06	4.1344E+19	2.4461E+13
Nd-147	2.1816E+02	2.6967E-06	1.1048E+19	8.0720E+12
Np-239	6.3877E+03	2.7534E-05	6.9378E+19	2.3634E+14
Pu-238	1.4153E+00	8.2671E-05	2.0918E+20	5.2366E+10
Pu-239	4.4354E-01	7.1358E-03	1.7980E+22	1.6411E+10
Pu-240	4.4585E-01	1.9566E-03	4.9096E+21	1.6496E+10
Pu-241	1.3458E+02	1.3065E-03	3.2646E+21	4.9796E+12
Am-241	5.0465E-02	1.4704E-05	3.6742E+19	1.8672E+09
Cm-242	8.4589E+00	2.5523E-06	6.3513E+18	3.1298E+11
Cm-244	2.0250E-01	2.5030E-06	6.1775E+18	7.4924E+09
I-130	8.5491E+01	4.3834E-08	2.0306E+17	3.1632E+12
Cs-134m	2.3216E-06	2.8789E-16	1.2938E+09	8.5901E+04
Sb-124	8.9611E+01	5.1229E-06	2.4880E+19	3.3156E+12

Sb-125	1.3306E+03	1.2887E-03	6.2087E+21	4.9232E+13
Sb-126	8.2027E+01	9.8150E-07	4.6911E+18	3.0350E+12
Te-131	3.7160E+02	6.4724E-09	2.9754E+16	1.3749E+13
Te-125m	2.7790E+02	1.5430E-05	7.4336E+19	1.0282E+13
Ba-137m	6.4880E+04	1.2064E-07	5.3030E+17	2.4006E+15
Pd-109	9.9410E+00	4.6426E-09	2.5650E+16	3.6782E+11
Rh-106	4.7386E+03	1.3312E-09	7.5630E+15	1.7533E+14
Rh-103m	7.2804E+03	2.2381E-07	1.3086E+18	2.6937E+14
Eu-154	2.3094E+00	8.7547E-06	3.4235E+19	8.5450E+10
Eu-155	1.7711E+00	3.8087E-06	1.4798E+19	6.5530E+10
Eu-156	3.0892E+01	5.6062E-07	2.1642E+18	1.1430E+12
Nb-97	7.9567E-01	2.9595E-11	1.8374E+14	2.9440E+10
Nb-95m	5.1848E+00	1.3611E-08	8.6283E+16	1.9184E+11
Pm-147	7.1679E+01	7.7322E-05	3.1676E+20	2.6521E+12
Pm-148	6.5516E+01	3.9877E-07	1.6226E+18	2.4241E+12
Pm-149	6.4683E+01	1.6324E-07	6.5978E+17	2.3933E+12
Pm-151	7.6414E+00	1.0457E-08	4.1703E+16	2.8273E+11
Pm-148m	1.4443E+01	6.7608E-07	2.7510E+18	5.3438E+11
Pr-144	1.3683E+03	1.8108E-08	7.5727E+16	5.0627E+13
Pr-144m	2.5178E+01	1.3884E-10	5.8062E+14	9.3160E+11
Sm-153	3.4338E+01	7.8290E-08	3.0815E+17	1.2705E+12
Y-91m	3.2451E+01	7.8072E-10	5.1666E+15	1.2007E+12
Br-82	4.8153E+02	4.4477E-07	3.2665E+18	1.7817E+13
Br-83	9.1110E-08	5.7672E-18	4.1845E+07	3.3711E+03
Am-242	3.0631E-01	3.7893E-10	9.4297E+14	1.1333E+10
Np-238	6.3124E+01	2.4358E-07	6.1632E+17	2.3356E+12
Pu-243	2.2222E-04	8.5398E-14	2.1164E+11	8.2221E+06

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.2200E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	7.6327E-01

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

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Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =  96.0000       Ci           kg         Atoms         Bq
Xe-133                 9.2677E-01  4.9512E-09  2.2419E+16  3.4291E+10
Xe-135                 1.2885E-02  5.0454E-12  2.2507E+13  4.7673E+08
Xe-131m                1.3409E-02  1.6008E-10  7.3592E+14  4.9613E+08
Xe-133m                4.4272E-02  9.8666E-11  4.4675E+14  1.6381E+09
Xe-135m                5.9800E-03  6.5648E-14  2.9284E+11  2.2126E+08

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =  96.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    2.3624E+16  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =  96.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =  111.1100

EAB Doses:

Time (h) = 111.1100     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        9.4659E-02  0.0000E+00  3.1370E-01  9.4659E-02
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Accumulated dose (rem)	4.9751E+00	0.0000E+00	1.2395E+01	4.9751E+00

LPZ Doses:

Time (h) = 111.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.4607E-04	0.0000E+00	1.4783E-03	4.4607E-04
Accumulated dose (rem)	1.6604E-01	0.0000E+00	3.8873E-01	1.6604E-01

Control Room Doses:

Time (h) = 111.1100	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.8075E-03	0.0000E+00	3.1059E-01	2.8075E-03
Accumulated dose (rem)	2.0911E+00	0.0000E+00	1.3021E+02	2.0911E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Rb-86	2.4987E+04	3.0709E-04	2.1504E+21	9.2452E+14
Sr-89	1.4479E+06	4.9840E-02	3.3724E+23	5.3574E+16
Sr-90	1.0505E+05	7.7011E-01	5.1530E+24	3.8868E+15
Sr-91	5.6961E+02	1.5713E-07	1.0399E+18	2.1075E+13
Sr-92	9.1508E-07	7.2802E-17	4.7655E+08	3.3858E+04
Y-90	7.3461E+04	1.3502E-04	9.0348E+20	2.7181E+15
Y-91	2.9710E+04	1.2115E-03	8.0172E+21	1.0993E+15
Y-92	2.1930E-03	2.2791E-13	1.4918E+12	8.1141E+07
Y-93	1.1148E+01	3.3415E-09	2.1637E+16	4.1248E+11
Zr-95	2.3697E+04	1.1031E-03	6.9924E+21	8.7679E+14
Zr-97	2.5183E+02	1.3173E-07	8.1784E+17	9.3176E+12
Nb-95	2.5007E+04	6.3953E-04	4.0540E+21	9.2528E+14
Mo-99	1.0176E+05	2.1217E-04	1.2906E+21	3.7651E+15
Tc-99m	9.8202E+04	1.8676E-05	1.1360E+20	3.6335E+15
Ru-103	2.4172E+05	7.4896E-03	4.3790E+22	8.9436E+15
Ru-105	5.0762E-03	7.5515E-13	4.3311E+12	1.8782E+08
Ru-106	7.7680E+04	2.3219E-02	1.3191E+23	2.8742E+15
Rh-105	2.1329E+04	2.5270E-05	1.4493E+20	7.8918E+14
Sb-127	1.6099E+05	6.0286E-04	2.8586E+21	5.9568E+15
Sb-129	2.0166E-02	3.5861E-12	1.6741E+13	7.4614E+08
Te-127	1.9490E+05	7.3852E-05	3.5019E+20	7.2114E+15
Te-127m	4.8270E+04	5.1174E-03	2.4266E+22	1.7860E+15
Te-129	9.8178E+04	4.6880E-06	2.1885E+19	3.6326E+15
Te-129m	1.4993E+05	4.9769E-03	2.3234E+22	5.5475E+15
Te-131m	3.8650E+04	4.8470E-05	2.2282E+20	1.4301E+15
Te-132	1.8604E+06	6.1280E-03	2.7957E+22	6.8835E+16
I-131	1.8851E+07	1.5206E-01	6.9902E+23	6.9750E+17
I-132	1.9226E+06	1.8626E-04	8.4974E+20	7.1135E+16
I-133	1.4396E+06	1.2709E-03	5.7543E+21	5.3266E+16
I-135	4.6698E+02	1.3297E-07	5.9317E+17	1.7278E+13
Xe-133	5.7639E+06	3.0793E-02	1.3943E+23	2.1326E+17
Xe-135	2.7915E+04	1.0931E-05	4.8762E+19	1.0329E+15
Cs-134	2.2175E+06	1.7139E+00	7.7027E+24	8.2049E+16
Cs-136	7.3337E+05	1.0006E-02	4.4308E+22	2.7135E+16
Cs-137	1.9726E+06	2.2679E+01	9.9689E+25	7.2988E+16
Ba-140	1.9602E+06	2.6775E-02	1.1518E+23	7.2527E+16
La-140	1.8252E+06	3.2837E-03	1.4125E+22	6.7532E+16
La-141	1.5125E-04	2.6744E-14	1.1423E+11	5.5962E+06
Ce-141	5.4688E+04	1.9193E-03	8.1974E+21	2.0234E+15
Ce-143	5.5055E+03	8.2904E-06	3.4913E+19	2.0370E+14
Ce-144	4.5021E+04	1.4115E-02	5.9031E+22	1.6658E+15
Pr-143	2.1813E+04	3.2393E-04	1.3642E+21	8.0708E+14
Nd-147	7.0769E+03	8.7479E-05	3.5837E+20	2.6185E+14
Np-239	1.7914E+05	7.7218E-04	1.9457E+21	6.6281E+15
Pu-238	4.7802E+01	2.7922E-03	7.0651E+21	1.7687E+12
Pu-239	1.4981E+01	2.4102E-01	6.0731E+23	5.5430E+11
Pu-240	1.5049E+01	6.6044E-02	1.6572E+23	5.5682E+11
Pu-241	4.5423E+03	4.4095E-02	1.1019E+23	1.6807E+14
Am-241	1.7160E+00	4.9996E-04	1.2493E+21	6.3491E+10
Cm-242	2.8478E+02	8.5924E-05	2.1382E+20	1.0537E+13
Cm-244	6.8346E+00	8.4480E-05	2.0850E+20	2.5288E+11
I-130	1.2353E+03	6.3337E-07	2.9340E+18	4.5706E+13
Kr-83m	1.6447E-07	7.9715E-18	5.7838E+07	6.0854E+03

Xe-131m	5.9580E+04	7.1131E-04	3.2699E+21	2.2045E+15
Xe-133m	2.2350E+05	4.9811E-04	2.2554E+21	8.2696E+15
Xe-135m	7.6826E+01	8.4338E-10	3.7622E+15	2.8426E+12
Cs-134m	2.1136E-06	2.6209E-16	1.1779E+09	7.8203E+04
Sb-124	3.0029E+03	1.7167E-04	8.3373E+20	1.1111E+14
Sb-125	4.4893E+04	4.3481E-02	2.0948E+23	1.6611E+15
Sb-126	2.6730E+03	3.1984E-05	1.5287E+20	9.8901E+13
Te-131	8.8456E+03	1.5407E-07	7.0826E+17	3.2729E+14
Te-125m	9.3866E+03	5.2118E-04	2.5109E+21	3.4730E+14
Ba-137m	2.1620E+06	4.0201E-06	1.7671E+19	7.9994E+16
Pd-109	1.5381E+02	7.1834E-08	3.9687E+17	5.6911E+12
Rh-106	1.3417E+05	3.7694E-08	2.1415E+17	4.9644E+15
Rh-103m	2.4302E+05	7.4709E-06	4.3680E+19	8.9917E+15
Eu-154	7.7943E+01	2.9547E-04	1.1554E+21	2.8839E+12
Eu-155	5.9766E+01	1.2853E-04	4.9937E+20	2.2114E+12
Eu-156	1.0132E+03	1.8387E-05	7.0981E+19	3.7488E+13
Nb-97	1.4451E+01	5.3752E-10	3.3371E+15	5.3470E+11
Nb-95m	1.7403E+02	4.5688E-07	2.8962E+18	6.4392E+12
Pm-147	2.4216E+03	2.6123E-03	1.0702E+22	8.9601E+13
Pm-148	2.0406E+03	1.2420E-05	5.0538E+19	7.5501E+13
Pm-149	1.7923E+03	4.5234E-06	1.8282E+19	6.6317E+13
Pm-151	1.7838E+02	2.4410E-07	9.7350E+17	6.6000E+12
Pm-148m	4.8238E+02	2.2581E-05	9.1881E+19	1.7848E+13
Pr-144	4.6102E+04	6.1010E-07	2.5515E+18	1.7058E+15
Pr-144m	8.4724E+02	4.6717E-09	1.9537E+16	3.1348E+13
Sm-153	9.2618E+02	2.1117E-06	8.3118E+18	3.4269E+13
Y-91m	3.6370E+02	8.7500E-09	5.7905E+16	1.3457E+13
Br-82	1.2068E+04	1.1147E-05	8.1861E+19	4.4650E+14
Br-83	3.8393E-08	2.4303E-18	1.7633E+07	1.4205E+03
Am-242	5.3771E+00	6.6521E-09	1.6554E+16	1.9895E+11
Np-238	1.7338E+03	6.6901E-06	1.6928E+19	6.4150E+13
Pu-243	9.0639E-04	3.4832E-13	8.6323E+11	3.3537E+07

Containment Sump Transport Group Inventory:

Time (h) = 111.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.4500E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.0571E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.5723E+01	0.0000E+00	0.0000E+00

Time (h) = 111.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Rb-86	8.5732E+02	1.0536E-05	7.3781E+19	3.1721E+13
Sr-89	4.9618E+04	1.7079E-03	1.1556E+22	1.8359E+15
Sr-90	3.5998E+03	2.6390E-02	1.7658E+23	1.3319E+14
Sr-91	1.9519E+01	5.3846E-09	3.5634E+16	7.2220E+11
Sr-92	3.1358E-08	2.4948E-18	1.6330E+07	1.1602E+03
Y-90	2.5174E+03	4.6270E-06	3.0960E+19	9.3142E+13
Y-91	1.0181E+03	4.1516E-05	2.7474E+20	3.7671E+13
Y-92	7.5155E-05	7.8105E-15	5.1126E+10	2.7807E+06
Y-93	3.8202E-01	1.1450E-10	7.4146E+14	1.4135E+10
Zr-95	8.1204E+02	3.7799E-05	2.3961E+20	3.0046E+13
Zr-97	8.6295E+00	4.5141E-09	2.8025E+16	3.1929E+11
Nb-95	8.5695E+02	2.1915E-05	1.3892E+20	3.1707E+13
Mo-99	3.4871E+03	7.2706E-06	4.4227E+19	1.2902E+14
Tc-99m	3.3651E+03	6.3998E-07	3.8930E+18	1.2451E+14
Ru-103	8.2832E+03	2.5665E-04	1.5006E+21	3.0648E+14
Ru-105	1.7395E-04	2.5877E-14	1.4842E+11	6.4361E+06
Ru-106	2.6619E+03	7.9565E-04	4.5203E+21	9.8490E+13
Rh-105	7.3090E+02	8.6594E-07	4.9665E+18	2.7043E+13

Sb-127	5.5169E+03	2.0658E-05	9.7959E+19	2.0412E+14
Sb-129	6.9104E-04	1.2289E-13	5.7367E+11	2.5568E+07
Te-127	6.6789E+03	2.5307E-06	1.2000E+19	2.4712E+14
Te-127m	1.6541E+03	1.7536E-04	8.3153E+20	6.1202E+13
Te-129	3.3643E+03	1.6065E-07	7.4996E+17	1.2448E+14
Te-129m	5.1378E+03	1.7055E-04	7.9617E+20	1.9010E+14
Te-131m	1.3245E+03	1.6610E-06	7.6355E+18	4.9005E+13
Te-132	6.3752E+04	2.0999E-04	9.5803E+20	2.3588E+15
I-131	6.4660E+05	5.2155E-03	2.3976E+22	2.3924E+16
I-132	6.5882E+04	6.3825E-06	2.9119E+19	2.4376E+15
I-133	4.9378E+04	4.3589E-05	1.9737E+20	1.8270E+15
I-135	1.6017E+01	4.5609E-09	2.0346E+16	5.9264E+11
Cs-134	7.6085E+04	5.8806E-02	2.6428E+23	2.8151E+15
Cs-136	2.5162E+04	3.4332E-04	1.5202E+21	9.3101E+14
Cs-137	6.7682E+04	7.7812E-01	3.4204E+24	2.5042E+15
Ba-140	6.7171E+04	9.1753E-04	3.9468E+21	2.4853E+15
La-140	6.2545E+04	1.1253E-04	4.8404E+20	2.3142E+15
La-141	5.1889E-06	9.1752E-16	3.9188E+09	1.9199E+05
Ce-141	1.8740E+03	6.5770E-05	2.8091E+20	6.9339E+13
Ce-143	1.8866E+02	2.8409E-07	1.1964E+18	6.9804E+12
Ce-144	1.5428E+03	4.8370E-04	2.0229E+21	5.7082E+13
Pr-143	7.4748E+02	1.1100E-05	4.6747E+19	2.7657E+13
Nd-147	2.4251E+02	2.9977E-06	1.2281E+19	8.9728E+12
Np-239	6.1387E+03	2.6461E-05	6.6674E+19	2.2713E+14
Pu-238	1.6381E+00	9.5682E-05	2.4211E+20	6.0608E+10
Pu-239	5.1336E-01	8.2592E-03	2.0811E+22	1.8994E+10
Pu-240	5.1570E-01	2.2632E-03	5.6788E+21	1.9081E+10
Pu-241	1.5566E+02	1.5110E-03	3.7758E+21	5.7593E+12
Am-241	5.8802E-02	1.7133E-05	4.2811E+19	2.1757E+09
Cm-242	9.7586E+00	2.9444E-06	7.3271E+18	3.6107E+11
Cm-244	2.3421E-01	2.8949E-06	7.1449E+18	8.6656E+09
I-130	4.2370E+01	2.1724E-08	1.0064E+17	1.5677E+12
Cs-134m	7.2519E-08	8.9925E-18	4.0414E+07	2.6832E+03
Sb-124	1.0290E+02	5.8828E-06	2.8570E+19	3.8074E+12
Sb-125	1.5384E+03	1.4900E-03	7.1784E+21	5.6920E+13
Sb-126	9.1598E+01	1.0960E-06	5.2384E+18	3.3891E+12
Te-131	3.0312E+02	5.2796E-09	2.4270E+16	1.1215E+13
Te-125m	3.2166E+02	1.7859E-05	8.6042E+19	1.1901E+13
Ba-137m	7.4179E+04	1.3793E-07	6.0630E+17	2.7446E+15
Pd-109	5.2708E+00	2.4616E-09	1.3600E+16	1.9502E+11
Rh-106	4.5978E+03	1.2917E-09	7.3384E+15	1.7012E+14
Rh-103m	8.3277E+03	2.5601E-07	1.4968E+18	3.0813E+14
Eu-154	2.6709E+00	1.0125E-05	3.9593E+19	9.8824E+10
Eu-155	2.0481E+00	4.4044E-06	1.7112E+19	7.5778E+10
Eu-156	3.4720E+01	6.3008E-07	2.4323E+18	1.2846E+12
Nb-97	4.9521E-01	1.8419E-11	1.1435E+14	1.8323E+10
Nb-95m	5.9637E+00	1.5656E-08	9.9245E+16	2.2066E+11
Pm-147	8.2984E+01	8.9517E-05	3.6672E+20	3.0704E+12
Pm-148	6.9926E+01	4.2561E-07	1.7318E+18	2.5873E+12
Pm-149	6.1419E+01	1.5501E-07	6.2649E+17	2.2725E+12
Pm-151	6.1126E+00	8.3646E-09	3.3360E+16	2.2616E+11
Pm-148m	1.6530E+01	7.7379E-07	3.1486E+18	6.1161E+11
Pr-144	1.5798E+03	2.0907E-08	8.7433E+16	5.8453E+13
Pr-144m	2.9033E+01	1.6009E-10	6.6950E+14	1.0742E+12
Sm-153	3.1738E+01	7.2363E-08	2.8482E+17	1.1743E+12
Y-91m	1.2463E+01	2.9984E-10	1.9843E+15	4.6114E+11
Br-82	4.1392E+02	3.8232E-07	2.8078E+18	1.5315E+13
Br-83	1.3169E-09	8.3359E-20	6.0481E+05	4.8725E+01
Am-242	1.8426E-01	2.2795E-10	5.6725E+14	6.8177E+09
Np-238	5.9413E+01	2.2926E-07	5.8009E+17	2.1983E+12
Pu-243	3.1060E-05	1.1936E-14	2.9581E+10	1.1492E+06

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.4206E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	8.8252E-01

Environment Integral Nuclide Release:

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Xe-133	1.9771E+05	1.0562E-03	4.7825E+21	7.3152E+15
Xe-135	9.5754E+02	3.7496E-07	1.6726E+18	3.5429E+13
Xe-131m	2.0436E+03	2.4398E-05	1.1216E+20	7.5613E+13
Xe-133m	7.6663E+03	1.7085E-05	7.7361E+19	2.8365E+14
Xe-135m	2.6340E+00	2.8916E-11	1.2899E+14	9.7460E+10

Environment Transport Group Inventory:

Time (h) = 111.1100	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	4.4445E+17	6.1728E+15	4.9737E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Rb-86	8.5732E+02	1.0536E-05	7.3781E+19	3.1721E+13
Sr-89	4.9618E+04	1.7079E-03	1.1556E+22	1.8359E+15
Sr-90	3.5998E+03	2.6390E-02	1.7658E+23	1.3319E+14
Sr-91	1.9519E+01	5.3846E-09	3.5634E+16	7.2220E+11
Sr-92	3.1358E-08	2.4948E-18	1.6330E+07	1.1602E+03
Y-90	2.5174E+03	4.6270E-06	3.0960E+19	9.3142E+13
Y-91	1.0181E+03	4.1516E-05	2.7474E+20	3.7671E+13
Y-92	7.5155E-05	7.8105E-15	5.1126E+10	2.7807E+06
Y-93	3.8202E-01	1.1450E-10	7.4146E+14	1.4135E+10
Zr-95	8.1204E+02	3.7799E-05	2.3961E+20	3.0046E+13
Zr-97	8.6295E+00	4.5141E-09	2.8025E+16	3.1929E+11
Nb-95	8.5695E+02	2.1915E-05	1.3892E+20	3.1707E+13
Mo-99	3.4871E+03	7.2706E-06	4.4227E+19	1.2902E+14
Tc-99m	3.3651E+03	6.3998E-07	3.8930E+18	1.2451E+14
Ru-103	8.2832E+03	2.5665E-04	1.5006E+21	3.0648E+14
Ru-105	1.7395E-04	2.5877E-14	1.4842E+11	6.4361E+06
Ru-106	2.6619E+03	7.9565E-04	4.5203E+21	9.8490E+13
Rh-105	7.3090E+02	8.6594E-07	4.9665E+18	2.7043E+13
Sb-127	5.5169E+03	2.0658E-05	9.7959E+19	2.0412E+14
Sb-129	6.9104E-04	1.2289E-13	5.7367E+11	2.5568E+07
Te-127	6.6789E+03	2.5307E-06	1.2000E+19	2.4712E+14
Te-127m	1.6541E+03	1.7536E-04	8.3153E+20	6.1202E+13
Te-129	3.3643E+03	1.6065E-07	7.4996E+17	1.2448E+14
Te-129m	5.1378E+03	1.7055E-04	7.9617E+20	1.9010E+14
Te-131m	1.3245E+03	1.6610E-06	7.6355E+18	4.9005E+13
Te-132	6.3752E+04	2.0999E-04	9.5803E+20	2.3588E+15
I-131	6.4660E+05	5.2155E-03	2.3976E+22	2.3924E+16
I-132	6.5882E+04	6.3825E-06	2.9119E+19	2.4376E+15
I-133	4.9378E+04	4.3589E-05	1.9737E+20	1.8270E+15
I-135	1.6017E+01	4.5609E-09	2.0346E+16	5.9264E+11
Cs-134	7.6085E+04	5.8806E-02	2.6428E+23	2.8151E+15
Cs-136	2.5162E+04	3.4332E-04	1.5202E+21	9.3101E+14
Cs-137	6.7682E+04	7.7812E-01	3.4204E+24	2.5042E+15
Ba-140	6.7171E+04	9.1753E-04	3.9468E+21	2.4853E+15
La-140	6.2545E+04	1.1253E-04	4.8404E+20	2.3142E+15
La-141	5.1889E-06	9.1752E-16	3.9188E+09	1.9199E+05
Ce-141	1.8740E+03	6.5770E-05	2.8091E+20	6.9339E+13
Ce-143	1.8866E+02	2.8409E-07	1.1964E+18	6.9804E+12
Ce-144	1.5428E+03	4.8370E-04	2.0229E+21	5.7082E+13
Pr-143	7.4748E+02	1.1100E-05	4.6747E+19	2.7657E+13
Nd-147	2.4251E+02	2.9977E-06	1.2281E+19	8.9728E+12
Np-239	6.1387E+03	2.6461E-05	6.6674E+19	2.2713E+14
Pu-238	1.6381E+00	9.5682E-05	2.4211E+20	6.0608E+10
Pu-239	5.1336E-01	8.2592E-03	2.0811E+22	1.8994E+10
Pu-240	5.1570E-01	2.2632E-03	5.6788E+21	1.9081E+10
Pu-241	1.5566E+02	1.5110E-03	3.7758E+21	5.7593E+12
Am-241	5.8802E-02	1.7133E-05	4.2811E+19	2.1757E+09
Cm-242	9.7586E+00	2.9444E-06	7.3271E+18	3.6107E+11

Cm-244	2.3421E-01	2.8949E-06	7.1449E+18	8.6656E+09
I-130	4.2370E+01	2.1724E-08	1.0064E+17	1.5677E+12
Cs-134m	7.2519E-08	8.9925E-18	4.0414E+07	2.6832E+03
Sb-124	1.0290E+02	5.8828E-06	2.8570E+19	3.8074E+12
Sb-125	1.5384E+03	1.4900E-03	7.1784E+21	5.6920E+13
Sb-126	9.1598E+01	1.0960E-06	5.2384E+18	3.3891E+12
Te-131	3.0312E+02	5.2796E-09	2.4270E+16	1.1215E+13
Te-125m	3.2166E+02	1.7859E-05	8.6042E+19	1.1901E+13
Ba-137m	7.4179E+04	1.3793E-07	6.0630E+17	2.7446E+15
Pd-109	5.2708E+00	2.4616E-09	1.3600E+16	1.9502E+11
Rh-106	4.5978E+03	1.2917E-09	7.3384E+15	1.7012E+14
Rh-103m	8.3277E+03	2.5601E-07	1.4968E+18	3.0813E+14
Eu-154	2.6709E+00	1.0125E-05	3.9593E+19	9.8824E+10
Eu-155	2.0481E+00	4.4044E-06	1.7112E+19	7.5778E+10
Eu-156	3.4720E+01	6.3008E-07	2.4323E+18	1.2846E+12
Nb-97	4.9521E-01	1.8419E-11	1.1435E+14	1.8323E+10
Nb-95m	5.9637E+00	1.5656E-08	9.9245E+16	2.2066E+11
Pm-147	8.2984E+01	8.9517E-05	3.6672E+20	3.0704E+12
Pm-148	6.9926E+01	4.2561E-07	1.7318E+18	2.5873E+12
Pm-149	6.1419E+01	1.5501E-07	6.2649E+17	2.2725E+12
Pm-151	6.1126E+00	8.3646E-09	3.3360E+16	2.2616E+11
Pm-148m	1.6530E+01	7.7379E-07	3.1486E+18	6.1161E+11
Pr-144	1.5798E+03	2.0907E-08	8.7433E+16	5.8453E+13
Pr-144m	2.9033E+01	1.6009E-10	6.6950E+14	1.0742E+12
Sm-153	3.1738E+01	7.2363E-08	2.8482E+17	1.1743E+12
Y-91m	1.2463E+01	2.9984E-10	1.9843E+15	4.6114E+11
Br-82	4.1392E+02	3.8232E-07	2.8078E+18	1.5315E+13
Br-83	1.3169E-09	8.3359E-20	6.0481E+05	4.8725E+01
Am-242	1.8426E-01	2.2795E-10	5.6725E+14	6.8177E+09
Np-238	5.9413E+01	2.2926E-07	5.8009E+17	2.1983E+12
Pu-243	3.1060E-05	1.1936E-14	2.9581E+10	1.1492E+06

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.4206E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	8.8252E-01

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 111.1100	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 111.1100	Ci	kg	Atoms	Bq
Xe-133	6.2816E-01	3.3559E-09	1.5195E+16	2.3242E+10
Xe-135	2.9956E-03	1.1731E-12	5.2328E+12	1.1084E+08
Xe-131m	1.1093E-02	1.3243E-10	6.0881E+14	4.1044E+08
Xe-133m	2.7087E-02	6.0367E-11	2.7334E+14	1.0022E+09
Xe-135m	1.0652E-03	1.1694E-14	5.2164E+10	3.9413E+07

Control Room Transport Group Inventory:

Time (h) = 111.1100	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.6082E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 111.1100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 111.1100	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 305.5600

EAB Doses:

Time (h) = 305.5600	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.9090E-01	0.0000E+00	2.2937E+00	6.9090E-01
Accumulated dose (rem)	5.6660E+00	0.0000E+00	1.4688E+01	5.6660E+00

LPZ Doses:

Time (h) = 305.5600	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.2558E-03	0.0000E+00	1.0809E-02	3.2558E-03
Accumulated dose (rem)	1.6930E-01	0.0000E+00	3.9954E-01	1.6930E-01

Control Room Doses:

Time (h) = 305.5600	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.7433E-02	0.0000E+00	1.9846E+00	1.7433E-02
Accumulated dose (rem)	2.1085E+00	0.0000E+00	1.3220E+02	2.1085E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Rb-86	1.7423E+04	2.1413E-04	1.4994E+21	6.4466E+14
Sr-89	1.2206E+06	4.2014E-02	2.8429E+23	4.5162E+16
Sr-90	9.8919E+04	7.2518E-01	4.8524E+24	3.6600E+15
Sr-91	3.6990E-04	1.0204E-13	6.7528E+11	1.3686E+07
Y-90	9.5328E+04	1.7521E-04	1.1724E+21	3.5271E+15
Y-91	2.5433E+04	1.0371E-03	6.8630E+21	9.4102E+14
Y-93	1.6817E-05	5.0406E-15	3.2640E+10	6.2223E+05
Zr-95	2.0450E+04	9.5192E-04	6.0343E+21	7.5665E+14
Zr-97	8.1582E-02	4.2676E-11	2.6495E+14	3.0185E+09
Nb-95	2.3235E+04	5.9421E-04	3.7667E+21	8.5971E+14
Mo-99	1.2439E+04	2.5936E-05	1.5777E+20	4.6026E+14
Tc-99m	1.2004E+04	2.2830E-06	1.3887E+19	4.4416E+14
Ru-103	1.9740E+05	6.1163E-03	3.5760E+22	7.3037E+15
Ru-106	7.2078E+04	2.1544E-02	1.2240E+23	2.6669E+15
Rh-105	4.4431E+02	5.2640E-07	3.0191E+18	1.6439E+13
Sb-127	3.5272E+04	1.3208E-04	6.2630E+20	1.3051E+15
Te-127	7.5363E+04	2.8556E-05	1.3541E+20	2.7884E+15
Te-127m	4.3895E+04	4.6535E-03	2.2066E+22	1.6241E+15
Te-129	7.8263E+04	3.7371E-06	1.7446E+19	2.8957E+15
Te-129m	1.1952E+05	3.9673E-03	1.8520E+22	4.4221E+15
Te-131m	4.0747E+02	5.1099E-07	2.3491E+18	1.5076E+13
Te-132	3.1275E+05	1.0302E-03	4.6998E+21	1.1572E+16
I-131	8.8363E+06	7.1275E-02	3.2765E+23	3.2694E+17
I-132	3.2320E+05	3.1311E-05	1.4285E+20	1.1958E+16
I-133	2.0805E+03	1.8366E-06	8.3160E+18	7.6980E+13
I-135	6.1356E-07	1.7471E-16	7.7935E+08	2.2702E+04
Xe-133	1.9936E+06	1.0650E-02	4.8224E+22	7.3762E+16
Xe-135	9.9871E-03	3.9108E-12	1.7446E+13	3.6952E+08
Cs-134	2.0737E+06	1.6028E+00	7.2031E+24	7.6728E+16
Cs-136	4.5005E+05	6.1406E-03	2.7191E+22	1.6652E+16
Cs-137	1.8576E+06	2.1356E+01	9.3874E+25	6.8730E+16
Ba-140	1.1884E+06	1.6234E-02	6.9829E+22	4.3972E+16
La-140	1.3546E+06	2.4371E-03	1.0483E+22	5.0120E+16
Ce-141	4.3348E+04	1.5213E-03	6.4976E+21	1.6039E+15
Ce-143	8.7321E+01	1.3149E-07	5.5375E+17	3.2309E+12
Ce-144	4.1587E+04	1.3039E-02	5.4529E+22	1.5387E+15
Pr-143	1.3959E+04	2.0730E-04	8.7299E+20	5.1649E+14
Nd-147	3.9979E+03	4.9419E-05	2.0245E+20	1.4792E+14
Np-239	1.5547E+04	6.7016E-05	1.6886E+20	5.7525E+14
Pu-238	4.5175E+01	2.6388E-03	6.6769E+21	1.6715E+12
Pu-239	1.4155E+01	2.2774E-01	5.7384E+23	5.2375E+11
Pu-240	1.4178E+01	6.2223E-02	1.5613E+23	5.2460E+11
Pu-241	4.2750E+03	4.1500E-02	1.0370E+23	1.5817E+14
Am-241	1.7688E+00	5.1536E-04	1.2878E+21	6.5445E+10
Cm-242	2.5922E+02	7.8213E-05	1.9463E+20	9.5911E+12
Cm-244	6.4338E+00	7.9525E-05	1.9627E+20	2.3805E+11
I-130	2.1381E-02	1.0963E-11	5.0783E+13	7.9108E+08
Xe-131m	8.6963E+04	1.0382E-03	4.7728E+21	3.2176E+15
Xe-133m	1.8111E+04	4.0364E-05	1.8276E+20	6.7012E+14

Xe-135m	1.0097E-07	1.1085E-18	4.9448E+06	3.7361E+03
Sb-124	2.5772E+03	1.4733E-04	7.1553E+20	9.5355E+13
Sb-125	4.2062E+04	4.0739E-02	1.9627E+23	1.5563E+15
Sb-126	1.6011E+03	1.9158E-05	9.1567E+19	5.9242E+13
Te-131	9.3267E+01	1.6245E-09	7.4678E+15	3.4509E+12
Te-125m	8.9149E+03	4.9498E-04	2.3847E+21	3.2985E+14
Ba-137m	2.0592E+06	3.8288E-06	1.6831E+19	7.6189E+16
Pd-109	6.3327E-03	2.9575E-12	1.6340E+13	2.3431E+08
Rh-106	1.4824E+05	4.1645E-08	2.3659E+17	5.4848E+15
Rh-103m	1.9846E+05	6.1012E-06	3.5672E+19	7.3431E+15
Eu-154	7.3305E+01	2.7789E-04	1.0867E+21	2.7123E+12
Eu-155	5.6135E+01	1.2072E-04	4.6902E+20	2.0770E+12
Eu-156	6.5955E+02	1.1969E-05	4.6206E+19	2.4403E+13
Nb-97	4.6817E-03	1.7414E-13	1.0811E+12	1.7322E+08
Nb-95m	1.5136E+02	3.9737E-07	2.5190E+18	5.6005E+12
Pm-147	2.2987E+03	2.4797E-03	1.0158E+22	8.5052E+13
Pm-148	6.8813E+02	4.1884E-06	1.7043E+19	2.5461E+13
Pm-149	1.3328E+02	3.3637E-07	1.3595E+18	4.9314E+12
Pm-151	1.4600E+00	1.9979E-09	7.9681E+15	5.4020E+10
Pm-148m	3.9669E+02	1.8570E-05	7.5560E+19	1.4678E+13
Pr-144	4.2597E+04	5.6372E-07	2.3575E+18	1.5761E+15
Pr-144m	7.8384E+02	4.3222E-09	1.8075E+16	2.9002E+13
Sm-153	4.8684E+01	1.1100E-07	4.3690E+17	1.8013E+12
Y-91m	2.3619E-04	5.6824E-15	3.7605E+10	8.7392E+06
Br-82	2.4976E+02	2.3069E-07	1.6942E+18	9.2410E+12
Am-242	1.1240E-03	1.3906E-12	3.4604E+12	4.1589E+07
Np-238	1.1509E+02	4.4409E-07	1.1237E+18	4.2582E+12

Containment Sump Transport Group Inventory:

Time (h) = 305.5600	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.3180E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.2781E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.4185E+01	0.0000E+00	0.0000E+00

Time (h) = 305.5600	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Rb-86	1.7044E+03	2.0947E-05	1.4668E+20	6.3062E+13
Sr-89	1.1935E+05	4.1080E-03	2.7797E+22	4.4158E+15
Sr-90	9.6720E+03	7.0906E-02	4.7445E+23	3.5786E+14
Sr-91	3.6168E-05	9.9773E-15	6.6027E+10	1.3382E+06
Y-90	9.3209E+03	1.7132E-05	1.1463E+20	3.4487E+14
Y-91	2.4868E+03	1.0140E-04	6.7106E+20	9.2011E+13
Y-93	1.6443E-06	4.9285E-16	3.1914E+09	6.0840E+04
Zr-95	1.9995E+03	9.3075E-05	5.9001E+20	7.3983E+13
Zr-97	7.9768E-03	4.1727E-12	2.5906E+13	2.9514E+08
Nb-95	2.2719E+03	5.8100E-05	3.6830E+20	8.4060E+13
Mo-99	1.2163E+03	2.5360E-06	1.5426E+19	4.5003E+13
Tc-99m	1.1738E+03	2.2322E-07	1.3579E+18	4.3429E+13
Ru-103	1.9301E+04	5.9803E-04	3.4965E+21	7.1413E+14
Ru-106	7.0476E+03	2.1065E-03	1.1968E+22	2.6076E+14
Rh-105	4.3443E+01	5.1469E-08	2.9520E+17	1.6074E+12
Sb-127	3.4488E+03	1.2914E-05	6.1237E+19	1.2761E+14
Te-127	7.3688E+03	2.7921E-06	1.3240E+19	2.7264E+14
Te-127m	4.2919E+03	4.5501E-04	2.1576E+21	1.5880E+14
Te-129	7.6523E+03	3.6540E-07	1.7058E+18	2.8313E+14
Te-129m	1.1686E+04	3.8791E-04	1.8109E+21	4.3238E+14
Te-131m	3.9841E+01	4.9963E-08	2.2968E+17	1.4741E+12
Te-132	3.0580E+04	1.0073E-04	4.5953E+20	1.1314E+15
I-131	8.6428E+05	6.9714E-03	3.2048E+22	3.1978E+16

I-132	3.1601E+04	3.0615E-06	1.3967E+19	1.1692E+15
I-133	2.0350E+02	1.7964E-07	8.1340E+17	7.5294E+12
I-135	6.0012E-08	1.7089E-17	7.6229E+07	2.2205E+03
Cs-134	2.0286E+05	1.5679E-01	7.0463E+23	7.5057E+15
Cs-136	4.4025E+04	6.0069E-04	2.6599E+21	1.6289E+15
Cs-137	1.8171E+05	2.0891E+00	9.1830E+24	6.7233E+15
Ba-140	1.1620E+05	1.5873E-03	6.8277E+21	4.2995E+15
La-140	1.3245E+05	2.3829E-04	1.0250E+21	4.9006E+15
Ce-141	4.2384E+03	1.4875E-04	6.3531E+20	1.5682E+14
Ce-143	8.5380E+00	1.2857E-08	5.4144E+16	3.1590E+11
Ce-144	4.0662E+03	1.2749E-03	5.3316E+21	1.5045E+14
Pr-143	1.3649E+03	2.0269E-05	8.5358E+19	5.0501E+13
Nd-147	3.9090E+02	4.8320E-06	1.9795E+19	1.4463E+13
Np-239	1.5202E+03	6.5526E-06	1.6511E+19	5.6246E+13
Pu-238	4.4171E+00	2.5801E-04	6.5285E+20	1.6343E+11
Pu-239	1.3841E+00	2.2267E-02	5.6108E+22	5.1210E+10
Pu-240	1.3863E+00	6.0839E-03	1.5266E+22	5.1294E+10
Pu-241	4.1800E+02	4.0577E-03	1.0139E+22	1.5466E+13
Am-241	1.7295E-01	5.0390E-05	1.2592E+20	6.3991E+09
Cm-242	2.5346E+01	7.6474E-06	1.9030E+19	9.3779E+11
Cm-244	6.2907E-01	7.7757E-06	1.9191E+19	2.3276E+10
I-130	2.0913E-03	1.0723E-12	4.9671E+12	7.7377E+07
Sb-124	2.5199E+02	1.4406E-05	6.9963E+19	9.3236E+12
Sb-125	4.1127E+03	3.9833E-03	1.9191E+22	1.5217E+14
Sb-126	1.5655E+02	1.8733E-06	8.9532E+18	5.7925E+12
Te-131	9.1193E+00	1.5884E-10	7.3018E+14	3.3742E+11
Te-125m	8.7167E+02	4.8398E-05	2.3317E+20	3.2252E+13
Ba-137m	2.0143E+05	3.7455E-07	1.6464E+18	7.4530E+15
Pd-109	6.1920E-04	2.8918E-13	1.5977E+12	2.2910E+07
Rh-106	1.4494E+04	4.0719E-09	2.3133E+16	5.3628E+14
Rh-103m	1.9405E+04	5.9655E-07	3.4879E+18	7.1799E+14
Eu-154	7.1676E+00	2.7171E-05	1.0625E+20	2.6520E+11
Eu-155	5.4887E+00	1.1803E-05	4.5859E+19	2.0308E+11
Eu-156	6.4489E+01	1.1703E-06	4.5178E+18	2.3861E+12
Nb-97	4.5777E-04	1.7027E-14	1.0571E+11	1.6937E+07
Nb-95m	1.4800E+01	3.8854E-08	2.4630E+17	5.4760E+11
Pm-147	2.2476E+02	2.4245E-04	9.9326E+20	8.3161E+12
Pm-148	6.7283E+01	4.0953E-07	1.6664E+18	2.4895E+12
Pm-149	1.3032E+01	3.2889E-08	1.3293E+17	4.8217E+11
Pm-151	1.4276E-01	1.9535E-10	7.7909E+14	5.2820E+09
Pm-148m	3.8787E+01	1.8157E-06	7.3880E+18	1.4351E+12
Pr-144	4.1650E+03	5.5118E-08	2.3051E+17	1.5410E+14
Pr-144m	7.6642E+01	4.2261E-10	1.7674E+15	2.8357E+12
Sm-153	4.7601E+00	1.0853E-08	4.2719E+16	1.7613E+11
Y-91m	2.3094E-05	5.5561E-16	3.6769E+09	8.5449E+05
Br-82	2.4429E+01	2.2564E-08	1.6571E+17	9.0387E+11
Am-242	1.0991E-04	1.3596E-13	3.3834E+11	4.0665E+06
Np-238	1.1253E+01	4.3421E-08	1.0987E+17	4.1636E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.2063E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	2.3658E+00

Environment Integral Nuclide Release:

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Xe-133	1.9499E+05	1.0417E-03	4.7169E+21	7.2148E+15
Xe-135	9.7687E-04	3.8253E-13	1.7064E+12	3.6144E+07
Xe-131m	8.5060E+03	1.0155E-04	4.6683E+20	3.1472E+14
Xe-133m	1.7715E+03	3.9480E-06	1.7876E+19	6.5546E+13

Environment Transport Group Inventory:

Time (h) = 305.5600	Present Release	Release Rate/s	Integral Release

Noble gases (atoms)	3.2598E+17	4.5275E+15	5.2016E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Rb-86	1.7044E+03	2.0947E-05	1.4668E+20	6.3062E+13
Sr-89	1.1935E+05	4.1080E-03	2.7797E+22	4.4158E+15
Sr-90	9.6720E+03	7.0906E-02	4.7445E+23	3.5786E+14
Sr-91	3.6168E-05	9.9773E-15	6.6027E+10	1.3382E+06
Y-90	9.3209E+03	1.7132E-05	1.1463E+20	3.4487E+14
Y-91	2.4868E+03	1.0140E-04	6.7106E+20	9.2011E+13
Y-93	1.6443E-06	4.9285E-16	3.1914E+09	6.0840E+04
Zr-95	1.9995E+03	9.3075E-05	5.9001E+20	7.3983E+13
Zr-97	7.9768E-03	4.1727E-12	2.5906E+13	2.9514E+08
Nb-95	2.2719E+03	5.8100E-05	3.6830E+20	8.4060E+13
Mo-99	1.2163E+03	2.5360E-06	1.5426E+19	4.5003E+13
Tc-99m	1.1738E+03	2.2322E-07	1.3579E+18	4.3429E+13
Ru-103	1.9301E+04	5.9803E-04	3.4965E+21	7.1413E+14
Ru-106	7.0476E+03	2.1065E-03	1.1968E+22	2.6076E+14
Rh-105	4.3443E+01	5.1469E-08	2.9520E+17	1.6074E+12
Sb-127	3.4488E+03	1.2914E-05	6.1237E+19	1.2761E+14
Te-127	7.3688E+03	2.7921E-06	1.3240E+19	2.7264E+14
Te-127m	4.2919E+03	4.5501E-04	2.1576E+21	1.5880E+14
Te-129	7.6523E+03	3.6540E-07	1.7058E+18	2.8313E+14
Te-129m	1.1686E+04	3.8791E-04	1.8109E+21	4.3238E+14
Te-131m	3.9841E+01	4.9963E-08	2.2968E+17	1.4741E+12
Te-132	3.0580E+04	1.0073E-04	4.5953E+20	1.1314E+15
I-131	8.6428E+05	6.9714E-03	3.2048E+22	3.1978E+16
I-132	3.1601E+04	3.0615E-06	1.3967E+19	1.1692E+15
I-133	2.0350E+02	1.7964E-07	8.1340E+17	7.5294E+12
I-135	6.0012E-08	1.7089E-17	7.6229E+07	2.2205E+03
Cs-134	2.0286E+05	1.5679E-01	7.0463E+23	7.5057E+15
Cs-136	4.4025E+04	6.0069E-04	2.6599E+21	1.6289E+15
Cs-137	1.8171E+05	2.0891E+00	9.1830E+24	6.7233E+15
Ba-140	1.1620E+05	1.5873E-03	6.8277E+21	4.2995E+15
La-140	1.3245E+05	2.3829E-04	1.0250E+21	4.9006E+15
Ce-141	4.2384E+03	1.4875E-04	6.3531E+20	1.5682E+14
Ce-143	8.5380E+00	1.2857E-08	5.4144E+16	3.1590E+11
Ce-144	4.0662E+03	1.2749E-03	5.3316E+21	1.5045E+14
Pr-143	1.3649E+03	2.0269E-05	8.5358E+19	5.0501E+13
Nd-147	3.9090E+02	4.8320E-06	1.9795E+19	1.4463E+13
Np-239	1.5202E+03	6.5526E-06	1.6511E+19	5.6246E+13
Pu-238	4.4171E+00	2.5801E-04	6.5285E+20	1.6343E+11
Pu-239	1.3841E+00	2.2267E-02	5.6108E+22	5.1210E+10
Pu-240	1.3863E+00	6.0839E-03	1.5266E+22	5.1294E+10
Pu-241	4.1800E+02	4.0577E-03	1.0139E+22	1.5466E+13
Am-241	1.7295E-01	5.0390E-05	1.2592E+20	6.3991E+09
Cm-242	2.5346E+01	7.6474E-06	1.9030E+19	9.3779E+11
Cm-244	6.2907E-01	7.7757E-06	1.9191E+19	2.3276E+10
I-130	2.0913E-03	1.0723E-12	4.9671E+12	7.7377E+07
Sb-124	2.5199E+02	1.4406E-05	6.9963E+19	9.3236E+12
Sb-125	4.1127E+03	3.9833E-03	1.9191E+22	1.5217E+14
Sb-126	1.5655E+02	1.8733E-06	8.9532E+18	5.7925E+12
Te-131	9.1193E+00	1.5884E-10	7.3018E+14	3.3742E+11
Te-125m	8.7167E+02	4.8398E-05	2.3317E+20	3.2252E+13
Ba-137m	2.0143E+05	3.7455E-07	1.6464E+18	7.4530E+15
Pd-109	6.1920E-04	2.8918E-13	1.5977E+12	2.2910E+07
Rh-106	1.4494E+04	4.0719E-09	2.3133E+16	5.3628E+14
Rh-103m	1.9405E+04	5.9655E-07	3.4879E+18	7.1799E+14
Eu-154	7.1676E+00	2.7171E-05	1.0625E+20	2.6520E+11
Eu-155	5.4887E+00	1.1803E-05	4.5859E+19	2.0308E+11
Eu-156	6.4489E+01	1.1703E-06	4.5178E+18	2.3861E+12
Nb-97	4.5777E-04	1.7027E-14	1.0571E+11	1.6937E+07
Nb-95m	1.4800E+01	3.8854E-08	2.4630E+17	5.4760E+11
Pm-147	2.2476E+02	2.4245E-04	9.9326E+20	8.3161E+12
Pm-148	6.7283E+01	4.0953E-07	1.6664E+18	2.4895E+12
Pm-149	1.3032E+01	3.2889E-08	1.3293E+17	4.8217E+11

Pm-151	1.4276E-01	1.9535E-10	7.7909E+14	5.2820E+09
Pm-148m	3.8787E+01	1.8157E-06	7.3880E+18	1.4351E+12
Pr-144	4.1650E+03	5.5118E-08	2.3051E+17	1.5410E+14
Pr-144m	7.6642E+01	4.2261E-10	1.7674E+15	2.8357E+12
Sm-153	4.7601E+00	1.0853E-08	4.2719E+16	1.7613E+11
Y-91m	2.3094E-05	5.5561E-16	3.6769E+09	8.5449E+05
Br-82	2.4429E+01	2.2564E-08	1.6571E+17	9.0387E+11
Am-242	1.0991E-04	1.3596E-13	3.3834E+11	4.0665E+06
Np-238	1.1253E+01	4.3421E-08	1.0987E+17	4.1636E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.2063E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	2.3658E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 305.5600	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 305.5600	Ci	kg	Atoms	Bq
Xe-133	1.8864E-01	1.0078E-09	4.5633E+15	6.9798E+09
Xe-135	9.4466E-10	3.6992E-19	1.6501E+06	3.4953E+01
Xe-131m	1.5555E-02	1.8571E-10	8.5372E+14	5.7554E+08
Xe-133m	1.7354E-03	3.8676E-12	1.7512E+13	6.4210E+07

Control Room Transport Group Inventory:

Time (h) = 305.5600	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.4345E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00

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Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                      Deposition Recirculating
Time (h) = 305.5600    Surfaces     Filter
Noble gases (atoms)   0.0000E+00  0.0000E+00
Elemental I (atoms)   0.0000E+00  0.0000E+00
Organic I (atoms)     0.0000E+00  0.0000E+00
Aerosols (kg)         0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 305.5600     Filter
Noble gases (atoms)   0.0000E+00
Elemental I (atoms)   0.0000E+00
Organic I (atoms)     0.0000E+00
Aerosols (kg)         0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 305.5600     Filter
Noble gases (atoms)   0.0000E+00
Elemental I (atoms)   0.0000E+00
Organic I (atoms)     0.0000E+00
Aerosols (kg)         0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                       Pathway
Time (h) = 305.5600     Filter
Noble gases (atoms)   0.0000E+00
Elemental I (atoms)   0.0000E+00
Organic I (atoms)     0.0000E+00
Aerosols (kg)         0.0000E+00

Control Room Exhaust Transport Group Inventory:

                       Pathway
Time (h) = 305.5600     Filter
Noble gases (atoms)   0.0000E+00
Elemental I (atoms)   0.0000E+00
Organic I (atoms)     0.0000E+00
Aerosols (kg)         0.0000E+00

Detailed model information at time (H) =  402.7800

EAB Doses:

Time (h) = 402.7800     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.4425E-01  0.0000E+00  4.8143E-01  1.4425E-01
Accumulated dose (rem)  5.8103E+00  0.0000E+00  1.5170E+01  5.8103E+00

LPZ Doses:

Time (h) = 402.7800     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        6.7976E-04  0.0000E+00  2.2687E-03  6.7976E-04
Accumulated dose (rem)  1.6998E-01  0.0000E+00  4.0181E-01  1.6998E-01

Control Room Doses:

Time (h) = 402.7800     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        3.4920E-03  0.0000E+00  4.0694E-01  3.4920E-03
Accumulated dose (rem)  2.1120E+00  0.0000E+00  1.3260E+02  2.1120E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 402.7800       Ci           kg         Atoms         Bq
Rb-86                  1.4549E+04  1.7881E-04  1.2521E+21  5.3832E+14
Sr-89                  1.1207E+06  3.8575E-02  2.6102E+23  4.1466E+16
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Sr-90	9.5990E+04	7.0370E-01	4.7087E+24	3.5516E+15
Sr-91	2.9819E-07	8.2261E-17	5.4438E+08	1.1033E+04
Y-90	9.4796E+04	1.7424E-04	1.1659E+21	3.5075E+15
Y-91	2.3530E+04	9.5946E-04	6.3494E+21	8.7060E+14
Y-93	2.0662E-08	6.1931E-18	4.0103E+07	7.6449E+02
Zr-95	1.8997E+04	8.8430E-04	5.6057E+21	7.0290E+14
Zr-97	1.4687E-03	7.6828E-13	4.7698E+12	5.4342E+07
Nb-95	2.2313E+04	5.7062E-04	3.6172E+21	8.2558E+14
Mo-99	4.3494E+03	9.0686E-06	5.5164E+19	1.6093E+14
Tc-99m	4.1974E+03	7.9824E-07	4.8557E+18	1.5530E+14
Ru-103	1.7838E+05	5.5272E-03	3.2316E+22	6.6002E+15
Ru-106	6.9431E+04	2.0753E-02	1.1790E+23	2.5689E+15
Rh-105	6.4133E+01	7.5982E-08	4.3579E+17	2.3729E+12
Sb-127	1.6510E+04	6.1825E-05	2.9316E+20	6.1088E+14
Te-127	5.5944E+04	2.1198E-05	1.0052E+20	2.0699E+15
Te-127m	4.1631E+04	4.4136E-03	2.0928E+22	1.5404E+15
Te-129	6.9875E+04	3.3365E-06	1.5576E+19	2.5854E+15
Te-129m	1.0671E+05	3.5421E-03	1.6536E+22	3.9481E+15
Te-131m	4.1842E+01	5.2473E-08	2.4122E+17	1.5482E+12
Te-132	1.2824E+05	4.2239E-04	1.9270E+21	4.7447E+15
I-131	6.0487E+06	4.8790E-02	2.2429E+23	2.2380E+17
I-132	1.3252E+05	1.2838E-05	5.8572E+19	4.9032E+15
I-133	7.9106E+01	6.9832E-08	3.1619E+17	2.9269E+12
Xe-133	1.1370E+06	6.0744E-03	2.7504E+22	4.2069E+16
Xe-135	5.8475E-06	2.2898E-15	1.0214E+10	2.1636E+05
Cs-134	2.0054E+06	1.5499E+00	6.9657E+24	7.4198E+16
Cs-136	3.5256E+05	4.8105E-03	2.1301E+22	1.3045E+16
Cs-137	1.8026E+06	2.0724E+01	9.1095E+25	6.6695E+16
Ba-140	9.2538E+05	1.2640E-02	5.4373E+22	3.4239E+16
La-140	1.0633E+06	1.9130E-03	8.2290E+21	3.9343E+16
Ce-141	3.8593E+04	1.3544E-03	5.7848E+21	1.4279E+15
Ce-143	1.0998E+01	1.6562E-08	6.9746E+16	4.0694E+11
Ce-144	3.9969E+04	1.2532E-02	5.2408E+22	1.4789E+15
Pr-143	1.1022E+04	1.6368E-04	6.8928E+20	4.0780E+14
Nd-147	3.0049E+03	3.7144E-05	1.5217E+20	1.1118E+14
Np-239	4.5805E+03	1.9744E-05	4.9750E+19	1.6948E+14
Pu-238	4.3872E+01	2.5627E-03	6.4844E+21	1.6233E+12
Pu-239	1.3743E+01	2.2110E-01	5.5710E+23	5.0848E+11
Pu-240	1.3762E+01	6.0396E-02	1.5155E+23	5.0920E+11
Pu-241	4.1473E+03	4.0260E-02	1.0060E+23	1.5345E+14
Am-241	1.7906E+00	5.2172E-04	1.3037E+21	6.6253E+10
Cm-242	2.4731E+02	7.4619E-05	1.8569E+20	9.1504E+12
Cm-244	6.2422E+00	7.7157E-05	1.9043E+20	2.3096E+11
I-130	8.8976E-05	4.5621E-14	2.1133E+11	3.2921E+06
Xe-131m	8.3443E+04	9.9621E-04	4.5796E+21	3.0874E+15
Xe-133m	4.8809E+03	1.0878E-05	4.9254E+19	1.8059E+14
Sb-124	2.3875E+03	1.3649E-04	6.6288E+20	8.8338E+13
Sb-125	4.0714E+04	3.9433E-02	1.8998E+23	1.5064E+15
Sb-126	1.2392E+03	1.4828E-05	7.0870E+19	4.5851E+13
Te-131	9.5774E+00	1.6682E-10	7.6686E+14	3.5437E+11
Te-125m	8.6835E+03	4.8214E-04	2.3228E+21	3.2129E+14
Ba-137m	1.9982E+06	3.7155E-06	1.6332E+19	7.3933E+16
Pd-109	4.0645E-05	1.8982E-14	1.0487E+11	1.5039E+06
Rh-106	1.4279E+05	4.0115E-08	2.2790E+17	5.2833E+15
Rh-103m	1.7935E+05	5.5135E-06	3.2236E+19	6.6359E+15
Eu-154	7.1091E+01	2.6949E-04	1.0538E+21	2.6304E+12
Eu-155	5.4402E+01	1.1699E-04	4.5455E+20	2.0129E+12
Eu-156	5.3214E+02	9.6572E-06	3.7280E+19	1.9689E+13
Nb-97	8.4284E-05	3.1349E-15	1.9463E+10	3.1185E+06
Nb-95m	1.4078E+02	3.6959E-07	2.3429E+18	5.2090E+12
Pm-147	2.2347E+03	2.4106E-03	9.8756E+21	8.2684E+13
Pm-148	4.0291E+02	2.4524E-06	9.9787E+18	1.4908E+13
Pm-149	3.6347E+01	9.1730E-08	3.7075E+17	1.3448E+12
Pm-151	1.3210E-01	1.8078E-10	7.2097E+14	4.8879E+09
Pm-148m	3.5974E+02	1.6840E-05	6.8521E+19	1.3310E+13
Pr-144	4.0940E+04	5.4179E-07	2.2658E+18	1.5148E+15
Pr-144m	7.5335E+02	4.1540E-09	1.7372E+16	2.7874E+13
Sm-153	1.1162E+01	2.5451E-08	1.0017E+17	4.1301E+11
Y-91m	1.9041E-07	4.5809E-18	3.0315E+07	7.0451E+03
Br-82	3.5934E+01	3.3191E-08	2.4376E+17	1.3296E+12

Am-242	1.6255E-05	2.0109E-14	5.0042E+10	6.0144E+05
Np-238	2.9653E+01	1.1442E-07	2.8952E+17	1.0972E+12

Containment Sump Transport Group Inventory:

Time (h) = 402.7800	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.2133E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.2435E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.3455E+01	0.0000E+00	0.0000E+00

Time (h) = 402.7800	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Rb-86	1.9063E+03	2.3428E-05	1.6406E+20	7.0533E+13
Sr-89	1.4679E+05	5.0525E-03	3.4187E+22	5.4311E+15
Sr-90	1.2573E+04	9.2169E-02	6.1673E+23	4.6518E+14
Sr-91	3.9057E-08	1.0774E-17	7.1301E+07	1.4451E+03
Y-90	1.2416E+04	2.2821E-05	1.5270E+20	4.5940E+14
Y-91	3.0819E+03	1.2567E-04	8.3164E+20	1.1403E+14
Y-93	2.7063E-09	8.1115E-19	5.2525E+06	1.0013E+02
Zr-95	2.4882E+03	1.1582E-04	7.3422E+20	9.2064E+13
Zr-97	1.9237E-04	1.0063E-13	6.2473E+11	7.1175E+06
Nb-95	2.9225E+03	7.4738E-05	4.7377E+20	1.0813E+14
Mo-99	5.6968E+02	1.1878E-06	7.2253E+18	2.1078E+13
Tc-99m	5.4976E+02	1.0455E-07	6.3599E+17	2.0341E+13
Ru-103	2.3364E+04	7.2394E-04	4.2327E+21	8.6448E+14
Ru-106	9.0939E+03	2.7182E-03	1.5443E+22	3.3647E+14
Rh-105	8.4000E+00	9.9520E-09	5.7078E+16	3.1080E+11
Sb-127	2.1625E+03	8.0976E-06	3.8398E+19	8.0012E+13
Te-127	7.3274E+03	2.7765E-06	1.3166E+19	2.7112E+14
Te-127m	5.4528E+03	5.7808E-04	2.7412E+21	2.0175E+14
Te-129	9.1521E+03	4.3701E-07	2.0401E+18	3.3863E+14
Te-129m	1.3976E+04	4.6393E-04	2.1658E+21	5.1712E+14
Te-131m	5.4804E+00	6.8728E-09	3.1595E+16	2.0278E+11
Te-132	1.6796E+04	5.5324E-05	2.5240E+20	6.2145E+14
I-131	7.9246E+05	6.3921E-03	2.9385E+22	2.9321E+16
I-132	1.7357E+04	1.6815E-06	7.6716E+18	6.4221E+14
I-133	1.0364E+01	9.1488E-09	4.1425E+16	3.8346E+11
Cs-134	2.6275E+05	2.0308E-01	9.1267E+23	9.7218E+15
Cs-136	4.6194E+04	6.3029E-04	2.7909E+21	1.7092E+15
Cs-137	2.3618E+05	2.7153E+00	1.1936E+25	8.7387E+15
Ba-140	1.2120E+05	1.6556E-03	7.1216E+21	4.4846E+15
La-140	1.3927E+05	2.5057E-04	1.0778E+21	5.1531E+15
Ce-141	5.0548E+03	1.7740E-04	7.5769E+20	1.8703E+14
Ce-143	1.4405E+00	2.1692E-09	9.1351E+15	5.3300E+10
Ce-144	5.2351E+03	1.6414E-03	6.8642E+21	1.9370E+14
Pr-143	1.4436E+03	2.1438E-05	9.0281E+19	5.3413E+13
Nd-147	3.9358E+02	4.8651E-06	1.9931E+19	1.4562E+13
Np-239	5.9994E+02	2.5860E-06	6.5161E+18	2.2198E+13
Pu-238	5.7463E+00	3.3565E-04	8.4931E+20	2.1261E+11
Pu-239	1.8000E+00	2.8959E-02	7.2968E+22	6.6599E+10
Pu-240	1.8025E+00	7.9105E-03	1.9849E+22	6.6694E+10
Pu-241	5.4320E+02	5.2731E-03	1.3177E+22	2.0098E+13
Am-241	2.3453E-01	6.8333E-05	1.7075E+20	8.6777E+09
Cm-242	3.2392E+01	9.7734E-06	2.4321E+19	1.1985E+12
Cm-244	8.1759E-01	1.0106E-05	2.4942E+19	3.0251E+10
I-130	1.1657E-05	5.9769E-15	2.7687E+10	4.3131E+05
Sb-124	3.1271E+02	1.7877E-05	8.6822E+19	1.1570E+13
Sb-125	5.3326E+03	5.1649E-03	2.4883E+22	1.9731E+14
Sb-126	1.6231E+02	1.9421E-06	9.2823E+18	6.0055E+12
Te-131	1.2544E+00	2.1849E-11	1.0044E+14	4.6414E+10

Te-125m	1.1373E+03	6.3150E-05	3.0424E+20	4.2082E+13
Ba-137m	2.6181E+05	4.8682E-07	2.1399E+18	9.6871E+15
Pd-109	5.3235E-06	2.4862E-15	1.3736E+10	1.9697E+05
Rh-106	1.8703E+04	5.2542E-09	2.9850E+16	6.9199E+14
Rh-103m	2.3491E+04	7.2215E-07	4.2222E+18	8.6915E+14
Eu-154	9.3114E+00	3.5298E-05	1.3803E+20	3.4452E+11
Eu-155	7.1255E+00	1.5323E-05	5.9535E+19	2.6364E+11
Eu-156	6.9699E+01	1.2649E-06	4.8829E+18	2.5789E+12
Nb-97	1.1039E-05	4.1060E-16	2.5492E+09	4.0845E+05
Nb-95m	1.8439E+01	4.8408E-08	3.0686E+17	6.8226E+11
Pm-147	2.9270E+02	3.1574E-04	1.2935E+21	1.0830E+13
Pm-148	5.2772E+01	3.2120E-07	1.3070E+18	1.9526E+12
Pm-149	4.7606E+00	1.2015E-08	4.8559E+16	1.7614E+11
Pm-151	1.7303E-02	2.3678E-11	9.4431E+13	6.4020E+08
Pm-148m	4.7117E+01	2.2056E-06	8.9747E+18	1.7433E+12
Pr-144	5.3622E+03	7.0962E-08	2.9677E+17	1.9840E+14
Pr-144m	9.8673E+01	5.4409E-10	2.2754E+15	3.6509E+12
Sm-153	1.4620E+00	3.3334E-09	1.3121E+16	5.4095E+10
Y-91m	2.4939E-08	5.9999E-19	3.9706E+06	9.2275E+02
Br-82	4.7079E+00	4.3485E-09	3.1936E+16	1.7419E+11
Am-242	2.1291E-06	2.6339E-15	6.5544E+09	7.8775E+04
Np-238	3.8839E+00	1.4987E-08	3.7921E+16	1.4371E+11

SIRWT Backleakage Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.9392E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.0731E+00

Environment Integral Nuclide Release:

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Xe-133	1.4896E+05	7.9583E-04	3.6034E+21	5.5117E+15
Xe-131m	1.0932E+04	1.3052E-04	5.9999E+20	4.0449E+14
Xe-133m	6.3947E+02	1.4251E-06	6.4529E+18	2.3660E+13

Environment Transport Group Inventory:

Time (h) = 402.7800	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.9698E+17	2.7358E+15	4.2099E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Rb-86	1.9063E+03	2.3428E-05	1.6406E+20	7.0533E+13
Sr-89	1.4679E+05	5.0525E-03	3.4187E+22	5.4311E+15
Sr-90	1.2573E+04	9.2169E-02	6.1673E+23	4.6518E+14
Sr-91	3.9057E-08	1.0774E-17	7.1301E+07	1.4451E+03
Y-90	1.2416E+04	2.2821E-05	1.5270E+20	4.5940E+14
Y-91	3.0819E+03	1.2567E-04	8.3164E+20	1.1403E+14
Y-93	2.7063E-09	8.1115E-19	5.2525E+06	1.0013E+02
Zr-95	2.4882E+03	1.1582E-04	7.3422E+20	9.2064E+13
Zr-97	1.9237E-04	1.0063E-13	6.2473E+11	7.1175E+06
Nb-95	2.9225E+03	7.4738E-05	4.7377E+20	1.0813E+14
Mo-99	5.6968E+02	1.1878E-06	7.2253E+18	2.1078E+13
Tc-99m	5.4976E+02	1.0455E-07	6.3599E+17	2.0341E+13
Ru-103	2.3364E+04	7.2394E-04	4.2327E+21	8.6448E+14
Ru-106	9.0939E+03	2.7182E-03	1.5443E+22	3.3647E+14
Rh-105	8.4000E+00	9.9520E-09	5.7078E+16	3.1080E+11
Sb-127	2.1625E+03	8.0976E-06	3.8398E+19	8.0012E+13
Te-127	7.3274E+03	2.7765E-06	1.3166E+19	2.7112E+14
Te-127m	5.4528E+03	5.7808E-04	2.7412E+21	2.0175E+14
Te-129	9.1521E+03	4.3701E-07	2.0401E+18	3.3863E+14

Te-129m	1.3976E+04	4.6393E-04	2.1658E+21	5.1712E+14
Te-131m	5.4804E+00	6.8728E-09	3.1595E+16	2.0278E+11
Te-132	1.6796E+04	5.5324E-05	2.5240E+20	6.2145E+14
I-131	7.9246E+05	6.3921E-03	2.9385E+22	2.9321E+16
I-132	1.7357E+04	1.6815E-06	7.6716E+18	6.4221E+14
I-133	1.0364E+01	9.1488E-09	4.1425E+16	3.8346E+11
Cs-134	2.6275E+05	2.0308E-01	9.1267E+23	9.7218E+15
Cs-136	4.6194E+04	6.3029E-04	2.7909E+21	1.7092E+15
Cs-137	2.3618E+05	2.7153E+00	1.1936E+25	8.7387E+15
Ba-140	1.2120E+05	1.6556E-03	7.1216E+21	4.4846E+15
La-140	1.3927E+05	2.5057E-04	1.0778E+21	5.1531E+15
Ce-141	5.0548E+03	1.7740E-04	7.5769E+20	1.8703E+14
Ce-143	1.4405E+00	2.1692E-09	9.1351E+15	5.3300E+10
Ce-144	5.2351E+03	1.6414E-03	6.8642E+21	1.9370E+14
Pr-143	1.4436E+03	2.1438E-05	9.0281E+19	5.3413E+13
Nd-147	3.9358E+02	4.8651E-06	1.9931E+19	1.4562E+13
Np-239	5.9994E+02	2.5860E-06	6.5161E+18	2.2198E+13
Pu-238	5.7463E+00	3.3565E-04	8.4931E+20	2.1261E+11
Pu-239	1.8000E+00	2.8959E-02	7.2968E+22	6.6599E+10
Pu-240	1.8025E+00	7.9105E-03	1.9849E+22	6.6694E+10
Pu-241	5.4320E+02	5.2731E-03	1.3177E+22	2.0098E+13
Am-241	2.3453E-01	6.8333E-05	1.7075E+20	8.6777E+09
Cm-242	3.2392E+01	9.7734E-06	2.4321E+19	1.1985E+12
Cm-244	8.1759E-01	1.0106E-05	2.4942E+19	3.0251E+10
I-130	1.1657E-05	5.9769E-15	2.7687E+10	4.3131E+05
Sb-124	3.1271E+02	1.7877E-05	8.6822E+19	1.1570E+13
Sb-125	5.3326E+03	5.1649E-03	2.4883E+22	1.9731E+14
Sb-126	1.6231E+02	1.9421E-06	9.2823E+18	6.0055E+12
Te-131	1.2544E+00	2.1849E-11	1.0044E+14	4.6414E+10
Te-125m	1.1373E+03	6.3150E-05	3.0424E+20	4.2082E+13
Ba-137m	2.6181E+05	4.8682E-07	2.1399E+18	9.6871E+15
Pd-109	5.3235E-06	2.4862E-15	1.3736E+10	1.9697E+05
Rh-106	1.8703E+04	5.2542E-09	2.9850E+16	6.9199E+14
Rh-103m	2.3491E+04	7.2215E-07	4.2222E+18	8.6915E+14
Eu-154	9.3114E+00	3.5298E-05	1.3803E+20	3.4452E+11
Eu-155	7.1255E+00	1.5323E-05	5.9535E+19	2.6364E+11
Eu-156	6.9699E+01	1.2649E-06	4.8829E+18	2.5789E+12
Nb-97	1.1039E-05	4.1060E-16	2.5492E+09	4.0845E+05
Nb-95m	1.8439E+01	4.8408E-08	3.0686E+17	6.8226E+11
Pm-147	2.9270E+02	3.1574E-04	1.2935E+21	1.0830E+13
Pm-148	5.2772E+01	3.2120E-07	1.3070E+18	1.9526E+12
Pm-149	4.7606E+00	1.2015E-08	4.8559E+16	1.7614E+11
Pm-151	1.7303E-02	2.3678E-11	9.4431E+13	6.4020E+08
Pm-148m	4.7117E+01	2.2056E-06	8.9747E+18	1.7433E+12
Pr-144	5.3622E+03	7.0962E-08	2.9677E+17	1.9840E+14
Pr-144m	9.8673E+01	5.4409E-10	2.2754E+15	3.6509E+12
Sm-153	1.4620E+00	3.3334E-09	1.3121E+16	5.4095E+10
Y-91m	2.4939E-08	5.9999E-19	3.9706E+06	9.2275E+02
Br-82	4.7079E+00	4.3485E-09	3.1936E+16	1.7419E+11
Am-242	2.1291E-06	2.6339E-15	6.5544E+09	7.8775E+04
Np-238	3.8839E+00	1.4987E-08	3.7921E+16	1.4371E+11

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 402.7800	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.9392E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.0731E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 402.7800	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 402.7800	Ci	kg	Atoms	Bq
Xe-133	1.0741E-01	5.7383E-10	2.5983E+15	3.9742E+09
Xe-131m	1.4617E-02	1.7451E-10	8.0222E+14	5.4083E+08
Xe-133m	4.6228E-04	1.0302E-12	4.6649E+12	1.7104E+07

Control Room Transport Group Inventory:

Time (h) = 402.7800	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.4052E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 402.7800	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 402.7800	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 402.7800	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 402.7800	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 500.0000

EAB Doses:

Time (h) = 500.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.2651E-02	0.0000E+00	2.8126E-01	8.2651E-02
Accumulated dose (rem)	5.8929E+00	0.0000E+00	1.5451E+01	5.8929E+00

LPZ Doses:

Time (h) = 500.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.8949E-04	0.0000E+00	1.3254E-03	3.8949E-04
Accumulated dose (rem)	1.7037E-01	0.0000E+00	4.0313E-01	1.7037E-01

Control Room Doses:

Time (h) = 500.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.0122E-03	0.0000E+00	2.4272E-01	2.0122E-03
Accumulated dose (rem)	2.1140E+00	0.0000E+00	1.3284E+02	2.1140E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Rb-86	1.2149E+04	1.4931E-04	1.0456E+21	4.4952E+14
Sr-89	1.0290E+06	3.5418E-02	2.3965E+23	3.8072E+16
Sr-90	9.3148E+04	6.8287E-01	4.5692E+24	3.4465E+15
Sr-91	2.4039E-10	6.6314E-20	4.3885E+05	8.8944E+00
Y-90	9.2765E+04	1.7050E-04	1.1409E+21	3.4323E+15
Y-91	2.1769E+04	8.8766E-04	5.8743E+21	8.0544E+14
Zr-95	1.7648E+04	8.2149E-04	5.2075E+21	6.5297E+14
Zr-97	2.6440E-05	1.3831E-14	8.5868E+10	9.7829E+05
Nb-95	2.1380E+04	5.4677E-04	3.4660E+21	7.9108E+14
Mo-99	1.5208E+03	3.1708E-06	1.9288E+19	5.6269E+13
Tc-99m	1.4676E+03	2.7911E-07	1.6978E+18	5.4301E+13
Ru-103	1.6120E+05	4.9948E-03	2.9203E+22	5.9645E+15
Ru-106	6.6880E+04	1.9991E-02	1.1357E+23	2.4746E+15
Rh-105	9.2572E+00	1.0968E-08	6.2903E+16	3.4252E+11
Sb-127	7.7283E+03	2.8939E-05	1.3723E+20	2.8595E+14
Te-127	4.5738E+04	1.7331E-05	8.2180E+19	1.6923E+15
Te-127m	3.9432E+04	4.1805E-03	1.9823E+22	1.4590E+15
Te-129	6.2386E+04	2.9790E-06	1.3907E+19	2.3083E+15
Te-129m	9.5270E+04	3.1625E-03	1.4763E+22	3.5250E+15
Te-131m	4.2967E+00	5.3884E-09	2.4771E+16	1.5898E+11
Te-132	5.2580E+04	1.7319E-04	7.9014E+20	1.9455E+15
I-131	4.1405E+06	3.3398E-02	1.5353E+23	1.5320E+17
I-132	5.4337E+04	5.2641E-06	2.4016E+19	2.0105E+15
I-133	3.0078E+00	2.6551E-09	1.2022E+16	1.1129E+11
Xe-133	6.4720E+05	3.4576E-03	1.5656E+22	2.3946E+16
Xe-135	3.4233E-09	1.3405E-18	5.9797E+06	1.2666E+02
Cs-134	1.9393E+06	1.4988E+00	6.7360E+24	7.1752E+16
Cs-136	2.7619E+05	3.7684E-03	1.6687E+22	1.0219E+16
Cs-137	1.7492E+06	2.0110E+01	8.8398E+25	6.4721E+16
Ba-140	7.2055E+05	9.8424E-03	4.2337E+22	2.6660E+16
La-140	8.2952E+05	1.4924E-03	6.4196E+21	3.0692E+16

Ce-141	3.4359E+04	1.2059E-03	5.1503E+21	1.2713E+15
Ce-143	1.3853E+00	2.0860E-09	8.7847E+15	5.1255E+10
Ce-144	3.8415E+04	1.2044E-02	5.0369E+22	1.4213E+15
Pr-143	8.6980E+03	1.2917E-04	5.4397E+20	3.2183E+14
Nd-147	2.2586E+03	2.7919E-05	1.1437E+20	8.3568E+13
Np-239	1.3495E+03	5.8170E-06	1.4657E+19	4.9931E+13
Pu-238	4.2603E+01	2.4885E-03	6.2967E+21	1.5763E+12
Pu-239	1.3340E+01	2.1462E-01	5.4078E+23	4.9358E+11
Pu-240	1.3358E+01	5.8623E-02	1.4710E+23	4.9425E+11
Pu-241	4.0234E+03	3.9057E-02	9.7597E+22	1.4887E+14
Am-241	1.8096E+00	5.2725E-04	1.3175E+21	6.6956E+10
Cm-242	2.3594E+02	7.1190E-05	1.7715E+20	8.7299E+12
Cm-244	6.0564E+00	7.4861E-05	1.8476E+20	2.2409E+11
I-130	3.7027E-07	1.8985E-16	8.7946E+08	1.3700E+04
Xe-131m	7.5453E+04	9.0081E-04	4.1411E+21	2.7918E+15
Xe-133m	1.3133E+03	2.9268E-06	1.3252E+19	4.8591E+13
Sb-124	2.2118E+03	1.2645E-04	6.1410E+20	8.1838E+13
Sb-125	3.9409E+04	3.8170E-02	1.8389E+23	1.4581E+15
Sb-126	9.5911E+02	1.1476E-05	5.4850E+19	3.5487E+13
Te-131	9.8349E-01	1.7130E-11	7.8748E+13	3.6389E+10
Te-125m	8.4555E+03	4.6948E-04	2.2618E+21	3.1285E+14
Ba-137m	1.9390E+06	3.6055E-06	1.5849E+19	7.1745E+16
Pd-109	2.6086E-07	1.2183E-16	6.7309E+08	9.6520E+03
Rh-106	1.3755E+05	3.8642E-08	2.1953E+17	5.0892E+15
Rh-103m	1.6207E+05	4.9825E-06	2.9131E+19	5.9967E+15
Eu-154	6.8944E+01	2.6135E-04	1.0220E+21	2.5509E+12
Eu-155	5.2723E+01	1.1338E-04	4.4052E+20	1.9508E+12
Eu-156	4.2935E+02	7.7917E-06	3.0079E+19	1.5886E+13
Nb-97	1.5173E-06	5.6437E-17	3.5038E+08	5.6141E+04
Nb-95m	1.3086E+02	3.4354E-07	2.1777E+18	4.8418E+12
Pm-147	2.1703E+03	2.3412E-03	9.5910E+21	8.0301E+13
Pm-148	2.3814E+02	1.4495E-06	5.8980E+18	8.8113E+12
Pm-149	9.9122E+00	2.5016E-08	1.0111E+17	3.6675E+11
Pm-151	1.1953E-02	1.6357E-11	6.5235E+13	4.4227E+08
Pm-148m	3.2623E+02	1.5271E-05	6.2138E+19	1.2070E+13
Pr-144	3.9348E+04	5.2072E-07	2.1777E+18	1.4559E+15
Pr-144m	7.2405E+02	3.9925E-09	1.6697E+16	2.6790E+13
Sm-153	2.5594E+00	5.8354E-09	2.2968E+16	9.4697E+10
Br-82	5.1701E+00	4.7755E-09	3.5072E+16	1.9129E+11
Am-242	2.3507E-07	2.9081E-16	7.2367E+08	8.6977E+03
Np-238	7.6405E+00	2.9482E-08	7.4599E+16	2.8270E+11

Containment Sump Transport Group Inventory:

Time (h) = 500.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.9810E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5356E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.2748E+01	0.0000E+00	0.0000E+00

Time (h) = 500.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Rb-86	2.0074E+03	2.4671E-05	1.7276E+20	7.4275E+13
Sr-89	1.6997E+05	5.8504E-03	3.9586E+22	6.2888E+15
Sr-90	1.5386E+04	1.1280E-01	7.5476E+23	5.6929E+14
Y-90	1.5323E+04	2.8164E-05	1.8845E+20	5.6696E+14
Y-91	3.5958E+03	1.4663E-04	9.7033E+20	1.3305E+14
Zr-95	2.9151E+03	1.3570E-04	8.6018E+20	1.0786E+14
Zr-97	4.3675E-06	2.2846E-15	1.4184E+10	1.6160E+05
Nb-95	3.5317E+03	9.0317E-05	5.7253E+20	1.3067E+14
Mo-99	2.5121E+02	5.2377E-07	3.1861E+18	9.2946E+12

Tc-99m	2.4242E+02	4.6103E-08	2.8045E+17	8.9696E+12
Ru-103	2.6628E+04	8.2505E-04	4.8239E+21	9.8523E+14
Ru-106	1.1047E+04	3.3021E-03	1.8760E+22	4.0876E+14
Rh-105	1.5291E+00	1.8116E-09	1.0390E+16	5.6578E+10
Sb-127	1.2766E+03	4.7803E-06	2.2667E+19	4.7233E+13
Te-127	7.5551E+03	2.8627E-06	1.3575E+19	2.7954E+14
Te-127m	6.5135E+03	6.9054E-04	3.2744E+21	2.4100E+14
Te-129	1.0305E+04	4.9207E-07	2.2972E+18	3.8129E+14
Te-129m	1.5737E+04	5.2238E-04	2.4387E+21	5.8227E+14
Te-131m	7.0975E-01	8.9007E-10	4.0917E+15	2.6261E+10
Te-132	8.6853E+03	2.8608E-05	1.3052E+20	3.2136E+14
I-131	6.8409E+05	5.5180E-03	2.5366E+22	2.5311E+16
I-132	8.9755E+03	8.6953E-07	3.9670E+18	3.3209E+14
I-133	4.9694E-01	4.3868E-10	1.9863E+15	1.8387E+10
Cs-134	3.2042E+05	2.4766E-01	1.1130E+24	1.1856E+16
Cs-136	4.5635E+04	6.2266E-04	2.7572E+21	1.6885E+15
Cs-137	2.8902E+05	3.3228E+00	1.4606E+25	1.0694E+16
Ba-140	1.1902E+05	1.6258E-03	6.9934E+21	4.4038E+15
La-140	1.3702E+05	2.4652E-04	1.0604E+21	5.0698E+15
Ce-141	5.6756E+03	1.9919E-04	8.5074E+20	2.1000E+14
Ce-143	2.2882E-01	3.4457E-10	1.4511E+15	8.4664E+09
Ce-144	6.3454E+03	1.9895E-03	8.3201E+21	2.3478E+14
Pr-143	1.4368E+03	2.1336E-05	8.9854E+19	5.3160E+13
Nd-147	3.7308E+02	4.6117E-06	1.8893E+19	1.3804E+13
Np-239	2.2291E+02	9.6086E-07	2.4211E+18	8.2477E+12
Pu-238	7.0372E+00	4.1106E-04	1.0401E+21	2.6038E+11
Pu-239	2.2035E+00	3.5451E-02	8.9328E+22	8.1531E+10
Pu-240	2.2065E+00	9.6835E-03	2.4298E+22	8.1642E+10
Pu-241	6.6459E+02	6.4516E-03	1.6121E+22	2.4590E+13
Am-241	2.9892E-01	8.7092E-05	2.1763E+20	1.1060E+10
Cm-242	3.8974E+01	1.1759E-05	2.9263E+19	1.4420E+12
Cm-244	1.0004E+00	1.2366E-05	3.0520E+19	3.7015E+10
I-130	6.1176E-08	3.1367E-17	1.4530E+08	2.2635E+03
Sb-124	3.6536E+02	2.0887E-05	1.0144E+20	1.3518E+13
Sb-125	6.5097E+03	6.3050E-03	3.0376E+22	2.4086E+14
Sb-126	1.5843E+02	1.8957E-06	9.0603E+18	5.8618E+12
Te-131	1.6246E-01	2.8296E-12	1.3008E+13	6.0109E+09
Te-125m	1.3967E+03	7.7550E-05	3.7361E+20	5.1678E+13
Ba-137m	3.2039E+05	5.9574E-07	2.6187E+18	1.1854E+16
Pd-109	4.3090E-08	2.0124E-17	1.1118E+08	1.5943E+03
Rh-106	2.2720E+04	6.3829E-09	3.6263E+16	8.4065E+14
Rh-103m	2.6772E+04	8.2301E-07	4.8119E+18	9.9055E+14
Eu-154	1.1388E+01	4.3171E-05	1.6882E+20	4.2137E+11
Eu-155	8.7090E+00	1.8729E-05	7.2766E+19	3.2223E+11
Eu-156	7.0921E+01	1.2871E-06	4.9685E+18	2.6241E+12
Nb-97	2.5064E-07	9.3224E-18	5.7877E+07	9.2735E+03
Nb-95m	2.1616E+01	5.6746E-08	3.5972E+17	7.9978E+11
Pm-147	3.5849E+02	3.8672E-04	1.5843E+21	1.3264E+13
Pm-148	3.9337E+01	2.3943E-07	9.7424E+17	1.4555E+12
Pm-149	1.6373E+00	4.1322E-09	1.6701E+16	6.0581E+10
Pm-151	1.9744E-03	2.7019E-12	1.0776E+13	7.3054E+07
Pm-148m	5.3887E+01	2.5225E-06	1.0264E+19	1.9938E+12
Pr-144	6.4996E+03	8.6013E-08	3.5971E+17	2.4048E+14
Pr-144m	1.1960E+02	6.5949E-10	2.7580E+15	4.4252E+12
Sm-153	4.2277E-01	9.6391E-10	3.7940E+15	1.5642E+10
Br-82	8.5420E-01	7.8900E-10	5.7945E+15	3.1605E+10
Am-242	3.8830E-08	4.8037E-17	1.1954E+08	1.4367E+03
Np-238	1.2621E+00	4.8699E-09	1.2322E+16	4.6697E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway
Time (h) = 500.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.5370E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.7586E+00

Environment Integral Nuclide Release:

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Xe-133	1.0693E+05	5.7127E-04	2.5866E+21	3.9564E+15
Xe-131m	1.2466E+04	1.4883E-04	6.8418E+20	4.6125E+14
Xe-133m	2.1698E+02	4.8356E-07	2.1895E+18	8.0282E+12

Environment Transport Group Inventory:

Time (h) = 500.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.2144E+17	1.6867E+15	3.2730E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Rb-86	2.0074E+03	2.4671E-05	1.7276E+20	7.4275E+13
Sr-89	1.6997E+05	5.8504E-03	3.9586E+22	6.2888E+15
Sr-90	1.5386E+04	1.1280E-01	7.5476E+23	5.6929E+14
Y-90	1.5323E+04	2.8164E-05	1.8845E+20	5.6696E+14
Y-91	3.5958E+03	1.4663E-04	9.7033E+20	1.3305E+14
Zr-95	2.9151E+03	1.3570E-04	8.6018E+20	1.0786E+14
Zr-97	4.3675E-06	2.2846E-15	1.4184E+10	1.6160E+05
Nb-95	3.5317E+03	9.0317E-05	5.7253E+20	1.3067E+14
Mo-99	2.5121E+02	5.2377E-07	3.1861E+18	9.2946E+12
Tc-99m	2.4242E+02	4.6103E-08	2.8045E+17	8.9696E+12
Ru-103	2.6628E+04	8.2505E-04	4.8239E+21	9.8523E+14
Ru-106	1.1047E+04	3.3021E-03	1.8760E+22	4.0876E+14
Rh-105	1.5291E+00	1.8116E-09	1.0390E+16	5.6578E+10
Sb-127	1.2766E+03	4.7803E-06	2.2667E+19	4.7233E+13
Te-127	7.5551E+03	2.8627E-06	1.3575E+19	2.7954E+14
Te-127m	6.5135E+03	6.9054E-04	3.2744E+21	2.4100E+14
Te-129	1.0305E+04	4.9207E-07	2.2972E+18	3.8129E+14
Te-129m	1.5737E+04	5.2238E-04	2.4387E+21	5.8227E+14
Te-131m	7.0975E-01	8.9007E-10	4.0917E+15	2.6261E+10
Te-132	8.6853E+03	2.8608E-05	1.3052E+20	3.2136E+14
I-131	6.8409E+05	5.5180E-03	2.5366E+22	2.5311E+16
I-132	8.9755E+03	8.6953E-07	3.9670E+18	3.3209E+14
I-133	4.9694E-01	4.3868E-10	1.9863E+15	1.8387E+10
Cs-134	3.2042E+05	2.4766E-01	1.1130E+24	1.1856E+16
Cs-136	4.5635E+04	6.2266E-04	2.7572E+21	1.6885E+15
Cs-137	2.8902E+05	3.3228E+00	1.4606E+25	1.0694E+16
Ba-140	1.1902E+05	1.6258E-03	6.9934E+21	4.4038E+15
La-140	1.3702E+05	2.4652E-04	1.0604E+21	5.0698E+15
Ce-141	5.6756E+03	1.9919E-04	8.5074E+20	2.1000E+14
Ce-143	2.2882E-01	3.4457E-10	1.4511E+15	8.4664E+09
Ce-144	6.3454E+03	1.9895E-03	8.3201E+21	2.3478E+14
Pr-143	1.4368E+03	2.1336E-05	8.9854E+19	5.3160E+13
Nd-147	3.7308E+02	4.6117E-06	1.8893E+19	1.3804E+13
Np-239	2.2291E+02	9.6086E-07	2.4211E+18	8.2477E+12
Pu-238	7.0372E+00	4.1106E-04	1.0401E+21	2.6038E+11
Pu-239	2.2035E+00	3.5451E-02	8.9328E+22	8.1531E+10
Pu-240	2.2065E+00	9.6835E-03	2.4298E+22	8.1642E+10
Pu-241	6.6459E+02	6.4516E-03	1.6121E+22	2.4590E+13
Am-241	2.9892E-01	8.7092E-05	2.1763E+20	1.1060E+10
Cm-242	3.8974E+01	1.1759E-05	2.9263E+19	1.4420E+12
Cm-244	1.0004E+00	1.2366E-05	3.0520E+19	3.7015E+10
I-130	6.1176E-08	3.1367E-17	1.4530E+08	2.2635E+03
Sb-124	3.6536E+02	2.0887E-05	1.0144E+20	1.3518E+13
Sb-125	6.5097E+03	6.3050E-03	3.0376E+22	2.4086E+14
Sb-126	1.5843E+02	1.8957E-06	9.0603E+18	5.8618E+12
Te-131	1.6246E-01	2.8296E-12	1.3008E+13	6.0109E+09
Te-125m	1.3967E+03	7.7550E-05	3.7361E+20	5.1678E+13
Ba-137m	3.2039E+05	5.9574E-07	2.6187E+18	1.1854E+16
Pd-109	4.3090E-08	2.0124E-17	1.1118E+08	1.5943E+03
Rh-106	2.2720E+04	6.3829E-09	3.6263E+16	8.4065E+14
Rh-103m	2.6772E+04	8.2301E-07	4.8119E+18	9.9055E+14
Eu-154	1.1388E+01	4.3171E-05	1.6882E+20	4.2137E+11
Eu-155	8.7090E+00	1.8729E-05	7.2766E+19	3.2223E+11

Eu-156	7.0921E+01	1.2871E-06	4.9685E+18	2.6241E+12
Nb-97	2.5064E-07	9.3224E-18	5.7877E+07	9.2735E+03
Nb-95m	2.1616E+01	5.6746E-08	3.5972E+17	7.9978E+11
Pm-147	3.5849E+02	3.8672E-04	1.5843E+21	1.3264E+13
Pm-148	3.9337E+01	2.3943E-07	9.7424E+17	1.4555E+12
Pm-149	1.6373E+00	4.1322E-09	1.6701E+16	6.0581E+10
Pm-151	1.9744E-03	2.7019E-12	1.0776E+13	7.3054E+07
Pm-148m	5.3887E+01	2.5225E-06	1.0264E+19	1.9938E+12
Pr-144	6.4996E+03	8.6013E-08	3.5971E+17	2.4048E+14
Pr-144m	1.1960E+02	6.5949E-10	2.7580E+15	4.4252E+12
Sm-153	4.2277E-01	9.6391E-10	3.7940E+15	1.5642E+10
Br-82	8.5420E-01	7.8900E-10	5.7945E+15	3.1605E+10
Am-242	3.8830E-08	4.8037E-17	1.1954E+08	1.4367E+03
Np-238	1.2621E+00	4.8699E-09	1.2322E+16	4.6697E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.5370E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.7586E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 500.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 500.0000	Ci	kg	Atoms	Bq
Xe-133	6.1131E-02	3.2658E-10	1.4787E+15	2.2618E+09
Xe-131m	1.2943E-02	1.5453E-10	7.1037E+14	4.7890E+08
Xe-133m	1.2410E-04	2.7658E-13	1.2523E+12	4.5918E+06

Control Room Transport Group Inventory:

Overlying

Time (h) = 500.0000	Atmosphere	Sump	Pool
Noble gases (atoms)	2.1904E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 500.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 500.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 597.2200

EAB Doses:

Time (h) = 597.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.7544E-02	0.0000E+00	1.6677E-01	4.7544E-02
Accumulated dose (rem)	5.9405E+00	0.0000E+00	1.5618E+01	5.9405E+00

LPZ Doses:

Time (h) = 597.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.2405E-04	0.0000E+00	7.8591E-04	2.2405E-04
Accumulated dose (rem)	1.7059E-01	0.0000E+00	4.0392E-01	1.7059E-01

Control Room Doses:

Time (h) = 597.2200	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.1671E-03	0.0000E+00	1.4773E-01	1.1671E-03
Accumulated dose (rem)	2.1152E+00	0.0000E+00	1.3299E+02	2.1152E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Rb-86	1.0145E+04	1.2468E-04	8.7310E+20	3.7537E+14
Sr-89	9.4475E+05	3.2519E-02	2.2004E+23	3.4956E+16
Sr-90	9.0389E+04	6.6264E-01	4.4339E+24	3.3444E+15
Y-90	9.0281E+04	1.6594E-04	1.1103E+21	3.3404E+15
Y-91	2.0140E+04	8.2123E-04	5.4347E+21	7.4517E+14
Zr-95	1.6394E+04	7.6313E-04	4.8376E+21	6.0659E+14
Zr-97	4.7600E-07	2.4899E-16	1.5459E+09	1.7612E+04
Nb-95	2.0446E+04	5.2288E-04	3.3146E+21	7.5652E+14
Mo-99	5.3174E+02	1.1087E-06	6.7441E+18	1.9674E+13
Tc-99m	5.1315E+02	9.7589E-08	5.9363E+17	1.8986E+13
Ru-103	1.4568E+05	4.5137E-03	2.6391E+22	5.3900E+15
Ru-106	6.4424E+04	1.9256E-02	1.0940E+23	2.3837E+15
Rh-105	1.3362E+00	1.5831E-09	9.0796E+15	4.9440E+10
Sb-127	3.6175E+03	1.3546E-05	6.4234E+19	1.3385E+14
Te-127	3.9904E+04	1.5120E-05	7.1697E+19	1.4764E+15
Te-127m	3.7325E+04	3.9571E-03	1.8764E+22	1.3810E+15
Te-129	5.5700E+04	2.6597E-06	1.2416E+19	2.0609E+15
Te-129m	8.5060E+04	2.8235E-03	1.3181E+22	3.1472E+15
Te-131m	4.4123E-01	5.5333E-10	2.5437E+15	1.6325E+10
Te-132	2.1559E+04	7.1014E-05	3.2398E+20	7.9769E+14
I-131	2.8343E+06	2.2862E-02	1.0510E+23	1.0487E+17
I-132	2.2280E+04	2.1584E-06	9.8472E+18	8.2434E+14
I-133	1.1436E-01	1.0095E-10	4.5711E+14	4.2314E+09
Xe-133	3.6808E+05	1.9664E-03	8.9038E+21	1.3619E+16
Cs-134	1.8753E+06	1.4494E+00	6.5139E+24	6.9387E+16
Cs-136	2.1636E+05	2.9521E-03	1.3072E+22	8.0055E+15
Cs-137	1.6974E+06	1.9515E+01	8.5781E+25	6.2805E+16
Ba-140	5.6106E+05	7.6638E-03	3.2966E+22	2.0759E+16
La-140	6.4619E+05	1.1626E-03	5.0009E+21	2.3909E+16
Ce-141	3.0590E+04	1.0736E-03	4.5854E+21	1.1318E+15
Ce-143	1.7448E-01	2.6274E-10	1.1065E+15	6.4557E+09
Ce-144	3.6921E+04	1.1576E-02	4.8410E+22	1.3661E+15
Pr-143	6.8637E+03	1.0193E-04	4.2925E+20	2.5396E+14
Nd-147	1.6976E+03	2.0984E-05	8.5967E+19	6.2812E+13
Np-239	3.9758E+02	1.7138E-06	4.3183E+18	1.4711E+13
Pu-238	4.1369E+01	2.4164E-03	6.1144E+21	1.5306E+12
Pu-239	1.2949E+01	2.0832E-01	5.2492E+23	4.7910E+11
Pu-240	1.2966E+01	5.6902E-02	1.4278E+23	4.7974E+11
Pu-241	3.9032E+03	3.7890E-02	9.4681E+22	1.4442E+14
Am-241	1.8259E+00	5.3200E-04	1.3294E+21	6.7558E+10
Cm-242	2.2510E+02	6.7918E-05	1.6901E+20	8.3287E+12
Cm-244	5.8761E+00	7.2632E-05	1.7926E+20	2.1742E+11
I-130	1.5409E-09	7.9006E-19	3.6599E+06	5.7013E+01
Xe-131m	6.5705E+04	7.8443E-04	3.6061E+21	2.4311E+15
Xe-133m	3.5327E+02	7.8731E-07	3.5649E+18	1.3071E+13
Sb-124	2.0491E+03	1.1714E-04	5.6891E+20	7.5815E+13
Sb-125	3.8147E+04	3.6947E-02	1.7800E+23	1.4114E+15
Sb-126	7.4231E+02	8.8822E-06	4.2452E+19	2.7466E+13
Te-131	1.0099E-01	1.7591E-12	8.0865E+12	3.7368E+09
Te-125m	8.2310E+03	4.5702E-04	2.2018E+21	3.0455E+14
Ba-137m	1.8816E+06	3.4988E-06	1.5380E+19	6.9621E+16
Pd-109	1.6743E-09	7.8192E-19	4.3200E+06	6.1948E+01
Rh-106	1.3250E+05	3.7222E-08	2.1147E+17	4.9023E+15
Rh-103m	1.4646E+05	4.5026E-06	2.6325E+19	5.4191E+15
Eu-154	6.6862E+01	2.5346E-04	9.9115E+20	2.4739E+12
Eu-155	5.1096E+01	1.0988E-04	4.2693E+20	1.8906E+12
Eu-156	3.4641E+02	6.2866E-06	2.4268E+19	1.2817E+13
Nb-97	2.7316E-08	1.0160E-18	6.3078E+06	1.0107E+03
Nb-95m	1.2160E+02	3.1922E-07	2.0236E+18	4.4991E+12
Pm-147	2.1061E+03	2.2719E-03	9.3072E+21	7.7925E+13
Pm-148	1.4275E+02	8.6885E-07	3.5354E+18	5.2817E+12
Pm-149	2.7031E+00	6.8220E-09	2.7573E+16	1.0002E+11
Pm-151	1.0815E-03	1.4800E-12	5.9026E+12	4.0017E+07
Pm-148m	2.9584E+02	1.3849E-05	5.6350E+19	1.0946E+13
Pr-144	3.7817E+04	5.0047E-07	2.0930E+18	1.3992E+15
Pr-144m	6.9589E+02	3.8372E-09	1.6047E+16	2.5748E+13
Sm-153	5.8683E-01	1.3380E-09	5.2663E+15	2.1713E+10
Br-82	7.4386E-01	6.8708E-10	5.0460E+15	2.7523E+10

Am-242	3.3995E-09	4.2055E-18	1.0465E+07	1.2578E+02
Np-238	1.9686E+00	7.5963E-09	1.9221E+16	7.2840E+10

Containment Sump Transport Group Inventory:

Time (h) = 597.2200	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.2513E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0511E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.2063E+01	0.0000E+00	0.0000E+00

Time (h) = 597.2200	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Rb-86	2.0338E+03	2.4995E-05	1.7503E+20	7.5251E+13
Sr-89	1.8935E+05	6.5175E-03	4.4100E+22	7.0059E+15
Sr-90	1.8116E+04	1.3281E-01	8.8866E+23	6.7029E+14
Y-90	1.8094E+04	3.3258E-05	2.2254E+20	6.6949E+14
Y-91	4.0365E+03	1.6459E-04	1.0892E+21	1.4935E+14
Zr-95	3.2858E+03	1.5295E-04	9.6956E+20	1.2157E+14
Zr-97	9.5400E-08	4.9904E-17	3.0982E+08	3.5298E+03
Nb-95	4.0979E+03	1.0480E-04	6.6432E+20	1.5162E+14
Mo-99	1.0657E+02	2.2220E-07	1.3517E+18	3.9432E+12
Tc-99m	1.0285E+02	1.9559E-08	1.1898E+17	3.8053E+12
Ru-103	2.9197E+04	9.0465E-04	5.2892E+21	1.0803E+15
Ru-106	1.2912E+04	3.8594E-03	2.1926E+22	4.7774E+14
Rh-105	2.6781E-01	3.1729E-10	1.8198E+15	9.9089E+09
Sb-127	7.2503E+02	2.7149E-06	1.2874E+19	2.6826E+13
Te-127	7.9976E+03	3.0304E-06	1.4370E+19	2.9591E+14
Te-127m	7.4808E+03	7.9308E-04	3.7607E+21	2.7679E+14
Te-129	1.1164E+04	5.3306E-07	2.4885E+18	4.1305E+14
Te-129m	1.7048E+04	5.6590E-04	2.6418E+21	6.3077E+14
Te-131m	8.8431E-02	1.1090E-10	5.0981E+14	3.2720E+09
Te-132	4.3209E+03	1.4233E-05	6.4933E+19	1.5987E+14
I-131	5.6816E+05	4.5829E-03	2.1068E+22	2.1022E+16
I-132	4.4653E+03	4.3259E-07	1.9736E+18	1.6522E+14
I-133	2.2925E-02	2.0237E-11	9.1631E+13	8.4821E+08
Cs-134	3.7595E+05	2.9057E-01	1.3059E+24	1.3910E+16
Cs-136	4.3375E+04	5.9182E-04	2.6206E+21	1.6049E+15
Cs-137	3.4028E+05	3.9121E+00	1.7197E+25	1.2591E+16
Ba-140	1.1245E+05	1.5360E-03	6.6071E+21	4.1606E+15
La-140	1.2951E+05	2.3301E-04	1.0023E+21	4.7919E+15
Ce-141	6.1310E+03	2.1517E-04	9.1901E+20	2.2685E+14
Ce-143	3.4969E-02	5.2658E-11	2.2176E+14	1.2939E+09
Ce-144	7.3997E+03	2.3200E-03	9.7024E+21	2.7379E+14
Pr-143	1.3756E+03	2.0429E-05	8.6031E+19	5.0899E+13
Nd-147	3.4024E+02	4.2057E-06	1.7230E+19	1.2589E+13
Np-239	7.9684E+01	3.4348E-07	8.6547E+17	2.9483E+12
Pu-238	8.2912E+00	4.8431E-04	1.2254E+21	3.0677E+11
Pu-239	2.5952E+00	4.1753E-02	1.0520E+23	9.6022E+10
Pu-240	2.5987E+00	1.1404E-02	2.8616E+22	9.6151E+10
Pu-241	7.8228E+02	7.5941E-03	1.8976E+22	2.8945E+13
Am-241	3.6595E-01	1.0662E-04	2.6643E+20	1.3540E+10
Cm-242	4.5115E+01	1.3612E-05	3.3874E+19	1.6693E+12
Cm-244	1.1777E+00	1.4557E-05	3.5928E+19	4.3575E+10
I-130	3.0888E-10	1.5837E-19	7.3366E+05	1.1429E+01
Sb-124	4.1068E+02	2.3478E-05	1.1402E+20	1.5195E+13
Sb-125	7.6454E+03	7.4049E-03	3.5675E+22	2.8288E+14
Sb-126	1.4878E+02	1.7802E-06	8.5083E+18	5.5047E+12
Te-131	2.0241E-02	3.5256E-13	1.6207E+12	7.4893E+08
Te-125m	1.6497E+03	9.1596E-05	4.4128E+20	6.1038E+13
Ba-137m	3.7721E+05	7.0140E-07	3.0832E+18	1.3957E+16

Pd-109	3.3556E-10	1.5671E-19	8.6582E+05	1.2416E+01
Rh-106	2.6555E+04	7.4601E-09	4.2383E+16	9.8253E+14
Rh-103m	2.9354E+04	9.0241E-07	5.2761E+18	1.0861E+15
Eu-154	1.3401E+01	5.0799E-05	1.9865E+20	4.9582E+11
Eu-155	1.0241E+01	2.2023E-05	8.5565E+19	3.7891E+11
Eu-156	6.9429E+01	1.2600E-06	4.8639E+18	2.5689E+12
Nb-97	5.4747E-09	2.0363E-19	1.2642E+06	2.0256E+02
Nb-95m	2.4371E+01	6.3979E-08	4.0557E+17	9.0172E+11
Pm-147	4.2210E+02	4.5533E-04	1.8654E+21	1.5618E+13
Pm-148	2.8610E+01	1.7414E-07	7.0857E+17	1.0586E+12
Pm-149	5.4177E-01	1.3673E-09	5.5262E+15	2.0045E+10
Pm-151	2.1676E-04	2.9663E-13	1.1830E+12	8.0203E+06
Pm-148m	5.9292E+01	2.7755E-06	1.1294E+19	2.1938E+12
Pr-144	7.5794E+03	1.0030E-07	4.1948E+17	2.8044E+14
Pr-144m	1.3947E+02	7.6906E-10	3.2162E+15	5.1605E+12
Sm-153	1.1761E-01	2.6816E-10	1.0555E+15	4.3517E+09
Br-82	1.4911E-01	1.3773E-10	1.0115E+15	5.5172E+09
Am-242	6.8133E-10	8.4287E-19	2.0975E+06	2.5209E+01
Np-238	3.9456E-01	1.5225E-09	3.8523E+15	1.4599E+10

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 597.2200	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.1070E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.4230E+00

Environment Integral Nuclide Release:

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Xe-133	7.3785E+04	3.9419E-04	1.7849E+21	2.7300E+15
Xe-131m	1.3171E+04	1.5725E-04	7.2287E+20	4.8733E+14
Xe-133m	7.0817E+01	1.5782E-07	7.1462E+17	2.6202E+12

Environment Transport Group Inventory:

Time (h) = 597.2200	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	7.6713E+16	1.0655E+15	2.5084E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 597.2200	Ci	kg	Atoms	Bq
Rb-86	2.0338E+03	2.4995E-05	1.7503E+20	7.5251E+13
Sr-89	1.8935E+05	6.5175E-03	4.4100E+22	7.0059E+15
Sr-90	1.8116E+04	1.3281E-01	8.8866E+23	6.7029E+14
Y-90	1.8094E+04	3.3258E-05	2.2254E+20	6.6949E+14
Y-91	4.0365E+03	1.6459E-04	1.0892E+21	1.4935E+14
Zr-95	3.2858E+03	1.5295E-04	9.6956E+20	1.2157E+14
Zr-97	9.5400E-08	4.9904E-17	3.0982E+08	3.5298E+03
Nb-95	4.0979E+03	1.0480E-04	6.6432E+20	1.5162E+14
Mo-99	1.0657E+02	2.2220E-07	1.3517E+18	3.9432E+12
Tc-99m	1.0285E+02	1.9559E-08	1.1898E+17	3.8053E+12
Ru-103	2.9197E+04	9.0465E-04	5.2892E+21	1.0803E+15
Ru-106	1.2912E+04	3.8594E-03	2.1926E+22	4.7774E+14
Rh-105	2.6781E-01	3.1729E-10	1.8198E+15	9.9089E+09
Sb-127	7.2503E+02	2.7149E-06	1.2874E+19	2.6826E+13
Te-127	7.9976E+03	3.0304E-06	1.4370E+19	2.9591E+14
Te-127m	7.4808E+03	7.9308E-04	3.7607E+21	2.7679E+14
Te-129	1.1164E+04	5.3306E-07	2.4885E+18	4.1305E+14
Te-129m	1.7048E+04	5.6590E-04	2.6418E+21	6.3077E+14
Te-131m	8.8431E-02	1.1090E-10	5.0981E+14	3.2720E+09
Te-132	4.3209E+03	1.4233E-05	6.4933E+19	1.5987E+14
I-131	5.6816E+05	4.5829E-03	2.1068E+22	2.1022E+16
I-132	4.4653E+03	4.3259E-07	1.9736E+18	1.6522E+14

I-133	2.2925E-02	2.0237E-11	9.1631E+13	8.4821E+08
Cs-134	3.7595E+05	2.9057E-01	1.3059E+24	1.3910E+16
Cs-136	4.3375E+04	5.9182E-04	2.6206E+21	1.6049E+15
Cs-137	3.4028E+05	3.9121E+00	1.7197E+25	1.2591E+16
Ba-140	1.1245E+05	1.5360E-03	6.6071E+21	4.1606E+15
La-140	1.2951E+05	2.3301E-04	1.0023E+21	4.7919E+15
Ce-141	6.1310E+03	2.1517E-04	9.1901E+20	2.2685E+14
Ce-143	3.4969E-02	5.2658E-11	2.2176E+14	1.2939E+09
Ce-144	7.3997E+03	2.3200E-03	9.7024E+21	2.7379E+14
Pr-143	1.3756E+03	2.0429E-05	8.6031E+19	5.0899E+13
Nd-147	3.4024E+02	4.2057E-06	1.7230E+19	1.2589E+13
Np-239	7.9684E+01	3.4348E-07	8.6547E+17	2.9483E+12
Pu-238	8.2912E+00	4.8431E-04	1.2254E+21	3.0677E+11
Pu-239	2.5952E+00	4.1753E-02	1.0520E+23	9.6022E+10
Pu-240	2.5987E+00	1.1404E-02	2.8616E+22	9.6151E+10
Pu-241	7.8228E+02	7.5941E-03	1.8976E+22	2.8945E+13
Am-241	3.6595E-01	1.0662E-04	2.6643E+20	1.3540E+10
Cm-242	4.5115E+01	1.3612E-05	3.3874E+19	1.6693E+12
Cm-244	1.1777E+00	1.4557E-05	3.5928E+19	4.3575E+10
I-130	3.0888E-10	1.5837E-19	7.3366E+05	1.1429E+01
Sb-124	4.1068E+02	2.3478E-05	1.1402E+20	1.5195E+13
Sb-125	7.6454E+03	7.4049E-03	3.5675E+22	2.8288E+14
Sb-126	1.4878E+02	1.7802E-06	8.5083E+18	5.5047E+12
Te-131	2.0241E-02	3.5256E-13	1.6207E+12	7.4893E+08
Te-125m	1.6497E+03	9.1596E-05	4.4128E+20	6.1038E+13
Ba-137m	3.7721E+05	7.0140E-07	3.0832E+18	1.3957E+16
Pd-109	3.3556E-10	1.5671E-19	8.6582E+05	1.2416E+01
Rh-106	2.6555E+04	7.4601E-09	4.2383E+16	9.8253E+14
Rh-103m	2.9354E+04	9.0241E-07	5.2761E+18	1.0861E+15
Eu-154	1.3401E+01	5.0799E-05	1.9865E+20	4.9582E+11
Eu-155	1.0241E+01	2.2023E-05	8.5565E+19	3.7891E+11
Eu-156	6.9429E+01	1.2600E-06	4.8639E+18	2.5689E+12
Nb-97	5.4747E-09	2.0363E-19	1.2642E+06	2.0256E+02
Nb-95m	2.4371E+01	6.3979E-08	4.0557E+17	9.0172E+11
Pm-147	4.2210E+02	4.5533E-04	1.8654E+21	1.5618E+13
Pm-148	2.8610E+01	1.7414E-07	7.0857E+17	1.0586E+12
Pm-149	5.4177E-01	1.3673E-09	5.5262E+15	2.0045E+10
Pm-151	2.1676E-04	2.9663E-13	1.1830E+12	8.0203E+06
Pm-148m	5.9292E+01	2.7755E-06	1.1294E+19	2.1938E+12
Pr-144	7.5794E+03	1.0030E-07	4.1948E+17	2.8044E+14
Pr-144m	1.3947E+02	7.6906E-10	3.2162E+15	5.1605E+12
Sm-153	1.1761E-01	2.6816E-10	1.0555E+15	4.3517E+09
Br-82	1.4911E-01	1.3773E-10	1.0115E+15	5.5172E+09
Am-242	6.8133E-10	8.4287E-19	2.0975E+06	2.5209E+01
Np-238	3.9456E-01	1.5225E-09	3.8523E+15	1.4599E+10

SIRWT Backleakage Transport Group Inventory:

Time (h) = 597.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	2.1070E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.4230E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 597.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 597.2200	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

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Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 597.2200       Ci           kg         Atoms         Bq
Xe-133                 3.4766E-02  1.8573E-10  8.4099E+14  1.2863E+09
Xe-131m                1.1038E-02  1.3178E-10  6.0581E+14  4.0841E+08
Xe-133m                3.3370E-05  7.4370E-14  3.3674E+11  1.2347E+06

Control Room Transport Group Inventory:

                                                Overlying
Time (h) = 597.2200    Atmosphere     Sump        Pool
Noble gases (atoms)    1.4471E+15  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) = 597.2200     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 597.2200      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
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Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 597.2200	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 694.4400

EAB Doses:

Time (h) = 694.4400	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.7491E-02	0.0000E+00	1.0058E-01	2.7491E-02
Accumulated dose (rem)	5.9680E+00	0.0000E+00	1.5718E+01	5.9680E+00

LPZ Doses:

Time (h) = 694.4400	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.2955E-04	0.0000E+00	4.7396E-04	1.2955E-04
Accumulated dose (rem)	1.7072E-01	0.0000E+00	4.0439E-01	1.7072E-01

Control Room Doses:

Time (h) = 694.4400	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.8218E-04	0.0000E+00	9.1846E-02	6.8218E-04
Accumulated dose (rem)	2.1159E+00	0.0000E+00	1.3308E+02	2.1159E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Rb-86	8.4717E+03	1.0412E-04	7.2907E+20	3.1345E+14
Sr-89	8.6742E+05	2.9857E-02	2.0203E+23	3.2094E+16
Sr-90	8.7713E+04	6.4302E-01	4.3026E+24	3.2454E+15
Y-90	8.7697E+04	1.6119E-04	1.0786E+21	3.2448E+15
Y-91	1.8633E+04	7.5977E-04	5.0280E+21	6.8940E+14
Zr-95	1.5230E+04	7.0893E-04	4.4940E+21	5.6350E+14
Zr-97	8.5692E-09	4.4826E-18	2.7829E+07	3.1706E+02
Nb-95	1.9518E+04	4.9914E-04	3.1641E+21	7.2216E+14
Mo-99	1.8592E+02	3.8765E-07	2.3581E+18	6.8792E+12
Tc-99m	1.7942E+02	3.4122E-08	2.0756E+17	6.6386E+12
Ru-103	1.3164E+05	4.0790E-03	2.3849E+22	4.8708E+15
Ru-106	6.2058E+04	1.8549E-02	1.0538E+23	2.2961E+15
Rh-105	1.9287E-01	2.2851E-10	1.3106E+15	7.1364E+09
Sb-127	1.6933E+03	6.3408E-06	3.0067E+19	6.2653E+13
Te-127	3.6173E+04	1.3707E-05	6.4995E+19	1.3384E+15
Te-127m	3.5319E+04	3.7444E-03	1.7755E+22	1.3068E+15
Te-129	4.9731E+04	2.3747E-06	1.1086E+19	1.8400E+15
Te-129m	7.5944E+04	2.5209E-03	1.1769E+22	2.8099E+15
Te-131m	4.5309E-02	5.6820E-11	2.6121E+14	1.6764E+09
Te-132	8.8399E+03	2.9118E-05	1.3284E+20	3.2707E+14
I-131	1.9401E+06	1.5650E-02	7.1942E+22	7.1785E+16
I-132	9.1352E+03	8.8501E-07	4.0376E+18	3.3800E+14
I-133	4.3482E-03	3.8384E-12	1.7380E+13	1.6088E+08
Xe-133	2.0925E+05	1.1179E-03	5.0617E+21	7.7422E+15
Cs-134	1.8135E+06	1.4016E+00	6.2992E+24	6.7099E+16
Cs-136	1.6950E+05	2.3127E-03	1.0241E+22	6.2714E+15
Cs-137	1.6472E+06	1.8937E+01	8.3242E+25	6.0945E+16
Ba-140	4.3687E+05	5.9675E-03	2.5669E+22	1.6164E+16
La-140	5.0321E+05	9.0534E-04	3.8943E+21	1.8619E+16
Ce-141	2.7235E+04	9.5583E-04	4.0824E+21	1.0077E+15
Ce-143	2.1976E-02	3.3092E-11	1.3936E+14	8.1311E+08
Ce-144	3.5485E+04	1.1125E-02	4.6527E+22	1.3129E+15
Pr-143	5.4162E+03	8.0432E-05	3.3872E+20	2.0040E+14
Nd-147	1.2760E+03	1.5772E-05	6.4615E+19	4.7211E+13
Np-239	1.1714E+02	5.0491E-07	1.2722E+18	4.3340E+12
Pu-238	4.0170E+01	2.3464E-03	5.9372E+21	1.4863E+12
Pu-239	1.2569E+01	2.0221E-01	5.0951E+23	4.6504E+11

Pu-240	1.2585E+01	5.5232E-02	1.3859E+23	4.6566E+11
Pu-241	3.7866E+03	3.6758E-02	9.1853E+22	1.4010E+14
Am-241	1.8396E+00	5.3600E-04	1.3394E+21	6.8067E+10
Cm-242	2.1476E+02	6.4797E-05	1.6125E+20	7.9460E+12
Cm-244	5.7012E+00	7.0470E-05	1.7393E+20	2.1094E+11
Xe-131m	5.5752E+04	6.6561E-04	3.0598E+21	2.0628E+15
Xe-133m	9.5027E+01	2.1178E-07	9.5893E+17	3.5160E+12
Sb-124	1.8983E+03	1.0852E-04	5.2704E+20	7.0236E+13
Sb-125	3.6924E+04	3.5763E-02	1.7229E+23	1.3662E+15
Sb-126	5.7452E+02	6.8745E-06	3.2856E+19	2.1257E+13
Te-131	1.0371E-02	1.8064E-13	8.3039E+11	3.8372E+08
Te-125m	8.0102E+03	4.4476E-04	2.1427E+21	2.9638E+14
Ba-137m	1.8259E+06	3.3952E-06	1.4924E+19	6.7560E+16
Rh-106	1.2763E+05	3.5855E-08	2.0370E+17	4.7223E+15
Rh-103m	1.3236E+05	4.0689E-06	2.3790E+19	4.8972E+15
Eu-154	6.4842E+01	2.4581E-04	9.6122E+20	2.3992E+12
Eu-155	4.9520E+01	1.0649E-04	4.1375E+20	1.8322E+12
Eu-156	2.7950E+02	5.0722E-06	1.9581E+19	1.0341E+13
Nb-97	4.9176E-10	1.8291E-20	1.1356E+05	1.8195E+01
Nb-95m	1.1298E+02	2.9659E-07	1.8801E+18	4.1801E+12
Pm-147	2.0425E+03	2.2033E-03	9.0263E+21	7.5573E+13
Pm-148	8.7324E+01	5.3151E-07	2.1627E+18	3.2310E+12
Pm-149	7.3717E-01	1.8604E-09	7.5193E+15	2.7275E+10
Pm-151	9.7860E-05	1.3391E-13	5.3408E+11	3.6208E+06
Pm-148m	2.6828E+02	1.2559E-05	5.1101E+19	9.9263E+12
Pr-144	3.6346E+04	4.8100E-07	2.0116E+18	1.3448E+15
Pr-144m	6.6882E+02	3.6879E-09	1.5423E+16	2.4747E+13
Sm-153	1.3455E-01	3.0678E-10	1.2075E+15	4.9784E+09
Br-82	1.0702E-01	9.8855E-11	7.2600E+14	3.9599E+09
Am-242	4.9161E-11	6.0817E-20	1.5134E+05	1.8190E+00
Np-238	5.0724E-01	1.9573E-09	4.9525E+15	1.8768E+10

Containment Sump Transport Group Inventory:

Time (h) = 694.4400	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	8.1225E+21	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.1946E+22	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.1400E+01	0.0000E+00	0.0000E+00

Time (h) = 694.4400	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Rb-86	2.0059E+03	2.4653E-05	1.7263E+20	7.4219E+13
Sr-89	2.0534E+05	7.0680E-03	4.7825E+22	7.5976E+15
Sr-90	2.0764E+04	1.5222E-01	1.0185E+24	7.6827E+14
Y-90	2.0760E+04	3.8158E-05	2.5532E+20	7.6812E+14
Y-91	4.4108E+03	1.7986E-04	1.1903E+21	1.6320E+14
Zr-95	3.6053E+03	1.6782E-04	1.0638E+21	1.3340E+14
Zr-97	2.0286E-09	1.0611E-18	6.5880E+06	7.5056E+01
Nb-95	4.6204E+03	1.1816E-04	7.4903E+20	1.7096E+14
Mo-99	4.4013E+01	9.1768E-08	5.5822E+17	1.6285E+12
Tc-99m	4.2474E+01	8.0776E-09	4.9136E+16	1.5715E+12
Ru-103	3.1164E+04	9.6560E-04	5.6456E+21	1.1531E+15
Ru-106	1.4691E+04	4.3911E-03	2.4947E+22	5.4356E+14
Rh-105	4.5659E-02	5.4094E-11	3.1025E+14	1.6894E+09
Sb-127	4.0085E+02	1.5010E-06	7.1176E+18	1.4832E+13
Te-127	8.5632E+03	3.2447E-06	1.5386E+19	3.1684E+14
Te-127m	8.3610E+03	8.8640E-04	4.2032E+21	3.0936E+14
Te-129	1.1773E+04	5.6214E-07	2.6243E+18	4.3559E+14
Te-129m	1.7978E+04	5.9677E-04	2.7859E+21	6.6519E+14
Te-131m	1.0726E-02	1.3451E-11	6.1835E+13	3.9686E+08

Te-132	2.0926E+03	6.8929E-06	3.1447E+19	7.7427E+13
I-131	4.5936E+05	3.7053E-03	1.7033E+22	1.6996E+16
I-132	2.1625E+03	2.0951E-07	9.5581E+17	8.0014E+13
I-133	1.0295E-03	9.0881E-13	4.1150E+12	3.8092E+07
Cs-134	4.2940E+05	3.3188E-01	1.4915E+24	1.5888E+16
Cs-136	4.0133E+04	5.4758E-04	2.4247E+21	1.4849E+15
Cs-137	3.9001E+05	4.4839E+00	1.9710E+25	1.4431E+16
Ba-140	1.0342E+05	1.4127E-03	6.0766E+21	3.8265E+15
La-140	1.1912E+05	2.1432E-04	9.2189E+20	4.4076E+15
Ce-141	6.4472E+03	2.2627E-04	9.6641E+20	2.3855E+14
Ce-143	5.2023E-03	7.8338E-12	3.2990E+13	1.9248E+08
Ce-144	8.4002E+03	2.6337E-03	1.1014E+22	3.1081E+14
Pr-143	1.2822E+03	1.9040E-05	8.0185E+19	4.7440E+13
Nd-147	3.0206E+02	3.7338E-06	1.5296E+19	1.1176E+13
Np-239	2.7729E+01	1.1953E-07	3.0117E+17	1.0260E+12
Pu-238	9.5093E+00	5.5546E-04	1.4055E+21	3.5184E+11
Pu-239	2.9753E+00	4.7868E-02	1.2061E+23	1.1009E+11
Pu-240	2.9793E+00	1.3075E-02	3.2808E+22	1.1023E+11
Pu-241	8.9639E+02	8.7017E-03	2.1744E+22	3.3166E+13
Am-241	4.3549E-01	1.2689E-04	3.1706E+20	1.6113E+10
Cm-242	5.0839E+01	1.5339E-05	3.8171E+19	1.8810E+12
Cm-244	1.3496E+00	1.6682E-05	4.1173E+19	4.9936E+10
Sb-124	4.4937E+02	2.5690E-05	1.2477E+20	1.6627E+13
Sb-125	8.7409E+03	8.4660E-03	4.0787E+22	3.2341E+14
Sb-126	1.3600E+02	1.6274E-06	7.7780E+18	5.0322E+12
Te-131	2.4551E-03	4.2761E-14	1.9658E+11	9.0838E+07
Te-125m	1.8962E+03	1.0529E-04	5.0724E+20	7.0161E+13
Ba-137m	4.3234E+05	8.0390E-07	3.5337E+18	1.5997E+16
Rh-106	3.0213E+04	8.4879E-09	4.8222E+16	1.1179E+15
Rh-103m	3.1332E+04	9.6321E-07	5.6316E+18	1.1593E+15
Eu-154	1.5350E+01	5.8189E-05	2.2755E+20	5.6795E+11
Eu-155	1.1723E+01	2.5210E-05	9.7946E+19	4.3374E+11
Eu-156	6.6164E+01	1.2007E-06	4.6352E+18	2.4481E+12
Nb-95m	2.6744E+01	7.0210E-08	4.4507E+17	9.8954E+11
Pm-147	4.8352E+02	5.2159E-04	2.1368E+21	1.7890E+13
Pm-148	2.0672E+01	1.2582E-07	5.1197E+17	7.6486E+11
Pm-149	1.7451E-01	4.4042E-10	1.7800E+15	6.4568E+09
Pm-151	2.3166E-05	3.1701E-14	1.2643E+11	8.5715E+05
Pm-148m	6.3509E+01	2.9729E-06	1.2097E+19	2.3498E+12
Pr-144	8.6042E+03	1.1387E-07	4.7619E+17	3.1835E+14
Pr-144m	1.5833E+02	8.7303E-10	3.6511E+15	5.8582E+12
Sm-153	3.1852E-02	7.2623E-11	2.8585E+14	1.1785E+09
Br-82	2.5340E-02	2.3405E-11	1.7189E+14	9.3757E+08
Np-238	1.2008E-01	4.6334E-10	1.1724E+15	4.4428E+09

SIRWT Backleakage Transport Group Inventory:

Time (h) = 694.4400	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.7034E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.0670E+00

Environment Integral Nuclide Release:

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Xe-133	4.9543E+04	2.6468E-04	1.1985E+21	1.8331E+15
Xe-131m	1.3200E+04	1.5759E-04	7.2446E+20	4.8841E+14
Xe-133m	2.2499E+01	5.0142E-08	2.2704E+17	8.3247E+11

Environment Transport Group Inventory:

Time (h) = 694.4400	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	4.9797E+16	6.9162E+14	1.9231E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 694.4400	Ci	kg	Atoms	Bq
Rb-86	2.0059E+03	2.4653E-05	1.7263E+20	7.4219E+13
Sr-89	2.0534E+05	7.0680E-03	4.7825E+22	7.5976E+15
Sr-90	2.0764E+04	1.5222E-01	1.0185E+24	7.6827E+14
Y-90	2.0760E+04	3.8158E-05	2.5532E+20	7.6812E+14
Y-91	4.4108E+03	1.7986E-04	1.1903E+21	1.6320E+14
Zr-95	3.6053E+03	1.6782E-04	1.0638E+21	1.3340E+14
Zr-97	2.0286E-09	1.0611E-18	6.5880E+06	7.5056E+01
Nb-95	4.6204E+03	1.1816E-04	7.4903E+20	1.7096E+14
Mo-99	4.4013E+01	9.1768E-08	5.5822E+17	1.6285E+12
Tc-99m	4.2474E+01	8.0776E-09	4.9136E+16	1.5715E+12
Ru-103	3.1164E+04	9.6560E-04	5.6456E+21	1.1531E+15
Ru-106	1.4691E+04	4.3911E-03	2.4947E+22	5.4356E+14
Rh-105	4.5659E-02	5.4094E-11	3.1025E+14	1.6894E+09
Sb-127	4.0085E+02	1.5010E-06	7.1176E+18	1.4832E+13
Te-127	8.5632E+03	3.2447E-06	1.5386E+19	3.1684E+14
Te-127m	8.3610E+03	8.8640E-04	4.2032E+21	3.0936E+14
Te-129	1.1773E+04	5.6214E-07	2.6243E+18	4.3559E+14
Te-129m	1.7978E+04	5.9677E-04	2.7859E+21	6.6519E+14
Te-131m	1.0726E-02	1.3451E-11	6.1835E+13	3.9686E+08
Te-132	2.0926E+03	6.8929E-06	3.1447E+19	7.7427E+13
I-131	4.5936E+05	3.7053E-03	1.7033E+22	1.6996E+16
I-132	2.1625E+03	2.0951E-07	9.5581E+17	8.0014E+13
I-133	1.0295E-03	9.0881E-13	4.1150E+12	3.8092E+07
Cs-134	4.2940E+05	3.3188E-01	1.4915E+24	1.5888E+16
Cs-136	4.0133E+04	5.4758E-04	2.4247E+21	1.4849E+15
Cs-137	3.9001E+05	4.4839E+00	1.9710E+25	1.4431E+16
Ba-140	1.0342E+05	1.4127E-03	6.0766E+21	3.8265E+15
La-140	1.1912E+05	2.1432E-04	9.2189E+20	4.4076E+15
Ce-141	6.4472E+03	2.2627E-04	9.6641E+20	2.3855E+14
Ce-143	5.2023E-03	7.8338E-12	3.2990E+13	1.9248E+08
Ce-144	8.4002E+03	2.6337E-03	1.1014E+22	3.1081E+14
Pr-143	1.2822E+03	1.9040E-05	8.0185E+19	4.7440E+13
Nd-147	3.0206E+02	3.7338E-06	1.5296E+19	1.1176E+13
Np-239	2.7729E+01	1.1953E-07	3.0117E+17	1.0260E+12
Pu-238	9.5093E+00	5.5546E-04	1.4055E+21	3.5184E+11
Pu-239	2.9753E+00	4.7868E-02	1.2061E+23	1.1009E+11
Pu-240	2.9793E+00	1.3075E-02	3.2808E+22	1.1023E+11
Pu-241	8.9639E+02	8.7017E-03	2.1744E+22	3.3166E+13
Am-241	4.3549E-01	1.2689E-04	3.1706E+20	1.6113E+10
Cm-242	5.0839E+01	1.5339E-05	3.8171E+19	1.8810E+12
Cm-244	1.3496E+00	1.6682E-05	4.1173E+19	4.9936E+10
Sb-124	4.4937E+02	2.5690E-05	1.2477E+20	1.6627E+13
Sb-125	8.7409E+03	8.4660E-03	4.0787E+22	3.2341E+14
Sb-126	1.3600E+02	1.6274E-06	7.7780E+18	5.0322E+12
Te-131	2.4551E-03	4.2761E-14	1.9658E+11	9.0838E+07
Te-125m	1.8962E+03	1.0529E-04	5.0724E+20	7.0161E+13
Ba-137m	4.3234E+05	8.0390E-07	3.5337E+18	1.5997E+16
Rh-106	3.0213E+04	8.4879E-09	4.8222E+16	1.1179E+15
Rh-103m	3.1332E+04	9.6321E-07	5.6316E+18	1.1593E+15
Eu-154	1.5350E+01	5.8189E-05	2.2755E+20	5.6795E+11
Eu-155	1.1723E+01	2.5210E-05	9.7946E+19	4.3374E+11
Eu-156	6.6164E+01	1.2007E-06	4.6352E+18	2.4481E+12
Nb-95m	2.6744E+01	7.0210E-08	4.4507E+17	9.8954E+11
Pm-147	4.8352E+02	5.2159E-04	2.1368E+21	1.7890E+13
Pm-148	2.0672E+01	1.2582E-07	5.1197E+17	7.6486E+11
Pm-149	1.7451E-01	4.4042E-10	1.7800E+15	6.4568E+09
Pm-151	2.3166E-05	3.1701E-14	1.2643E+11	8.5715E+05
Pm-148m	6.3509E+01	2.9729E-06	1.2097E+19	2.3498E+12
Pr-144	8.6042E+03	1.1387E-07	4.7619E+17	3.1835E+14
Pr-144m	1.5833E+02	8.7303E-10	3.6511E+15	5.8582E+12
Sm-153	3.1852E-02	7.2623E-11	2.8585E+14	1.1785E+09
Br-82	2.5340E-02	2.3405E-11	1.7189E+14	9.3757E+08
Np-238	1.2008E-01	4.6334E-10	1.1724E+15	4.4428E+09

SIRWT Backleakage Transport Group Inventory:

Pathway

```
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    1.7034E+22
Organic I (atoms)      0.0000E+00
Aerosols (kg)          5.0670E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                       Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                       Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 694.4400       Ci           kg         Atoms         Bq
Xe-133                 1.9764E-02  1.0559E-10  4.7809E+14  7.3127E+08
Xe-131m                9.1735E-03  1.0952E-10  5.0347E+14  3.3942E+08
Xe-133m                8.9757E-06  2.0003E-14  9.0574E+10  3.3210E+05

Control Room Transport Group Inventory:

                                              Overlying
Time (h) = 694.4400    Atmosphere     Sump        Pool
Noble gases (atoms)    9.8165E+14  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) = 694.4400     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                       Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
```

```
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 694.4400      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =  720.0000

EAB Doses:

Time (h) = 720.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        5.0722E-03  0.0000E+00  1.9216E-02  5.0722E-03
Accumulated dose (rem)  5.9730E+00  0.0000E+00  1.5738E+01  5.9730E+00

LPZ Doses:

Time (h) = 720.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        2.3902E-05  0.0000E+00  9.0556E-05  2.3902E-05
Accumulated dose (rem)  1.7075E-01  0.0000E+00  4.0448E-01  1.7075E-01

Control Room Doses:

Time (h) = 720.0000     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        1.2697E-04  0.0000E+00  1.7941E-02  1.2697E-04
Accumulated dose (rem)  2.1160E+00  0.0000E+00  1.3310E+02  2.1160E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000       Ci           kg         Atoms         Bq
Rb-86                  8.0796E+03  9.9297E-05  6.9533E+20  2.9894E+14
Sr-89                  8.4816E+05  2.9194E-02  1.9754E+23  3.1382E+16
Sr-90                  8.7022E+04  6.3796E-01  4.2688E+24  3.2198E+15
Y-90                   8.7018E+04  1.5994E-04  1.0702E+21  3.2197E+15
Y-91                   1.8255E+04  7.4439E-04  4.9262E+21  6.7545E+14
Zr-95                  1.4938E+04  6.9533E-04  4.4077E+21  5.5269E+14
Zr-97                  2.9802E-09  1.5590E-18  9.6787E+06  1.1027E+02
Nb-95                  1.9276E+04  4.9294E-04  3.1248E+21  7.1319E+14
Mo-99                  1.4104E+02  2.9408E-07  1.7889E+18  5.2186E+12
Tc-99m                 1.3611E+02  2.5885E-08  1.5746E+17  5.0361E+12
Ru-103                 1.2819E+05  3.9718E-03  2.3222E+22  4.7429E+15
Ru-106                 6.1450E+04  1.8368E-02  1.0435E+23  2.2737E+15
Rh-105                 1.1595E-01  1.3737E-10  7.8789E+14  4.2902E+09
Sb-127                 1.3870E+03  5.1936E-06  2.4627E+19  5.1318E+13
Te-127                 3.5392E+04  1.3411E-05  6.3592E+19  1.3095E+15
Te-127m                3.4809E+04  3.6903E-03  1.7499E+22  1.2879E+15
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Te-129	4.8270E+04	2.3049E-06	1.0760E+19	1.7860E+15
Te-129m	7.3714E+04	2.4469E-03	1.1423E+22	2.7274E+15
Te-131m	2.4906E-02	3.1234E-11	1.4358E+14	9.2152E+08
Te-132	6.9928E+03	2.3033E-05	1.0508E+20	2.5873E+14
I-131	1.7561E+06	1.4165E-02	6.5118E+22	6.4977E+16
I-132	7.2264E+03	7.0009E-07	3.1940E+18	2.6738E+14
I-133	1.8407E-03	1.6249E-12	7.3575E+12	6.8107E+07
Xe-133	1.8037E+05	9.6361E-04	4.3631E+21	6.6737E+15
Cs-134	1.7976E+06	1.3893E+00	6.2439E+24	6.6511E+16
Cs-136	1.5896E+05	2.1689E-03	9.6039E+21	5.8815E+15
Cs-137	1.6342E+06	1.8788E+01	8.2587E+25	6.0466E+16
Ba-140	4.0906E+05	5.5876E-03	2.4035E+22	1.5135E+16
La-140	4.7118E+05	8.4771E-04	3.6465E+21	1.7434E+16
Ce-141	2.6416E+04	9.2708E-04	3.9596E+21	9.7738E+14
Ce-143	1.2746E-02	1.9194E-11	8.0831E+13	4.7161E+08
Ce-144	3.5116E+04	1.1010E-02	4.6044E+22	1.2993E+15
Pr-143	5.0892E+03	7.5576E-05	3.1827E+20	1.8830E+14
Nd-147	1.1837E+03	1.4632E-05	5.9942E+19	4.3797E+13
Np-239	8.4948E+01	3.6617E-07	9.2264E+17	3.1431E+12
Pu-238	3.9860E+01	2.3283E-03	5.8914E+21	1.4748E+12
Pu-239	1.2471E+01	2.0063E-01	5.0554E+23	4.6141E+11
Pu-240	1.2487E+01	5.4801E-02	1.3751E+23	4.6203E+11
Pu-241	3.7565E+03	3.6467E-02	9.1123E+22	1.3899E+14
Am-241	1.8428E+00	5.3693E-04	1.3417E+21	6.8185E+10
Cm-242	2.1212E+02	6.4001E-05	1.5927E+20	7.8483E+12
Cm-244	5.6561E+00	6.9912E-05	1.7255E+20	2.0928E+11
Xe-131m	5.3217E+04	6.3535E-04	2.9207E+21	1.9690E+15
Xe-133m	6.7285E+01	1.4995E-07	6.7898E+17	2.4896E+12
Sb-124	1.8605E+03	1.0636E-04	5.1656E+20	6.8839E+13
Sb-125	3.6609E+04	3.5458E-02	1.7082E+23	1.3545E+15
Sb-126	5.3709E+02	6.4266E-06	3.0716E+19	1.9872E+13
Te-131	5.7008E-03	9.9294E-14	4.5646E+11	2.1093E+08
Te-125m	7.9528E+03	4.4157E-04	2.1273E+21	2.9425E+14
Ba-137m	1.8116E+06	3.3685E-06	1.4807E+19	6.7028E+16
Rh-106	1.2638E+05	3.5504E-08	2.0171E+17	4.6760E+15
Rh-103m	1.2888E+05	3.9620E-06	2.3165E+19	4.7685E+15
Eu-154	6.4322E+01	2.4383E-04	9.5350E+20	2.3799E+12
Eu-155	4.9113E+01	1.0562E-04	4.1036E+20	1.8172E+12
Eu-156	2.6416E+02	4.7939E-06	1.8506E+19	9.7740E+12
Nb-95m	1.1081E+02	2.9090E-07	1.8441E+18	4.1000E+12
Pm-147	2.0260E+03	2.1855E-03	8.9532E+21	7.4961E+13
Pm-148	7.7073E+01	4.6911E-07	1.9088E+18	2.8517E+12
Pm-149	5.2385E-01	1.3221E-09	5.3434E+15	1.9383E+10
Pm-151	5.2033E-05	7.1203E-14	2.8397E+11	1.9252E+06
Pm-148m	2.6147E+02	1.2240E-05	4.9804E+19	9.6744E+12
Pr-144	3.5969E+04	4.7601E-07	1.9907E+18	1.3309E+15
Pr-144m	6.6188E+02	3.6497E-09	1.5263E+16	2.4490E+13
Sm-153	9.1354E-02	2.0829E-10	8.1983E+14	3.3801E+09
Br-82	6.4285E-02	5.9378E-11	4.3608E+14	2.3786E+09
Np-238	3.5512E-01	1.3703E-09	3.4672E+15	1.3139E+10

Containment Sump Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.2845E+21	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.5122E+22	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	2.1229E+01	0.0000E+00	0.0000E+00

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 720.0000	Ci	kg	Atoms	Bq

Rb-86	1.9916E+03	2.4477E-05	1.7140E+20	7.3691E+13
Sr-89	2.0903E+05	7.1950E-03	4.8685E+22	7.7341E+15
Sr-90	2.1447E+04	1.5723E-01	1.0520E+24	7.9353E+14
Y-90	2.1446E+04	3.9418E-05	2.6375E+20	7.9349E+14
Y-91	4.4991E+03	1.8346E-04	1.2141E+21	1.6647E+14
Zr-95	3.6814E+03	1.7136E-04	1.0863E+21	1.3621E+14
Zr-97	7.3449E-10	3.8421E-19	2.3853E+06	2.7176E+01
Nb-95	4.7505E+03	1.2149E-04	7.7011E+20	1.7577E+14
Mo-99	3.4760E+01	7.2476E-08	4.4087E+17	1.2861E+12
Tc-99m	3.3545E+01	6.3795E-09	3.8806E+16	1.2412E+12
Ru-103	3.1592E+04	9.7886E-04	5.7231E+21	1.1689E+15
Ru-106	1.5145E+04	4.5267E-03	2.5718E+22	5.6035E+14
Rh-105	2.8576E-02	3.3856E-11	1.9418E+14	1.0573E+09
Sb-127	3.4182E+02	1.2800E-06	6.0694E+18	1.2647E+13
Te-127	8.7225E+03	3.3051E-06	1.5672E+19	3.2273E+14
Te-127m	8.5788E+03	9.0948E-04	4.3126E+21	3.1742E+14
Te-129	1.1896E+04	5.6806E-07	2.6519E+18	4.4017E+14
Te-129m	1.8167E+04	6.0305E-04	2.8152E+21	6.7218E+14
Te-131m	6.1382E-03	7.6977E-12	3.5387E+13	2.2711E+08
Te-132	1.7234E+03	5.6767E-06	2.5898E+19	6.3765E+13
I-131	4.3287E+05	3.4916E-03	1.6051E+22	1.6016E+16
I-132	1.7810E+03	1.7254E-07	7.8716E+17	6.5896E+13
I-133	4.5372E-04	4.0053E-13	1.8136E+12	1.6788E+07
Cs-134	4.4311E+05	3.4248E-01	1.5392E+24	1.6395E+16
Cs-136	3.9184E+04	5.3464E-04	2.3674E+21	1.4498E+15
Cs-137	4.0284E+05	4.6313E+00	2.0358E+25	1.4905E+16
Ba-140	1.0081E+05	1.3771E-03	5.9235E+21	3.7301E+15
La-140	1.1612E+05	2.0892E-04	8.9868E+20	4.2966E+15
Ce-141	6.5102E+03	2.2848E-04	9.7585E+20	2.4088E+14
Ce-143	3.1414E-03	4.7304E-12	1.9921E+13	1.1623E+08
Ce-144	8.6545E+03	2.7135E-03	1.1348E+22	3.2022E+14
Pr-143	1.2542E+03	1.8626E-05	7.8439E+19	4.6407E+13
Nd-147	2.9172E+02	3.6060E-06	1.4773E+19	1.0794E+13
Np-239	2.0936E+01	9.0243E-08	2.2739E+17	7.7461E+11
Pu-238	9.8237E+00	5.7383E-04	1.4520E+21	3.6348E+11
Pu-239	3.0734E+00	4.9446E-02	1.2459E+23	1.1372E+11
Pu-240	3.0775E+00	1.3506E-02	3.3889E+22	1.1387E+11
Pu-241	9.2580E+02	8.9873E-03	2.2457E+22	3.4255E+13
Am-241	4.5417E-01	1.3233E-04	3.3066E+20	1.6804E+10
Cm-242	5.2277E+01	1.5773E-05	3.9251E+19	1.9342E+12
Cm-244	1.3940E+00	1.7230E-05	4.2525E+19	5.1576E+10
Sb-124	4.5853E+02	2.6213E-05	1.2731E+20	1.6966E+13
Sb-125	9.0224E+03	8.7386E-03	4.2100E+22	3.3383E+14
Sb-126	1.3237E+02	1.5839E-06	7.5700E+18	4.8976E+12
Te-131	1.4050E-03	2.4471E-14	1.1250E+11	5.1984E+07
Te-125m	1.9600E+03	1.0883E-04	5.2429E+20	7.2520E+13
Ba-137m	4.4656E+05	8.3034E-07	3.6499E+18	1.6523E+16
Rh-106	3.1146E+04	8.7501E-09	4.9711E+16	1.1524E+15
Rh-103m	3.1762E+04	9.7644E-07	5.7090E+18	1.1752E+15
Eu-154	1.5852E+01	6.0093E-05	2.3499E+20	5.8653E+11
Eu-155	1.2104E+01	2.6030E-05	1.0113E+20	4.4785E+11
Eu-156	6.5103E+01	1.1815E-06	4.5609E+18	2.4088E+12
Nb-95m	2.7310E+01	7.1694E-08	4.5448E+17	1.0105E+12
Pm-147	4.9930E+02	5.3861E-04	2.2065E+21	1.8474E+13
Pm-148	1.8995E+01	1.1561E-07	4.7043E+17	7.0281E+11
Pm-149	1.2911E-01	3.2583E-10	1.3169E+15	4.7769E+09
Pm-151	1.2824E-05	1.7548E-14	6.9985E+10	4.7447E+05
Pm-148m	6.4440E+01	3.0165E-06	1.2274E+19	2.3843E+12
Pr-144	8.8647E+03	1.1731E-07	4.9061E+17	3.2799E+14
Pr-144m	1.6312E+02	8.9947E-10	3.7616E+15	6.0356E+12
Sm-153	2.2514E-02	5.1333E-11	2.0205E+14	8.3303E+08
Br-82	1.5846E-02	1.4636E-11	1.0749E+14	5.8629E+08
Np-238	8.7519E-02	3.3771E-10	8.5451E+14	3.2382E+09

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.6052E+22

Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.2330E+00

Environment Integral Nuclide Release:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Xe-133	4.4460E+04	2.3752E-04	1.0755E+21	1.6450E+15
Xe-131m	1.3118E+04	1.5661E-04	7.1993E+20	4.8535E+14
Xe-133m	1.6585E+01	3.6963E-08	1.6736E+17	6.1366E+11

Environment Transport Group Inventory:

Time (h) = 720.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	4.4660E+16	6.2028E+14	1.7956E+21
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Backleakage

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	1.9916E+03	2.4477E-05	1.7140E+20	7.3691E+13
Sr-89	2.0903E+05	7.1950E-03	4.8685E+22	7.7341E+15
Sr-90	2.1447E+04	1.5723E-01	1.0520E+24	7.9353E+14
Y-90	2.1446E+04	3.9418E-05	2.6375E+20	7.9349E+14
Y-91	4.4991E+03	1.8346E-04	1.2141E+21	1.6647E+14
Zr-95	3.6814E+03	1.7136E-04	1.0863E+21	1.3621E+14
Zr-97	7.3449E-10	3.8421E-19	2.3853E+06	2.7176E+01
Nb-95	4.7505E+03	1.2149E-04	7.7011E+20	1.7577E+14
Mo-99	3.4760E+01	7.2476E-08	4.4087E+17	1.2861E+12
Tc-99m	3.3545E+01	6.3795E-09	3.8806E+16	1.2412E+12
Ru-103	3.1592E+04	9.7886E-04	5.7231E+21	1.1689E+15
Ru-106	1.5145E+04	4.5267E-03	2.5718E+22	5.6035E+14
Rh-105	2.8576E-02	3.3856E-11	1.9418E+14	1.0573E+09
Sb-127	3.4182E+02	1.2800E-06	6.0694E+18	1.2647E+13
Te-127	8.7225E+03	3.3051E-06	1.5672E+19	3.2273E+14
Te-127m	8.5788E+03	9.0948E-04	4.3126E+21	3.1742E+14
Te-129	1.1896E+04	5.6806E-07	2.6519E+18	4.4017E+14
Te-129m	1.8167E+04	6.0305E-04	2.8152E+21	6.7218E+14
Te-131m	6.1382E-03	7.6977E-12	3.5387E+13	2.2711E+08
Te-132	1.7234E+03	5.6767E-06	2.5898E+19	6.3765E+13
I-131	4.3287E+05	3.4916E-03	1.6051E+22	1.6016E+16
I-132	1.7810E+03	1.7254E-07	7.8716E+17	6.5896E+13
I-133	4.5372E-04	4.0053E-13	1.8136E+12	1.6788E+07
Cs-134	4.4311E+05	3.4248E-01	1.5392E+24	1.6395E+16
Cs-136	3.9184E+04	5.3464E-04	2.3674E+21	1.4498E+15
Cs-137	4.0284E+05	4.6313E+00	2.0358E+25	1.4905E+16
Ba-140	1.0081E+05	1.3771E-03	5.9235E+21	3.7301E+15
La-140	1.1612E+05	2.0892E-04	8.9868E+20	4.2966E+15
Ce-141	6.5102E+03	2.2848E-04	9.7585E+20	2.4088E+14
Ce-143	3.1414E-03	4.7304E-12	1.9921E+13	1.1623E+08
Ce-144	8.6545E+03	2.7135E-03	1.1348E+22	3.2022E+14
Pr-143	1.2542E+03	1.8626E-05	7.8439E+19	4.6407E+13
Nd-147	2.9172E+02	3.6060E-06	1.4773E+19	1.0794E+13
Np-239	2.0936E+01	9.0243E-08	2.2739E+17	7.7461E+11
Pu-238	9.8237E+00	5.7383E-04	1.4520E+21	3.6348E+11
Pu-239	3.0734E+00	4.9446E-02	1.2459E+23	1.1372E+11
Pu-240	3.0775E+00	1.3506E-02	3.3889E+22	1.1387E+11
Pu-241	9.2580E+02	8.9873E-03	2.2457E+22	3.4255E+13
Am-241	4.5417E-01	1.3233E-04	3.3066E+20	1.6804E+10
Cm-242	5.2277E+01	1.5773E-05	3.9251E+19	1.9342E+12
Cm-244	1.3940E+00	1.7230E-05	4.2525E+19	5.1576E+10
Sb-124	4.5853E+02	2.6213E-05	1.2731E+20	1.6966E+13
Sb-125	9.0224E+03	8.7386E-03	4.2100E+22	3.3383E+14
Sb-126	1.3237E+02	1.5839E-06	7.5700E+18	4.8976E+12
Te-131	1.4050E-03	2.4471E-14	1.1250E+11	5.1984E+07
Te-125m	1.9600E+03	1.0883E-04	5.2429E+20	7.2520E+13
Ba-137m	4.4656E+05	8.3034E-07	3.6499E+18	1.6523E+16
Rh-106	3.1146E+04	8.7501E-09	4.9711E+16	1.1524E+15

Rh-103m	3.1762E+04	9.7644E-07	5.7090E+18	1.1752E+15
Eu-154	1.5852E+01	6.0093E-05	2.3499E+20	5.8653E+11
Eu-155	1.2104E+01	2.6030E-05	1.0113E+20	4.4785E+11
Eu-156	6.5103E+01	1.1815E-06	4.5609E+18	2.4088E+12
Nb-95m	2.7310E+01	7.1694E-08	4.5448E+17	1.0105E+12
Pm-147	4.9930E+02	5.3861E-04	2.2065E+21	1.8474E+13
Pm-148	1.8995E+01	1.1561E-07	4.7043E+17	7.0281E+11
Pm-149	1.2911E-01	3.2583E-10	1.3169E+15	4.7769E+09
Pm-151	1.2824E-05	1.7548E-14	6.9985E+10	4.7447E+05
Pm-148m	6.4440E+01	3.0165E-06	1.2274E+19	2.3843E+12
Pr-144	8.8647E+03	1.1731E-07	4.9061E+17	3.2799E+14
Pr-144m	1.6312E+02	8.9947E-10	3.7616E+15	6.0356E+12
Sm-153	2.2514E-02	5.1333E-11	2.0205E+14	8.3303E+08
Br-82	1.5846E-02	1.4636E-11	1.0749E+14	5.8629E+08
Np-238	8.7519E-02	3.3771E-10	8.5451E+14	3.2382E+09

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.6052E+22
Organic I (atoms)	0.0000E+00
Aerosols (kg)	5.2330E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Xe-133	1.7036E-02	9.1015E-11	4.1211E+14	6.3035E+08
Xe-131m	8.7089E-03	1.0397E-10	4.7797E+14	3.2223E+08
Xe-133m	6.3553E-06	1.4164E-14	6.4132E+10	2.3515E+05

Control Room Transport Group Inventory:

```
                                                Overlying
Time (h) = 720.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    8.9014E+14  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) = 720.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

--------------------------------
Transport Group Totals in Model:
--------------------------------
Noble Gases (atoms)    9.0801E+21
Elemental I (atoms)    8.1173E+22
Organic I   (atoms)    0.0000E+00
Aerosols    (kg)       2.6462E+01
--------------------------------

  37010

#####################################################################
                            I-131 Summary
#####################################################################

             Containment Sump         Environment          Control Room
Time (hr)    I-131 (Curies)         I-131 (Curies)       I-131 (Curies)
   0.000       0.0000E+00             0.0000E+00           0.0000E+00
   0.008       0.0000E+00             0.0000E+00           0.0000E+00
   0.025       3.6151E+04             0.0000E+00           0.0000E+00
```

0.300	2.0233E+06	0.0000E+00	0.0000E+00
0.317	2.1437E+06	0.0000E+00	0.0000E+00
0.508	3.5268E+06	0.0000E+00	0.0000E+00
0.780	8.6622E+06	0.0000E+00	0.0000E+00
1.040	1.3705E+07	0.0000E+00	0.0000E+00
1.300	1.8741E+07	0.0000E+00	0.0000E+00
1.560	2.3767E+07	0.0000E+00	0.0000E+00
1.808	2.8560E+07	0.0000E+00	0.0000E+00
2.000	2.8765E+07	0.0000E+00	0.0000E+00
2.260	2.8736E+07	0.0000E+00	0.0000E+00
2.520	2.8708E+07	0.0000E+00	0.0000E+00
2.780	2.8679E+07	0.0000E+00	0.0000E+00
3.040	2.8650E+07	0.0000E+00	0.0000E+00
3.300	2.8622E+07	0.0000E+00	0.0000E+00
3.560	2.8593E+07	0.0000E+00	0.0000E+00
3.820	2.8565E+07	0.0000E+00	0.0000E+00
4.080	2.8536E+07	0.0000E+00	0.0000E+00
4.170	2.8526E+07	0.0000E+00	0.0000E+00
4.440	2.8497E+07	0.0000E+00	0.0000E+00
4.700	2.8468E+07	0.0000E+00	0.0000E+00
4.960	2.8440E+07	0.0000E+00	0.0000E+00
5.220	2.8412E+07	0.0000E+00	0.0000E+00
5.480	2.8383E+07	0.0000E+00	0.0000E+00
5.740	2.8355E+07	0.0000E+00	0.0000E+00
6.000	2.8327E+07	0.0000E+00	0.0000E+00
6.260	2.8298E+07	0.0000E+00	0.0000E+00
6.520	2.8270E+07	0.0000E+00	0.0000E+00
6.780	2.8242E+07	0.0000E+00	0.0000E+00
7.040	2.8214E+07	0.0000E+00	0.0000E+00
7.300	2.8186E+07	0.0000E+00	0.0000E+00
7.560	2.8157E+07	0.0000E+00	0.0000E+00
7.820	2.8129E+07	0.0000E+00	0.0000E+00
8.000	2.8110E+07	0.0000E+00	0.0000E+00
8.260	2.8082E+07	0.0000E+00	0.0000E+00
8.520	2.8054E+07	0.0000E+00	0.0000E+00
8.780	2.8026E+07	0.0000E+00	0.0000E+00
9.040	2.7998E+07	0.0000E+00	0.0000E+00
9.300	2.7970E+07	0.0000E+00	0.0000E+00
9.560	2.7942E+07	0.0000E+00	0.0000E+00
9.820	2.7914E+07	0.0000E+00	0.0000E+00
10.080	2.7886E+07	0.0000E+00	0.0000E+00
11.110	2.7776E+07	0.0000E+00	0.0000E+00
22.220	2.6612E+07	0.0000E+00	0.0000E+00
24.000	2.6430E+07	0.0000E+00	0.0000E+00
96.000	1.9993E+07	0.0000E+00	0.0000E+00
111.110	1.8851E+07	0.0000E+00	0.0000E+00
305.560	8.8363E+06	0.0000E+00	0.0000E+00
402.780	6.0487E+06	0.0000E+00	0.0000E+00
500.000	4.1405E+06	0.0000E+00	0.0000E+00
597.220	2.8343E+06	0.0000E+00	0.0000E+00
694.440	1.9401E+06	0.0000E+00	0.0000E+00
720.000	1.7561E+06	0.0000E+00	0.0000E+00

##
Cumulative Dose Summary
##

	EAB		LPZ		Control Room	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.008	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.025	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.317	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.508	0.0000E+00	8.7186E-04	0.0000E+00	1.0773E-04	0.0000E+00	7.0156E-05
0.780	0.0000E+00	3.8355E-03	0.0000E+00	4.7393E-04	0.0000E+00	6.3844E-04
1.040	0.0000E+00	1.0078E-02	0.0000E+00	1.2452E-03	0.0000E+00	2.2857E-03
1.300	0.0000E+00	2.0686E-02	0.0000E+00	2.5560E-03	0.0000E+00	5.7743E-03
1.560	0.0000E+00	3.6176E-02	0.0000E+00	4.4700E-03	0.0000E+00	1.1805E-02

1.808	0.0000E+00	5.5777E-02	0.0000E+00	6.8920E-03	0.0000E+00	2.0511E-02
2.000	0.0000E+00	7.4030E-02	0.0000E+00	9.1473E-03	0.0000E+00	2.9483E-02
2.260	0.0000E+00	1.0185E-01	0.0000E+00	1.0711E-02	0.0000E+00	4.3475E-02
2.520	0.0000E+00	1.3192E-01	0.0000E+00	1.2402E-02	0.0000E+00	5.9189E-02
2.780	0.0000E+00	1.6352E-01	0.0000E+00	1.4178E-02	0.0000E+00	7.7199E-02
3.040	0.0000E+00	1.9625E-01	0.0000E+00	1.6018E-02	0.0000E+00	9.7540E-02
3.300	0.0000E+00	2.2988E-01	0.0000E+00	1.7909E-02	0.0000E+00	1.2012E-01
3.560	0.0000E+00	2.6430E-01	0.0000E+00	1.9843E-02	0.0000E+00	1.4480E-01
3.820	0.0000E+00	2.9940E-01	0.0000E+00	2.1817E-02	0.0000E+00	1.7148E-01
4.080	0.0000E+00	3.3512E-01	0.0000E+00	2.3825E-02	0.0000E+00	2.0003E-01
4.170	0.0000E+00	3.4762E-01	0.0000E+00	2.4527E-02	0.0000E+00	2.1033E-01
4.440	0.0000E+00	3.8550E-01	0.0000E+00	2.6657E-02	0.0000E+00	2.4240E-01
4.700	0.0000E+00	4.2248E-01	0.0000E+00	2.8736E-02	0.0000E+00	2.7493E-01
4.960	0.0000E+00	4.5992E-01	0.0000E+00	3.0840E-02	0.0000E+00	3.0895E-01
5.220	0.0000E+00	4.9777E-01	0.0000E+00	3.2968E-02	0.0000E+00	3.4437E-01
5.480	0.0000E+00	5.3600E-01	0.0000E+00	3.5117E-02	0.0000E+00	3.8108E-01
5.740	0.0000E+00	5.7456E-01	0.0000E+00	3.7285E-02	0.0000E+00	4.1900E-01
6.000	0.0000E+00	6.1343E-01	0.0000E+00	3.9470E-02	0.0000E+00	4.5803E-01
6.260	0.0000E+00	6.5256E-01	0.0000E+00	4.1669E-02	0.0000E+00	4.9809E-01
6.520	0.0000E+00	6.9193E-01	0.0000E+00	4.3882E-02	0.0000E+00	5.3910E-01
6.780	0.0000E+00	7.3150E-01	0.0000E+00	4.6107E-02	0.0000E+00	5.8099E-01
7.040	0.0000E+00	7.7124E-01	0.0000E+00	4.8341E-02	0.0000E+00	6.2367E-01
7.300	0.0000E+00	8.1113E-01	0.0000E+00	5.0583E-02	0.0000E+00	6.6707E-01
7.560	0.0000E+00	8.5114E-01	0.0000E+00	5.2832E-02	0.0000E+00	7.1114E-01
7.820	0.0000E+00	8.9123E-01	0.0000E+00	5.5087E-02	0.0000E+00	7.5581E-01
8.000	0.0000E+00	9.1904E-01	0.0000E+00	5.6650E-02	0.0000E+00	7.8705E-01
8.260	0.0000E+00	9.5919E-01	0.0000E+00	5.8169E-02	0.0000E+00	8.2188E-01
8.520	0.0000E+00	9.9921E-01	0.0000E+00	5.9684E-02	0.0000E+00	8.4546E-01
8.780	0.0000E+00	1.0392E+00	0.0000E+00	6.1197E-02	0.0000E+00	8.6548E-01
9.040	0.0000E+00	1.0791E+00	0.0000E+00	6.2709E-02	0.0000E+00	8.8428E-01
9.300	0.0000E+00	1.1190E+00	0.0000E+00	6.4219E-02	0.0000E+00	9.0263E-01
9.560	0.0000E+00	1.1589E+00	0.0000E+00	6.5727E-02	0.0000E+00	9.2083E-01
9.820	0.0000E+00	1.1986E+00	0.0000E+00	6.7232E-02	0.0000E+00	9.3899E-01
10.080	0.0000E+00	1.2383E+00	0.0000E+00	6.8734E-02	0.0000E+00	9.5715E-01
11.110	0.0000E+00	1.3943E+00	0.0000E+00	7.4637E-02	0.0000E+00	1.0292E+00
22.220	0.0000E+00	2.8216E+00	0.0000E+00	1.2866E-01	0.0000E+00	1.7048E+00
24.000	0.0000E+00	2.9972E+00	0.0000E+00	1.3531E-01	0.0000E+00	1.7858E+00
96.000	0.0000E+00	4.8805E+00	0.0000E+00	1.6560E-01	0.0000E+00	2.0883E+00
111.110	0.0000E+00	4.9751E+00	0.0000E+00	1.6604E-01	0.0000E+00	2.0911E+00
305.560	0.0000E+00	5.6660E+00	0.0000E+00	1.6930E-01	0.0000E+00	2.1085E+00
402.780	0.0000E+00	5.8103E+00	0.0000E+00	1.6998E-01	0.0000E+00	2.1120E+00
500.000	0.0000E+00	5.8929E+00	0.0000E+00	1.7037E-01	0.0000E+00	2.1140E+00
597.220	0.0000E+00	5.9405E+00	0.0000E+00	1.7059E-01	0.0000E+00	2.1152E+00
694.440	0.0000E+00	5.9680E+00	0.0000E+00	1.7072E-01	0.0000E+00	2.1159E+00
720.000	0.0000E+00	5.9730E+00	0.0000E+00	1.7075E-01	0.0000E+00	2.1160E+00

```
#####################################################################
                        Worst Two-Hour Dose
                   (Provided for Dose Location 1)
#####################################################################
```

EAB

Time (hr)	Whole Body (rem)	Thyroid (rem)	Skin (rem)	TEDE (rem)
7.3	3.0791E-01	0.0000E+00	6.9714E-01	3.0791E-01

```
#####################################################################
                     30 Day Control Room Skin Dose
#####################################################################
```

Control Room

Time (hr)	Skin (rem)
720.0	1.3310E+02

ATTACHMENT C

QADMOD-GP Input Files for Scenario 1

Inp_s1c1.dat
Inp_s1c2.dat
Inp_s1c3.dat
Inp_s1c4.dat
Inp_s1c5.dat

s1c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 1 (Base), Case 1 (2 h)
   21    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s1c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 1 (Base), Case 2 (8 h)
   21    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s1c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 1 (Base), Case 3 (24 h)
   20    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s1c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 1 (Base), Case 4 (96 h)
   19    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s1c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 1 (Base), Case 5 (720 h)
   19    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

ATTACHMENT D

QADMOD-GP Input Files for Scenario 2

Inp_s2c1.dat
Inp_s2c2.dat
Inp_s2c3.dat
Inp_sc4.dat
Inp_s2c5.dat

s2c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 2, Case 1 (2 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   577.85   589.10
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   589.10
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   577.85
  1     1  1 51 34                            731.52  1249.68   580.39
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                       0.  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s2c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 2, Case 2 (8 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   577.85   592.98
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   592.98
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   577.85
  1     1  1 51 34                            731.52  1249.68   580.39
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s2c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 2, Case 3 (24 h)
   20    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   577.85   603.34
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   603.34
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   577.85
  1     1  1 51 34                            731.52  1249.68   580.39
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s2c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 2, Case 4 (96 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   577.85   649.94
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   649.94
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   577.85
  1     1  1 51 34                            731.52  1249.68   580.39
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6 33 51                                731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s2c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 2, Case 5 (720 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   577.85  1053.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1053.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   577.85
  1     1  1 51 34                            731.52  1249.68   580.39
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

ATTACHMENT E

QADMOD-GP Input Files for Scenario 3

Inp_s3c1.dat
Inp_s3c2.dat
Inp_s3c3.dat
Inp_s3c4.dat
Inp_s3c5.dat

s3c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 3, Case 1 (2 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   579.12   590.37
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   590.37
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   579.12
  1     1  1 51 34                            731.52  1249.68   581.66
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                       0.  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s3c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 3, Case 2 (8 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   579.12   594.25
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   594.25
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   579.12
  1     1  1 51 34                            731.52  1249.68   581.66
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s3c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 3, Case 3 (24 h)
   20    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   579.12   604.61
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   604.61
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   579.12
  1     1  1 51 34                            731.52  1249.68   581.66
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s3c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 3, Case 4 (96 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   579.12   651.21
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   651.21
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   579.12
  1     1  1 51 34                            731.52  1249.68   581.66
  2     2  1  2 33 34                       1432.8775  1249.68   581.66
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6 33 51                                731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s3c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 3, Case 5 (720 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   579.12  1055.10
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1055.10
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   579.12
  1     1  1 51 34                            731.52  1249.68   581.66
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

ATTACHMENT F

QADMOD-GP Input Files for Scenario 4

Inp_s4c1.dat
Inp_s4c2.dat
Inp_s4c3.dat
Inp_s4c4.dat
Inp_s4c5.dat

s4c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 4, Case 1 (2 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   581.66   592.91
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   592.91
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   581.66
  1     1  1 51 34                            731.52  1249.68   582.20
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                       0.  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s4c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 4, Case 2 (8 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   581.66   596.79
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   596.79
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   581.66
  1     1  1 51 34                            731.52  1249.68   582.20
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s4c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 4, Case 3 (24 h)
   20    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   581.66   607.15
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   607.15
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   581.66
  1     1  1 51 34                            731.52  1249.68   582.20
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s4c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 4, Case 4 (96 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   581.66   653.75
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   653.75
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   581.66
  1     1  1 51 34                            731.52  1249.68   582.20
  2     2  1  2 33 34                       1432.8775  1249.68   582.20
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                  731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                       0  1249.68    457.2
  7     4  4  5 13 14 30 29                  198.12    190.5    457.2
  8     3  4 35 14 15 30 29                   60.96   335.28    457.2
  9     3 35 36 14 15 30 50                  137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6 33 51                                731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s4c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 4, Case 5 (720 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   581.66  1057.64
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1057.64
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   581.66
  1     1  1 51 34                            731.52  1249.68   582.20
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 28 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  1 33 51                              731.52  1249.68    577.0
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

ATTACHMENT G

QADMOD-GP Input Files for Scenario 5

Inp_s5c1.dat
Inp_s5c2.dat
Inp_s5c3.dat
Inp_s5c4.dat
Inp_s5c5.dat

s5c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 5, Case 1 (2 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s5c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 5, Case 2 (8 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s5c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 5, Case 3 (24 h)
   20    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s5c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 5, Case 4 (96 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s5c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 5, Case 5 (720 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

ATTACHMENT H

QADMOD-GP Input Files for Scenario 6

Inp_s6c1.dat
Inp_s6c2.dat
Inp_s6c3.dat
Inp_s6c4.dat
Inp_s6c5.dat

s6c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 6, Case 1 (2 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   398.78
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s6c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 6, Case 2 (8 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   398.78
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s6c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 6, Case 3 (24 h)
   20    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   398.78
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s6c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 6, Case 4 (96 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   398.78
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s6c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 6, Case 5 (720 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   398.78
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

ATTACHMENT I

QADMOD-GP Input Files for Scenario 7

Inp_s7c1.dat
Inp_s7c2.dat
Inp_s7c3.dat
Inp_s7c4.dat
Inp_s7c5.dat

s7c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 7, Case 1 (2 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   401.32
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s7c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 7, Case 2 (8 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   401.32
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s7c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 7, Case 3 (24 h)
   20    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   401.32
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                            -1
```

s7c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 7, Case 4 (96 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   401.32
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s7c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 7, Case 5 (720 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   401.32
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

ATTACHMENT J

QADMOD-GP Input Files for Scenario 8

Inp_s8c1.dat
Inp_s8c2.dat
Inp_s8c3.dat
Inp_s8c4.dat
Inp_s8c5.dat

s8c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 8, Case 1 (2 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   364.49
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s8c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 8, Case 2 (8 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   364.49
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s8c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 8, Case 3 (24 h)
   20    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   364.49
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s8c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 8, Case 4 (96 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   364.49
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s8c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 8, Case 5 (720 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   364.49
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

ATTACHMENT K

QADMOD-GP Input Files for Scenario 9

Inp_s9c1.dat
Inp_s9c2.dat
Inp_s9c3.dat
Inp_s9c4.dat
Inp_s9c5.dat

s9c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 9, Case 1 (2 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   363.22
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s9c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 9, Case 2 (8 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   363.22
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s9c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 9, Case 3 (24 h)
   20    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   363.22
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s9c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 9, Case 4 (96 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   363.22
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s9c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 9, Case 5 (720 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   363.22
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

ATTACHMENT L

QADMOD-GP Input Files for Scenario 10

Inp_s10c1.dat
Inp_s10c2.dat
Inp_s10c3.dat
Inp_s10c4.dat
Inp_s10c5.dat

s10c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 10, Case 1 (2 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   360.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.9170+3 6.0954+4 8.2089+6 1.8295+5 7.2169+5 1.7366+5 1.2479+6 8.9211+5
 2.6253+6 7.9475+6 7.5710+6 3.6778+7 8.2204+7 6.8749+7 9.7490+7 5.0639+7
 4.6978+7 1.0860+7 6.2030+5 4.5961+4 2.6577+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s10c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 10, Case 2 (8 h)
   21    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   591.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   591.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   360.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.1471+4 3.6354+5 3.8631+7 9.0653+5 4.1787+6 9.2506+5 5.4941+6 4.6578+6
 5.0482+6 3.4134+7 2.8839+7 1.6780+8 3.1535+8 1.4371+8 1.3384+8 1.0603+8
 1.0986+8 2.0083+7 7.5784+4 2.0996+2 1.8049-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s10c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 10, Case 3 (24 h)
   20    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   602.07
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   602.07
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   360.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.4036+4 6.5469+5 6.5469+7 1.6442+6 7.1616+6 1.7040+6 1.0086+7 7.6187+6
 8.3952+6 5.3846+7 4.2674+7 2.9351+8 3.5666+8 1.7692+8 1.4647+8 6.7537+7
 6.1630+7 8.6054+6 3.9119+5 1.6968-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s10c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 10, Case 4 (96 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   648.67
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   648.67
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   360.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                     0.7082   0.8068
                                                        11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.6687+3 6.4710+5 5.9293+7 1.9076+6 5.4404+6 1.9567+6 1.1115+7 4.8833+6
 7.8957+6 4.0685+7 4.6299+7 3.1904+8 8.5487+7 1.7819+8 1.2140+8 3.3943+7
 4.2227+7 1.7603+6 1.2273+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

s10c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 10, Case 5 (720 h)
   19    7    8    6   51  115    1   -3    0 -100  -62  -16          1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58  1052.56
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3  1052.56
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   360.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	29	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

```
 80     4  8  9 25 26 30 29                    906.78  2004.06    457.2
 81     3  9 10 13 43 30 29                   1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                   1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                   1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                   1082.04     1524    457.2
 85     4 10 11 13 14 30 29                   1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                   1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                   1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                   1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                   1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                   1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                   1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                   1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                   1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                   1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                   1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                   1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                   1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                   1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                   1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                   1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                   1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                   1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                   1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                   1463.04    457.2    457.2
105     3 11 12 42 45 30 50                   1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                   1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                   1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                   1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                   1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                   1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                    731.52  1249.68      381
112     4  3 12 13 26 51 27                    731.52  1249.68   182.88
113     4  3                                   -304.8       0.       0.
114     4  3 13                                 304.8       0.       0.
115     6  3 12 13 26 28 51                    731.52  1249.68     365.
      1.0
             2.702
                       2.35
                             1.22-3
                                      0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.2086+3 2.4712+5 8.1538+6 1.0436+6 3.1580+4 4.4761+5 1.2658+6 6.2018+4
 1.5352+6 8.5601+5 7.4334+6 3.2962+7 1.1271+7 8.9367+7 4.6615+7 5.9509+6
 1.1357+7 1.0505+5 3.7521+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
```

```
 1188.72  1402.08    91.44    1
  731.52  1706.88    91.44    1
   749.3  1706.88    91.44    1
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                            -1
```

ATTACHMENT M

QADMOD-GP Input Files for Scenario 11

Inp_s11c1.dat
Inp_s11c2.dat
Inp_s11c3.dat
Inp_s11c4.dat
Inp_s11c5.dat

s11c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 11, Case 1 (2 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.28
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.28
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 1.5330+3 3.2032+4 4.3139+6 9.6145+4 3.7927+5 9.1262+4 6.5579+5 4.6881+5
 1.3797+6 4.1767+6 3.9787+6 1.9328+7 4.3201+7 3.6131+7 5.1235+7 2.6613+7
 2.4689+7 5.7071+6 3.2598+5 2.4154+4 1.3966+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s11c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 11, Case 2 (8 h)
   21    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   589.23
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   589.23
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 1.2860+4 2.1774+5 2.3138+7 5.4297+5 2.5028+6 5.5407+5 3.2908+6 2.7897+6
 3.0235+6 2.0444+7 1.7273+7 1.0050+8 1.8888+8 8.6073+7 8.0162+7 6.3505+7
 6.5800+7 1.2029+7 4.5389+4 1.2575+2 1.0810-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s11c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 11, Case 3 (24 h)
   20    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   594.40
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   594.40
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.0071+4 4.6973+5 4.6975+7 1.1797+6 5.1385+6 1.2226+6 7.2370+6 5.4665+6
 6.0236+6 3.8635+7 3.0619+7 2.1060+8 2.5590+8 1.2694+8 1.0510+8 4.8459+7
 4.4220+7 6.1745+6 2.8067+5 1.2175-1
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s11c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 11, Case 4 (96 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   617.71
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   617.71
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.4839+3 5.7542+5 5.2723+7 1.6963+6 4.8376+6 1.7400+6 9.8840+6 4.3424+6
 7.0211+6 3.6177+7 4.1169+7 2.8370+8 7.6016+7 1.5845+8 1.0796+8 3.0182+7
 3.7548+7 1.5652+6 1.0913+6
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

s11c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 11, Case 5 (720 h)
   19    7    8    6   51  158    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   819.65
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   819.65
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
 51     3   397.51
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                       1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 51                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
```

10	4	35	36	14	15	50	51	137.16	335.28	441.96
11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	51	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	51	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	51	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	51	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	51	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	51	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	51	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	51	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	51	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	51	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	51	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	51	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	51	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	51	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	51	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	51	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	51	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	51	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	51	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	51	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	51	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	51	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	51	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	51	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	51	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	51	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	51	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	51	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	51	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2

80	4	8	9	25	26	30	51	906.78	2004.06	457.2
81	3	9	10	13	43	30	29	1082.04	457.2	457.2
82	3	9	10	43	44	30	50	1082.04	1092.2	502.92
83	4	9	10	43	44	50	51	1082.04	1092.2	441.96
84	3	9	10	44	26	30	29	1082.04	1524	457.2
85	4	10	11	13	14	30	51	1264.92	190.5	457.2
86	3	10	11	14	15	30	29	1264.92	335.28	457.2
87	4	10	11	15	16	30	51	1264.92	487.68	457.2
88	3	10	11	16	17	30	29	1264.92	640.08	457.2
89	4	10	11	17	18	30	51	1264.92	792.48	457.2
90	3	10	11	18	19	30	29	1264.92	944.88	457.2
91	4	10	11	19	20	30	51	1264.92	1097.28	457.2
92	3	10	37	20	21	30	29	1102.36	1249.68	457.2
93	3	37	38	20	21	30	50	1148.08	1249.68	502.92
94	4	37	38	20	21	50	51	1148.08	1249.68	441.96
95	3	38	11	20	21	30	29	1310.64	1249.68	457.2
96	4	10	11	21	22	30	51	1264.92	1402.08	457.2
97	3	10	37	22	23	30	29	1102.36	1554.48	457.2
98	3	37	38	22	23	30	50	1148.08	1554.48	502.92
99	4	37	38	22	23	50	51	1148.08	1554.48	441.96
100	3	38	11	22	23	30	29	1310.64	1554.48	457.2
101	4	10	11	23	24	30	51	1264.92	1706.88	457.2
102	3	10	11	24	25	30	29	1264.92	1859.28	457.2
103	4	10	11	25	26	30	51	1264.92	2004.06	457.2
104	3	11	12	13	42	30	29	1463.04	457.2	457.2
105	3	11	12	42	45	30	50	1463.04	1066.8	502.92
106	4	11	12	42	45	50	51	1463.04	1066.8	441.96
107	3	11	12	45	46	30	29	1463.04	1249.68	457.2
108	3	11	12	46	47	30	50	1463.04	1371.6	502.92
109	4	11	12	46	47	50	51	1463.04	1371.6	441.96
110	3	11	12	47	26	30	29	1463.04	1859.28	457.2
111	3	3	12	13	26	29	28	731.52	1249.68	381
112	4	3	12	13	26	28	27	731.52	1249.68	182.88
113	4	3						-304.8	0.	0.
114	4	3	13					304.8	0.	0.
115	6	29	51	4	5	13	14	198.12	190.5	397
116	6	29	51	35	36	14	15	137.16	335.28	397
117	6	29	51	4	5	15	16	198.12	487.68	397
118	6	29	51	35	36	16	17	137.16	640.08	397
119	6	29	51	4	5	17	18	198.12	792.48	397
120	6	29	51	35	36	18	19	137.16	944.88	397
121	6	29	51	4	5	19	20	198.12	1097.28	397
122	6	29	51	35	36	20	21	137.16	1249.68	397
123	6	29	51	4	5	21	22	198.12	1402.08	397
124	6	29	51	35	36	22	23	137.16	1554.48	397
125	6	29	51	4	5	23	24	198.12	1706.88	397
126	6	29	51	35	36	24	25	137.16	1859.28	397
127	6	29	51	4	5	25	26	198.12	2004.06	397
128	6	29	51	5	6	39	41	381	226.06	397
129	6	29	51	5	6	43	44	381	1092.2	397
130	6	29	51	5	6	48	49	381	1974.85	397
131	6	29	51	6	7	13	14	556.26	190.5	397
132	6	29	51	6	7	15	16	556.26	487.68	397
133	6	29	51	6	7	17	18	556.26	792.48	397
134	6	29	51	6	7	19	20	556.26	1097.28	397
135	6	29	51	6	7	21	22	556.26	1402.08	397
136	6	29	51	6	7	23	24	556.26	1706.88	397
137	6	29	51	6	7	25	26	556.26	2004.06	397
138	6	29	51	7	8	40	14	731.52	271.78	397
139	6	29	51	7	8	43	44	731.52	1092.2	397
140	6	29	51	8	9	13	14	906.78	190.5	397
141	6	29	51	8	9	15	16	906.78	487.68	397
142	6	29	51	8	9	17	18	906.78	792.48	397
143	6	29	51	8	9	19	20	906.78	1097.28	397
144	6	29	51	8	9	21	22	906.78	1402.08	397
145	6	29	51	8	9	23	24	906.78	1706.88	397
146	6	29	51	8	9	25	26	906.78	2004.06	397
147	6	29	51	9	10	43	44	1082.04	1092.2	397
148	6	29	51	10	11	13	14	1264.92	190.5	397
149	6	29	51	10	11	15	16	1264.92	487.68	397

```
150     6 29 51 10 11 17 18                    1264.92   792.48      397
151     6 29 51 10 11 19 20                    1264.92  1097.28      397
152     6 29 51 37 38 20 21                    1148.08  1249.68      397
153     6 29 51 10 11 21 22                    1264.92  1402.08      397
154     6 29 51 37 38 22 23                    1148.08  1554.48      397
155     6 29 51 10 11 23 24                    1264.92  1706.88      397
156     6 29 51 10 11 25 26                    1264.92  2004.06      397
157     6 29 51 11 12 42 45                    1463.04   1066.8      397
158     6 29 51 11 12 46 47                    1463.04   1371.6      397
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
                                                          11.3
   24    8   25   23    9    5   13
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.3132+3 2.6849+5 8.8592+6 1.1339+6 3.4312+4 4.8634+5 1.3754+6 6.7382+4
 1.6680+6 9.3008+5 8.0765+6 3.5814+7 1.2245+7 9.7102+7 5.0648+7 6.4658+6
 1.2340+7 1.1414+5 4.0765+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
    762.0  1706.88    91.44    1
   883.92  1706.88    91.44    1
  1188.72  1706.88    91.44    1
   731.52  1216.66    91.44    1
    749.3  1216.66    91.44    1
    762.0  1216.66    91.44    1
   883.92  1216.66    91.44    1
  1188.72  1216.66    91.44    1
   731.52  1188.72    91.44    1
    749.3  1188.72    91.44    1
    762.0  1188.72    91.44    1
   883.92  1188.72    91.44    1
  1188.72  1188.72    91.44    1
   731.52  1097.28    91.44    1
    749.3  1097.28    91.44    1
    762.0  1097.28    91.44    1
   883.92  1097.28    91.44    1
  1188.72  1097.28    91.44    1
   731.52   792.48    91.44    1
    749.3   792.48    91.44    1
    762.0   792.48    91.44    1
   883.92   792.48    91.44    1
  1188.72   792.48    91.44    1
   713.74  1249.68    91.44    1
```

```
701.04  1249.68    91.44    1
579.12  1249.68    91.44    1
274.32  1249.68    91.44    1
713.74   1282.7    91.44    1
701.04   1282.7    91.44    1
579.12   1282.7    91.44    1
274.32   1282.7    91.44    1
713.74  1310.64    91.44    1
701.04  1310.64    91.44    1
579.12  1310.64    91.44    1
274.32  1310.64    91.44    1
713.74  1402.08    91.44    1
701.04  1402.08    91.44    1
579.12  1402.08    91.44    1
274.32  1402.08    91.44    1
713.74  1706.88    91.44    1
701.04  1706.88    91.44    1
579.12  1706.88    91.44    1
274.32  1706.88    91.44    1
713.74  1216.66    91.44    1
701.04  1216.66    91.44    1
579.12  1216.66    91.44    1
274.32  1216.66    91.44    1
713.74  1188.72    91.44    1
701.04  1188.72    91.44    1
579.12  1188.72    91.44    1
274.32  1188.72    91.44    1
713.74  1097.28    91.44    1
701.04  1097.28    91.44    1
579.12  1097.28    91.44    1
274.32  1097.28    91.44    1
713.74   792.48    91.44    1
701.04   792.48    91.44    1
579.12   792.48    91.44    1
274.32   792.48    91.44    1
                           -1
```

ATTACHMENT N

CD Electronic File Listing

```
 Volume in drive E has no label
 Volume Serial Number is 123E-11D9
 Directory of E:\Projects\Joe\Palisades CR Habitability\PalShield\SIRWT\db\CDAttN

.               <DIR>        06-09-05  6:29p .
..              <DIR>        06-09-05  6:29p ..
INP_S8C5 DAT        13,311  06-09-05 12:09p Inp_s8c5.dat
INP_S1~1 DAT        13,346  06-09-05  1:03p Inp_s10c2.dat
INP_S1~2 DAT        13,329  06-09-05  1:20p Inp_s10c3.dat
INP_S1~3 DAT        13,311  06-09-05  2:17p Inp_s10c4.dat
INP_S1~4 DAT        13,312  06-09-05  2:36p Inp_s10c5.dat
INP_S1~5 DAT        16,528  06-07-05  3:01p Inp_s11c1.dat
INP_S1~6 DAT        16,528  06-08-05  1:27p Inp_s11c2.dat
INP_S1~7 DAT        16,511  06-08-05  1:46p Inp_s11c3.dat
INP_S1~8 DAT        16,493  06-08-05  2:01p Inp_s11c4.dat
INP_S1~9 DAT        16,494  06-15-05 10:40a Inp_s11c5.dat
INP_S1C1 DAT        13,190  03-08-05  5:23p Inp_s1c1.dat
INP_S1C2 DAT        13,190  03-08-05  5:32p Inp_s1c2.dat
INP_S1C3 DAT        13,173  03-08-05  5:42p Inp_s1c3.dat
INP_S1C4 DAT        13,155  03-09-05 10:01a Inp_s1c4.dat
INP_S1C5 DAT        13,156  03-09-05 10:11a Inp_s1c5.dat
INP_S2C1 DAT        13,345  05-12-05  2:48p Inp_s2c1.dat
INP_S2C2 DAT        13,345  05-12-05  5:51p Inp_s2c2.dat
INP_S2C3 DAT        13,328  05-12-05  3:36p Inp_s2c3.dat
INP_S2C4 DAT        13,310  05-12-05  4:58p Inp_s2c4.dat
INP_S2C5 DAT        13,311  05-12-05  5:11p Inp_s2c5.dat
INP_S3C1 DAT        13,345  05-12-05  5:37p Inp_s3c1.dat
INP_S3C2 DAT        13,345  05-13-05  3:34p Inp_s3c2.dat
INP_S3C3 DAT        13,328  05-13-05  3:45p Inp_s3c3.dat
INP_S3C4 DAT        13,310  05-13-05  4:01p Inp_s3c4.dat
INP_S3C5 DAT        13,311  05-13-05  4:11p Inp_s3c5.dat
INP_S4C1 DAT        13,345  05-13-05  4:22p Inp_s4c1.dat
INP_S4C2 DAT        13,345  05-13-05  4:33p Inp_s4c2.dat
INP_S4C3 DAT        13,328  05-13-05  4:44p Inp_s4c3.dat
INP_S4C4 DAT        13,310  05-13-05  4:56p Inp_s4c4.dat
INP_S4C5 DAT        13,311  05-13-05  5:07p Inp_s4c5.dat
INP_S5C1 DAT        16,527  05-16-05  3:41p Inp_s5c1.dat
INP_S5C2 DAT        16,527  06-08-05  5:07p Inp_s5c2.dat
INP_S5C3 DAT        16,510  06-08-05  5:18p Inp_s5c3.dat
INP_S5C4 DAT        16,492  06-08-05  5:28p Inp_s5c4.dat
INP_S5C5 DAT        16,493  06-08-05  5:38p Inp_s5c5.dat
INP_S6C1 DAT        16,527  05-17-05  2:23p Inp_s6c1.dat
INP_S6C2 DAT        16,527  06-08-05  5:48p Inp_s6c2.dat
INP_S6C3 DAT        16,510  06-08-05  5:59p Inp_s6c3.dat
INP_S6C4 DAT        16,492  06-08-05  6:09p Inp_s6c4.dat
INP_S6C5 DAT        16,493  06-09-05  9:54a Inp_s6c5.dat
INP_S7C1 DAT        16,527  05-17-05  3:18p Inp_s7c1.dat
INP_S7C2 DAT        16,527  06-09-05 10:19a Inp_s7c2.dat
INP_S7C3 DAT        16,510  06-09-05 10:29a Inp_s7c3.dat
INP_S7C4 DAT        16,492  06-09-05 10:38a Inp_s7c4.dat
INP_S7C5 DAT        16,493  06-09-05 10:48a Inp_s7c5.dat
INP_S8C1 DAT        13,345  05-17-05  4:26p Inp_s8c1.dat
INP_S8C2 DAT        13,345  06-09-05 10:58a Inp_s8c2.dat
INP_S8C3 DAT        13,328  06-09-05 11:08a Inp_s8c3.dat
INP_S8C4 DAT        13,310  06-09-05 11:17a Inp_s8c4.dat
INP_S~10 DAT        13,346  05-18-05 12:10p Inp_s10c1.dat
INP_S9C1 DAT        13,345  05-18-05  9:52a Inp_s9c1.dat
INP_S9C2 DAT        13,345  06-09-05 12:21p Inp_s9c2.dat
INP_S9C3 DAT        13,328  06-09-05 12:30p Inp_s9c3.dat
INP_S9C4 DAT        13,310  06-09-05 12:41p Inp_s9c4.dat
INP_S9C5 DAT        13,311  06-09-05 12:52p Inp_s9c5.dat
OUT_S4C4 DAT     6,338,253  05-13-05  5:03p Out_s4c4.dat
OUT_S1~1 DAT     6,215,495  06-09-05  1:16p Out_s10c2.dat
OUT_S1~2 DAT     6,204,364  06-09-05  1:35p Out_s10c3.dat
OUT_S1~3 DAT     6,147,176  06-09-05  2:28p Out_s10c4.dat
OUT_S1~4 DAT     6,074,301  06-09-05  2:44p Out_s10c5.dat
OUT_S1~5 DAT     6,295,086  06-07-05  3:15p Out_s11c1.dat
OUT_S1~6 DAT     6,140,475  06-08-05  1:35p Out_s11c2.dat
OUT_S1~7 DAT     6,348,613  06-08-05  1:54p Out_s11c3.dat
```

```
OUT_S1~8 DAT     6,174,984  06-08-05  2:08p Out_s11c4.dat
OUT_S1~9 DAT     6,228,863  06-15-05 10:52a Out_s11c5.dat
OUT_S1C1 DAT     6,068,130  03-08-05  5:30p Out_s1c1.dat
OUT_S1C2 DAT     6,214,438  03-08-05  5:39p Out_s1c2.dat
OUT_S1C3 DAT     6,203,319  03-08-05  5:48p Out_s1c3.dat
OUT_S1C4 DAT     6,146,143  03-09-05 10:08a Out_s1c4.dat
OUT_S1C5 DAT     6,073,268  03-09-05 10:19a Out_s1c5.dat
OUT_S2C1 DAT     6,255,127  05-12-05  2:56p Out_s2c1.dat
OUT_S2C2 DAT     6,293,344  05-12-05  5:59p Out_s2c2.dat
OUT_S2C3 DAT     6,192,933  05-12-05  3:43p Out_s2c3.dat
OUT_S2C4 DAT     6,223,977  05-12-05  5:06p Out_s2c4.dat
OUT_S2C5 DAT     6,279,266  05-12-05  5:19p Out_s2c5.dat
OUT_S3C1 DAT     6,207,265  05-12-05  5:45p Out_s3c1.dat
OUT_S3C2 DAT     6,280,310  05-13-05  3:42p Out_s3c2.dat
OUT_S3C3 DAT     6,255,254  05-13-05  3:52p Out_s3c3.dat
OUT_S3C4 DAT     6,204,948  05-13-05  4:09p Out_s3c4.dat
OUT_S3C5 DAT     6,224,444  05-13-05  4:19p Out_s3c5.dat
OUT_S4C1 DAT     6,279,387  05-13-05  4:30p Out_s4c1.dat
OUT_S4C2 DAT     6,288,744  05-13-05  4:41p Out_s4c2.dat
OUT_S4C3 DAT     6,380,481  05-13-05  4:51p Out_s4c3.dat
OUT_S~10 DAT     6,069,117  05-18-05 12:18p Out_s10c1.dat
OUT_S4C5 DAT     6,191,947  05-13-05  5:15p Out_s4c5.dat
OUT_S5C1 DAT     6,199,818  05-16-05  3:49p Out_s5c1.dat
OUT_S5C2 DAT     6,355,624  06-08-05  5:15p Out_s5c2.dat
OUT_S5C3 DAT     6,289,584  06-08-05  5:26p Out_s5c3.dat
OUT_S5C4 DAT     6,264,412  06-08-05  5:35p Out_s5c4.dat
OUT_S5C5 DAT     6,141,977  06-08-05  5:45p Out_s5c5.dat
OUT_S6C1 DAT     6,153,259  05-17-05  2:32p Out_s6c1.dat
OUT_S6C2 DAT     6,354,553  06-08-05  5:57p Out_s6c2.dat
OUT_S6C3 DAT     6,292,045  06-08-05  6:07p Out_s6c3.dat
OUT_S6C4 DAT     6,267,999  06-08-05  6:16p Out_s6c4.dat
OUT_S6C5 DAT     6,126,898  06-09-05 10:02a Out_s6c5.dat
OUT_S7C1 DAT     6,189,948  05-17-05  3:26p Out_s7c1.dat
OUT_S7C2 DAT     6,286,567  06-09-05 10:27a Out_s7c2.dat
OUT_S7C3 DAT     6,298,916  06-09-05 10:36a Out_s7c3.dat
OUT_S7C4 DAT     6,278,756  06-09-05 10:46a Out_s7c4.dat
OUT_S7C5 DAT     6,146,165  06-09-05 10:56a Out_s7c5.dat
OUT_S8C1 DAT     6,069,117  05-17-05  4:33p Out_s8c1.dat
OUT_S8C2 DAT     6,215,495  06-09-05 11:05a Out_s8c2.dat
OUT_S8C3 DAT     6,204,364  06-09-05 11:15a Out_s8c3.dat
OUT_S8C4 DAT     6,147,176  06-09-05 11:24a Out_s8c4.dat
OUT_S8C5 DAT     6,074,301  06-09-05 12:17p Out_s8c5.dat
OUT_S9C1 DAT     6,069,117  05-18-05  9:59a Out_s9c1.dat
OUT_S9C2 DAT     6,215,495  06-09-05 12:28p Out_s9c2.dat
OUT_S9C3 DAT     6,204,364  06-09-05 12:38p Out_s9c3.dat
OUT_S9C4 DAT     6,147,176  06-09-05 12:48p Out_s9c4.dat
OUT_S9C5 DAT     6,074,301  06-09-05 12:59p Out_s9c5.dat
PAL_SI~1 OUT       412,386  02-24-05 12:57p pal_sirwt_db_ast_shield.out
PAL_SI~1 PSF         3,130  02-24-05 12:54p pal_sirwt_db_ast_shield.psf
PAL_SI~2 OUT       412,263  05-18-05  1:21p pal_sirwt_db_ast_shield_50bl.out
PAL_SI~2 PSF         3,149  05-18-05  1:18p pal_sirwt_db_ast_shield_50bl.psf
PALTK01  MS5         5,936  05-19-05  3:23p PALTK01.MS5
PALTK01  XLS        45,056  05-19-05  2:38p Paltk01.xls
PALTK02  MS5         5,961  05-19-05  3:23p Paltk02.MS5
PALTK02  XLS        44,032  05-19-05  2:57p Paltk02.xls
PALTK03  MS5         5,887  05-19-05  3:24p Paltk03.MS5
PALTK03  XLS        42,496  05-19-05  2:58p Paltk03.xls
PALTK04  MS5         5,714  05-19-05  3:24p Paltk04.MS5
PALTK04  XLS        39,424  05-19-05  2:59p Paltk04.xls
PALTK05  MS5         5,378  05-19-05  3:25p Paltk05.MS5
PALTK05  XLS        34,304  05-19-05  3:01p Paltk05.xls
PALTNK01 MS5         5,957  02-24-05  5:27p PALTNK01.MS5
PALTNK01 XLS        44,032  02-24-05  5:04p PALTNK01.xls
PALTNK02 MS5         5,981  02-24-05  5:27p Paltnk02.MS5
PALTNK02 XLS        43,520  02-24-05  5:12p Paltnk02.xls
PALTNK03 MS5         5,899  02-24-05  5:28p Paltnk03.MS5
PALTNK03 XLS        42,496  02-24-05  5:13p Paltnk03.xls
PALTNK04 MS5         5,731  02-24-05  5:29p Paltnk04.MS5
PALTNK04 XLS        39,936  02-24-05  5:14p Paltnk04.xls
PALTNK05 MS5         5,392  02-24-05  5:29p Paltnk05.MS5
```

```
PALTNK05 XLS        35,328  02-24-05  5:16p Paltnk05.xls
SIRWT_~1 XLS       195,584  06-15-05 11:03a sirwt_source_db_ast.xls
FILELIST                 0  06-15-05 11:09a filelist
       136 file(s)    343,857,755 bytes
         2 dir(s)        5,402.95 MB free
```

ATTACHMENT O

Review Comments & Responses

Comment 1

Page 9 Add an item under assumptions that rebar in the concrete is not considered.

Comment 2

Page 14 Water was specified for parameter MATGP. A rule of thumb for shielding is that the outermost shielding material, as long as it is of a certain thickness, may be used for determination of the buildup factor (in this case, concrete). For example, page 425 of Schaeffer's "Reactor Shielding for Nuclear Engineers" states:

Extension of the buildup-factor method to structures with multiple layers leans more heavily on rules of thumb and physical intuition. When the outermost layer exceeds two or three mean free paths, the buildup factor of the outermost material is generally recommended ...

Although a sensitivity study has shown that using water for the buildup factor is conservative, an argument can be made for using concrete instead, resulting in a lower dose.

Comment 3

Page 29 In Table 16, the dose rate at 96 hours should be 2.4189E+1.

Comment 4

Page 34 In the last paragraph, Table 2 is referenced for the time-dependent SIRWT volume. Table 2 is based on a 4.4 gpm leak rate. A new table corresponding to a 2.2 gpm leak rate should be used. This changes the volume souce terms listed in Tables 26, 27, 28, 29, and 30.

Comment 5

General Typographical errors have been identified in a hard copy markup provided to the preparer.

Responses to Comments

Comment 1

The following assumption was added in Section 3.0:

Rebar in the concrete is neglected for shielding purposes. The effect of rebar on the shielded dose would be small. Moreover, neglecting the presence of the rebar provides a higher shielded dose result, which is conservative.

Comment 2

During the preparation process the sensitivity studies showed that using concrete as the buildup material resulted in a dose rate of approximately 90% of the result using water as the buildup material. Air was also selected during the sensitivity study as a buildup material and it resulted in shielded dose of approximately 99.5% of the result that used water as the buildup material.

Additionally, QADMOD-GP does not have the ability to select an individual shield to be used for buildup. The code only allows buildup to be applied to a particular material, and all regions that are comprised of that material are utilized in the buildup calculation. The calculation and QADMOD-GP files are not

changed based on this comment, and water is conservatively used as the buildup material for a bounding shielded dose result.

Comment 3

The value in the table for the dose rate at 96 hours for scenario 2 is corrected to 2.4189E+01. The other values affected by this change in that table and Table 1 – Scenario Results are updated.

Comment 4

A new table that lists SIRWT volume, source height, and upper bound based on a 2.2 gpm leak rate was added as Table 26. Tables 26 through 31 were updated and renumbered as appropriate. The cases for scenario 11 were rerun with the correct SIRWT levels and volume source and the results were updated.

While incorporating this comment it was noticed that the values for ZB(2) and ADM(1) for surface 34 were not correct for cases 2 through 5 of scenarios 5 through 10. These cases were rerun with the correct SIRWT levels and the results were updated.

Comment 5

The typographical errors have been corrected.

ATTACHMENT P

RADTRAD-NAI Output for Nuclide Source with Reduced Backleakage

pal_sirwt_norefill_db_ast.out

```
#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on May 25, 2006 at 07:55:09
#######################################################################

#######################################################################
                     File information
#######################################################################

Plant file name           = AST/LOCA/pal_sirwt_norefill_db_ast.psf
Inventory file name       = AST/LOCA/palisades_loca_db_ast.nif
Scenario file name        = AST/LOCA/pal_sirwt_norefill_db_ast.psf
Release file name         = AST/LOCA/pal_loca_eccs_ast.rft
Dose conversion file name = AST/LOCA/nai-1101-001rev0.dcf
```

```
     #####    ####   #####    #  #     #  #####   #    #  #####
     #    #  #       #        #  ##    #  #    #  #    #    #
     #    #  #       #        #  # #   #  #    #  #    #    #
     #####    ####   ####     #  #  #  #  #####   #    #    #
     #            #  #        #  #   # #  #       #    #    #
     #            #  #        #  #    ##  #       #    #    #
     #        ####   #        #  #     #  #        ####     #
```

```
*RADTRAD-NAI 1.1a(QA)
*25 May 2006 07:55:03
** Palisades LOCA Design Basis AST
** SIRWT Backleakage Dose
** No SIRWT Refill
**
*Nuclide inventory file
AST/LOCA/palisades_loca_db_ast.nif
*Plant power
2703
*Compartments
5
*Compartment 1:
Containment Sump
   3
57577
   0
   0
   0
   0
*Compartment 2:
Environment
   2
2e+20
   0
   0
   0
   0
*Compartment 3:
Control Room
   1
35923
   0
   1
   0
   0
*Compartment 4:
SIRWT Water
   4
  10
0 554
2 613.4
```

```
8 615.8
24 622.2
72 641.5
168 680
240 708.9
336 747.4
432 785.9
624 862.9
   0
   0
   0
   0
*Compartment 5:
SIRWT Air
   4
  10
0 39597.1
2 39537.7
8 39535.3
24 39528.9
72 39509.6
168 39471.1
240 39442.2
336 39403.7
432 39365.2
624 39288.2
   0
   0
   0
   0
*Pathways
   7
*Pathway 1:
SIRWT Backleakage
   1
   4
   2
*Pathway 2:
Control Room Unfiltered Makeup
   2
   3
   2
*Pathway 3:
Control Room Filtered Makeup
   2
   3
   2
*Pathway 4:
Control Room Unfiltered Inleakage
   2
   3
   2
*Pathway 5:
Control Room Exhaust
   3
   2
   2
*Pathway 6:
SIRWT Water to SIRWT Air
   4
   5
   2
*Pathway 7:
SIRWT Leakage
   5
   2
   2
*Sources
   5
   1 1
```

```
   2 0
   3 0
   4 0
   5 0
*dose conversion factors filename
AST/LOCA/nai-1101-001rev0.dcf
*release fraction and timing filename
AST/LOCA/pal_loca_eccs_ast.rft
0.008333
   1
   1
*Iodine
0 0.97 0.03
*Overlying pool
*aerosol model
   0
*elemental model
   0
*organic model
   0
*pH tracking
   0
*Compartment detail
*Compartment 1:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Compartment 2:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Compartment 3:
   1
*spray model
0
0
0
*filter model
   1
   3
0 0 99 99 99
0.025 1413.6 99 99 99
720 1413.6 99 99 99
*deposition model
0
0
*Compartment 4:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
```

```
0
*Compartment 5:
   1
*spray model
0
0
0
*filter model
0
*deposition model
0
0
*Pathways:
*Pathway 1
*filter efficiency model
   1
   4
0 0 0 0 0
0.3167 0.588196 0 0 0
2 0.006684 0 0 0
720 0.006684 0 0 0
*Pathway 2
*filter efficiency model
   1
   3
0 384.2 0 0 0
0.025 0 0 0 0
720 0 0 0 0
*Pathway 3
*filter efficiency model
   1
   3
0 0 99 99 99
0.025 1413.6 99 99 99
720 1413.6 99 99 99
*Pathway 4
*filter efficiency model
   1
   3
0 0 0 0 0
0.025 10 0 0 0
720 10 0 0 0
*Pathway 5
*filter efficiency model
   1
   3
0 384.2 0 0 0
0.025 1423.6 0 0 0
720 1423.6 0 0 0
*Pathway 6
*filter efficiency model
   1
  10
0.3167 0.00057048 100 0 0
2 1.1955e-05 100 0 0
8 1.2895e-05 100 0 0
24 1.4921e-05 100 0 0
72 1.7737e-05 100 0 0
168 1.9907e-05 100 0 0
240 2.1376e-05 100 0 0
336 2.2501e-05 100 0 0
432 2.3366e-05 100 0 0
624 2.3737e-05 100 0 0
*Pathway 7
*filter efficiency model
   1
   4
0 0 100 0 0
0.3167 0.588196 100 0 0
2 0.006684 100 0 0
```

```
720 0.006684 100 0 0
*x/q tables
   4
EAB
   2
0 0.000539
720 0.000539
LPZ
   6
0 6.66e-05
2 3.03e-05
8 2.04e-05
24 8.67e-06
96 2.54e-06
720 2.54e-06
Control Room-Normal
   6
0 0.0957
2 0.0759
8 0.0287
24 0.0219
96 0.0165
720 0.0165
Control Room-Emergency
   6
0 0.000966
2 0.000792
8 0.000313
24 0.00022
96 0.000164
720 0.000164
*dose locations
   3
*location name, compartment number and x/q table
EAB
   2
   1
*br model
   1
   4
0 0.00035
8 0.00018
24 0.00023
720 0.00023
*of model
   0
*location x/q input to be included
   0
*location name, compartment number and x/q table
LPZ
   2
   2
*br model
   1
   4
0 0.00035
8 0.00018
24 0.00023
720 0.00023
*of model
   0
*location x/q input to be included
   0
*location name, compartment number and x/q table
Control Room
   3
   0
*br model
   1
   2
```

```
0 0.00035
720 0.00035
*of model
   1
   4
0 1
24 0.6
96 0.4
720 0.4
*location x/q input to be included
   1
*number of intake combinations
   3
*intake combinations
2 7 3
3 7 4
4 7 3
*time step count
   3
0 1e-06
0.001 0.02
720 0.02
*show plant, scenario, event, step, model
   1
   1
   1
   0
   1

 ######################################################################
       RADTRAD-NAI Version 1.1a(QA) run on May 25, 2006 at 07:55:09
 ######################################################################

 ######################################################################
                      Plant Description
 ######################################################################

 Number of Nuclides = 107

 Inventory Power =   2.7030E+03 MWth
 Plant Power Level =   2.7030E+03 MWth

 Number of compartments    =   5

 Compartment information

 Compartment number  1  (Source term fraction =   1.0000E+00)
 Name: Containment Sump
 Compartment volume =   5.7577E+04 (Cubic feet)
 Pathways into and out of compartment  1
     Pathway to compartment number   4: SIRWT Backleakage

 Compartment number  2
 Name: Environment
 Pathways into and out of compartment  2
     Pathway to compartment number   3: Control Room Unfiltered Makeup
     Pathway to compartment number   3: Control Room Filtered Makeup
     Pathway to compartment number   3: Control Room Unfiltered Inleakage
     Pathway from compartment number 3: Control Room Exhaust
     Pathway from compartment number 5: SIRWT Leakage

 Compartment number  3
 Name: Control Room
 Compartment volume =   3.5923E+04 (Cubic feet)
 Removal devices within compartment:
      Filter(s)
 Pathways into and out of compartment  3
     Pathway to compartment number   2: Control Room Exhaust
     Pathway from compartment number 2: Control Room Unfiltered Makeup
     Pathway from compartment number 2: Control Room Filtered Makeup
```

```
    Pathway from compartment number 2: Control Room Unfiltered Inleakage

Compartment number  4
Name: SIRWT Water
Compartment volume =   5.5400E+02 (Cubic feet) VARIABLE
Pathways into and out of compartment  4
    Pathway to compartment number   5: SIRWT Water to SIRWT Air
    Pathway from compartment number 1: SIRWT Backleakage

Compartment number  5
Name: SIRWT Air
Compartment volume =   3.9597E+04 (Cubic feet) VARIABLE
Pathways into and out of compartment  5
    Pathway to compartment number   2: SIRWT Leakage
    Pathway from compartment number 4: SIRWT Water to SIRWT Air

Total number of pathways =   7


#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on May 25, 2006 at 07:55:09
#######################################################################

#######################################################################
                     Scenario Description
#######################################################################


Time between shutdown and first release =   8.3330E-03 (Hours)

Radioactive Decay is enabled
Calculation of Daughters is enabled

Iodine fractions
     Aerosol     =   0.0000E+00
     Elemental   =   9.7000E-01
     Organic     =   3.0000E-02

COMPARTMENT DATA

Compartment number   1: Containment Sump

Compartment number   2: Environment

Compartment number   3: Control Room

     Compartment Filter Data

      Time (hr)      Flow Rate          Filter Efficiencies (%)
                       (cfm)        Aerosol     Elemental    Organic
       0.0000E+00    0.0000E+00   9.9000E+01   9.9000E+01   9.9000E+01
       2.5000E-02    1.4136E+03   9.9000E+01   9.9000E+01   9.9000E+01
       7.2000E+02    1.4136E+03   9.9000E+01   9.9000E+01   9.9000E+01

Compartment number   4: SIRWT Water

     Variable Volume Data
      Time (hr)          Volume (ft^3)
       0.0000E+00          5.5400E+02
       2.0000E+00          6.1340E+02
       8.0000E+00          6.1580E+02
       2.4000E+01          6.2220E+02
       7.2000E+01          6.4150E+02
       1.6800E+02          6.8000E+02
       2.4000E+02          7.0890E+02
       3.3600E+02          7.4740E+02
       4.3200E+02          7.8590E+02
       6.2400E+02          8.6290E+02

Compartment number   5: SIRWT Air
```

Variable Volume Data

Time (hr)	Volume (ft^3)
0.0000E+00	3.9597E+04
2.0000E+00	3.9538E+04
8.0000E+00	3.9535E+04
2.4000E+01	3.9529E+04
7.2000E+01	3.9510E+04
1.6800E+02	3.9471E+04
2.4000E+02	3.9442E+04
3.3600E+02	3.9404E+04
4.3200E+02	3.9365E+04
6.2400E+02	3.9288E+04

PATHWAY DATA

Pathway number 1: SIRWT Backleakage

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.1670E-01	5.8820E-01	0.0000E+00	0.0000E+00	0.0000E+00
2.0000E+00	6.6840E-03	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	6.6840E-03	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 2: Control Room Unfiltered Makeup

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.8420E+02	0.0000E+00	0.0000E+00	0.0000E+00
2.5000E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 3: Control Room Filtered Makeup

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	9.9000E+01	9.9000E+01	9.9000E+01
2.5000E-02	1.4136E+03	9.9000E+01	9.9000E+01	9.9000E+01
7.2000E+02	1.4136E+03	9.9000E+01	9.9000E+01	9.9000E+01

Pathway number 4: Control Room Unfiltered Inleakage

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.5000E-02	1.0000E+01	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	1.0000E+01	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 5: Control Room Exhaust

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.8420E+02	0.0000E+00	0.0000E+00	0.0000E+00
2.5000E-02	1.4236E+03	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	1.4236E+03	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 6: SIRWT Water to SIRWT Air

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
3.1670E-01	5.7048E-04	1.0000E+02	0.0000E+00	0.0000E+00
2.0000E+00	1.1955E-05	1.0000E+02	0.0000E+00	0.0000E+00
8.0000E+00	1.2895E-05	1.0000E+02	0.0000E+00	0.0000E+00
2.4000E+01	1.4921E-05	1.0000E+02	0.0000E+00	0.0000E+00
7.2000E+01	1.7737E-05	1.0000E+02	0.0000E+00	0.0000E+00
1.6800E+02	1.9907E-05	1.0000E+02	0.0000E+00	0.0000E+00
2.4000E+02	2.1376E-05	1.0000E+02	0.0000E+00	0.0000E+00
3.3600E+02	2.2501E-05	1.0000E+02	0.0000E+00	0.0000E+00
4.3200E+02	2.3366E-05	1.0000E+02	0.0000E+00	0.0000E+00
6.2400E+02	2.3737E-05	1.0000E+02	0.0000E+00	0.0000E+00

Pathway number 7: SIRWT Leakage

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	1.0000E+02	0.0000E+00	0.0000E+00
3.1670E-01	5.8820E-01	1.0000E+02	0.0000E+00	0.0000E+00
2.0000E+00	6.6840E-03	1.0000E+02	0.0000E+00	0.0000E+00
7.2000E+02	6.6840E-03	1.0000E+02	0.0000E+00	0.0000E+00

X/Q DATA

X/Q table 1: EAB

Time (hr)	X/Q (s * m^-3)
0.0000E+00	5.3900E-04
7.2000E+02	5.3900E-04

X/Q table 2: LPZ

Time (hr)	X/Q (s * m^-3)
0.0000E+00	6.6600E-05
2.0000E+00	3.0300E-05
8.0000E+00	2.0400E-05
2.4000E+01	8.6700E-06
9.6000E+01	2.5400E-06
7.2000E+02	2.5400E-06

X/Q table 3: Control Room-Normal

Time (hr)	X/Q (s * m^-3)
0.0000E+00	9.5700E-02
2.0000E+00	7.5900E-02
8.0000E+00	2.8700E-02
2.4000E+01	2.1900E-02
9.6000E+01	1.6500E-02
7.2000E+02	1.6500E-02

X/Q table 4: Control Room-Emergency

Time (hr)	X/Q (s * m^-3)
0.0000E+00	9.6600E-04
2.0000E+00	7.9200E-04
8.0000E+00	3.1300E-04
2.4000E+01	2.2000E-04
9.6000E+01	1.6400E-04
7.2000E+02	1.6400E-04

LOCATION DATA

Location EAB is in compartment 2

Using X/Q Table 1

Location Breathing Rate Data

Time (hr)	Breathing Rate (m^3 * sec^-1)
0.0000E+00	3.5000E-04
8.0000E+00	1.8000E-04
2.4000E+01	2.3000E-04

```
       7.2000E+02                 2.3000E-04

     Location LPZ is in compartment   2

     Using X/Q Table   2

     Location Breathing Rate Data
      Time (hr)         Breathing Rate (m^3 * sec^-1)
       0.0000E+00                3.5000E-04
       8.0000E+00                1.8000E-04
       2.4000E+01                2.3000E-04
       7.2000E+02                2.3000E-04

     Location Control Room is in compartment   3

     Inleakage X/Q Table Assignments
     Inleakage Path   Source Path  X/Q Table
            2              7           3
            3              7           4
            4              7           3

     Location Breathing Rate Data
      Time (hr)         Breathing Rate (m^3 * sec^-1)
       0.0000E+00                3.5000E-04
       7.2000E+02                3.5000E-04

     Location Occupancy Factor Data
      Time (hr)         Occupancy Factor
       0.0000E+00            1.0000E+00
       2.4000E+01            6.0000E-01
       9.6000E+01            4.0000E-01
       7.2000E+02            4.0000E-01

USER SPECIFIED TIME STEP DATA - SUPPLEMENTAL TIME STEPS
     Time            Time step
      0.0000E+00       1.0000E-06
      1.0000E-03       2.0000E-02
      7.2000E+02       2.0000E-02

#######################################################################
      RADTRAD-NAI Version 1.1a(QA) run on May 25, 2006 at 07:55:09
#######################################################################




     ####   #    #  #####  #####   #    #  #####
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #####   #    #    #
    #    #  #    #    #    #       #    #    #
    #    #  #    #    #    #       #    #    #
     ####    ####     #    #        ####     #


#####################################################################
            Dose, Detailed Model and Detailed Inventory Output
#####################################################################

Detailed model information at time (H) =    0.0083

EAB Doses:

Time (h) =   0.0083     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:
```

Time (h) = 0.0083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Doses:

Time (h) = 0.0083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Containment Sump Transport Group Inventory:

Time (h) = 0.0083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 0.0083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.0083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.0083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 0.0083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 0.0083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Transport Group Inventory:

			Overlying
Time (h) = 0.0083	Atmosphere	Sump	Pool
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

	Deposition Surfaces	Recirculating Filter
Time (h) = 0.0083		
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 0.0083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 0.0083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 0.0083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 0.0083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

```
SIRWT Water Transport Group Inventory:

                                                Overlying
Time (h) =   0.0083    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0083     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

SIRWT Backleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Water to SIRWT Air Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Air Transport Group Inventory:

                                                Overlying
Time (h) =   0.0083    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0083     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

SIRWT Water to SIRWT Air Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.0250
```

EAB Doses:

Time (h) = 0.0250	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0250	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Doses:

Time (h) = 0.0250	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.0250	Ci	kg	Atoms	Bq
Rb-86	9.7946E+01	1.2038E-06	8.4293E+18	3.6240E+12
Sr-89	8.3486E-02	2.8736E-09	1.9444E+16	3.0890E+09
I-131	3.7414E+04	3.0179E-04	1.3873E+21	1.3843E+15
I-132	5.3322E+04	5.1658E-06	2.3567E+19	1.9729E+15
I-133	7.3084E+04	6.4515E-05	2.9212E+20	2.7041E+15
I-134	7.9503E+04	2.9802E-06	1.3394E+19	2.9416E+15
I-135	6.8420E+04	1.9483E-05	8.6909E+19	2.5316E+15
Xe-133	1.7610E+00	9.4077E-09	4.2597E+16	6.5155E+10
Xe-135	1.9895E+01	7.7905E-09	3.4752E+16	7.3611E+11
Cs-134	1.0185E+04	7.8720E-03	3.5378E+22	3.7684E+14
Cs-136	2.9363E+03	4.0064E-05	1.7741E+20	1.0864E+14
Cs-137	5.5000E+03	6.3232E-02	2.7795E+23	2.0350E+14
I-130	1.8689E+03	9.5823E-07	4.4389E+18	6.9148E+13
Kr-83m	7.7164E+00	3.7400E-10	2.7136E+15	2.8551E+11
Xe-131m	4.5419E-03	5.4225E-11	2.4927E+14	1.6805E+08
Xe-133m	1.2607E-01	2.8097E-10	1.2722E+15	4.6647E+09
Xe-135m	1.2916E+02	1.4179E-09	6.3248E+15	4.7788E+12
Cs-138	6.6406E+04	1.5694E-06	6.8485E+18	2.4570E+15
Cs-134m	2.4453E+03	3.0323E-07	1.3628E+18	9.0478E+13
Rb-88	2.6555E+04	2.2122E-07	1.5139E+18	9.8253E+14
Rb-89	3.2196E+04	2.3164E-07	1.5674E+18	1.1912E+15
Ba-137m	3.8172E+02	7.0977E-10	3.1200E+15	1.4124E+13
Br-82	2.6397E+02	2.4382E-07	1.7906E+18	9.7669E+12
Br-83	4.5181E+03	2.8600E-07	2.0751E+18	1.6717E+14
Br-84	7.6991E+03	1.0938E-07	7.8414E+17	2.8487E+14

Containment Sump Transport Group Inventory:

Time (h) = 0.0250	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	8.7910E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7581E+21	0.0000E+00	0.0000E+00
Organic I (atoms)	5.4373E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	7.1147E-02	0.0000E+00	0.0000E+00

Time (h) = 0.0250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.0250	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

```
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Environment Transport Group Inventory:

                        Present     Release     Integral
Time (h) =   0.0250     Release     Rate/s      Release
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   0.0250    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0250     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
```

```
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Water Transport Group Inventory:

                                                Overlying
Time (h) =   0.0250    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0250     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

SIRWT Backleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Water to SIRWT Air Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
```

```
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Air Transport Group Inventory:

                                                Overlying
Time (h) =   0.0250    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.0250     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

SIRWT Water to SIRWT Air Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =   0.0250      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Detailed model information at time (H) =    0.3167

EAB Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Control Room Doses:

Time (h) =   0.3167     Whole Body    Thyroid      Skin       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00  0.0000E+00

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) =   0.3167       Ci           kg         Atoms         Bq
Rb-86                  5.8095E+03  7.1398E-05  4.9997E+20  2.1495E+14
Sr-89                  1.0478E+02  3.6068E-06  2.4405E+19  3.8770E+12
I-131                  2.2188E+06  1.7897E-02  8.2274E+22  8.2095E+16
I-132                  3.0200E+06  2.9257E-04  1.3348E+21  1.1174E+17
I-133                  4.3091E+06  3.8039E-03  1.7224E+22  1.5944E+17
I-134                  4.0490E+06  1.5178E-04  6.8212E+20  1.4981E+17
I-135                  3.9378E+06  1.1213E-03  5.0018E+21  1.4570E+17
Xe-133                 3.6472E+03  1.9485E-05  8.8225E+19  1.3494E+14
Xe-135                 4.1815E+04  1.6374E-05  7.3043E+19  1.5472E+15
Cs-134                 6.0437E+05  4.6712E-01  2.0993E+24  2.2362E+16
```

Cs-136	1.7413E+05	2.3759E-03	1.0520E+22	6.4428E+15
Cs-137	3.2637E+05	3.7522E+00	1.6493E+25	1.2076E+16
I-130	1.0910E+05	5.5939E-05	2.5913E+20	4.0367E+15
Kr-83m	1.4665E+04	7.1078E-07	5.1571E+18	5.4260E+14
Xe-131m	9.4440E+00	1.1275E-07	5.1831E+17	3.4943E+11
Xe-133m	2.6092E+02	5.8149E-07	2.6330E+18	9.6540E+12
Xe-135m	2.0847E+05	2.2886E-06	1.0209E+19	7.7135E+15
Cs-138	3.0623E+06	7.2369E-05	3.1581E+20	1.1330E+17
Cs-134m	1.3533E+05	1.6782E-05	7.5420E+19	5.0074E+15
Rb-88	1.1152E+06	9.2905E-06	6.3578E+19	4.1263E+16
Rb-89	8.6005E+05	6.1878E-06	4.1869E+19	3.1822E+16
Ba-137m	2.9638E+05	5.5109E-07	2.4225E+18	1.0966E+16
Br-82	1.5575E+04	1.4386E-05	1.0565E+20	5.7626E+14
Br-83	2.4636E+05	1.5594E-05	1.1315E+20	9.1152E+15
Br-84	3.1197E+05	4.4319E-06	3.1773E+19	1.5543E+16

Containment Sump Transport Group Inventory:

Time (h) = 0.3167	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.7978E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0382E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	3.2108E+21	0.0000E+00	0.0000E+00
Aerosols (kg)	4.2218E+00	0.0000E+00	0.0000E+00

Time (h) = 0.3167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Transport Group Inventory:

Time (h) = 0.3167	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.3167	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
```

Control Room Exhaust Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
```

SIRWT Leakage Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
```

Control Room Transport Group Inventory:

```
                                                Overlying
Time (h) =   0.3167    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                      Deposition Recirculating
Time (h) =   0.3167    Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00
```

Control Room Unfiltered Makeup Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
```

Control Room Filtered Makeup Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
```

Control Room Unfiltered Inleakage Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00
```

Control Room Exhaust Transport Group Inventory:

```
                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Water Transport Group Inventory:

                                                Overlying
Time (h) =   0.3167    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.3167     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

SIRWT Backleakage Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Water to SIRWT Air Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Air Transport Group Inventory:

                                                Overlying
Time (h) =   0.3167    Atmosphere     Sump        Pool
Noble gases (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Deposition Recirculating
Time (h) =   0.3167     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  0.0000E+00
Organic I (atoms)      0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00

SIRWT Water to SIRWT Air Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =   0.3167      Filter
```

Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 0.5083

EAB Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.2168E-10	2.8768E-08	1.8146E-10	1.0294E-09
Accumulated dose (rem)	1.2168E-10	2.8768E-08	1.8146E-10	1.0294E-09

LPZ Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.5035E-11	3.5547E-09	2.2421E-11	1.2720E-10
Accumulated dose (rem)	1.5035E-11	3.5547E-09	2.2421E-11	1.2720E-10

Control Room Doses:

Time (h) = 0.5083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.3278E-13	3.4465E-09	2.1865E-11	1.0918E-10
Accumulated dose (rem)	4.3278E-13	3.4465E-09	2.1865E-11	1.0918E-10

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	9.5580E+03	1.1747E-04	8.2256E+20	3.5365E+14
Sr-89	2.0213E+02	6.9574E-06	4.7077E+19	7.4787E+12
I-131	3.6499E+06	2.9440E-02	1.3534E+23	1.3505E+17
I-132	4.8290E+06	4.6782E-04	2.1343E+21	1.7867E+17
I-133	7.0586E+06	6.2311E-03	2.8214E+22	2.6117E+17
I-134	6.0146E+06	2.2546E-04	1.0133E+21	2.2254E+17
I-135	6.3515E+06	1.8086E-03	8.0679E+21	2.3501E+17
Xe-133	9.6097E+03	5.1339E-05	2.3246E+20	3.5556E+14
Xe-135	1.1061E+05	4.3315E-05	1.9322E+20	4.0927E+15
Cs-134	9.9463E+05	7.6875E-01	3.4548E+24	3.6801E+16
Cs-136	2.8645E+05	3.9084E-03	1.7307E+22	1.0599E+16
Cs-137	5.3711E+05	6.1750E+00	2.7144E+25	1.9873E+16
I-130	1.7763E+05	9.1076E-05	4.2190E+20	6.5723E+15
Kr-83m	3.6463E+04	1.7673E-06	1.2823E+19	1.3491E+15
Xe-131m	2.4955E+01	2.9793E-07	1.3696E+18	9.2332E+11
Xe-133m	6.8712E+02	1.5313E-06	6.9338E+18	2.5424E+13
Xe-135m	4.6924E+05	5.1513E-06	2.2979E+19	1.7362E+16
Cs-138	4.1838E+06	9.8875E-05	4.3148E+20	1.5480E+17
Cs-134m	2.1275E+05	2.6382E-05	1.1856E+20	7.8718E+15
Rb-88	1.4985E+06	1.2484E-05	8.5430E+19	5.5445E+16
Rb-89	8.3786E+05	6.0281E-06	4.0789E+19	3.1001E+16
Ba-137m	5.2445E+05	9.7518E-07	4.2866E+18	1.9405E+16
Br-82	2.5535E+04	2.3586E-05	1.7322E+20	9.4480E+14
Br-83	3.8352E+05	2.4277E-05	1.7614E+20	1.4190E+16
Br-84	3.9960E+05	5.6768E-06	4.0698E+19	1.4785E+16

Containment Sump Transport Group Inventory:

Time (h) = 0.5083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.6978E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7031E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	5.2674E+21	0.0000E+00	0.0000E+00
Aerosols (kg)	6.9479E+00	0.0000E+00	0.0000E+00

Time (h) = 0.5083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
I-131	1.0185E-07	8.2150E-16	3.7765E+09	3.7683E+03
I-132	1.3196E-07	1.2784E-17	5.8324E+07	4.8825E+03
I-133	1.9675E-07	1.7369E-16	7.8644E+08	7.2799E+03
I-134	1.6203E-07	6.0737E-18	2.7296E+07	5.9950E+03
I-135	1.7726E-07	5.0475E-17	2.2516E+08	6.5587E+03
Xe-133	3.4190E-10	1.8266E-18	8.2705E+06	1.2650E+01
Xe-135	3.9525E-09	1.5477E-18	6.9042E+06	1.4624E+02
I-130	4.9574E-09	2.5418E-18	1.1775E+07	1.8342E+02
Xe-135m	1.6176E-08	1.7758E-19	7.9214E+05	5.9851E+02
Br-82	7.1265E-10	6.5825E-19	4.8342E+06	2.6368E+01
Br-83	1.0703E-08	6.7753E-19	4.9159E+06	3.9603E+02
Br-84	1.1152E-08	1.5843E-19	1.1358E+06	4.1263E+02

Environment Transport Group Inventory:

Time (h) = 0.5083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	2.1221E+06	2.9473E+04	1.6718E+07
Elemental I (atoms)	6.1820E+08	8.5862E+06	4.7495E+09
Organic I (atoms)	1.9120E+07	2.6555E+05	1.4689E+08
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 0.5083	Ci	kg	Atoms	Bq
I-131	6.5428E-11	5.2775E-19	2.4261E+06	2.4208E+00
I-133	1.2640E-10	1.1158E-19	5.0523E+05	4.6768E+00
I-135	1.1388E-10	3.2427E-20	1.4465E+05	4.2135E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	3.0512E+06
Organic I (atoms)	9.4366E+04
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

```
                        Pathway
Time (h) =   0.5083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =   0.5083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =   0.5083       Ci           kg         Atoms         Bq
I-131                  3.8026E-11  3.0673E-19  1.4100E+06  1.4070E+00
I-133                  7.3465E-11  6.4852E-20  2.9364E+05  2.7182E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =   0.5083    Atmosphere     Sump        Pool
Noble gases (atoms)    1.6628E+04  0.0000E+00  0.0000E+00
Elemental I (atoms)    1.7734E+06  0.0000E+00  0.0000E+00
Organic I (atoms)      5.4846E+04  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Recirculating Filter Inventory

Time (h) =   0.5083       Ci           kg         Atoms         Bq
I-131                  4.3443E-12  3.5042E-20  1.6109E+05  1.6074E-01

                       Deposition Recirculating
Time (h) =   0.5083     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  2.0258E+05
Organic I (atoms)      0.0000E+00  6.2655E+03
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.5083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) =   0.5083       Ci           kg         Atoms         Bq
I-131                  6.5428E-11  5.2775E-19  2.4261E+06  2.4208E+00
I-133                  1.2640E-10  1.1158E-19  5.0523E+05  4.6768E+00
I-135                  1.1388E-10  3.2427E-20  1.4465E+05  4.2135E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =   0.5083      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    3.0512E+06
Organic I (atoms)      9.4366E+04
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:
```

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 0.5083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
I-131	6.9772E-11	5.6279E-19	2.5872E+06	2.5816E+00
I-133	1.3479E-10	1.1899E-19	5.3878E+05	4.9873E+00
I-135	1.2144E-10	3.4580E-20	1.5425E+05	4.4932E+00

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	9.0244E-01	1.1091E-08	7.7664E+16	3.3390E+10
Sr-89	2.2802E-02	7.8486E-10	5.3107E+15	8.4367E+08
I-131	3.4457E+02	2.7794E-06	1.2777E+19	1.2749E+13
I-132	4.4993E+02	4.3589E-08	1.9886E+17	1.6647E+13
I-133	6.6595E+02	5.8787E-07	2.6619E+18	2.4640E+13
I-134	5.5547E+02	2.0822E-08	9.3579E+16	2.0553E+13
I-135	5.9970E+02	1.7076E-07	7.6175E+17	2.2189E+13
Xe-133	1.0644E+00	5.6866E-09	2.5749E+16	3.9384E+10
Xe-135	1.2283E+01	4.8098E-09	2.1456E+16	4.5446E+11
Cs-134	9.3910E+01	7.2583E-05	3.2620E+20	3.4747E+12
Cs-136	2.7046E+01	3.6902E-07	1.6340E+18	1.0007E+12
Cs-137	5.0713E+01	5.8303E-04	2.5628E+21	1.8764E+12
I-130	1.6771E+01	8.5992E-09	3.9835E+16	6.2054E+11
Kr-83m	4.0367E+00	1.9565E-10	1.4196E+15	1.4936E+11
Xe-131m	2.7642E-03	3.3001E-11	1.5171E+14	1.0228E+08
Xe-133m	7.6106E-02	1.6961E-10	7.6799E+14	2.8159E+09
Xe-135m	5.1045E+01	5.6036E-10	2.4997E+15	1.8886E+12
Cs-138	3.8462E+02	9.0896E-09	3.9666E+16	1.4231E+13
Cs-134m	2.0087E+01	2.4909E-09	1.1194E+16	7.4324E+11
Rb-88	1.2665E+02	1.0551E-09	7.2204E+15	4.6861E+12
Rb-89	7.9108E+01	5.6916E-10	3.8512E+15	2.9270E+12
Ba-137m	5.3271E+01	9.9053E-11	4.3541E+14	1.9710E+12
Br-82	2.4110E+00	2.2269E-09	1.6355E+16	8.9206E+10
Br-83	3.6211E+01	2.2921E-09	1.6631E+16	1.3398E+12
Br-84	3.7729E+01	5.3599E-10	3.8426E+15	1.3960E+12

SIRWT Water Transport Group Inventory:

Time (h) = 0.5083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.2043E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.6073E+19	0.0000E+00	0.0000E+00
Organic I (atoms)	4.9709E+17	0.0000E+00	0.0000E+00
Aerosols (kg)	6.5601E-04	0.0000E+00	0.0000E+00

Time (h) = 0.5083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

	Pathway
Time (h) = 0.5083	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	4.9123E-06	6.0372E-14	4.2276E+11	1.8176E+05
Sr-89	1.3227E-07	4.5529E-15	3.0807E+10	4.8940E+03
Cs-134	5.1119E-04	3.9510E-10	1.7756E+15	1.8914E+07
Cs-136	1.4722E-04	2.0087E-12	8.8947E+12	5.4472E+06
Cs-137	2.7605E-04	3.1736E-09	1.3950E+16	1.0214E+07
Cs-138	2.0712E-03	4.8949E-14	2.1361E+11	7.6636E+07
Cs-134m	1.0934E-04	1.3559E-14	6.0935E+10	4.0457E+06
Rb-88	6.5997E-04	5.4980E-15	3.7625E+10	2.4419E+07
Rb-89	4.3061E-04	3.0981E-15	2.0963E+10	1.5933E+07
Ba-137m	2.9494E-04	5.4841E-16	2.4107E+09	1.0913E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway
Time (h) = 0.5083	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.5709E-09

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 0.5083	Ci	kg	Atoms	Bq
I-131	1.8737E-03	1.5114E-11	6.9480E+13	6.9329E+07
I-132	2.4342E-03	2.3582E-13	1.0759E+12	9.0065E+07
I-133	3.6204E-03	3.1959E-12	1.4471E+13	1.3395E+08
I-134	2.9945E-03	1.1225E-13	5.0447E+11	1.1080E+08
I-135	3.2612E-03	9.2863E-13	4.1425E+12	1.2066E+08
Xe-133	6.1189E-06	3.2689E-14	1.4802E+11	2.2640E+05
Xe-135	7.0690E-05	2.7681E-14	1.2348E+11	2.6155E+06
I-130	9.1204E-05	4.6763E-14	2.1663E+11	3.3745E+06
Kr-83m	2.3199E-05	1.1244E-15	8.1582E+09	8.5835E+05
Xe-131m	1.5890E-08	1.8971E-16	8.7211E+08	5.8794E+02
Xe-133m	4.3748E-07	9.7499E-16	4.4147E+09	1.6187E+04
Xe-135m	2.9093E-04	3.1938E-15	1.4247E+10	1.0764E+07
Br-82	1.3111E-05	1.2110E-14	8.8939E+10	4.8511E+05
Br-83	1.9692E-04	1.2465E-14	9.0440E+10	7.2859E+06
Br-84	2.0517E-04	2.9148E-15	2.0897E+10	7.5914E+06

SIRWT Air Transport Group Inventory:

			Overlying
Time (h) = 0.5083	Atmosphere	Sump	Pool
Noble gases (atoms)	2.9919E+11	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.7388E+13	0.0000E+00	0.0000E+00
Organic I (atoms)	2.7027E+12	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

	Deposition	Recirculating
Time (h) = 0.5083	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 0.5083	Ci	kg	Atoms	Bq
Rb-86	4.9123E-06	6.0372E-14	4.2276E+11	1.8176E+05
Sr-89	1.3227E-07	4.5529E-15	3.0807E+10	4.8940E+03

Cs-134	5.1119E-04	3.9510E-10	1.7756E+15	1.8914E+07
Cs-136	1.4722E-04	2.0087E-12	8.8947E+12	5.4472E+06
Cs-137	2.7605E-04	3.1736E-09	1.3950E+16	1.0214E+07
Cs-138	2.0712E-03	4.8949E-14	2.1361E+11	7.6636E+07
Cs-134m	1.0934E-04	1.3559E-14	6.0935E+10	4.0457E+06
Rb-88	6.5997E-04	5.4980E-15	3.7625E+10	2.4419E+07
Rb-89	4.3061E-04	3.0981E-15	2.0963E+10	1.5933E+07
Ba-137m	2.9494E-04	5.4841E-16	2.4107E+09	1.0913E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 0.5083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	3.5709E-09

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 0.5083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 1.8083

EAB Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.2741E-07	3.9569E-05	1.9130E-07	1.3712E-06
Accumulated dose (rem)	1.2753E-07	3.9598E-05	1.9148E-07	1.3722E-06

LPZ Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.5743E-08	4.8892E-06	2.3637E-08	1.6942E-07
Accumulated dose (rem)	1.5758E-08	4.8928E-06	2.3659E-08	1.6955E-07

Control Room Doses:

Time (h) = 1.8083	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.5265E-09	1.5669E-05	7.8052E-08	4.9395E-07
Accumulated dose (rem)	1.5270E-09	1.5672E-05	7.8074E-08	4.9406E-07

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	5.8140E+04	7.1453E-04	5.0035E+21	2.1512E+15
Sr-89	1.4285E+06	4.9169E-02	3.3270E+23	5.2853E+16
Sr-90	1.6757E+05	1.2285E+00	8.2202E+24	6.2003E+15
Sr-91	1.5409E+06	4.2506E-04	2.8130E+21	5.7012E+16
Sr-92	1.1923E+06	9.4859E-05	6.2093E+20	4.4116E+16
Y-90	2.8998E+03	5.3298E-06	3.5663E+19	1.0729E+14
Y-91	1.8650E+04	7.6048E-04	5.0326E+21	6.9004E+14
Y-92	1.7328E+05	1.8008E-05	1.1788E+20	6.4114E+15
Y-93	1.9268E+04	5.7752E-06	3.7397E+19	7.1291E+14
Zr-95	2.4471E+04	1.1391E-03	7.2209E+21	9.0543E+14
Zr-97	2.2186E+04	1.1606E-05	7.2052E+19	8.2088E+14
Nb-95	2.4746E+04	6.3283E-04	4.0116E+21	9.1559E+14
Mo-99	3.3242E+05	6.9310E-04	4.2161E+21	1.2300E+16
Tc-99m	2.9623E+05	5.6336E-05	3.4269E+20	1.0961E+16
Ru-103	3.1164E+05	9.6559E-03	5.6456E+22	1.1531E+16
Ru-105	1.7649E+05	2.6256E-05	1.5059E+20	6.5302E+15
Ru-106	1.4347E+05	4.2884E-02	2.4364E+23	5.3085E+15
Rh-105	2.1604E+05	2.5595E-04	1.4680E+21	7.9934E+15
Sb-127	4.4520E+05	1.6671E-03	7.9051E+21	1.6473E+16
Sb-129	9.5163E+05	1.6923E-04	7.9001E+20	3.5210E+16

Te-127	4.4568E+05	1.6888E-04	8.0078E+20	1.6490E+16
Te-127m	6.0586E+04	6.4231E-03	3.0457E+22	2.2417E+15
Te-129	1.0598E+06	5.0606E-05	2.3624E+20	3.9213E+16
Te-129m	1.8693E+05	6.2051E-03	2.8967E+22	6.9164E+15
Te-131m	5.2873E+05	6.6306E-04	3.0481E+21	1.9563E+16
Te-132	5.1084E+06	1.6826E-02	7.6766E+22	1.8901E+17
I-131	2.9551E+07	2.3836E-01	1.0958E+24	1.0934E+18
I-132	3.4636E+07	3.3555E-03	1.5308E+22	1.2815E+18
I-133	5.5375E+07	4.8882E-02	2.2134E+23	2.0489E+18
I-134	2.4279E+07	9.1011E-04	4.0902E+21	8.9832E+17
I-135	4.5023E+07	1.2820E-02	5.7190E+22	1.6659E+18
Xe-133	2.2982E+05	1.2278E-03	5.5592E+21	8.5032E+15
Xe-135	2.5248E+06	9.8865E-04	4.4102E+21	9.3416E+16
Cs-134	6.0621E+06	4.6854E+00	2.1057E+25	2.2430E+17
Cs-136	1.7409E+06	2.3754E-02	1.0518E+23	6.4415E+16
Cs-137	3.2737E+06	3.7637E+01	1.6544E+26	1.2113E+17
Ba-139	1.0430E+06	6.3764E-05	2.7625E+20	3.8590E+16
Ba-140	2.4862E+06	3.3960E-02	1.4608E+23	9.1989E+16
La-140	5.3245E+04	9.5795E-05	4.1206E+20	1.9701E+15
La-141	3.2233E+04	5.6996E-06	2.4343E+19	1.1926E+15
La-142	1.0158E+04	7.0959E-07	3.0093E+18	3.7584E+14
Ce-141	6.0013E+04	2.1062E-03	8.9957E+21	2.2205E+15
Ce-143	5.3538E+04	8.0619E-05	3.3951E+20	1.9809E+15
Ce-144	5.0513E+04	1.5837E-02	6.6232E+22	1.8690E+15
Pr-143	2.2056E+04	3.2754E-04	1.3794E+21	8.1608E+14
Nd-147	9.4058E+03	1.1627E-04	4.7631E+20	3.4801E+14
Np-239	8.8655E+05	3.8215E-03	9.6291E+21	3.2802E+16
Pu-238	1.9455E+02	1.1364E-02	2.8755E+22	7.1983E+12
Pu-239	1.7629E+01	2.8362E-01	7.1464E+23	6.5226E+11
Pu-240	2.6777E+01	1.1751E-01	2.9486E+23	9.9074E+11
Pu-241	7.5387E+03	7.3182E-02	1.8287E+23	2.7893E+14
Am-241	3.7342E+00	1.0880E-03	2.7187E+21	1.3817E+11
Cm-242	1.1233E+03	3.3892E-04	8.4340E+20	4.1561E+13
Cm-244	1.1775E+02	1.4554E-03	3.5921E+21	4.3566E+12
I-130	1.3416E+06	6.8787E-04	3.1865E+21	4.9638E+16
Kr-83m	5.9504E+05	2.8840E-05	2.0925E+20	2.2016E+16
Xe-131m	6.1044E+02	7.2879E-06	3.3503E+19	2.2586E+13
Xe-133m	1.6385E+04	3.6517E-05	1.6534E+20	6.0625E+14
Xe-135m	5.5806E+06	6.1264E-05	2.7329E+20	2.0648E+17
Cs-138	5.9060E+06	1.3958E-04	6.0909E+20	2.1852E+17
Cs-134m	9.5040E+05	1.1785E-04	5.2964E+20	3.5165E+16
Rb-88	3.3108E+06	2.7581E-05	1.8875E+20	1.2250E+17
Rb-89	1.4568E+05	1.0481E-06	7.0919E+18	5.3900E+15
Sb-124	8.4230E+03	4.8153E-04	2.3386E+21	3.1165E+14
Sb-125	7.7612E+04	7.5171E-02	3.6215E+23	2.8717E+15
Sb-126	5.4601E+03	6.5333E-05	3.1226E+20	2.0202E+14
Te-131	2.7621E+05	4.8109E-06	2.2116E+19	1.0220E+16
Te-133	1.2846E+05	1.1313E-06	5.1224E+18	4.7532E+15
Te-134	9.9968E+05	2.9780E-05	1.3383E+20	3.6988E+16
Te-125m	1.6906E+04	9.3868E-04	4.5223E+21	6.2552E+14
Te-133m	6.8896E+05	2.6998E-05	1.2225E+20	2.5492E+16
Ba-141	3.8374E+04	5.2574E-07	2.2454E+18	1.4198E+15
Ba-137m	3.4753E+06	6.4621E-06	2.8406E+19	1.2859E+17
Pd-109	7.5052E+04	3.5051E-05	1.9365E+20	2.7769E+15
Rh-106	2.4697E+05	6.9383E-08	3.9418E+17	9.1380E+15
Rh-103m	3.0475E+05	9.3685E-06	5.4775E+19	1.1276E+16
Tc-101	1.5648E+03	1.1935E-08	7.1164E+16	5.7896E+13
Eu-154	2.4706E+02	9.3656E-04	3.6624E+21	9.1412E+12
Eu-155	1.6737E+02	3.5994E-04	1.3984E+21	6.1928E+12
Eu-156	3.9943E+03	7.2488E-05	2.7983E+20	1.4779E+14
La-143	1.1123E+02	1.2037E-09	5.0692E+15	4.1154E+12
Nb-97	9.2792E+03	3.4514E-07	2.1428E+18	3.4333E+14
Nb-95m	1.7499E+02	4.5940E-07	2.9122E+18	6.4747E+12
Pm-147	2.5602E+03	2.7617E-03	1.1314E+22	9.4726E+13
Pm-148	4.2070E+03	2.5606E-05	1.0419E+20	1.5566E+14
Pm-149	8.7870E+03	2.2176E-05	8.9629E+19	3.2512E+14
Pm-151	3.0445E+03	4.1662E-06	1.6616E+19	1.1265E+14
Pm-148m	5.9343E+02	2.7779E-05	1.1303E+20	2.1957E+13
Pr-144	4.2309E+04	5.5990E-07	2.3415E+18	1.5654E+15
Pr-144m	8.7810E+02	4.8419E-09	2.0249E+16	3.2490E+13

Sm-153	8.5311E+03	1.9451E-05	7.6560E+19	3.1565E+14
Y-94	4.2684E+02	4.0757E-09	2.6111E+16	1.5793E+13
Y-95	2.0770E+01	1.1228E-10	7.1177E+14	7.6848E+11
Y-91m	3.6840E+05	8.8629E-06	5.8653E+19	1.3631E+16
Br-82	2.0222E+05	1.8678E-04	1.3717E+21	7.4820E+15
Br-83	2.1370E+06	1.3527E-04	9.8149E+20	7.9070E+16
Br-84	5.9294E+05	8.4235E-06	6.0390E+19	2.1939E+16
Am-242	1.6603E+03	2.0540E-06	5.1113E+18	6.1431E+13
Np-238	2.0809E+04	8.0294E-05	2.0317E+20	7.6992E+14
Pu-243	1.8039E+04	6.9324E-06	1.7180E+19	6.6745E+14

Containment Sump Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.0651E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3573E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	4.1978E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4340E+01	0.0000E+00	0.0000E+00

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	1.4167E-04	1.1428E-12	5.2533E+12	5.2419E+06
I-132	1.4048E-04	1.3610E-14	6.2091E+10	5.1979E+06
I-133	2.6445E-04	2.3345E-13	1.0570E+12	9.7846E+06
I-134	9.6311E-05	3.6103E-15	1.6225E+10	3.5635E+06
I-135	2.1601E-04	6.1508E-14	2.7438E+11	7.9923E+06
Xe-133	1.8391E-06	9.8253E-15	4.4488E+10	6.8047E+04
Xe-135	2.0593E-05	8.0640E-15	3.5972E+10	7.6195E+05
I-130	6.4365E-06	3.3002E-15	1.5288E+10	2.3815E+05
Kr-83m	4.6915E-06	2.2739E-16	1.6499E+09	1.7359E+05
Xe-131m	4.8781E-09	5.8238E-17	2.6772E+08	1.8049E+02
Xe-133m	1.3096E-07	2.9185E-16	1.3215E+09	4.8454E+03
Xe-135m	3.3719E-05	3.7017E-16	1.6513E+09	1.2476E+06
Br-82	9.7017E-07	8.9612E-16	6.5811E+09	3.5896E+04
Br-83	1.0253E-05	6.4900E-16	4.7089E+09	3.7935E+05
Br-84	2.8447E-06	4.0413E-17	2.8973E+08	1.0526E+05

Environment Transport Group Inventory:

Time (h) = 1.8083	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.7203E+09	2.3893E+07	8.5351E+10
Elemental I (atoms)	1.4126E+11	1.9619E+09	6.4892E+12
Organic I (atoms)	4.3688E+09	6.0677E+07	2.0070E+11
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	9.0492E-08	7.2992E-16	3.3555E+09	3.3482E+03
I-132	8.9733E-08	8.6933E-18	3.9661E+07	3.3201E+03
I-133	1.6891E-07	1.4911E-16	6.7516E+08	6.2498E+03
I-134	6.1518E-08	2.3061E-18	1.0364E+07	2.2762E+03
I-135	1.3797E-07	3.9288E-17	1.7526E+08	5.1050E+03
I-130	4.1112E-09	2.1079E-18	9.7649E+06	1.5211E+02
Br-82	6.1968E-10	5.7238E-19	4.2036E+06	2.2928E+01
Br-83	6.5488E-09	4.1454E-19	3.0077E+06	2.4231E+02
Br-84	1.8170E-09	2.5813E-20	1.8506E+05	6.7230E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.1449E+09
Organic I (atoms)	1.2819E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	2.4682E-08	1.9909E-16	9.1523E+08	9.1325E+02
I-132	2.4955E-08	2.4176E-18	1.1030E+07	9.2335E+02
I-133	4.6097E-08	4.0693E-17	1.8425E+08	1.7056E+03
I-134	1.7195E-08	6.4457E-19	2.8968E+06	6.3622E+02
I-135	3.7629E-08	1.0715E-17	4.7798E+07	1.3923E+03
Xe-133	1.1830E-09	6.3202E-18	2.8617E+07	4.3772E+01
Xe-135	1.3160E-08	5.1531E-18	2.2987E+07	4.8690E+02
I-130	1.1213E-09	5.7490E-19	2.6632E+06	4.1486E+01
Kr-83m	3.0351E-09	1.4711E-19	1.0674E+06	1.1230E+02
Xe-131m	3.1414E-12	3.7504E-20	1.7241E+05	1.1623E-01
Xe-133m	8.4274E-11	1.8782E-19	8.5042E+05	3.1181E+00
Xe-135m	2.4540E-08	2.6940E-19	1.2017E+06	9.0799E+02
Br-82	1.6901E-10	1.5611E-19	1.1465E+06	6.2532E+00
Br-83	1.7861E-09	1.1306E-19	8.2030E+05	6.6084E+01

Control Room Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.4896E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1309E+09	0.0000E+00	0.0000E+00
Organic I (atoms)	3.4977E+07	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	1.9972E-08	1.6110E-16	7.4057E+08	7.3896E+02
I-132	1.9566E-08	1.8956E-18	8.6481E+06	7.2396E+02
I-133	3.7268E-08	3.2898E-17	1.4896E+08	1.3789E+03
I-134	1.3371E-08	5.0123E-19	2.2526E+06	4.9474E+02
I-135	3.0453E-08	8.6714E-18	3.8682E+07	1.1268E+03
I-130	9.0742E-10	4.6526E-19	2.1553E+06	3.3574E+01
Br-82	1.3677E-10	1.2633E-19	9.2781E+05	5.0607E+00
Br-83	1.4454E-09	9.1496E-20	6.6386E+05	5.3481E+01

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	9.1462E+08
Organic I (atoms)	0.0000E+00	2.8287E+07
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	9.0492E-08	7.2992E-16	3.3555E+09	3.3482E+03
I-132	8.9733E-08	8.6933E-18	3.9661E+07	3.3201E+03
I-133	1.6891E-07	1.4911E-16	6.7516E+08	6.2498E+03
I-134	6.1518E-08	2.3061E-18	1.0364E+07	2.2762E+03
I-135	1.3797E-07	3.9288E-17	1.7526E+08	5.1050E+03
I-130	4.1112E-09	2.1079E-18	9.7649E+06	1.5211E+02
Br-82	6.1968E-10	5.7238E-19	4.2036E+06	2.2928E+01
Br-83	6.5488E-09	4.1454E-19	3.0077E+06	2.4231E+02
Br-84	1.8170E-09	2.5813E-20	1.8506E+05	6.7230E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.1449E+09
Organic I (atoms)	1.2819E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	1.1046E-07	8.9102E-16	4.0961E+09	4.0872E+03
I-132	1.0930E-07	1.0589E-17	4.8309E+07	4.0441E+03
I-133	2.0618E-07	1.8201E-16	8.2412E+08	7.6287E+03
I-134	7.4889E-08	2.8073E-18	1.2616E+07	2.7709E+03
I-135	1.6842E-07	4.7959E-17	2.1394E+08	6.2317E+03
I-130	5.0186E-09	2.5732E-18	1.1920E+07	1.8569E+02
Br-82	7.5646E-10	6.9872E-19	5.1314E+06	2.7989E+01
Br-83	7.9942E-09	5.0604E-19	3.6716E+06	2.9579E+02
Br-84	2.2181E-09	3.1511E-20	2.2591E+05	8.2069E+01

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	2.7783E+01	3.4146E-07	2.3910E+18	1.0280E+12
Sr-89	5.6431E+02	1.9424E-05	1.3143E+20	2.0880E+13
Sr-90	6.6172E+01	4.8511E-04	3.2460E+21	2.4484E+12
Sr-91	6.0846E+02	1.6785E-07	1.1108E+18	2.2513E+13
Sr-92	4.7083E+02	3.7458E-08	2.4519E+17	1.7421E+13
Y-90	1.2964E+00	2.3828E-09	1.5944E+16	4.7966E+10
Y-91	7.4083E+00	3.0209E-07	1.9991E+18	2.7411E+11
Y-92	8.8854E+01	9.2341E-09	6.0445E+16	3.2876E+12
Y-93	7.6085E+00	2.2805E-09	1.4767E+16	2.8152E+11
Zr-95	9.6633E+00	4.4981E-07	2.8514E+18	3.5754E+11
Zr-97	8.7609E+00	4.5828E-09	2.8452E+16	3.2415E+11
Nb-95	9.7716E+00	2.4989E-07	1.5841E+18	3.6155E+11
Mo-99	1.3127E+02	2.7369E-07	1.6649E+18	4.8569E+12
Tc-99m	1.1698E+02	2.2246E-08	1.3532E+17	4.3281E+12
Ru-103	1.2306E+02	3.8130E-06	2.2293E+19	4.5532E+12
Ru-105	6.9694E+01	1.0368E-08	5.9464E+16	2.5787E+12
Ru-106	5.6655E+01	1.6934E-05	9.6208E+19	2.0962E+12
Rh-105	8.5309E+01	1.0107E-07	5.7968E+17	3.1564E+12
Sb-127	1.7580E+02	6.5831E-07	3.1216E+18	6.5047E+12
Sb-129	3.7578E+02	6.6825E-08	3.1196E+17	1.3904E+13
Te-127	1.7599E+02	6.6686E-08	3.1622E+17	6.5117E+12
Te-127m	2.3924E+01	2.5364E-06	1.2027E+19	8.8520E+11
Te-129	4.1850E+02	1.9983E-08	9.3289E+16	1.5484E+13
Te-129m	7.3815E+01	2.4503E-06	1.1439E+19	2.7312E+12
Te-131m	2.0879E+02	2.6183E-07	1.2037E+18	7.7251E+12
Te-132	2.0172E+03	6.6445E-06	3.0314E+19	7.4637E+13
I-131	1.3505E+04	1.0893E-04	5.0077E+20	4.9968E+14
I-132	1.4675E+04	1.4217E-06	6.4861E+18	5.4298E+14
I-133	2.5264E+04	2.2302E-05	1.0098E+20	9.3475E+14
I-134	1.0210E+04	3.8272E-07	1.7200E+18	3.7776E+14
I-135	2.0582E+04	5.8608E-06	2.6144E+19	7.6155E+14
Xe-133	1.4214E+02	7.5937E-07	3.4384E+18	5.2592E+12
Xe-135	1.5770E+03	6.1754E-07	2.7548E+18	5.8350E+13
Cs-134	2.8969E+03	2.2390E-03	1.0062E+22	1.0719E+14
Cs-136	8.3195E+02	1.1351E-05	5.0264E+19	3.0782E+13
Cs-137	1.5644E+03	1.7986E-02	7.9061E+22	5.7884E+13
Ba-139	4.1186E+02	2.5179E-08	1.0909E+17	1.5239E+13
Ba-140	9.8175E+02	1.3410E-05	5.7685E+19	3.6325E+13
La-140	2.4584E+01	4.4230E-08	1.9025E+17	9.0961E+11
La-141	1.5415E+01	2.7258E-09	1.1642E+16	5.7037E+11
La-142	4.0112E+00	2.8021E-10	1.1883E+15	1.4841E+11
Ce-141	2.3698E+01	8.3170E-07	3.5522E+18	8.7682E+11
Ce-143	2.1138E+01	3.1831E-08	1.3405E+17	7.8212E+11
Ce-144	1.9947E+01	6.2539E-06	2.6154E+19	7.3803E+11
Pr-143	8.7155E+00	1.2943E-07	5.4506E+17	3.2247E+11
Nd-147	3.7142E+00	4.5912E-08	1.8809E+17	1.3742E+11
Np-239	3.5008E+02	1.5090E-06	3.8023E+18	1.2953E+13

Pu-238	7.6824E-02	4.4875E-06	1.1355E+19	2.8425E+09
Pu-239	6.9613E-03	1.1200E-04	2.8220E+20	2.5757E+08
Pu-240	1.0574E-02	4.6403E-05	1.1644E+20	3.9123E+08
Pu-241	2.9769E+00	2.8898E-05	7.2211E+19	1.1014E+11
Am-241	1.4747E-03	4.2966E-07	1.0736E+18	5.4562E+07
Cm-242	4.4356E-01	1.3383E-07	3.3304E+17	1.6412E+10
Cm-244	4.6496E-02	5.7471E-07	1.4184E+18	1.7203E+09
I-130	6.1330E+02	3.1446E-07	1.4567E+18	2.2692E+13
Kr-83m	3.6536E+02	1.7708E-08	1.2848E+17	1.3518E+13
Xe-131m	3.7724E-01	4.5038E-09	2.0704E+16	1.3958E+10
Xe-133m	1.0128E+01	2.2572E-08	1.0220E+17	3.7474E+11
Xe-135m	2.9978E+03	3.2909E-08	1.4680E+17	1.1092E+14
Cs-138	2.6722E+03	6.3150E-08	2.7558E+17	9.8870E+13
Cs-134m	4.5417E+02	5.6319E-08	2.5310E+17	1.6804E+13
Rb-88	8.2463E+02	6.8697E-09	4.7012E+16	3.0511E+13
Rb-89	6.9615E+01	5.0086E-10	3.3890E+15	2.5758E+12
Sb-124	3.3261E+00	1.9015E-07	9.2347E+17	1.2307E+11
Sb-125	3.0648E+01	2.9684E-05	1.4301E+20	1.1340E+12
Sb-126	2.1561E+00	2.5799E-08	1.2331E+17	7.9776E+10
Te-131	1.0907E+02	1.8998E-09	8.7333E+15	4.0356E+12
Te-133	5.0728E+01	4.4673E-10	2.0228E+15	1.8769E+12
Te-134	3.9476E+02	1.1759E-08	5.2849E+16	1.4606E+13
Te-125m	6.6758E+00	3.7067E-07	1.7858E+18	2.4701E+11
Te-133m	2.7206E+02	1.0661E-08	4.8273E+16	1.0066E+13
Ba-141	1.5153E+01	2.0760E-10	8.8668E+14	5.6067E+11
Ba-137m	1.7107E+03	3.1810E-09	1.3983E+16	6.3297E+13
Pd-109	2.9637E+01	1.3841E-08	7.6470E+16	1.0966E+12
Rh-106	9.7525E+01	2.7398E-11	1.5566E+14	3.6084E+12
Rh-103m	1.2034E+02	3.6995E-09	2.1630E+16	4.4525E+12
Tc-101	6.1789E-01	4.7130E-12	2.8101E+13	2.2862E+10
Eu-154	9.7560E-02	3.6983E-07	1.4462E+18	3.6097E+09
Eu-155	6.6093E-02	1.4213E-07	5.5222E+17	2.4454E+09
Eu-156	1.5773E+00	2.8624E-08	1.1050E+17	5.8360E+10
La-143	4.3921E-02	4.7533E-13	2.0017E+12	1.6251E+09
Nb-97	3.6642E+00	1.3629E-10	8.4614E+14	1.3558E+11
Nb-95m	6.9101E-02	1.8141E-10	1.1500E+15	2.5568E+09
Pm-147	1.0110E+00	1.0906E-06	4.4677E+18	3.7406E+10
Pm-148	1.6613E+00	1.0111E-08	4.1144E+16	6.1467E+10
Pm-149	3.4698E+00	8.7569E-09	3.5393E+16	1.2838E+11
Pm-151	1.2022E+00	1.6452E-09	6.5612E+15	4.4483E+10
Pm-148m	2.3434E-01	1.0970E-08	4.4635E+16	8.6704E+09
Pr-144	1.8371E+01	2.4311E-10	1.0167E+15	6.7972E+11
Pr-144m	3.6773E-01	2.0277E-12	8.4798E+12	1.3606E+10
Sm-153	3.3688E+00	7.6808E-09	3.0232E+16	1.2464E+11
Y-94	1.6855E-01	1.6094E-12	1.0311E+13	6.2364E+09
Y-95	8.2016E-03	4.4338E-14	2.8107E+11	3.0346E+08
Y-91m	1.8469E+02	4.4433E-09	2.9405E+16	6.8335E+12
Br-82	9.2443E+01	8.5387E-08	6.2708E+17	3.4204E+12
Br-83	9.7693E+02	6.1840E-08	4.4869E+17	3.6147E+13
Br-84	2.7106E+02	3.8508E-09	2.7607E+16	1.0029E+13
Am-242	6.5562E-01	8.1108E-10	2.0184E+15	2.4258E+10
Np-238	8.2170E+00	3.1707E-08	8.0227E+16	3.0403E+11
Pu-243	7.1234E+00	2.7375E-09	6.7841E+15	2.6356E+11

SIRWT Water Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	6.5913E+18	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.1950E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	1.9160E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	2.1023E-02	0.0000E+00	0.0000E+00

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	8.9663E-04	1.1020E-11	7.7164E+13	3.3175E+07
Sr-89	1.4983E-02	5.1573E-10	3.4896E+15	5.5437E+08
Sr-90	1.7561E-03	1.2874E-08	8.6143E+16	6.4976E+07
Sr-91	1.6147E-02	4.4545E-12	2.9478E+13	5.9745E+08
Sr-92	1.2495E-02	9.9407E-13	6.5070E+12	4.6231E+08
Y-90	3.6408E-05	6.6918E-14	4.4776E+11	1.3471E+06
Y-91	1.9722E-04	8.0421E-12	5.3221E+13	7.2973E+06
Y-92	2.6310E-03	2.7343E-13	1.7898E+12	9.7347E+07
Y-93	2.0192E-04	6.0521E-14	3.9190E+11	7.4709E+06
Zr-95	2.5645E-04	1.1937E-11	7.5671E+13	9.4885E+06
Zr-97	2.3250E-04	1.2162E-13	7.5507E+11	8.6024E+06
Nb-95	2.5932E-04	6.6317E-12	4.2039E+13	9.5949E+06
Mo-99	3.4836E-03	7.2634E-12	4.4183E+13	1.2889E+08
Tc-99m	3.1043E-03	5.9038E-13	3.5912E+12	1.1486E+08
Ru-103	3.2658E-03	1.0119E-10	5.9163E+14	1.2083E+08
Ru-105	1.8496E-03	2.7515E-13	1.5781E+12	6.8434E+07
Ru-106	1.5035E-03	4.4941E-10	2.5532E+15	5.5630E+07
Rh-105	2.2640E-03	2.6822E-12	1.5384E+13	8.3766E+07
Sb-127	4.6655E-03	1.7470E-11	8.2842E+13	1.7262E+08
Sb-129	9.9726E-03	1.7734E-12	8.2789E+12	3.6899E+08
Te-127	4.6705E-03	1.7697E-12	8.3918E+12	1.7281E+08
Te-127m	6.3491E-04	6.7310E-11	3.1918E+14	2.3492E+07
Te-129	1.1106E-02	5.3032E-13	2.4757E+12	4.1093E+08
Te-129m	1.9589E-03	6.5026E-11	3.0356E+14	7.2480E+07
Te-131m	5.5408E-03	6.9485E-12	3.1943E+13	2.0501E+08
Te-132	5.3533E-02	1.7633E-10	8.0447E+14	1.9807E+09
Cs-134	9.3489E-02	7.2258E-08	3.2474E+17	3.4591E+09
Cs-136	2.6849E-02	3.6633E-10	1.6221E+15	9.9340E+08
Cs-137	5.0488E-02	5.8044E-07	2.5515E+18	1.8680E+09
Ba-139	1.0930E-02	6.6821E-13	2.8950E+12	4.0441E+08
Ba-140	2.6054E-02	3.5589E-10	1.5309E+15	9.6400E+08
La-140	6.9951E-04	1.2585E-12	5.4135E+12	2.5882E+07
La-141	4.5390E-04	8.0261E-14	3.4280E+11	1.6794E+07
La-142	1.0645E-04	7.4362E-15	3.1536E+10	3.9386E+06
Ce-141	6.2891E-04	2.2072E-11	9.4270E+13	2.3270E+07
Ce-143	5.6092E-04	8.4466E-13	3.5571E+12	2.0754E+07
Ce-144	5.2935E-04	1.6597E-10	6.9408E+14	1.9586E+07
Pr-143	2.3137E-04	3.4359E-12	1.4470E+13	8.5607E+06
Nd-147	9.8568E-05	1.2184E-12	4.9915E+12	3.6470E+06
Np-239	9.2906E-03	4.0047E-11	1.0091E+14	3.4375E+08
Pu-238	2.0388E-06	1.1909E-10	3.0133E+14	7.5434E+04
Pu-239	1.8474E-07	2.9722E-09	7.4891E+15	6.8354E+03
Pu-240	2.8061E-07	1.2315E-09	3.0900E+15	1.0382E+04
Pu-241	7.9001E-05	7.6691E-10	1.9164E+15	2.9230E+06
Am-241	3.9136E-08	1.1403E-11	2.8493E+13	1.4480E+03
Cm-242	1.1771E-05	3.5517E-12	8.8384E+12	4.3554E+05
Cm-244	1.2339E-06	1.5252E-11	3.7643E+13	4.5655E+04
Cs-138	8.2997E-02	1.9614E-12	8.5594E+12	3.0709E+09
Cs-134m	1.4657E-02	1.8175E-12	8.1682E+12	5.4231E+08
Rb-88	1.7939E-02	1.4944E-13	1.0227E+12	6.6374E+08
Rb-89	2.2466E-03	1.6164E-14	1.0937E+11	8.3125E+07
Sb-124	8.8269E-05	5.0462E-12	2.4507E+13	3.2659E+06
Sb-125	8.1334E-04	7.8775E-10	3.7952E+15	3.0093E+07
Sb-126	5.7219E-05	6.8466E-13	3.2723E+12	2.1171E+06
Te-131	2.8946E-03	5.0416E-14	2.3177E+11	1.0710E+08
Te-133	1.3462E-03	1.1855E-14	5.3681E+10	4.9811E+07
Te-134	1.0476E-02	3.1208E-13	1.4025E+12	3.8762E+08
Te-125m	1.7717E-04	9.8368E-12	4.7391E+13	6.5551E+06

Te-133m	7.2200E-03	2.8293E-13	1.2811E+12	2.6714E+08
Ba-141	4.0214E-04	5.5095E-15	2.3531E+10	1.4879E+07
Ba-137m	5.5330E-02	1.0288E-13	4.5224E+11	2.0472E+09
Pd-109	7.8651E-04	3.6731E-13	2.0294E+12	2.9101E+07
Rh-106	2.5882E-03	7.2710E-16	4.1308E+09	9.5762E+07
Rh-103m	3.1936E-03	9.8177E-14	5.7402E+11	1.1816E+08
Tc-101	1.6398E-05	1.2508E-16	7.4576E+08	6.0672E+05
Eu-154	2.5891E-06	9.8147E-12	3.8380E+13	9.5795E+04
Eu-155	1.7540E-06	3.7720E-12	1.4655E+13	6.4897E+04
Eu-156	4.1859E-05	7.5964E-13	2.9325E+12	1.5488E+06
La-143	1.1656E-06	1.2614E-17	5.3123E+07	4.3127E+04
Nb-97	9.7242E-05	3.6169E-15	2.2455E+10	3.5979E+06
Nb-95m	1.8338E-06	4.8143E-15	3.0518E+10	6.7852E+04
Pm-147	2.6829E-05	2.8942E-11	1.1856E+14	9.9268E+05
Pm-148	4.4087E-05	2.6834E-13	1.0919E+12	1.6312E+06
Pm-149	9.2083E-05	2.3239E-13	9.3927E+11	3.4071E+06
Pm-151	3.1905E-05	4.3660E-14	1.7412E+11	1.1805E+06
Pm-148m	6.2189E-06	2.9111E-13	1.1845E+12	2.3010E+05
Pr-144	5.0323E-04	6.6596E-15	2.7851E+10	1.8619E+07
Pr-144m	9.8813E-06	5.4486E-17	2.2786E+08	3.6561E+05
Sm-153	8.9401E-05	2.0384E-13	8.0231E+11	3.3078E+06
Y-94	4.4731E-06	4.2712E-17	2.7363E+08	1.6550E+05
Y-95	2.1765E-07	1.1767E-18	7.4590E+06	8.0532E+03
Y-91m	5.3706E-03	1.2921E-13	8.5505E+11	1.9871E+08
Am-242	1.7399E-05	2.1525E-14	5.3563E+10	6.4377E+05
Np-238	2.1806E-04	8.4144E-13	2.1291E+12	8.0684E+06
Pu-243	1.8904E-04	7.2648E-14	1.8004E+11	6.9945E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 1.8083	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.7396E-07

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 1.8083	Ci	kg	Atoms	Bq
I-131	4.1885E-01	3.3785E-09	1.5531E+16	1.5497E+10
I-132	4.3029E-01	4.1686E-11	1.9018E+14	1.5921E+10
I-133	7.8256E-01	6.9081E-10	3.1279E+15	2.8955E+10
I-134	2.9732E-01	1.1145E-11	5.0088E+13	1.1001E+10
I-135	6.3851E-01	1.8182E-10	8.1105E+14	2.3625E+10
Xe-133	5.0317E-03	2.6881E-11	1.2172E+14	1.8617E+08
Xe-135	5.6137E-02	2.1982E-11	9.8060E+13	2.0771E+09
I-130	1.9026E-02	9.7552E-12	4.5190E+13	7.0396E+08
Kr-83m	1.2875E-02	6.2405E-13	4.5279E+12	4.7639E+08
Xe-131m	1.3349E-05	1.5937E-13	7.3262E+11	4.9391E+05
Xe-133m	3.5838E-04	7.9871E-13	3.6165E+12	1.3260E+07
Xe-135m	9.7581E-02	1.0712E-12	4.7786E+12	3.6105E+09
Br-82	2.8678E-03	2.6489E-12	1.9454E+13	1.0611E+08
Br-83	3.0307E-02	1.9184E-12	1.3919E+13	1.1213E+09
Br-84	8.4089E-03	1.1946E-13	8.5643E+11	3.1113E+08

SIRWT Air Transport Group Inventory:

Time (h) = 1.8083	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	2.3343E+14	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9196E+16	0.0000E+00	0.0000E+00
Organic I (atoms)	5.9370E+14	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 1.8083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00

Aerosols (kg) 0.0000E+00 0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 1.8083	Ci	kg	Atoms	Bq
Rb-86	8.9663E-04	1.1020E-11	7.7164E+13	3.3175E+07
Sr-89	1.4983E-02	5.1573E-10	3.4896E+15	5.5437E+08
Sr-90	1.7561E-03	1.2874E-08	8.6143E+16	6.4976E+07
Sr-91	1.6147E-02	4.4545E-12	2.9478E+13	5.9745E+08
Sr-92	1.2495E-02	9.9407E-13	6.5070E+12	4.6231E+08
Y-90	3.6408E-05	6.6918E-14	4.4776E+11	1.3471E+06
Y-91	1.9722E-04	8.0421E-12	5.3221E+13	7.2973E+06
Y-92	2.6310E-03	2.7343E-13	1.7898E+12	9.7347E+07
Y-93	2.0192E-04	6.0521E-14	3.9190E+11	7.4709E+06
Zr-95	2.5645E-04	1.1937E-11	7.5671E+13	9.4885E+06
Zr-97	2.3250E-04	1.2162E-13	7.5507E+11	8.6024E+06
Nb-95	2.5932E-04	6.6317E-12	4.2039E+13	9.5949E+06
Mo-99	3.4836E-03	7.2634E-12	4.4183E+13	1.2889E+08
Tc-99m	3.1043E-03	5.9038E-13	3.5912E+12	1.1486E+08
Ru-103	3.2658E-03	1.0119E-10	5.9163E+14	1.2083E+08
Ru-105	1.8496E-03	2.7515E-13	1.5781E+12	6.8434E+07
Ru-106	1.5035E-03	4.4941E-10	2.5532E+15	5.5630E+07
Rh-105	2.2640E-03	2.6822E-12	1.5384E+13	8.3766E+07
Sb-127	4.6655E-03	1.7470E-11	8.2842E+13	1.7262E+08
Sb-129	9.9726E-03	1.7734E-12	8.2789E+12	3.6899E+08
Te-127	4.6705E-03	1.7697E-12	8.3918E+12	1.7281E+08
Te-127m	6.3491E-04	6.7310E-11	3.1918E+14	2.3492E+07
Te-129	1.1106E-02	5.3032E-13	2.4757E+12	4.1093E+08
Te-129m	1.9589E-03	6.5026E-11	3.0356E+14	7.2480E+07
Te-131m	5.5408E-03	6.9485E-12	3.1943E+13	2.0501E+08
Te-132	5.3533E-02	1.7633E-10	8.0447E+14	1.9807E+09
Cs-134	9.3489E-02	7.2258E-08	3.2474E+17	3.4591E+09
Cs-136	2.6849E-02	3.6633E-10	1.6221E+15	9.9340E+08
Cs-137	5.0488E-02	5.8044E-07	2.5515E+18	1.8680E+09
Ba-139	1.0930E-02	6.6821E-13	2.8950E+12	4.0441E+08
Ba-140	2.6054E-02	3.5589E-10	1.5309E+15	9.6400E+08
La-140	6.9951E-04	1.2585E-12	5.4135E+12	2.5882E+07
La-141	4.5390E-04	8.0261E-14	3.4280E+11	1.6794E+07
La-142	1.0645E-04	7.4362E-15	3.1536E+10	3.9386E+06
Ce-141	6.2891E-04	2.2072E-11	9.4270E+13	2.3270E+07
Ce-143	5.6092E-04	8.4466E-13	3.5571E+12	2.0754E+07
Ce-144	5.2935E-04	1.6597E-10	6.9408E+14	1.9586E+07
Pr-143	2.3137E-04	3.4359E-12	1.4470E+13	8.5607E+06
Nd-147	9.8568E-05	1.2184E-12	4.9915E+12	3.6470E+06
Np-239	9.2906E-03	4.0047E-11	1.0091E+14	3.4375E+08
Pu-238	2.0388E-06	1.1909E-10	3.0133E+14	7.5434E+04
Pu-239	1.8474E-07	2.9722E-09	7.4891E+15	6.8354E+03
Pu-240	2.8061E-07	1.2315E-09	3.0900E+15	1.0382E+04
Pu-241	7.9001E-05	7.6691E-10	1.9164E+15	2.9230E+06
Am-241	3.9136E-08	1.1403E-11	2.8493E+13	1.4480E+03
Cm-242	1.1771E-05	3.5517E-12	8.8384E+12	4.3554E+05
Cm-244	1.2339E-06	1.5252E-11	3.7643E+13	4.5655E+04
Cs-138	8.2997E-02	1.9614E-12	8.5594E+12	3.0709E+09
Cs-134m	1.4657E-02	1.8175E-12	8.1682E+12	5.4231E+08
Rb-88	1.7939E-02	1.4944E-13	1.0227E+12	6.6374E+08
Rb-89	2.2466E-03	1.6164E-14	1.0937E+11	8.3125E+07
Sb-124	8.8269E-05	5.0462E-12	2.4507E+13	3.2659E+06
Sb-125	8.1334E-04	7.8775E-10	3.7952E+15	3.0093E+07
Sb-126	5.7219E-05	6.8466E-13	3.2723E+12	2.1171E+06
Te-131	2.8946E-03	5.0416E-14	2.3177E+11	1.0710E+08
Te-133	1.3462E-03	1.1855E-14	5.3681E+10	4.9811E+07
Te-134	1.0476E-02	3.1208E-13	1.4025E+12	3.8762E+08
Te-125m	1.7717E-04	9.8368E-12	4.7391E+13	6.5551E+06
Te-133m	7.2200E-03	2.8293E-13	1.2811E+12	2.6714E+08
Ba-141	4.0214E-04	5.5095E-15	2.3531E+10	1.4879E+07
Ba-137m	5.5330E-02	1.0288E-13	4.5224E+11	2.0472E+09
Pd-109	7.8651E-04	3.6731E-13	2.0294E+12	2.9101E+07
Rh-106	2.5882E-03	7.2710E-16	4.1308E+09	9.5762E+07
Rh-103m	3.1936E-03	9.8177E-14	5.7402E+11	1.1816E+08
Tc-101	1.6398E-05	1.2508E-16	7.4576E+08	6.0672E+05

Eu-154	2.5891E-06	9.8147E-12	3.8380E+13	9.5795E+04
Eu-155	1.7540E-06	3.7720E-12	1.4655E+13	6.4897E+04
Eu-156	4.1859E-05	7.5964E-13	2.9325E+12	1.5488E+06
La-143	1.1656E-06	1.2614E-17	5.3123E+07	4.3127E+04
Nb-97	9.7242E-05	3.6169E-15	2.2455E+10	3.5979E+06
Nb-95m	1.8338E-06	4.8143E-15	3.0518E+10	6.7852E+04
Pm-147	2.6829E-05	2.8942E-11	1.1856E+14	9.9268E+05
Pm-148	4.4087E-05	2.6834E-13	1.0919E+12	1.6312E+06
Pm-149	9.2083E-05	2.3239E-13	9.3927E+11	3.4071E+06
Pm-151	3.1905E-05	4.3660E-14	1.7412E+11	1.1805E+06
Pm-148m	6.2189E-06	2.9111E-13	1.1845E+12	2.3010E+05
Pr-144	5.0323E-04	6.6596E-15	2.7851E+10	1.8619E+07
Pr-144m	9.8813E-06	5.4486E-17	2.2786E+08	3.6561E+05
Sm-153	8.9401E-05	2.0384E-13	8.0231E+11	3.3078E+06
Y-94	4.4731E-06	4.2712E-17	2.7363E+08	1.6550E+05
Y-95	2.1765E-07	1.1767E-18	7.4590E+06	8.0532E+03
Y-91m	5.3706E-03	1.2921E-13	8.5505E+11	1.9871E+08
Am-242	1.7399E-05	2.1525E-14	5.3563E+10	6.4377E+05
Np-238	2.1806E-04	8.4144E-13	2.1291E+12	8.0684E+06
Pu-243	1.8904E-04	7.2648E-14	1.8004E+11	6.9945E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.7396E-07

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 1.8083	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 2.0000

EAB Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	7.0115E-08	2.3980E-05	1.0569E-07	8.2293E-07
Accumulated dose (rem)	1.9765E-07	6.3577E-05	2.9716E-07	2.1951E-06

LPZ Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.6636E-09	2.9630E-06	1.3059E-08	1.0168E-07
Accumulated dose (rem)	2.4422E-08	7.8558E-06	3.6718E-08	2.7124E-07

Control Room Doses:

Time (h) = 2.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	9.5896E-10	1.0644E-05	4.9331E-08	3.3509E-07
Accumulated dose (rem)	2.4859E-09	2.6316E-05	1.2741E-07	8.2915E-07

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	5.8554E+04	7.1962E-04	5.0391E+21	2.1665E+15
Sr-89	1.4411E+06	4.9604E-02	3.3564E+23	5.3320E+16
Sr-90	1.6907E+05	1.2395E+00	8.2937E+24	6.2557E+15
Sr-91	1.5330E+06	4.2291E-04	2.7987E+21	5.6723E+16
Sr-92	1.1454E+06	9.1128E-05	5.9651E+20	4.2381E+16
Y-90	3.2597E+03	5.9914E-06	4.0090E+19	1.2061E+14
Y-91	1.8912E+04	7.7116E-04	5.1033E+21	6.9973E+14
Y-92	2.1035E+05	2.1861E-05	1.4310E+20	7.7830E+15

Y-93	1.9186E+04	5.7507E-06	3.7238E+19	7.0989E+14
Zr-95	2.4688E+04	1.1492E-03	7.2848E+21	9.1345E+14
Zr-97	2.2209E+04	1.1618E-05	7.2127E+19	8.2174E+14
Nb-95	2.4967E+04	6.3849E-04	4.0474E+21	9.2377E+14
Mo-99	3.3472E+05	6.9790E-04	4.2453E+21	1.2385E+16
Tc-99m	2.9877E+05	5.6819E-05	3.4563E+20	1.1054E+16
Ru-103	3.1438E+05	9.7409E-03	5.6952E+22	1.1632E+16
Ru-105	1.7282E+05	2.5710E-05	1.4745E+20	6.3944E+15
Ru-106	1.4475E+05	4.3267E-02	2.4581E+23	5.3559E+15
Rh-105	2.1781E+05	2.5805E-04	1.4800E+21	8.0589E+15
Sb-127	4.4854E+05	1.6796E-03	7.9643E+21	1.6596E+16
Sb-129	9.3106E+05	1.6557E-04	7.7293E+20	3.4449E+16
Te-127	4.4939E+05	1.7028E-04	8.0744E+20	1.6627E+16
Te-127m	6.1129E+04	6.4806E-03	3.0730E+22	2.2618E+15
Te-129	1.0466E+06	4.9978E-05	2.3331E+20	3.8726E+16
Te-129m	1.8860E+05	6.2607E-03	2.9227E+22	6.9784E+15
Te-131m	5.3110E+05	6.6603E-04	3.0618E+21	1.9651E+16
Te-132	5.1453E+06	1.6948E-02	7.7321E+22	1.9038E+17
I-131	2.9761E+07	2.4006E-01	1.1036E+24	1.1012E+18
I-132	3.3291E+07	3.2252E-03	1.4714E+22	1.2318E+18
I-133	5.5457E+07	4.8956E-02	2.2167E+23	2.0519E+18
I-134	2.1191E+07	7.9435E-04	3.5699E+21	7.8405E+17
I-135	4.4472E+07	1.2663E-02	5.6489E+22	1.6454E+18
Xe-133	2.8655E+05	1.5309E-03	6.9316E+21	1.0602E+16
Xe-135	3.1229E+06	1.2229E-03	5.4551E+21	1.1555E+17
Cs-134	6.1070E+06	4.7201E+00	2.1213E+25	2.2596E+17
Cs-136	1.7531E+06	2.3920E-02	1.0592E+23	6.4865E+16
Cs-137	3.2980E+06	3.7916E+01	1.6667E+26	1.2203E+17
Ba-139	9.5561E+05	5.8422E-05	2.5311E+20	3.5358E+16
Ba-140	2.5073E+06	3.4249E-02	1.4732E+23	9.2771E+16
La-140	6.1557E+04	1.1075E-04	4.7639E+20	2.2776E+15
La-141	3.2364E+04	5.7227E-06	2.4442E+19	1.1975E+15
La-142	9.4025E+03	6.5682E-07	2.7855E+18	3.4789E+14
Ce-141	6.0545E+04	2.1249E-03	9.0754E+21	2.2402E+15
Ce-143	5.3800E+04	8.1014E-05	3.4117E+20	1.9906E+15
Ce-144	5.0964E+04	1.5979E-02	6.6823E+22	1.8857E+15
Pr-143	2.2266E+04	3.3066E-04	1.3925E+21	8.2384E+14
Nd-147	9.4851E+03	1.1725E-04	4.8032E+20	3.5095E+14
Np-239	8.9238E+05	3.8466E-03	9.6923E+21	3.3018E+16
Pu-238	1.9629E+02	1.1466E-02	2.9012E+22	7.2628E+12
Pu-239	1.7787E+01	2.8616E-01	7.2105E+23	6.5811E+11
Pu-240	2.7016E+01	1.1856E-01	2.9750E+23	9.9960E+11
Pu-241	7.6060E+03	7.3836E-02	1.8450E+23	2.8142E+14
Am-241	3.7679E+00	1.0978E-03	2.7432E+21	1.3941E+11
Cm-242	1.1333E+03	3.4195E-04	8.5094E+20	4.1933E+13
Cm-244	1.1880E+02	1.4684E-03	3.6242E+21	4.3955E+12
I-130	1.3376E+06	6.8582E-04	3.1770E+21	4.9491E+16
Kr-83m	7.0050E+05	3.3952E-05	2.4634E+20	2.5918E+16
Xe-131m	7.6378E+02	9.1185E-06	4.1918E+19	2.8260E+13
Xe-133m	2.0419E+04	4.5506E-05	2.0605E+20	7.5550E+14
Xe-135m	6.1967E+06	6.8026E-05	3.0345E+20	2.2928E+17
Cs-138	4.6486E+06	1.0986E-04	4.7940E+20	1.7200E+17
Cs-134m	9.1458E+05	1.1341E-04	5.0968E+20	3.3840E+16
Rb-88	2.1710E+06	1.8086E-05	1.2377E+20	8.0326E+16
Rb-89	8.6865E+04	6.2497E-07	4.2288E+18	3.2140E+15
Sb-124	8.4975E+03	4.8579E-04	2.3593E+21	3.1441E+14
Sb-125	7.8306E+04	7.5843E-02	3.6539E+23	2.8973E+15
Sb-126	5.5065E+03	6.5888E-05	3.1491E+20	2.0374E+14
Te-131	2.3538E+05	4.0998E-06	1.8847E+19	8.7091E+15
Te-133	1.0913E+05	9.6105E-07	4.3516E+18	4.0378E+15
Te-134	8.3350E+05	2.4829E-05	1.1159E+20	3.0840E+16
Te-125m	1.7057E+04	9.4707E-04	4.5627E+21	6.3111E+14
Te-133m	6.0197E+05	2.3589E-05	1.0681E+20	2.2273E+16
Ba-141	2.5027E+04	3.4289E-07	1.4645E+18	9.2602E+14
Ba-137m	3.6460E+06	6.7794E-06	2.9800E+19	1.3490E+17
Pd-109	7.4978E+04	3.5016E-05	1.9346E+20	2.7742E+15
Rh-106	2.9770E+05	8.3634E-08	4.7515E+17	1.1015E+16
Rh-103m	3.0856E+05	9.4859E-06	5.5461E+19	1.1417E+16
Tc-101	9.0057E+02	6.8692E-09	4.0958E+16	3.3321E+13
Eu-154	2.4927E+02	9.4493E-04	3.6951E+21	9.2229E+12

Eu-155	1.6887E+02	3.6316E-04	1.4109E+21	6.2481E+12
Eu-156	4.0286E+03	7.3110E-05	2.8223E+20	1.4906E+14
La-143	6.4091E+01	6.9361E-10	2.9210E+15	2.3714E+12
Nb-97	8.5067E+03	3.1640E-07	1.9644E+18	3.1475E+14
Nb-95m	1.7655E+02	4.6349E-07	2.9381E+18	6.5324E+12
Pm-147	2.5831E+03	2.7865E-03	1.1415E+22	9.5575E+13
Pm-148	4.2403E+03	2.5809E-05	1.0502E+20	1.5689E+14
Pm-149	8.8434E+03	2.2318E-05	9.0204E+19	3.2720E+14
Pm-151	3.0574E+03	4.1839E-06	1.6686E+19	1.1312E+14
Pm-148m	5.9866E+02	2.8024E-05	1.1403E+20	2.2150E+13
Pr-144	4.6052E+04	6.0944E-07	2.5487E+18	1.7039E+15
Pr-144m	9.3390E+02	5.1496E-09	2.1536E+16	3.4554E+13
Sm-153	8.5829E+03	1.9569E-05	7.7025E+19	3.1757E+14
Y-94	2.8372E+02	2.7091E-09	1.7356E+16	1.0497E+13
Y-95	9.9485E+00	5.3782E-11	3.4093E+14	3.6809E+11
Y-91m	4.4712E+05	1.0757E-05	7.1185E+19	1.6543E+16
Br-82	2.0303E+05	1.8753E-04	1.3772E+21	7.5120E+15
Br-83	2.0372E+06	1.2896E-04	9.3566E+20	7.5378E+16
Br-84	4.6507E+05	6.6070E-06	4.7367E+19	1.7208E+16
Am-242	1.6613E+03	2.0552E-06	5.1144E+18	6.1469E+13
Np-238	2.0940E+04	8.0800E-05	2.0445E+20	7.7477E+14
Pu-243	1.7719E+04	6.8094E-06	1.6875E+19	6.5561E+14

Containment Sump Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3184E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3634E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	4.2166E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4672E+01	0.0000E+00	0.0000E+00

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	2.2782E-04	1.8376E-12	8.4476E+12	8.4293E+06
I-132	2.1725E-04	2.1047E-14	9.6019E+10	8.0381E+06
I-133	4.2302E-04	3.7343E-13	1.6908E+12	1.5652E+07
I-134	1.3609E-04	5.1013E-15	2.2926E+10	5.0352E+06
I-135	3.4065E-04	9.6999E-14	4.3270E+11	1.2604E+07
Xe-133	3.2830E-06	1.7539E-14	7.9414E+10	1.2147E+05
Xe-135	3.6398E-05	1.4253E-14	6.3579E+10	1.3467E+06
I-130	1.0246E-05	5.2533E-15	2.4336E+10	3.7909E+05
Kr-83m	7.9004E-06	3.8292E-16	2.7783E+09	2.9231E+05
Xe-131m	8.7358E-09	1.0429E-16	4.7945E+08	3.2323E+02
Xe-133m	2.3362E-07	5.2066E-16	2.3575E+09	8.6441E+03
Xe-135m	5.3934E-05	5.9208E-16	2.6412E+09	1.9956E+06
Br-82	1.5552E-06	1.4365E-15	1.0549E+10	5.7541E+04
Br-83	1.5605E-05	9.8780E-16	7.1670E+09	5.7738E+05
Br-84	3.5624E-06	5.0609E-17	3.6283E+08	1.3181E+05

Environment Transport Group Inventory:

	Present	Release	Integral

Time (h) = 2.0000	Release	Rate/s	Release
Noble gases (atoms)	6.4724E+09	8.9894E+07	1.5125E+11
Elemental I (atoms)	4.7925E+11	6.6563E+09	1.0411E+13
Organic I (atoms)	1.4822E+10	2.0587E+08	3.2198E+11
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	1.4551E-07	1.1737E-15	5.3956E+09	5.3838E+03
I-132	1.3876E-07	1.3443E-17	6.1329E+07	5.1341E+03
I-133	2.7019E-07	2.3851E-16	1.0800E+09	9.9969E+03
I-134	8.6921E-08	3.2583E-18	1.4643E+07	3.2161E+03
I-135	2.1757E-07	6.1954E-17	2.7637E+08	8.0502E+03
I-130	6.5440E-09	3.3553E-18	1.5543E+07	2.4213E+02
Br-82	9.9330E-10	9.1748E-19	6.7380E+06	3.6752E+01
Br-83	9.9670E-09	6.3091E-19	4.5776E+06	3.6878E+02
Br-84	2.2753E-09	3.2324E-20	2.3174E+05	8.4187E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.6493E+09
Organic I (atoms)	2.0565E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	3.6717E-08	2.9616E-16	1.3615E+09	1.3585E+03
I-132	3.5813E-08	3.4695E-18	1.5829E+07	1.3251E+03
I-133	6.8216E-08	6.0218E-17	2.7266E+08	2.5240E+03

I-134	2.2537E-08	8.4481E-19	3.7967E+06	8.3386E+02
I-135	5.4895E-08	1.5631E-17	6.9729E+07	2.0311E+03
Xe-133	2.0086E-09	1.0731E-17	4.8589E+07	7.4319E+01
Xe-135	2.2110E-08	8.6577E-18	3.8621E+07	8.1805E+02
I-130	1.6511E-09	8.4657E-19	3.9216E+06	6.1090E+01
Kr-83m	4.8673E-09	2.3591E-19	1.7117E+06	1.8009E+02
Xe-131m	5.3522E-12	6.3899E-20	2.9375E+05	1.9803E-01
Xe-133m	1.4301E-10	3.1872E-19	1.4431E+06	5.2914E+00
Xe-135m	3.8225E-08	4.1963E-19	1.8719E+06	1.4143E+03
Br-82	2.5061E-10	2.3148E-19	1.7000E+06	9.2727E+00
Br-83	2.5147E-09	1.5918E-19	1.1550E+06	9.3045E+01

Control Room Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.2530E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.6784E+09	0.0000E+00	0.0000E+00
Organic I (atoms)	5.1910E+07	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	3.3589E-08	2.7093E-16	1.2455E+09	1.2428E+03
I-132	3.1634E-08	3.0646E-18	1.3982E+07	1.1704E+03
I-133	6.2349E-08	5.5039E-17	2.4921E+08	2.3069E+03
I-134	1.9765E-08	7.4090E-19	3.3297E+06	7.3130E+02
I-135	5.0227E-08	1.4302E-17	6.3799E+07	1.8584E+03
I-130	1.5107E-09	7.7457E-19	3.5881E+06	5.5895E+01
Br-82	2.2930E-10	2.1180E-19	1.5555E+06	8.4841E+00
Br-83	2.3009E-09	1.4565E-19	1.0567E+06	8.5132E+01

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.5346E+09
Organic I (atoms)	0.0000E+00	4.7462E+07
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	1.4551E-07	1.1737E-15	5.3956E+09	5.3838E+03
I-132	1.3876E-07	1.3443E-17	6.1329E+07	5.1341E+03
I-133	2.7019E-07	2.3851E-16	1.0800E+09	9.9969E+03
I-134	8.6921E-08	3.2583E-18	1.4643E+07	3.2161E+03
I-135	2.1757E-07	6.1954E-17	2.7637E+08	8.0502E+03
I-130	6.5440E-09	3.3553E-18	1.5543E+07	2.4213E+02
Br-82	9.9330E-10	9.1748E-19	6.7380E+06	3.6752E+01
Br-83	9.9670E-09	6.3091E-19	4.5776E+06	3.6878E+02
Br-84	2.2753E-09	3.2324E-20	2.3174E+05	8.4187E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.6493E+09
Organic I (atoms)	2.0565E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	1.7910E-07	1.4446E-15	6.6411E+09	6.6266E+03
I-132	1.7039E-07	1.6507E-17	7.5311E+07	6.3045E+03
I-133	3.3254E-07	2.9355E-16	1.3292E+09	1.2304E+04
I-134	1.0669E-07	3.9992E-18	1.7973E+07	3.9474E+03
I-135	2.6780E-07	7.6256E-17	3.4017E+08	9.9086E+03
I-130	8.0547E-09	4.1299E-18	1.9131E+07	2.9802E+02
Br-82	1.2226E-09	1.1293E-18	8.2935E+06	4.5236E+01
Br-83	1.2268E-08	7.7656E-19	5.6344E+06	4.5391E+02
Br-84	2.8006E-09	3.9786E-20	2.8524E+05	1.0362E+02

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	3.4653E+01	4.2588E-07	2.9822E+18	1.2822E+12
Sr-89	7.3351E+02	2.5248E-05	1.7084E+20	2.7140E+13
Sr-90	8.6030E+01	6.3069E-04	4.2201E+21	3.1831E+12
Sr-91	7.8006E+02	2.1519E-07	1.4241E+18	2.8862E+13
Sr-92	5.8283E+02	4.6369E-08	3.0352E+17	2.1565E+13
Y-90	1.8138E+00	3.3338E-09	2.2308E+16	6.7111E+10
Y-91	9.6714E+00	3.9437E-07	2.6098E+18	3.5784E+11
Y-92	1.2725E+02	1.3224E-08	8.6561E+16	4.7081E+12
Y-93	9.7626E+00	2.9261E-09	1.8948E+16	3.6121E+11
Zr-95	1.2562E+01	5.8475E-07	3.7068E+18	4.6480E+11
Zr-97	1.1301E+01	5.9115E-09	3.6701E+16	4.1813E+11
Nb-95	1.2704E+01	3.2488E-07	2.0595E+18	4.7005E+11
Mo-99	1.7032E+02	3.5511E-07	2.1601E+18	6.3018E+12
Tc-99m	1.5202E+02	2.8912E-08	1.7587E+17	5.6249E+12
Ru-103	1.5997E+02	4.9565E-06	2.8979E+19	5.9187E+12
Ru-105	8.7938E+01	1.3082E-08	7.5030E+16	3.2537E+12
Ru-106	7.3656E+01	2.2016E-05	1.2508E+20	2.7253E+12
Rh-105	1.1083E+02	1.3131E-07	7.5308E+17	4.1007E+12
Sb-127	2.2823E+02	8.5463E-07	4.0525E+18	8.4446E+12
Sb-129	4.7376E+02	8.4247E-08	3.9329E+17	1.7529E+13
Te-127	2.2866E+02	8.6644E-08	4.1085E+17	8.4605E+12
Te-127m	3.1104E+01	3.2975E-06	1.5636E+19	1.1509E+12
Te-129	5.3257E+02	2.5430E-08	1.1872E+17	1.9705E+13
Te-129m	9.5969E+01	3.1856E-06	1.4872E+19	3.5508E+12
Te-131m	2.7024E+02	3.3890E-07	1.5579E+18	9.9989E+12
Te-132	2.6181E+03	8.6238E-06	3.9344E+19	9.6870E+13
I-131	1.6991E+04	1.3705E-04	6.3005E+20	6.2868E+14
I-132	1.7875E+04	1.7317E-06	7.9004E+18	6.6137E+14
I-133	3.1618E+04	2.7911E-05	1.2638E+20	1.1699E+15
I-134	1.1314E+04	4.2410E-07	1.9060E+18	4.1861E+14
I-135	2.5396E+04	7.2316E-06	3.2259E+19	9.3966E+14
Xe-133	2.0146E+02	1.0763E-06	4.8733E+18	7.4540E+12
Xe-135	2.2144E+03	8.6712E-07	3.8681E+18	8.1932E+13
Cs-134	3.6142E+03	2.7934E-03	1.2554E+22	1.3373E+14
Cs-136	1.0375E+03	1.4156E-05	6.2684E+19	3.8388E+13

Cs-137	1.9518E+03	2.2439E-02	9.8637E+22	7.2217E+13
Ba-139	4.8625E+02	2.9727E-08	1.2879E+17	1.7991E+13
Ba-140	1.2758E+03	1.7427E-05	7.4963E+19	4.7205E+13
La-140	3.4967E+01	6.2910E-08	2.7061E+17	1.2938E+12
La-141	1.9113E+01	3.3796E-09	1.4434E+16	7.0718E+11
La-142	4.7843E+00	3.3421E-10	1.4174E+15	1.7702E+11
Ce-141	3.0808E+01	1.0812E-06	4.6179E+18	1.1399E+12
Ce-143	2.7372E+01	4.1218E-08	1.7358E+17	1.0128E+12
Ce-144	2.5932E+01	8.1305E-06	3.4002E+19	9.5949E+11
Pr-143	1.1336E+01	1.6834E-07	7.0892E+17	4.1942E+11
Nd-147	4.8264E+00	5.9659E-08	2.4441E+17	1.7858E+11
Np-239	4.5407E+02	1.9573E-06	4.9318E+18	1.6801E+13
Pu-238	9.9880E-02	5.8342E-06	1.4762E+19	3.6956E+09
Pu-239	9.0506E-03	1.4561E-04	3.6690E+20	3.3487E+08
Pu-240	1.3747E-02	6.0328E-05	1.5138E+20	5.0863E+08
Pu-241	3.8702E+00	3.7570E-05	9.3881E+19	1.4320E+11
Am-241	1.9173E-03	5.5863E-07	1.3959E+18	7.0940E+07
Cm-242	5.7668E-01	1.7400E-07	4.3299E+17	2.1337E+10
Cm-244	6.0449E-02	7.4718E-07	1.8441E+18	2.2366E+09
I-130	7.6385E+02	3.9165E-07	1.8143E+18	2.8262E+13
Kr-83m	4.8883E+02	2.3693E-08	1.7191E+17	1.8087E+13
Xe-131m	5.3648E-01	6.4049E-09	2.9444E+16	1.9850E+10
Xe-133m	1.4347E+01	3.1974E-08	1.4477E+17	5.3083E+11
Xe-135m	3.8158E+03	4.1890E-08	1.8686E+17	1.4119E+14
Cs-138	2.6322E+03	6.2205E-08	2.7146E+17	9.7390E+13
Cs-134m	5.4126E+02	6.7118E-08	3.0164E+17	2.0027E+13
Rb-88	7.8181E+02	6.5130E-09	4.4571E+16	2.8927E+13
Rb-89	5.1408E+01	3.6986E-10	2.5026E+15	1.9021E+12
Sb-124	4.3238E+00	2.4719E-07	1.2005E+18	1.5998E+11
Sb-125	3.9845E+01	3.8591E-05	1.8592E+20	1.4743E+12
Sb-126	2.8019E+00	3.3526E-08	1.6024E+17	1.0367E+11
Te-131	1.1977E+02	2.0861E-09	9.5900E+15	4.4315E+12
Te-133	5.5530E+01	4.8902E-10	2.2142E+15	2.0546E+12
Te-134	4.2412E+02	1.2634E-08	5.6779E+16	1.5692E+13
Te-125m	8.6793E+00	4.8190E-07	2.3217E+18	3.2113E+11
Te-133m	3.0630E+02	1.2003E-08	5.4349E+16	1.1333E+13
Ba-141	1.2735E+01	1.7447E-10	7.4518E+14	4.7119E+11
Ba-137m	2.1604E+03	4.0171E-09	1.7658E+16	7.9936E+13
Pd-109	3.8151E+01	1.7817E-08	9.8439E+16	1.4116E+12
Rh-106	1.5148E+02	4.2556E-11	2.4177E+14	5.6048E+12
Rh-103m	1.5701E+02	4.8267E-09	2.8221E+16	5.8093E+12
Tc-101	4.5824E-01	3.4953E-12	2.0841E+13	1.6955E+10
Eu-154	1.2684E-01	4.8081E-07	1.8802E+18	4.6930E+09
Eu-155	8.5926E-02	1.8479E-07	7.1794E+17	3.1793E+09
Eu-156	2.0499E+00	3.7201E-08	1.4361E+17	7.5846E+10
La-143	3.2612E-02	3.5293E-13	1.4863E+12	1.2066E+09
Nb-97	4.3285E+00	1.6100E-10	9.9954E+14	1.6015E+11
Nb-95m	8.9835E-02	2.3584E-10	1.4950E+15	3.3239E+09
Pm-147	1.3144E+00	1.4178E-06	5.8085E+18	4.8632E+10
Pm-148	2.1576E+00	1.3132E-08	5.3436E+16	7.9831E+10
Pm-149	4.4998E+00	1.1356E-08	4.5899E+16	1.6649E+11
Pm-151	1.5557E+00	2.1289E-09	8.4904E+15	5.7562E+10
Pm-148m	3.0462E-01	1.4260E-08	5.8022E+16	1.1271E+10
Pr-144	2.4536E+01	3.2470E-10	1.3579E+15	9.0782E+11
Pr-144m	4.8272E-01	2.6618E-12	1.1132E+13	1.7861E+10
Sm-153	4.3673E+00	9.9574E-09	3.9193E+16	1.6159E+11
Y-94	1.4436E-01	1.3785E-12	8.8312E+12	5.3415E+09
Y-95	5.0621E-03	2.7366E-14	1.7348E+11	1.8730E+08
Y-91m	2.6201E+02	6.3034E-09	4.1714E+16	9.6943E+12
Br-82	1.1594E+02	1.0709E-07	7.8649E+17	4.2899E+12
Br-83	1.1634E+03	7.3643E-08	5.3432E+17	4.3046E+13
Br-84	2.6559E+02	3.7730E-09	2.7050E+16	9.8267E+12
Am-242	8.4533E-01	1.0458E-09	2.6024E+15	3.1277E+10
Np-238	1.0655E+01	4.1114E-08	1.0403E+17	3.9423E+11
Pu-243	9.0161E+00	3.4648E-09	8.5867E+15	3.3359E+11

SIRWT Water Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool

Noble gases (atoms)	9.2744E+18	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.7760E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.4050E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	2.6270E-02	0.0000E+00	0.0000E+00

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	1.2660E-03	1.5559E-11	1.0895E+14	4.6842E+07
Sr-89	2.2666E-02	7.8016E-10	5.2789E+15	8.3862E+08
Sr-90	2.6573E-03	1.9480E-08	1.3035E+17	9.8319E+07
Sr-91	2.4094E-02	6.6467E-12	4.3986E+13	8.9149E+08
Sr-92	1.8002E-02	1.4322E-12	9.3751E+12	6.6609E+08
Y-90	5.9186E-05	1.0879E-13	7.2791E+11	2.1899E+06
Y-91	2.9975E-04	1.2223E-11	8.0887E+13	1.1091E+07
Y-92	4.3446E-03	4.5151E-13	2.9555E+12	1.6075E+08
Y-93	3.0154E-04	9.0382E-14	5.8526E+11	1.1157E+07
Zr-95	3.8801E-04	1.8061E-11	1.1449E+14	1.4356E+07
Zr-97	3.4905E-04	1.8259E-13	1.1336E+12	1.2915E+07
Nb-95	3.9240E-04	1.0035E-11	6.3612E+13	1.4519E+07
Mo-99	5.2607E-03	1.0969E-11	6.6722E+13	1.9465E+08
Tc-99m	4.6957E-03	8.9301E-13	5.4321E+12	1.7374E+08
Ru-103	4.9410E-03	1.5309E-10	8.9511E+14	1.8282E+08
Ru-105	2.7162E-03	4.0407E-13	2.3175E+12	1.0050E+08
Ru-106	2.2751E-03	6.8002E-10	3.8634E+15	8.4177E+07
Rh-105	3.4232E-03	4.0557E-12	2.3261E+13	1.2666E+08
Sb-127	7.0495E-03	2.6398E-11	1.2517E+14	2.6083E+08
Sb-129	1.4633E-02	2.6022E-12	1.2148E+13	5.4143E+08
Te-127	7.0629E-03	2.6762E-12	1.2690E+13	2.6133E+08
Te-127m	9.6074E-04	1.0185E-10	4.8297E+14	3.5547E+07
Te-129	1.6450E-02	7.8549E-13	3.6669E+12	6.0865E+08
Te-129m	2.9642E-03	9.8397E-11	4.5935E+14	1.0968E+08
Te-131m	8.3471E-03	1.0468E-11	4.8121E+13	3.0884E+08
Te-132	8.0867E-02	2.6637E-10	1.2152E+15	2.9921E+09
Cs-134	1.3204E-01	1.0205E-07	4.5864E+17	4.8855E+09
Cs-136	3.7904E-02	5.1717E-10	2.2901E+15	1.4025E+09
Cs-137	7.1307E-02	8.1979E-07	3.6036E+18	2.6384E+09
Ba-139	1.5019E-02	9.1821E-13	3.9781E+12	5.5571E+08
Ba-140	3.9407E-02	5.3828E-10	2.3154E+15	1.4581E+09
La-140	1.1543E-03	2.0767E-12	8.9329E+12	4.2708E+07
La-141	6.5348E-04	1.1555E-13	4.9352E+11	2.4179E+07
La-142	1.4778E-04	1.0323E-14	4.3780E+10	5.4677E+06
Ce-141	9.5159E-04	3.3397E-11	1.4264E+14	3.5209E+07
Ce-143	8.4540E-04	1.2730E-12	5.3611E+12	3.1280E+07
Ce-144	8.0098E-04	2.5113E-10	1.0502E+15	2.9636E+07
Pr-143	3.5026E-04	5.2014E-12	2.1905E+13	1.2959E+07
Nd-147	1.4907E-04	1.8427E-12	7.5491E+12	5.5158E+06
Np-239	1.4025E-02	6.0456E-11	1.5233E+14	5.1893E+08
Pu-238	3.0851E-06	1.8021E-10	4.5597E+14	1.1415E+05
Pu-239	2.7955E-07	4.4975E-09	1.1333E+16	1.0343E+04
Pu-240	4.2461E-07	1.8634E-09	4.6757E+15	1.5710E+04
Pu-241	1.1954E-04	1.1605E-09	2.8998E+15	4.4231E+06
Am-241	5.9223E-08	1.7255E-11	4.3117E+13	2.1912E+03
Cm-242	1.7812E-05	5.3744E-12	1.3374E+13	6.5905E+05

Cm-244	1.8671E-06	2.3079E-11	5.6960E+13	6.9083E+04
Cs-138	9.2733E-02	2.1915E-12	9.5635E+12	3.4311E+09
Cs-134m	1.9774E-02	2.4521E-12	1.1020E+13	7.3165E+08
Rb-88	1.9212E-02	1.6004E-13	1.0952E+12	7.1083E+08
Rb-89	1.8781E-03	1.3512E-14	9.1431E+10	6.9491E+07
Sb-124	1.3355E-04	7.6350E-12	3.7080E+13	4.9415E+06
Sb-125	1.2307E-03	1.1920E-09	5.7427E+15	4.5536E+07
Sb-126	8.6544E-05	1.0355E-12	4.9493E+12	3.2021E+06
Te-131	3.6994E-03	6.4435E-14	2.9621E+11	1.3688E+08
Te-133	1.7152E-03	1.5105E-14	6.8392E+10	6.3462E+07
Te-134	1.3100E-02	3.9024E-13	1.7538E+12	4.8470E+08
Te-125m	2.6808E-04	1.4885E-11	7.1711E+13	9.9190E+06
Te-133m	9.4610E-03	3.7074E-13	1.6787E+12	3.5006E+08
Ba-141	3.9335E-04	5.3891E-15	2.3017E+10	1.4554E+07
Ba-137m	7.8954E-02	1.4681E-13	6.4533E+11	2.9213E+09
Pd-109	1.1784E-03	5.5034E-13	3.0405E+12	4.3601E+07
Rh-106	4.6789E-03	1.3145E-15	7.4678E+09	1.7312E+08
Rh-103m	4.8496E-03	1.4909E-13	8.7167E+11	1.7944E+08
Tc-101	1.4154E-05	1.0796E-16	6.4372E+08	5.2370E+05
Eu-154	3.9177E-06	1.4851E-11	5.8075E+13	1.4495E+05
Eu-155	2.6541E-06	5.7076E-12	2.2175E+13	9.8200E+04
Eu-156	6.3316E-05	1.1490E-12	4.4357E+12	2.3427E+06
La-143	1.0073E-06	1.0901E-17	4.5908E+07	3.7270E+04
Nb-97	1.3370E-04	4.9728E-15	3.0873E+10	4.9468E+06
Nb-95m	2.7748E-06	7.2845E-15	4.6177E+10	1.0267E+05
Pm-147	4.0598E-05	4.3794E-11	1.7941E+14	1.5021E+06
Pm-148	6.6643E-05	4.0563E-13	1.6505E+12	2.4658E+06
Pm-149	1.3899E-04	3.5077E-13	1.4177E+12	5.1426E+06
Pm-151	4.8053E-05	6.5757E-14	2.6225E+11	1.7779E+06
Pm-148m	9.4089E-06	4.4044E-13	1.7922E+12	3.4813E+05
Pr-144	7.7602E-04	1.0270E-14	4.2948E+10	2.8713E+07
Pr-144m	1.5007E-05	8.2749E-17	3.4606E+08	5.5525E+05
Sm-153	1.3489E-04	3.0756E-13	1.2106E+12	4.9911E+06
Y-94	4.4591E-06	4.2578E-17	2.7278E+08	1.6499E+05
Y-95	1.5636E-07	8.4528E-19	5.3583E+06	5.7852E+03
Y-91m	8.7507E-03	2.1053E-13	1.3932E+12	3.2378E+08
Am-242	2.6110E-05	3.2301E-14	8.0381E+10	9.6608E+05
Np-238	3.2911E-04	1.2699E-12	3.2133E+12	1.2177E+07
Pu-243	2.7849E-04	1.0702E-13	2.6522E+11	1.0304E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway
Time (h) = 2.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	9.5398E-07

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Bq
I-131	5.9899E-01	4.8315E-09	2.2211E+16	2.2162E+10
I-132	5.9375E-01	5.7522E-11	2.6243E+14	2.1969E+10
I-133	1.1133E+00	9.8273E-10	4.4497E+15	4.1190E+10
I-134	3.7433E-01	1.4032E-11	6.3062E+13	1.3850E+10
I-135	8.9549E-01	2.5499E-10	1.1375E+15	3.3133E+10
Xe-133	8.0110E-03	4.2798E-11	1.9379E+14	2.9641E+08
Xe-135	8.8512E-02	3.4660E-11	1.5461E+14	3.2750E+09
I-130	2.6934E-02	1.3810E-11	6.3973E+13	9.9655E+08
Kr-83m	1.9344E-02	9.3756E-13	6.8026E+12	7.1572E+08
Xe-131m	2.1323E-05	2.5457E-13	1.1703E+12	7.8894E+05
Xe-133m	5.7025E-04	1.2709E-12	5.7545E+12	2.1099E+07
Xe-135m	1.3937E-01	1.5300E-12	6.8252E+12	5.1568E+09
Br-82	4.0882E-03	3.7761E-12	2.7732E+13	1.5126E+08
Br-83	4.1022E-02	2.5967E-12	1.8841E+13	1.5178E+09
Br-84	9.3647E-03	1.3304E-13	9.5378E+11	3.4650E+08

SIRWT Air Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.6895E+14	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.7388E+16	0.0000E+00	0.0000E+00
Organic I (atoms)	8.4705E+14	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 2.0000	Ci	kg	Atoms	Bq
Rb-86	1.2660E-03	1.5559E-11	1.0895E+14	4.6842E+07
Sr-89	2.2666E-02	7.8016E-10	5.2789E+15	8.3862E+08
Sr-90	2.6573E-03	1.9480E-08	1.3035E+17	9.8319E+07
Sr-91	2.4094E-02	6.6467E-12	4.3986E+13	8.9149E+08
Sr-92	1.8002E-02	1.4322E-12	9.3751E+12	6.6609E+08
Y-90	5.9186E-05	1.0879E-13	7.2791E+11	2.1899E+06
Y-91	2.9975E-04	1.2223E-11	8.0887E+13	1.1091E+07
Y-92	4.3446E-03	4.5151E-13	2.9555E+12	1.6075E+08
Y-93	3.0154E-04	9.0382E-14	5.8526E+11	1.1157E+07
Zr-95	3.8801E-04	1.8061E-11	1.1449E+14	1.4356E+07
Zr-97	3.4905E-04	1.8259E-13	1.1336E+12	1.2915E+07
Nb-95	3.9240E-04	1.0035E-11	6.3612E+13	1.4519E+07
Mo-99	5.2607E-03	1.0969E-11	6.6722E+13	1.9465E+08
Tc-99m	4.6957E-03	8.9301E-13	5.4321E+12	1.7374E+08
Ru-103	4.9410E-03	1.5309E-10	8.9511E+14	1.8282E+08
Ru-105	2.7162E-03	4.0407E-13	2.3175E+12	1.0050E+08
Ru-106	2.2751E-03	6.8002E-10	3.8634E+15	8.4177E+07
Rh-105	3.4232E-03	4.0557E-12	2.3261E+13	1.2666E+08
Sb-127	7.0495E-03	2.6398E-11	1.2517E+14	2.6083E+08
Sb-129	1.4633E-02	2.6022E-12	1.2148E+13	5.4143E+08
Te-127	7.0629E-03	2.6762E-12	1.2690E+13	2.6133E+08
Te-127m	9.6074E-04	1.0185E-10	4.8297E+14	3.5547E+07
Te-129	1.6450E-02	7.8549E-13	3.6669E+12	6.0865E+08
Te-129m	2.9642E-03	9.8397E-11	4.5935E+14	1.0968E+08
Te-131m	8.3471E-03	1.0468E-11	4.8121E+13	3.0884E+08
Te-132	8.0867E-02	2.6637E-10	1.2152E+15	2.9921E+09
Cs-134	1.3204E-01	1.0205E-07	4.5864E+17	4.8855E+09
Cs-136	3.7904E-02	5.1717E-10	2.2901E+15	1.4025E+09
Cs-137	7.1307E-02	8.1979E-07	3.6036E+18	2.6384E+09
Ba-139	1.5019E-02	9.1821E-13	3.9781E+12	5.5571E+08
Ba-140	3.9407E-02	5.3828E-10	2.3154E+15	1.4581E+09
La-140	1.1543E-03	2.0767E-12	8.9329E+12	4.2708E+07
La-141	6.5348E-04	1.1555E-13	4.9352E+11	2.4179E+07
La-142	1.4778E-04	1.0323E-14	4.3780E+10	5.4677E+06
Ce-141	9.5159E-04	3.3397E-11	1.4264E+14	3.5209E+07
Ce-143	8.4540E-04	1.2730E-12	5.3611E+12	3.1280E+07
Ce-144	8.0098E-04	2.5113E-10	1.0502E+15	2.9636E+07
Pr-143	3.5026E-04	5.2014E-12	2.1905E+13	1.2959E+07
Nd-147	1.4907E-04	1.8427E-12	7.5491E+12	5.5158E+06
Np-239	1.4025E-02	6.0456E-11	1.5233E+14	5.1893E+08
Pu-238	3.0851E-06	1.8021E-10	4.5597E+14	1.1415E+05
Pu-239	2.7955E-07	4.4975E-09	1.1333E+16	1.0343E+04
Pu-240	4.2461E-07	1.8634E-09	4.6757E+15	1.5710E+04
Pu-241	1.1954E-04	1.1605E-09	2.8998E+15	4.4231E+06
Am-241	5.9223E-08	1.7255E-11	4.3117E+13	2.1912E+03
Cm-242	1.7812E-05	5.3744E-12	1.3374E+13	6.5905E+05
Cm-244	1.8671E-06	2.3079E-11	5.6960E+13	6.9083E+04
Cs-138	9.2733E-02	2.1915E-12	9.5635E+12	3.4311E+09
Cs-134m	1.9774E-02	2.4521E-12	1.1020E+13	7.3165E+08
Rb-88	1.9212E-02	1.6004E-13	1.0952E+12	7.1083E+08
Rb-89	1.8781E-03	1.3512E-14	9.1431E+10	6.9491E+07
Sb-124	1.3355E-04	7.6350E-12	3.7080E+13	4.9415E+06
Sb-125	1.2307E-03	1.1920E-09	5.7427E+15	4.5536E+07

Sb-126	8.6544E-05	1.0355E-12	4.9493E+12	3.2021E+06
Te-131	3.6994E-03	6.4435E-14	2.9621E+11	1.3688E+08
Te-133	1.7152E-03	1.5105E-14	6.8392E+10	6.3462E+07
Te-134	1.3100E-02	3.9024E-13	1.7538E+12	4.8470E+08
Te-125m	2.6808E-04	1.4885E-11	7.1711E+13	9.9190E+06
Te-133m	9.4610E-03	3.7074E-13	1.6787E+12	3.5006E+08
Ba-141	3.9335E-04	5.3891E-15	2.3017E+10	1.4554E+07
Ba-137m	7.8954E-02	1.4681E-13	6.4533E+11	2.9213E+09
Pd-109	1.1784E-03	5.5034E-13	3.0405E+12	4.3601E+07
Rh-106	4.6789E-03	1.3145E-15	7.4678E+09	1.7312E+08
Rh-103m	4.8496E-03	1.4909E-13	8.7167E+11	1.7944E+08
Tc-101	1.4154E-05	1.0796E-16	6.4372E+08	5.2370E+05
Eu-154	3.9177E-06	1.4851E-11	5.8075E+13	1.4495E+05
Eu-155	2.6541E-06	5.7076E-12	2.2175E+13	9.8200E+04
Eu-156	6.3316E-05	1.1490E-12	4.4357E+12	2.3427E+06
La-143	1.0073E-06	1.0901E-17	4.5908E+07	3.7270E+04
Nb-97	1.3370E-04	4.9728E-15	3.0873E+10	4.9468E+06
Nb-95m	2.7748E-06	7.2845E-15	4.6177E+10	1.0267E+05
Pm-147	4.0598E-05	4.3794E-11	1.7941E+14	1.5021E+06
Pm-148	6.6643E-05	4.0563E-13	1.6505E+12	2.4658E+06
Pm-149	1.3899E-04	3.5077E-13	1.4177E+12	5.1426E+06
Pm-151	4.8053E-05	6.5757E-14	2.6225E+11	1.7779E+06
Pm-148m	9.4089E-06	4.4044E-13	1.7922E+12	3.4813E+05
Pr-144	7.7602E-04	1.0270E-14	4.2948E+10	2.8713E+07
Pr-144m	1.5007E-05	8.2749E-17	3.4606E+08	5.5525E+05
Sm-153	1.3489E-04	3.0756E-13	1.2106E+12	4.9911E+06
Y-94	4.4591E-06	4.2578E-17	2.7278E+08	1.6499E+05
Y-95	1.5636E-07	8.4528E-19	5.3583E+06	5.7852E+03
Y-91m	8.7507E-03	2.1053E-13	1.3932E+12	3.2378E+08
Am-242	2.6110E-05	3.2301E-14	8.0381E+10	9.6608E+05
Np-238	3.2911E-04	1.2699E-12	3.2133E+12	1.2177E+07
Pu-243	2.7849E-04	1.0702E-13	2.6522E+11	1.0304E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	9.5398E-07

SIRWT Leakage Transport Group Inventory:

Time (h) = 2.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 8.0000

EAB Doses:

Time (h) = 8.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.8855E-08	1.0689E-05	2.9542E-08	3.5226E-07
Accumulated dose (rem)	2.1650E-07	7.4267E-05	3.2670E-07	2.5474E-06

LPZ Doses:

Time (h) = 8.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.0600E-09	6.0090E-07	1.6607E-09	1.9802E-08
Accumulated dose (rem)	2.5482E-08	8.4567E-06	3.8379E-08	2.9104E-07

Control Room Doses:

Time (h) = 8.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.5879E-09	1.9357E-05	1.4007E-07	6.0876E-07
Accumulated dose (rem)	5.0739E-09	4.5674E-05	2.6747E-07	1.4379E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	5.8010E+04	7.1294E-04	4.9923E+21	2.1464E+15
Sr-89	1.4361E+06	4.9432E-02	3.3448E+23	5.3136E+16
Sr-90	1.6906E+05	1.2394E+00	8.2932E+24	6.2553E+15
Sr-91	9.8949E+05	2.7296E-04	1.8064E+21	3.6611E+16
Sr-92	2.4687E+05	1.9640E-05	1.2856E+20	9.1341E+15
Y-90	1.3693E+04	2.5167E-05	1.6840E+20	5.0662E+14
Y-91	2.2419E+04	9.1419E-04	6.0499E+21	8.2952E+14
Y-92	4.1472E+05	4.3100E-05	2.8212E+20	1.5345E+16
Y-93	1.2710E+04	3.8095E-06	2.4668E+19	4.7026E+14
Zr-95	2.4620E+04	1.1460E-03	7.2648E+21	9.1094E+14
Zr-97	1.7364E+04	9.0829E-06	5.6390E+19	6.4245E+14
Nb-95	2.4964E+04	6.3842E-04	4.0470E+21	9.2368E+14
Mo-99	3.1427E+05	6.5525E-04	3.9859E+21	1.1628E+16
Tc-99m	2.9113E+05	5.5366E-05	3.3679E+20	1.0772E+16
Ru-103	3.1298E+05	9.6976E-03	5.6699E+22	1.1580E+16
Ru-105	6.7730E+04	1.0076E-05	5.7789E+19	2.5060E+15
Ru-106	1.4468E+05	4.3245E-02	2.4569E+23	5.3531E+15
Rh-105	2.0597E+05	2.4403E-04	1.3996E+21	7.6209E+15
Sb-127	4.2878E+05	1.6056E-03	7.6135E+21	1.5865E+16
Sb-129	3.5552E+05	6.3221E-05	2.9514E+20	1.3154E+16
Te-127	4.3910E+05	1.6638E-04	7.8896E+20	1.6247E+16
Te-127m	6.1152E+04	6.4830E-03	3.0741E+22	2.2626E+15
Te-129	5.0023E+05	2.3886E-05	1.1151E+20	1.8508E+16
Te-129m	1.8832E+05	6.2512E-03	2.9182E+22	6.9678E+15
Te-131m	4.6233E+05	5.7979E-04	2.6653E+21	1.7106E+16
Te-132	4.8786E+06	1.6070E-02	7.3313E+22	1.8051E+17
I-131	2.9136E+07	2.3502E-01	1.0804E+24	1.0780E+18
I-132	9.6277E+06	9.3272E-04	4.2553E+21	3.5622E+17
I-133	4.5429E+07	4.0103E-02	1.8158E+23	1.6809E+18
I-134	2.0443E+05	7.6632E-06	3.4439E+19	7.5638E+15
I-135	2.3704E+07	6.7496E-03	3.0109E+22	8.7703E+17
Xe-133	1.8657E+06	9.9673E-03	4.5131E+22	6.9031E+16
Xe-135	1.3871E+07	5.4318E-03	2.4230E+22	5.1324E+17
Cs-134	6.1055E+06	4.7189E+00	2.1207E+25	2.2590E+17
Cs-136	1.7300E+06	2.3605E-02	1.0452E+23	6.4010E+16
Cs-137	3.2978E+06	3.7914E+01	1.6666E+26	1.2202E+17
Ba-139	4.6758E+04	2.8586E-06	1.2385E+19	1.7300E+15
Ba-140	2.4733E+06	3.3785E-02	1.4533E+23	9.1514E+16
La-140	2.9986E+05	5.3949E-04	2.3206E+21	1.1095E+16
La-141	1.1963E+04	2.1153E-06	9.0345E+18	4.4263E+14
La-142	6.3335E+02	4.4244E-08	1.8764E+17	2.3434E+13
Ce-141	6.0333E+04	2.1174E-03	9.0436E+21	2.2323E+15
Ce-143	4.7428E+04	7.1418E-05	3.0076E+20	1.7548E+15
Ce-144	5.0931E+04	1.5968E-02	6.6780E+22	1.8844E+15
Pr-143	2.2624E+04	3.3597E-04	1.4149E+21	8.3709E+14
Nd-147	9.3362E+03	1.1541E-04	4.7278E+20	3.4544E+14
Np-239	8.2904E+05	3.5736E-03	9.0044E+21	3.0674E+16
Pu-238	1.9640E+02	1.1472E-02	2.9028E+22	7.2667E+12
Pu-239	1.7803E+01	2.8642E-01	7.2171E+23	6.5871E+11
Pu-240	2.7015E+01	1.1856E-01	2.9749E+23	9.9956E+11
Pu-241	7.6055E+03	7.3830E-02	1.8449E+23	2.8140E+14
Am-241	3.7761E+00	1.1002E-03	2.7492E+21	1.3972E+11
Cm-242	1.1334E+03	3.4196E-04	8.5097E+20	4.1934E+13
Cm-244	1.1879E+02	1.4683E-03	3.6239E+21	4.3952E+12
I-130	9.5537E+05	4.8985E-04	2.2692E+21	3.5349E+16
Kr-83m	7.0453E+05	3.4147E-05	2.4776E+20	2.6068E+16
Xe-131m	5.4780E+03	6.5400E-05	3.0065E+20	2.0269E+14
Xe-133m	1.2976E+05	2.8920E-04	1.3095E+21	4.8013E+15
Xe-135m	3.9010E+06	4.2824E-05	1.9103E+20	1.4434E+17
Cs-138	2.0033E+03	4.7343E-08	2.0660E+17	7.4122E+13
Cs-134m	2.1796E+05	2.7028E-05	1.2147E+20	8.0646E+15
Rb-88	1.7717E+00	1.4759E-11	1.0100E+14	6.5553E+10
Rb-89	6.4442E-03	4.6364E-14	3.1372E+11	2.3844E+08
Sb-124	8.4727E+03	4.8437E-04	2.3524E+21	3.1349E+14
Sb-125	7.8289E+04	7.5826E-02	3.6531E+23	2.8967E+15
Sb-126	5.4298E+03	6.4971E-05	3.1053E+20	2.0090E+14

Te-131	1.0583E+05	1.8433E-06	8.4737E+18	3.9157E+15
Te-133	1.1544E+03	1.0166E-08	4.6031E+16	4.2713E+13
Te-134	2.1295E+03	6.3437E-08	2.8510E+17	7.8793E+13
Te-125m	1.7059E+04	9.4716E-04	4.5632E+21	6.3117E+14
Te-133m	6.6589E+03	2.6094E-07	1.1815E+18	2.4638E+14
Ba-141	2.9294E-02	4.0134E-13	1.7141E+12	1.0839E+09
Ba-137m	3.6557E+06	6.7976E-06	2.9880E+19	1.3526E+17
Pd-109	5.5004E+04	2.5688E-05	1.4192E+20	2.0352E+15
Rh-106	2.9755E+05	8.3591E-08	4.7490E+17	1.1009E+16
Rh-103m	3.1458E+05	9.6709E-06	5.6543E+19	1.1640E+16
Tc-101	2.1026E-05	1.6038E-16	9.5625E+08	7.7796E+05
Eu-154	2.4924E+02	9.4484E-04	3.6948E+21	9.2221E+12
Eu-155	1.6885E+02	3.6311E-04	1.4108E+21	6.2473E+12
Eu-156	3.9827E+03	7.2277E-05	2.7902E+20	1.4736E+14
La-143	1.5528E-06	1.6805E-17	7.0771E+07	5.7454E+04
Nb-97	1.2235E+03	4.5509E-08	2.8254E+17	4.5270E+13
Nb-95m	1.7636E+02	4.6298E-07	2.9349E+18	6.5253E+12
Pm-147	2.5842E+03	2.7877E-03	1.1420E+22	9.5617E+13
Pm-148	4.1063E+03	2.4994E-05	1.0170E+20	1.5193E+14
Pm-149	8.1766E+03	2.0636E-05	8.3403E+19	3.0253E+14
Pm-151	2.6408E+03	3.6138E-06	1.4412E+19	9.7710E+13
Pm-148m	5.9613E+02	2.7905E-05	1.1355E+20	2.2057E+13
Pr-144	5.2167E+04	6.9037E-07	2.8872E+18	1.9302E+15
Pr-144m	9.5995E+02	5.2932E-09	2.2137E+16	3.5518E+13
Sm-153	7.8513E+03	1.7901E-05	7.0459E+19	2.9050E+14
Y-94	6.0118E-04	5.7404E-15	3.6776E+10	2.2244E+07
Y-91m	6.2831E+05	1.5116E-05	1.0003E+20	2.3248E+16
Br-82	1.8046E+05	1.6668E-04	1.2241E+21	6.6769E+15
Br-83	3.5752E+05	2.2631E-05	1.6420E+20	1.3228E+16
Br-84	1.8181E+02	2.5828E-09	1.8517E+16	6.7269E+12
Am-242	1.2814E+03	1.5852E-06	3.9448E+18	4.7412E+13
Np-238	1.9293E+04	7.4446E-05	1.8837E+20	7.1385E+14
Pu-243	7.6556E+03	2.9420E-06	7.2910E+18	2.8326E+14

Containment Sump Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.1411E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2610E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	3.9001E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4666E+01	0.0000E+00	0.0000E+00

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	2.6226E-04	2.1155E-12	9.7249E+12	9.7038E+06
I-132	4.2276E-05	4.0957E-15	1.8685E+10	1.5642E+06
I-133	4.0748E-04	3.5971E-13	1.6287E+12	1.5077E+07
I-134	1.4053E-06	5.2678E-17	2.3674E+08	5.1995E+04
I-135	2.1358E-04	6.0816E-14	2.7129E+11	7.9023E+06
Xe-133	1.7956E-05	9.5928E-14	4.3435E+11	6.6437E+05
Xe-135	1.3416E-04	5.2535E-14	2.3435E+11	4.9639E+06
I-130	8.6081E-06	4.4137E-15	2.0446E+10	3.1850E+05

Kr-83m	6.6488E-06	3.2226E-16	2.3382E+09	2.4601E+05
Xe-131m	5.2583E-08	6.2777E-16	2.8859E+09	1.9456E+03
Xe-133m	1.2465E-06	2.7781E-15	1.2579E+10	4.6122E+04
Xe-135m	3.5163E-05	3.8601E-16	1.7219E+09	1.3010E+06
Br-82	1.6260E-06	1.5018E-15	1.1030E+10	6.0160E+04
Br-83	3.2213E-06	2.0391E-16	1.4795E+09	1.1919E+05

Environment Transport Group Inventory:

Time (h) = 8.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	3.7145E+08	5.1590E+06	6.8823E+11
Elemental I (atoms)	6.1909E+09	8.5985E+07	1.1326E+13
Organic I (atoms)	1.9147E+08	2.6593E+06	3.5030E+11
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	1.6297E-07	1.3146E-15	6.0431E+09	6.0299E+03
I-132	2.6233E-08	2.5415E-18	1.1595E+07	9.7064E+02
I-133	2.5320E-07	2.2352E-16	1.0121E+09	9.3685E+03
I-134	8.7208E-10	3.2691E-20	1.4692E+05	3.2267E+01
I-135	1.3272E-07	3.7791E-17	1.6858E+08	4.9105E+03
I-130	5.3491E-09	2.7427E-18	1.2705E+07	1.9792E+02
Br-82	1.0104E-09	9.3325E-19	6.8539E+06	3.7384E+01
Br-83	2.0018E-09	1.2671E-19	9.1936E+05	7.4065E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.0382E+09
Organic I (atoms)	2.1768E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	5.4949E-10	4.4322E-18	2.0375E+07	2.0331E+01
I-133	8.5460E-10	7.5441E-19	3.4159E+06	3.1620E+01
I-135	4.4738E-10	1.2739E-19	5.6828E+05	1.6553E+01
Xe-133	9.6121E-10	5.1352E-18	2.3252E+07	3.5565E+01
Xe-135	6.7640E-09	2.6487E-18	1.1815E+07	2.5027E+02
Kr-83m	4.8582E-10	2.3547E-20	1.7085E+05	1.7975E+01
Xe-131m	3.0328E-12	3.6208E-20	1.6645E+05	1.1221E-01
Xe-133m	6.8250E-11	1.5210E-19	6.8872E+05	2.5252E+00
Xe-135m	1.5981E-08	1.7543E-19	7.8258E+05	5.9129E+02

Control Room Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.6876E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.3737E+07	0.0000E+00	0.0000E+00
Organic I (atoms)	7.3415E+05	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	5.7510E-08	4.6389E-16	2.1325E+09	2.1279E+03
I-132	9.2516E-09	8.9628E-19	4.0891E+06	3.4231E+02
I-133	8.9350E-08	7.8875E-17	3.5714E+08	3.3060E+03
I-135	4.6834E-08	1.3336E-17	5.9490E+07	1.7329E+03
I-130	1.8876E-09	9.6785E-19	4.4835E+06	6.9843E+01
Br-82	3.5655E-10	3.2933E-19	2.4186E+06	1.3192E+01
Br-83	7.0639E-10	4.4715E-20	3.2443E+05	2.6136E+01

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.4837E+09
Organic I (atoms)	0.0000E+00	7.6815E+07
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	1.6297E-07	1.3146E-15	6.0431E+09	6.0299E+03
I-132	2.6233E-08	2.5415E-18	1.1595E+07	9.7064E+02
I-133	2.5320E-07	2.2352E-16	1.0121E+09	9.3685E+03
I-134	8.7208E-10	3.2691E-20	1.4692E+05	3.2267E+01
I-135	1.3272E-07	3.7791E-17	1.6858E+08	4.9105E+03
I-130	5.3491E-09	2.7427E-18	1.2705E+07	1.9792E+02
Br-82	1.0104E-09	9.3325E-19	6.8539E+06	3.7384E+01
Br-83	2.0018E-09	1.2671E-19	9.1936E+05	7.4065E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.0382E+09

Organic I (atoms)	2.1768E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	2.2048E-07	1.7784E-15	8.1756E+09	8.1578E+03
I-132	3.5485E-08	3.4378E-18	1.5684E+07	1.3129E+03
I-133	3.4255E-07	3.0239E-16	1.3692E+09	1.2674E+04
I-134	1.1797E-09	4.4221E-20	1.9873E+05	4.3648E+01
I-135	1.7955E-07	5.1127E-17	2.2807E+08	6.6434E+03
I-130	7.2368E-09	3.7105E-18	1.7189E+07	2.6776E+02
Br-82	1.3669E-09	1.2626E-18	9.2725E+06	5.0576E+01
Br-83	2.7081E-09	1.7143E-19	1.2438E+06	1.0020E+02

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	3.6757E+01	4.5174E-07	3.1633E+18	1.3600E+12
Sr-89	7.9103E+02	2.7228E-05	1.8424E+20	2.9268E+13
Sr-90	9.3094E+01	6.8247E-04	4.5666E+21	3.4445E+12
Sr-91	5.4486E+02	1.5031E-07	9.9468E+17	2.0160E+13
Sr-92	1.3594E+02	1.0815E-08	7.0792E+16	5.0296E+12
Y-90	7.6851E+00	1.4125E-08	9.4517E+16	2.8435E+11
Y-91	1.2414E+01	5.0619E-07	3.3498E+18	4.5931E+11
Y-92	2.3461E+02	2.4381E-08	1.5960E+17	8.6805E+12
Y-93	6.9986E+00	2.0977E-09	1.3583E+16	2.5895E+11
Zr-95	1.3557E+01	6.3106E-07	4.0003E+18	5.0161E+11
Zr-97	9.5612E+00	5.0015E-09	3.1051E+16	3.5376E+11
Nb-95	1.3746E+01	3.5154E-07	2.2285E+18	5.0862E+11
Mo-99	1.7305E+02	3.6081E-07	2.1948E+18	6.4028E+12
Tc-99m	1.6031E+02	3.0487E-08	1.8545E+17	5.9314E+12
Ru-103	1.7234E+02	5.3399E-06	3.1221E+19	6.3766E+12
Ru-105	3.7295E+01	5.5482E-09	3.1821E+16	1.3799E+12
Ru-106	7.9667E+01	2.3813E-05	1.3529E+20	2.9477E+12
Rh-105	1.1342E+02	1.3437E-07	7.7067E+17	4.1964E+12
Sb-127	2.3611E+02	8.8412E-07	4.1923E+18	8.7359E+12
Sb-129	1.9576E+02	3.4813E-08	1.6252E+17	7.2433E+12
Te-127	2.4179E+02	9.1617E-08	4.3444E+17	8.9462E+12
Te-127m	3.3673E+01	3.5698E-06	1.6928E+19	1.2459E+12
Te-129	2.7545E+02	1.3153E-08	6.1401E+16	1.0192E+13
Te-129m	1.0370E+02	3.4422E-06	1.6069E+19	3.8368E+12
Te-131m	2.5458E+02	3.1926E-07	1.4677E+18	9.4194E+12
Te-132	2.6864E+03	8.8486E-06	4.0370E+19	9.9396E+13
I-131	1.7852E+04	1.4400E-04	6.6197E+20	6.6053E+14
I-132	5.4547E+03	5.2845E-07	2.4109E+18	2.0183E+14
I-133	2.7798E+04	2.4539E-05	1.1111E+20	1.0285E+15
I-134	1.1719E+02	4.3930E-09	1.9743E+16	4.3361E+12
I-135	1.4527E+04	4.1367E-06	1.8453E+19	5.3752E+14
Xe-133	1.1786E+03	6.2966E-06	2.8510E+19	4.3608E+13
Xe-135	8.7792E+03	3.4378E-06	1.5336E+19	3.2483E+14
Cs-134	3.8686E+03	2.9900E-03	1.3438E+22	1.4314E+14

Cs-136	1.0962E+03	1.4956E-05	6.6228E+19	4.0558E+13
Cs-137	2.0896E+03	2.4023E-02	1.0560E+23	7.7315E+13
Ba-139	2.5747E+01	1.5741E-09	6.8196E+15	9.5264E+11
Ba-140	1.3619E+03	1.8603E-05	8.0023E+19	5.0392E+13
La-140	1.6840E+02	3.0298E-07	1.3033E+18	6.2310E+12
La-141	7.5052E+00	1.3271E-09	5.6681E+15	2.7769E+11
La-142	3.4875E-01	2.4363E-11	1.0332E+14	1.2904E+10
Ce-141	3.3231E+01	1.1663E-06	4.9811E+18	1.2295E+12
Ce-143	2.6113E+01	3.9323E-08	1.6560E+17	9.6620E+11
Ce-144	2.8045E+01	8.7928E-06	3.6772E+19	1.0377E+12
Pr-143	1.2464E+01	1.8509E-07	7.7947E+17	4.6116E+11
Nd-147	5.1409E+00	6.3548E-08	2.6034E+17	1.9021E+11
Np-239	4.5650E+02	1.9678E-06	4.9582E+18	1.6891E+13
Pu-238	1.0815E-01	6.3170E-06	1.5984E+19	4.0014E+09
Pu-239	9.8032E-03	1.5772E-04	3.9741E+20	3.6272E+08
Pu-240	1.4876E-02	6.5283E-05	1.6381E+20	5.5040E+08
Pu-241	4.1879E+00	4.0654E-05	1.0159E+20	1.5495E+11
Am-241	2.0794E-03	6.0584E-07	1.5139E+18	7.6936E+07
Cm-242	6.2408E-01	1.8830E-07	4.6858E+17	2.3091E+10
Cm-244	6.5411E-02	8.0852E-07	1.9955E+18	2.4202E+09
I-130	5.8553E+02	3.0022E-07	1.3907E+18	2.1664E+13
Kr-83m	4.4094E+02	2.1372E-08	1.5506E+17	1.6315E+13
Xe-131m	3.4555E+00	4.1254E-08	1.8965E+17	1.2785E+11
Xe-133m	8.1905E+01	1.8254E-07	8.2651E+17	3.0305E+12
Xe-135m	2.3908E+03	2.6246E-08	1.1708E+17	8.8461E+13
Cs-138	1.2181E+00	2.8787E-11	1.2562E+14	4.5070E+10
Cs-134m	1.3811E+02	1.7126E-08	7.6965E+16	5.1100E+12
Rb-88	7.1209E-04	5.9322E-15	4.0596E+10	2.6347E+07
Rb-89	4.0832E-06	2.9377E-17	1.9878E+08	1.5108E+05
Sb-124	4.6655E+00	2.6672E-07	1.2953E+18	1.7262E+11
Sb-125	4.3109E+01	4.1753E-05	2.0116E+20	1.5950E+12
Sb-126	2.9899E+00	3.5776E-08	1.7099E+17	1.1063E+11
Te-131	5.8274E+01	1.0150E-09	4.6660E+15	2.1561E+12
Te-133	6.3567E-01	5.5979E-12	2.5347E+13	2.3520E+10
Te-134	1.1726E+00	3.4931E-11	1.5699E+14	4.3387E+10
Te-125m	9.3933E+00	5.2155E-07	2.5127E+18	3.4755E+11
Te-133m	3.6667E+00	1.4369E-10	6.5060E+14	1.3567E+11
Ba-141	1.6130E-05	2.2099E-16	9.4387E+08	5.9682E+05
Ba-137m	2.3164E+03	4.3071E-09	1.8933E+16	8.5705E+13
Pd-109	3.0288E+01	1.4145E-08	7.8149E+16	1.1206E+12
Rh-106	1.6384E+02	4.6029E-11	2.6150E+14	6.0622E+12
Rh-103m	1.7322E+02	5.3252E-09	3.1135E+16	6.4093E+12
Tc-101	1.1578E-08	8.8311E-20	5.2655E+05	4.2838E+02
Eu-154	1.3725E-01	5.2027E-07	2.0345E+18	5.0781E+09
Eu-155	9.2974E-02	1.9994E-07	7.7682E+17	3.4400E+09
Eu-156	2.1931E+00	3.9799E-08	1.5364E+17	8.1144E+10
Nb-97	6.7373E-01	2.5059E-11	1.5558E+14	2.4928E+10
Nb-95m	9.7111E-02	2.5494E-10	1.6161E+15	3.5931E+09
Pm-147	1.4230E+00	1.5350E-06	6.2885E+18	5.2651E+10
Pm-148	2.2611E+00	1.3763E-08	5.6000E+16	8.3662E+10
Pm-149	4.5024E+00	1.1363E-08	4.5925E+16	1.6659E+11
Pm-151	1.4542E+00	1.9899E-09	7.9361E+15	5.3804E+10
Pm-148m	3.2825E-01	1.5366E-08	6.2524E+16	1.2145E+10
Pr-144	2.8726E+01	3.8015E-10	1.5898E+15	1.0629E+12
Pr-144m	5.2859E-01	2.9147E-12	1.2189E+13	1.9558E+10
Sm-153	4.3233E+00	9.8571E-09	3.8798E+16	1.5996E+11
Y-94	3.3103E-07	3.1609E-18	2.0250E+07	1.2248E+04
Y-91m	3.4621E+02	8.3291E-09	5.5120E+16	1.2810E+13
Br-82	1.1060E+02	1.0216E-07	7.5024E+17	4.0921E+12
Br-83	2.1912E+02	1.3870E-08	1.0064E+17	8.1073E+12
Br-84	1.1143E-01	1.5830E-12	1.1349E+13	4.1228E+09
Am-242	7.0560E-01	8.7290E-10	2.1722E+15	2.6107E+10
Np-238	1.0624E+01	4.0993E-08	1.0373E+17	3.9308E+11
Pu-243	4.2155E+00	1.6200E-09	4.0148E+15	1.5597E+11

SIRWT Water Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.5134E+19	0.0000E+00	0.0000E+00

Elemental I (atoms)	7.7232E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.3886E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	2.8135E-02	0.0000E+00	0.0000E+00

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	1.5037E-03	1.8480E-11	1.2941E+14	5.5636E+07
Sr-89	2.7928E-02	9.6130E-10	6.5046E+15	1.0333E+09
Sr-90	3.2856E-03	2.4087E-08	1.6117E+17	1.2157E+08
Sr-91	1.9230E-02	5.3048E-12	3.5106E+13	7.1151E+08
Sr-92	4.7977E-03	3.8169E-13	2.4985E+12	1.7751E+08
Y-90	2.7458E-04	5.0468E-13	3.3770E+12	1.0159E+07
Y-91	4.3971E-04	1.7930E-11	1.1865E+14	1.6269E+07
Y-92	8.4244E-03	8.7550E-13	5.7309E+12	3.1170E+08
Y-93	2.4701E-04	7.4035E-14	4.7941E+11	9.1392E+06
Zr-95	4.7847E-04	2.2272E-11	1.4119E+14	1.7703E+07
Zr-97	3.3745E-04	1.7652E-13	1.0959E+12	1.2486E+07
Nb-95	4.8516E-04	1.2407E-11	7.8651E+13	1.7951E+07
Mo-99	6.1075E-03	1.2734E-11	7.7462E+13	2.2598E+08
Tc-99m	5.6578E-03	1.0760E-12	6.5452E+12	2.0934E+08
Ru-103	6.0825E-03	1.8847E-10	1.1019E+15	2.2505E+08
Ru-105	1.3163E-03	1.9582E-13	1.1231E+12	4.8703E+07
Ru-106	2.8117E-03	8.4043E-10	4.7747E+15	1.0403E+08
Rh-105	4.0029E-03	4.7425E-12	2.7200E+13	1.4811E+08
Sb-127	8.3330E-03	3.1204E-11	1.4796E+14	3.0832E+08
Sb-129	6.9092E-03	1.2287E-12	5.7358E+12	2.5564E+08
Te-127	8.5336E-03	3.2335E-12	1.5333E+13	3.1574E+08
Te-127m	1.1884E-03	1.2599E-10	5.9744E+14	4.3972E+07
Te-129	9.7216E-03	4.6421E-13	2.1671E+12	3.5970E+08
Te-129m	3.6598E-03	1.2149E-10	5.6714E+14	1.3541E+08
Te-131m	8.9850E-03	1.1268E-11	5.1799E+13	3.3245E+08
Te-132	9.4812E-02	3.1230E-10	1.4248E+15	3.5081E+09
Cs-134	1.5826E-01	1.2232E-07	5.4972E+17	5.8556E+09
Cs-136	4.4844E-02	6.1186E-10	2.7093E+15	1.6592E+09
Cs-137	8.5484E-02	9.8278E-07	4.3200E+18	3.1629E+09
Ba-139	9.0870E-04	5.5555E-14	2.4069E+11	3.3622E+07
Ba-140	4.8068E-02	6.5658E-10	2.8243E+15	1.7785E+09
La-140	6.0191E-03	1.0829E-11	4.6582E+13	2.2271E+08
La-141	2.8919E-04	5.1136E-14	2.1840E+11	1.0700E+07
La-142	1.2309E-05	8.5985E-16	3.6466E+09	4.5542E+05
Ce-141	1.1731E-03	4.1170E-11	1.7584E+14	4.3404E+07
Ce-143	9.2157E-04	1.3877E-12	5.8441E+12	3.4098E+07
Ce-144	9.8980E-04	3.1033E-10	1.2978E+15	3.6622E+07
Pr-143	4.4003E-04	6.5345E-12	2.7519E+13	1.6281E+07
Nd-147	1.8144E-04	2.2428E-12	9.1882E+12	6.7134E+06
Np-239	1.6112E-02	6.9450E-11	1.7499E+14	5.9613E+08
Pu-238	3.8168E-06	2.2295E-10	5.6413E+14	1.4122E+05
Pu-239	3.4599E-07	5.5664E-09	1.4026E+16	1.2802E+04
Pu-240	5.2502E-07	2.3041E-09	5.7814E+15	1.9426E+04
Pu-241	1.4781E-04	1.4348E-09	3.5854E+15	5.4689E+06
Am-241	7.3390E-08	2.1383E-11	5.3432E+13	2.7154E+03
Cm-242	2.2026E-05	6.6458E-12	1.6538E+13	8.1497E+05
Cm-244	2.3086E-06	2.8536E-11	7.0428E+13	8.5418E+04

Cs-138	4.8218E-05	1.1395E-15	4.9727E+09	1.7841E+06
Cs-134m	5.6499E-03	7.0060E-13	3.1486E+12	2.0904E+08
Rb-88	2.0415E-08	1.7007E-19	1.1639E+06	7.5537E+02
Sb-124	1.6466E-04	9.4135E-12	4.5717E+13	6.0925E+06
Sb-125	1.5215E-03	1.4736E-09	7.0995E+15	5.6295E+07
Sb-126	1.0552E-04	1.2627E-12	6.0348E+12	3.9044E+06
Te-131	2.0567E-03	3.5823E-14	1.6468E+11	7.6098E+07
Te-133	2.2435E-05	1.9757E-16	8.9459E+08	8.3009E+05
Te-134	4.1386E-05	1.2329E-15	5.5406E+09	1.5313E+06
Te-125m	3.3152E-04	1.8407E-11	8.8682E+13	1.2266E+07
Te-133m	1.2941E-04	5.0712E-15	2.2962E+10	4.7882E+06
Ba-137m	9.4761E-02	1.7620E-13	7.7453E+11	3.5062E+09
Pd-109	1.0690E-03	4.9923E-13	2.7582E+12	3.9552E+07
Rh-106	5.7827E-03	1.6245E-15	9.2294E+09	2.1396E+08
Rh-103m	6.1137E-03	1.8795E-13	1.0989E+12	2.2621E+08
Eu-154	4.8439E-06	1.8362E-11	7.1805E+13	1.7922E+05
Eu-155	3.2814E-06	7.0567E-12	2.7417E+13	1.2141E+05
Eu-156	7.7401E-05	1.4047E-12	5.4225E+12	2.8639E+06
Nb-97	2.3778E-05	8.8443E-16	5.4909E+09	8.7980E+05
Nb-95m	3.4274E-06	8.9977E-15	5.7038E+10	1.2681E+05
Pm-147	5.0223E-05	5.4176E-11	2.2194E+14	1.8582E+06
Pm-148	7.9803E-05	4.8573E-13	1.9764E+12	2.9527E+06
Pm-149	1.5891E-04	4.0104E-13	1.6209E+12	5.8795E+06
Pm-151	5.1322E-05	7.0231E-14	2.8009E+11	1.8989E+06
Pm-148m	1.1585E-05	5.4232E-13	2.2067E+12	4.2865E+05
Pr-144	1.0138E-03	1.3417E-14	5.6110E+10	3.7512E+07
Pr-144m	1.8656E-05	1.0287E-16	4.3021E+08	6.9027E+05
Sm-153	1.5258E-04	3.4789E-13	1.3693E+12	5.6456E+06
Y-91m	1.2224E-02	2.9408E-13	1.9462E+12	4.5228E+08
Am-242	2.4903E-05	3.0808E-14	7.6665E+10	9.2142E+05
Np-238	3.7495E-04	1.4468E-12	3.6609E+12	1.3873E+07
Pu-243	1.4878E-04	5.7176E-14	1.4170E+11	5.5049E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 8.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.1448E-06

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Bq
I-131	7.0714E-01	5.7039E-09	2.6221E+16	2.6164E+10
I-132	1.2436E-01	1.2048E-11	5.4965E+13	4.6013E+09
I-133	1.0998E+00	9.7086E-10	4.3960E+15	4.0693E+10
I-134	4.0208E-03	1.5072E-13	6.7737E+11	1.4877E+08
I-135	5.7574E-01	1.6394E-10	7.3132E+14	2.1302E+10
Xe-133	4.7624E-02	2.5443E-10	1.1520E+15	1.7621E+09
Xe-135	3.5536E-01	1.3915E-10	6.2074E+14	1.3148E+10
I-130	2.3205E-02	1.1898E-11	5.5117E+13	8.5859E+08
Kr-83m	1.7716E-02	8.5868E-13	6.2302E+12	6.5551E+08
Xe-131m	1.3954E-04	1.6659E-12	7.6581E+12	5.1628E+06
Xe-133m	3.3077E-03	7.3717E-12	3.3378E+13	1.2239E+08
Xe-135m	9.4751E-02	1.0402E-12	4.6400E+12	3.5058E+09
Br-82	4.3831E-03	4.0485E-12	2.9733E+13	1.6218E+08
Br-83	8.6838E-03	5.4969E-13	3.9883E+12	3.2130E+08
Br-84	4.4160E-06	6.2735E-17	4.4976E+08	1.6339E+05

SIRWT Air Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.8247E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.0548E+16	0.0000E+00	0.0000E+00
Organic I (atoms)	9.4479E+14	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 8.0000	Ci	kg	Atoms	Bq
Rb-86	1.5037E-03	1.8480E-11	1.2941E+14	5.5636E+07
Sr-89	2.7928E-02	9.6130E-10	6.5046E+15	1.0333E+09
Sr-90	3.2856E-03	2.4087E-08	1.6117E+17	1.2157E+08
Sr-91	1.9230E-02	5.3048E-12	3.5106E+13	7.1151E+08
Sr-92	4.7977E-03	3.8169E-13	2.4985E+12	1.7751E+08
Y-90	2.7458E-04	5.0468E-13	3.3770E+12	1.0159E+07
Y-91	4.3971E-04	1.7930E-11	1.1865E+14	1.6269E+07
Y-92	8.4244E-03	8.7550E-13	5.7309E+12	3.1170E+08
Y-93	2.4701E-04	7.4035E-14	4.7941E+11	9.1392E+06
Zr-95	4.7847E-04	2.2272E-11	1.4119E+14	1.7703E+07
Zr-97	3.3745E-04	1.7652E-13	1.0959E+12	1.2486E+07
Nb-95	4.8516E-04	1.2407E-11	7.8651E+13	1.7951E+07
Mo-99	6.1075E-03	1.2734E-11	7.7462E+13	2.2598E+08
Tc-99m	5.6578E-03	1.0760E-12	6.5452E+12	2.0934E+08
Ru-103	6.0825E-03	1.8847E-10	1.1019E+15	2.2505E+08
Ru-105	1.3163E-03	1.9582E-13	1.1231E+12	4.8703E+07
Ru-106	2.8117E-03	8.4043E-10	4.7747E+15	1.0403E+08
Rh-105	4.0029E-03	4.7425E-12	2.7200E+13	1.4811E+08
Sb-127	8.3330E-03	3.1204E-11	1.4796E+14	3.0832E+08
Sb-129	6.9092E-03	1.2287E-12	5.7358E+12	2.5564E+08
Te-127	8.5336E-03	3.2335E-12	1.5333E+13	3.1574E+08
Te-127m	1.1884E-03	1.2599E-10	5.9744E+14	4.3972E+07
Te-129	9.7216E-03	4.6421E-13	2.1671E+12	3.5970E+08
Te-129m	3.6598E-03	1.2149E-10	5.6714E+14	1.3541E+08
Te-131m	8.9850E-03	1.1268E-11	5.1799E+13	3.3245E+08
Te-132	9.4812E-02	3.1230E-10	1.4248E+15	3.5081E+09
Cs-134	1.5826E-01	1.2232E-07	5.4972E+17	5.8556E+09
Cs-136	4.4844E-02	6.1186E-10	2.7093E+15	1.6592E+09
Cs-137	8.5484E-02	9.8278E-07	4.3200E+18	3.1629E+09
Ba-139	9.0870E-04	5.5555E-14	2.4069E+11	3.3622E+07
Ba-140	4.8068E-02	6.5658E-10	2.8243E+15	1.7785E+09
La-140	6.0191E-03	1.0829E-11	4.6582E+13	2.2271E+08
La-141	2.8919E-04	5.1136E-14	2.1840E+11	1.0700E+07
La-142	1.2309E-05	8.5985E-16	3.6466E+09	4.5542E+05
Ce-141	1.1731E-03	4.1170E-11	1.7584E+14	4.3404E+07
Ce-143	9.2157E-04	1.3877E-12	5.8441E+12	3.4098E+07
Ce-144	9.8980E-04	3.1033E-10	1.2978E+15	3.6622E+07
Pr-143	4.4003E-04	6.5345E-12	2.7519E+13	1.6281E+07
Nd-147	1.8144E-04	2.2428E-12	9.1882E+12	6.7134E+06
Np-239	1.6112E-02	6.9450E-11	1.7499E+14	5.9613E+08
Pu-238	3.8168E-06	2.2295E-10	5.6413E+14	1.4122E+05
Pu-239	3.4599E-07	5.5664E-09	1.4026E+16	1.2802E+04
Pu-240	5.2502E-07	2.3041E-09	5.7814E+15	1.9426E+04
Pu-241	1.4781E-04	1.4348E-09	3.5854E+15	5.4689E+06
Am-241	7.3390E-08	2.1383E-11	5.3432E+13	2.7154E+03
Cm-242	2.2026E-05	6.6458E-12	1.6538E+13	8.1497E+05
Cm-244	2.3086E-06	2.8536E-11	7.0428E+13	8.5418E+04
Cs-138	4.8218E-05	1.1395E-15	4.9727E+09	1.7841E+06
Cs-134m	5.6499E-03	7.0060E-13	3.1486E+12	2.0904E+08
Rb-88	2.0415E-08	1.7007E-19	1.1639E+06	7.5537E+02
Sb-124	1.6466E-04	9.4135E-12	4.5717E+13	6.0925E+06
Sb-125	1.5215E-03	1.4736E-09	7.0995E+15	5.6295E+07
Sb-126	1.0552E-04	1.2627E-12	6.0348E+12	3.9044E+06
Te-131	2.0567E-03	3.5823E-14	1.6468E+11	7.6098E+07
Te-133	2.2435E-05	1.9757E-16	8.9459E+08	8.3009E+05
Te-134	4.1386E-05	1.2329E-15	5.5406E+09	1.5313E+06
Te-125m	3.3152E-04	1.8407E-11	8.8682E+13	1.2266E+07
Te-133m	1.2941E-04	5.0712E-15	2.2962E+10	4.7882E+06
Ba-137m	9.4761E-02	1.7620E-13	7.7453E+11	3.5062E+09
Pd-109	1.0690E-03	4.9923E-13	2.7582E+12	3.9552E+07

Rh-106	5.7827E-03	1.6245E-15	9.2294E+09	2.1396E+08
Rh-103m	6.1137E-03	1.8795E-13	1.0989E+12	2.2621E+08
Eu-154	4.8439E-06	1.8362E-11	7.1805E+13	1.7922E+05
Eu-155	3.2814E-06	7.0567E-12	2.7417E+13	1.2141E+05
Eu-156	7.7401E-05	1.4047E-12	5.4225E+12	2.8639E+06
Nb-97	2.3778E-05	8.8443E-16	5.4909E+09	8.7980E+05
Nb-95m	3.4274E-06	8.9977E-15	5.7038E+10	1.2681E+05
Pm-147	5.0223E-05	5.4176E-11	2.2194E+14	1.8582E+06
Pm-148	7.9803E-05	4.8573E-13	1.9764E+12	2.9527E+06
Pm-149	1.5891E-04	4.0104E-13	1.6209E+12	5.8795E+06
Pm-151	5.1322E-05	7.0231E-14	2.8009E+11	1.8989E+06
Pm-148m	1.1585E-05	5.4232E-13	2.2067E+12	4.2865E+05
Pr-144	1.0138E-03	1.3417E-14	5.6110E+10	3.7512E+07
Pr-144m	1.8656E-05	1.0287E-16	4.3021E+08	6.9027E+05
Sm-153	1.5258E-04	3.4789E-13	1.3693E+12	5.6456E+06
Y-91m	1.2224E-02	2.9408E-13	1.9462E+12	4.5228E+08
Am-242	2.4903E-05	3.0808E-14	7.6665E+10	9.2142E+05
Np-238	3.7495E-04	1.4468E-12	3.6609E+12	1.3873E+07
Pu-243	1.4878E-04	5.7176E-14	1.4170E+11	5.5049E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.1448E-06

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 8.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 24.0000

EAB Doses:

Time (h) = 24.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.8166E-08	1.7998E-05	4.8586E-08	5.8411E-07
Accumulated dose (rem)	2.4467E-07	9.2265E-05	3.7529E-07	3.1315E-06

LPZ Doses:

Time (h) = 24.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.0660E-09	6.8118E-07	1.8389E-09	2.2107E-08
Accumulated dose (rem)	2.6548E-08	9.1378E-06	4.0218E-08	3.1314E-07

Control Room Doses:

Time (h) = 24.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.4203E-09	6.7899E-06	8.1562E-08	2.1118E-07
Accumulated dose (rem)	6.4942E-09	5.2464E-05	3.4903E-07	1.6491E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	5.6585E+04	6.9542E-04	4.8697E+21	2.0936E+15
Sr-89	1.4229E+06	4.8976E-02	3.3140E+23	5.2646E+16
Sr-90	1.6904E+05	1.2392E+00	8.2919E+24	6.2544E+15
Sr-91	3.0787E+05	8.4929E-05	5.6204E+20	1.1391E+16
Sr-92	4.1221E+03	3.2795E-07	2.1467E+18	1.5252E+14
Y-90	3.8411E+04	7.0600E-05	4.7240E+20	1.4212E+15
Y-91	2.7083E+04	1.1044E-03	7.3083E+21	1.0021E+15
Y-92	3.9794E+04	4.1356E-06	2.7071E+19	1.4724E+15
Y-93	4.2385E+03	1.2704E-06	8.2264E+18	1.5682E+14

Zr-95	2.4440E+04	1.1377E-03	7.2117E+21	9.0429E+14
Zr-97	9.0072E+03	4.7117E-06	2.9252E+19	3.3327E+14
Nb-95	2.4956E+04	6.3821E-04	4.0457E+21	9.2337E+14
Mo-99	2.6563E+05	5.5384E-04	3.3690E+21	9.8282E+15
Tc-99m	2.5441E+05	4.8384E-05	2.9432E+20	9.4133E+15
Ru-103	3.0929E+05	9.5831E-03	5.6030E+22	1.1444E+16
Ru-105	5.5711E+03	8.2878E-07	4.7534E+18	2.0613E+14
Ru-106	1.4448E+05	4.3186E-02	2.4535E+23	5.3458E+15
Rh-105	1.5681E+05	1.8578E-04	1.0655E+21	5.8020E+15
Sb-127	3.8024E+05	1.4238E-03	6.7516E+21	1.4069E+16
Sb-129	2.7283E+04	4.8517E-06	2.2649E+19	1.0095E+15
Te-127	4.0431E+05	1.5320E-04	7.2645E+20	1.4960E+16
Te-127m	6.1187E+04	6.4868E-03	3.0759E+22	2.2639E+15
Te-129	1.5095E+05	7.2077E-06	3.3648E+19	5.5850E+15
Te-129m	1.8612E+05	6.1781E-03	2.8841E+22	6.8863E+15
Te-131m	3.1941E+05	4.0057E-04	1.8414E+21	1.1818E+16
Te-132	4.2331E+06	1.3943E-02	6.3612E+22	1.5662E+17
I-131	2.7528E+07	2.2204E-01	1.0207E+24	1.0185E+18
I-132	4.4114E+06	4.2738E-04	1.9498E+21	1.6322E+17
I-133	2.6652E+07	2.3527E-02	1.0653E+23	9.8611E+17
I-134	6.8087E-01	2.5523E-11	1.1470E+14	2.5192E+10
I-135	4.4269E+06	1.2606E-03	5.6232E+21	1.6380E+17
Xe-133	4.5993E+06	2.4571E-02	1.1126E+23	1.7017E+17
Xe-135	1.0993E+07	4.3046E-03	1.9202E+22	4.0674E+17
Cs-134	6.1011E+06	4.7155E+00	2.1192E+25	2.2574E+17
Cs-136	1.6699E+06	2.2784E-02	1.0089E+23	6.1785E+16
Cs-137	3.2973E+06	3.7908E+01	1.6663E+26	1.2200E+17
Ba-139	1.4976E+01	9.1555E-10	3.9666E+15	5.5410E+11
Ba-140	2.3850E+06	3.2578E-02	1.4013E+23	8.8244E+16
La-140	8.1192E+05	1.4607E-03	6.2834E+21	3.0041E+16
La-141	7.1157E+02	1.2582E-07	5.3739E+17	2.6328E+13
La-142	4.7577E-01	3.3236E-11	1.4095E+14	1.7603E+10
Ce-141	5.9530E+04	2.0893E-03	8.9233E+21	2.2026E+15
Ce-143	3.3887E+04	5.1028E-05	2.1489E+20	1.2538E+15
Ce-144	5.0842E+04	1.5941E-02	6.6664E+22	1.8812E+15
Pr-143	2.3212E+04	3.4470E-04	1.4516E+21	8.5883E+14
Nd-147	8.9504E+03	1.1064E-04	4.5325E+20	3.3117E+14
Np-239	6.8125E+05	2.9365E-03	7.3993E+21	2.5206E+16
Pu-238	1.9664E+02	1.1486E-02	2.9063E+22	7.2756E+12
Pu-239	1.7841E+01	2.8703E-01	7.2323E+23	6.6011E+11
Pu-240	2.7012E+01	1.1854E-01	2.9745E+23	9.9945E+11
Pu-241	7.6040E+03	7.3816E-02	1.8445E+23	2.8135E+14
Am-241	3.7979E+00	1.1066E-03	2.7651E+21	1.4052E+11
Cm-242	1.1322E+03	3.4161E-04	8.5009E+20	4.1891E+13
Cm-244	1.1877E+02	1.4680E-03	3.6233E+21	4.3944E+12
I-130	3.8944E+05	1.9968E-04	9.2499E+20	1.4409E+16
Kr-83m	1.2856E+04	6.2309E-07	4.5209E+18	4.7566E+14
Xe-131m	1.7241E+04	2.0584E-04	9.4625E+20	6.3792E+14
Xe-133m	2.9765E+05	6.6335E-04	3.0036E+21	1.1013E+16
Xe-135m	7.2855E+05	7.9979E-06	3.5678E+19	2.6956E+16
Cs-138	2.1227E-06	5.0165E-17	2.1891E+08	7.8540E+04
Cs-134m	4.7586E+03	5.9008E-07	2.6519E+18	1.7607E+14
Sb-124	8.4070E+03	4.8062E-04	2.3341E+21	3.1106E+14
Sb-125	7.8245E+04	7.5783E-02	3.6510E+23	2.8950E+15
Sb-126	5.2306E+03	6.2587E-05	2.9913E+20	1.9353E+14
Te-131	7.3112E+04	1.2734E-06	5.8540E+18	2.7051E+15
Te-133	7.0130E-03	6.1759E-14	2.7964E+11	2.5948E+08
Te-134	2.5980E-04	7.7391E-15	3.4780E+10	9.6124E+06
Te-125m	1.7063E+04	9.4741E-04	4.5643E+21	6.3134E+14
Te-133m	4.0453E-02	1.5852E-12	7.1778E+12	1.4968E+09
Ba-137m	3.6552E+06	6.7965E-06	2.9876E+19	1.3524E+17
Pd-109	2.4079E+04	1.1245E-05	6.2128E+19	8.9091E+14
Rh-106	2.9714E+05	8.3477E-08	4.7426E+17	1.0994E+16
Rh-103m	3.1096E+05	9.5594E-06	5.5891E+19	1.1505E+16
Eu-154	2.4918E+02	9.4460E-04	3.6938E+21	9.2197E+12
Eu-155	1.6878E+02	3.6297E-04	1.4102E+21	6.2450E+12
Eu-156	3.8630E+03	7.0104E-05	2.7063E+20	1.4293E+14
Nb-97	5.1692E+02	1.9227E-08	1.1937E+17	1.9126E+13
Nb-95m	1.7578E+02	4.6147E-07	2.9253E+18	6.5039E+12
Pm-147	2.5871E+03	2.7908E-03	1.1433E+22	9.5723E+13

Pm-148	3.7696E+03	2.2944E-05	9.3359E+19	1.3947E+14
Pm-149	6.6341E+03	1.6743E-05	6.7670E+19	2.4546E+14
Pm-151	1.7869E+03	2.4452E-06	9.7520E+18	6.6115E+13
Pm-148m	5.8943E+02	2.7592E-05	1.1227E+20	2.1809E+13
Pr-144	5.2077E+04	6.8917E-07	2.8821E+18	1.9268E+15
Pr-144m	9.5829E+02	5.2841E-09	2.2098E+16	3.5457E+13
Sm-153	6.1909E+03	1.4115E-05	5.5558E+19	2.2906E+14
Y-91m	1.9659E+05	4.7295E-06	3.1298E+19	7.2737E+15
Br-82	1.3179E+05	1.2173E-04	8.9399E+20	4.8762E+15
Br-83	3.4513E+03	2.1847E-07	1.5851E+18	1.2770E+14
Br-84	1.4855E-07	2.1103E-18	1.5129E+07	5.4963E+03
Am-242	6.4119E+02	7.9322E-07	1.9739E+18	2.3724E+13
Np-238	1.5508E+04	5.9841E-05	1.5142E+20	5.7380E+14
Pu-243	8.1674E+02	3.1387E-07	7.7784E+17	3.0219E+13

Containment Sump Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3445E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1026E+24	0.0000E+00	0.0000E+00
Organic I (atoms)	3.4100E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4652E+01	0.0000E+00	0.0000E+00

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
I-131	3.8510E-04	3.1063E-12	1.4280E+13	1.4249E+07
I-132	9.2151E-07	8.9275E-17	4.0729E+08	3.4096E+04
I-133	3.7199E-04	3.2838E-13	1.4869E+12	1.3764E+07
I-135	6.2033E-05	1.7664E-14	7.8796E+10	2.2952E+06
Xe-133	6.5770E-05	3.5137E-13	1.5910E+12	2.4335E+06
Xe-135	1.5783E-04	6.1805E-14	2.7570E+11	5.8398E+06
I-130	5.4571E-06	2.7980E-15	1.2962E+10	2.0191E+05
Xe-131m	2.4576E-07	2.9341E-15	1.3488E+10	9.0931E+03
Xe-133m	4.2483E-06	9.4679E-15	4.2870E+10	1.5719E+05
Xe-135m	1.0212E-05	1.1211E-16	5.0008E+08	3.7784E+05
Br-82	1.8467E-06	1.7057E-15	1.2527E+10	6.8328E+04

Environment Transport Group Inventory:

Time (h) = 24.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.0447E+09	1.4510E+07	1.9236E+12
Elemental I (atoms)	8.4101E+09	1.1681E+08	1.5395E+13
Organic I (atoms)	2.6011E+08	3.6126E+06	4.7614E+11
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

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Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) =  24.0000       Ci           kg         Atoms         Bq
I-131                  1.8230E-07  1.4704E-15  6.7597E+09  6.7450E+03
I-132                  3.3139E-10  3.2104E-20  1.4647E+05  1.2261E+01
I-133                  1.7604E-07  1.5540E-16  7.0366E+08  6.5136E+03
I-135                  2.9367E-08  8.3624E-18  3.7303E+07  1.0866E+03
I-130                  2.5835E-09  1.3246E-18  6.1363E+06  9.5589E+01
Br-82                  8.7427E-10  8.0753E-19  5.9306E+06  3.2348E+01

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    7.2875E+09
Organic I (atoms)      2.2539E+08
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =  24.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =  24.0000       Ci           kg         Atoms         Bq
I-131                  3.0535E-10  2.4630E-18  1.1323E+07  1.1298E+01
I-133                  2.9522E-10  2.6061E-19  1.1800E+06  1.0923E+01
Xe-133                 8.0432E-10  4.2970E-18  1.9456E+07  2.9760E+01
Xe-135                 1.8249E-09  7.1462E-19  3.1878E+06  6.7522E+01
Xe-131m                3.7858E-12  4.5198E-20  2.0778E+05  1.4008E-01
Xe-133m                5.5671E-11  1.2407E-19  5.6178E+05  2.0598E+00
Xe-135m                3.5135E-09  3.8570E-20  1.7206E+05  1.3000E+02

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =  24.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    2.3588E+07  0.0000E+00  0.0000E+00
Elemental I (atoms)    1.2209E+07  0.0000E+00  0.0000E+00
Organic I (atoms)      3.7761E+05  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Recirculating Filter Inventory
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Time (h) = 24.0000	Ci	kg	Atoms	Bq
I-131	6.3780E-08	5.1446E-16	2.3650E+09	2.3599E+03
I-133	6.1591E-08	5.4370E-17	2.4618E+08	2.2789E+03
I-135	1.0275E-08	2.9257E-18	1.3051E+07	3.8017E+02
I-130	9.0388E-10	4.6345E-19	2.1469E+06	3.3444E+01
Br-82	3.0588E-10	2.8253E-19	2.0749E+06	1.1318E+01

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.5497E+09
Organic I (atoms)	0.0000E+00	7.8855E+07
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 24.0000	Ci	kg	Atoms	Bq
I-131	1.8230E-07	1.4704E-15	6.7597E+09	6.7450E+03
I-132	3.3139E-10	3.2104E-20	1.4647E+05	1.2261E+01
I-133	1.7604E-07	1.5540E-16	7.0366E+08	6.5136E+03
I-135	2.9367E-08	8.3624E-18	3.7303E+07	1.0866E+03
I-130	2.5835E-09	1.3246E-18	6.1363E+06	9.5589E+01
Br-82	8.7427E-10	8.0753E-19	5.9306E+06	3.2348E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	7.2875E+09
Organic I (atoms)	2.2539E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
I-131	2.4608E-07	1.9849E-15	9.1247E+09	9.1049E+03
I-132	4.4404E-10	4.3018E-20	1.9626E+05	1.6430E+01
I-133	2.3764E-07	2.0978E-16	9.4985E+08	8.7925E+03
I-135	3.9642E-08	1.1288E-17	5.0355E+07	1.4668E+03
I-130	3.4874E-09	1.7881E-18	8.2832E+06	1.2903E+02
Br-82	1.1801E-09	1.0901E-18	8.0055E+06	4.3665E+01

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	4.2163E+01	5.1818E-07	3.6286E+18	1.5600E+12
Sr-89	9.4238E+02	3.2438E-05	2.1949E+20	3.4868E+13
Sr-90	1.1193E+02	8.2054E-04	5.4904E+21	4.1413E+12
Sr-91	2.0385E+02	5.6236E-08	3.7215E+17	7.5426E+12
Sr-92	2.7294E+00	2.1715E-10	1.4214E+15	1.0099E+11
Y-90	2.5556E+01	4.6972E-08	3.1430E+17	9.4556E+11
Y-91	1.8001E+01	7.3402E-07	4.8575E+18	6.6604E+11
Y-92	2.6621E+01	2.7666E-09	1.8110E+16	9.8499E+11
Y-93	2.8065E+00	8.4119E-10	5.4471E+15	1.0384E+11
Zr-95	1.6183E+01	7.5329E-07	4.7752E+18	5.9877E+11
Zr-97	5.9641E+00	3.1198E-09	1.9369E+16	2.2067E+11
Nb-95	1.6524E+01	4.2259E-07	2.6788E+18	6.1140E+11
Mo-99	1.7588E+02	3.6672E-07	2.2307E+18	6.5077E+12
Tc-99m	1.6846E+02	3.2037E-08	1.9488E+17	6.2330E+12
Ru-103	2.0479E+02	6.3454E-06	3.7100E+19	7.5773E+12
Ru-105	3.6889E+00	5.4878E-10	3.1474E+15	1.3649E+11
Ru-106	9.5668E+01	2.8595E-05	1.6246E+20	3.5397E+12
Rh-105	1.0383E+02	1.2302E-07	7.0554E+17	3.8418E+12
Sb-127	2.5177E+02	9.4279E-07	4.4706E+18	9.3157E+12
Sb-129	1.8065E+01	3.2125E-09	1.4997E+16	6.6841E+11
Te-127	2.6771E+02	1.0144E-07	4.8102E+17	9.9054E+12
Te-127m	4.0515E+01	4.2952E-06	2.0367E+19	1.4990E+12
Te-129	9.9949E+01	4.7726E-09	2.2280E+16	3.6981E+12
Te-129m	1.2324E+02	4.0908E-06	1.9097E+19	4.5597E+12
Te-131m	2.1150E+02	2.6523E-07	1.2193E+18	7.8254E+12
Te-132	2.8029E+03	9.2325E-06	4.2121E+19	1.0371E+14
I-131	1.9934E+04	1.6079E-04	7.3918E+20	7.3758E+14
I-132	2.9222E+03	2.8310E-07	1.2916E+18	1.0812E+14
I-133	1.9280E+04	1.7020E-05	7.7065E+19	7.1337E+14
I-134	4.6565E-04	1.7455E-14	7.8447E+10	1.7229E+07
I-135	3.2068E+03	9.1313E-07	4.0733E+18	1.1865E+14
Xe-133	3.3613E+03	1.7957E-05	8.1309E+19	1.2437E+14
Xe-135	8.0451E+03	3.1503E-06	1.4053E+19	2.9767E+14
Cs-134	4.5461E+03	3.5137E-03	1.5791E+22	1.6821E+14
Cs-136	1.2443E+03	1.6977E-05	7.5175E+19	4.6038E+13
Cs-137	2.4569E+03	2.8247E-02	1.2416E+23	9.0907E+13
Ba-139	9.9160E-03	6.0622E-13	2.6265E+12	3.6689E+08
Ba-140	1.5792E+03	2.1571E-05	9.2789E+19	5.8430E+13
La-140	5.4011E+02	9.7171E-07	4.1799E+18	1.9984E+13
La-141	5.2577E-01	9.2969E-11	3.9707E+14	1.9454E+10
La-142	3.1503E-04	2.2007E-14	9.3329E+10	1.1656E+07
Ce-141	3.9431E+01	1.3839E-06	5.9105E+18	1.4589E+12
Ce-143	2.2436E+01	3.3785E-08	1.4228E+17	8.3014E+11
Ce-144	3.3665E+01	1.0555E-05	4.4141E+19	1.2456E+12
Pr-143	1.5375E+01	2.2833E-07	9.6155E+17	5.6888E+11
Nd-147	5.9265E+00	7.3258E-08	3.0012E+17	2.1928E+11
Np-239	4.5109E+02	1.9444E-06	4.8994E+18	1.6690E+13
Pu-238	1.3020E-01	7.6055E-06	1.9244E+19	4.8175E+09
Pu-239	1.1813E-02	1.9005E-04	4.7888E+20	4.3709E+08
Pu-240	1.7886E-02	7.8493E-05	1.9696E+20	6.6178E+08
Pu-241	5.0349E+00	4.8877E-05	1.2213E+20	1.8629E+11
Am-241	2.5148E-03	7.3273E-07	1.8309E+18	9.3049E+07
Cm-242	7.4968E-01	2.2619E-07	5.6288E+17	2.7738E+10
Cm-244	7.8642E-02	9.7206E-07	2.3991E+18	2.9098E+09
I-130	2.8210E+02	1.4464E-07	6.7005E+17	1.0438E+13
Kr-83m	9.3338E+00	4.5239E-10	3.2824E+15	3.4535E+11
Xe-131m	1.2581E+01	1.5020E-07	6.9049E+17	4.6551E+11
Xe-133m	2.1735E+02	4.8439E-07	2.1933E+18	8.0419E+12
Xe-135m	5.2775E+02	5.7936E-09	2.5844E+16	1.9527E+13
Cs-138	1.5274E-09	3.6097E-20	1.5752E+05	5.6514E+01
Cs-134m	3.5458E+00	4.3969E-10	1.9760E+15	1.3119E+11
Sb-124	5.5667E+00	3.1824E-07	1.5455E+18	2.0597E+11
Sb-125	5.1809E+01	5.0180E-05	2.4175E+20	1.9169E+12
Sb-126	3.4634E+00	4.1442E-08	1.9807E+17	1.2815E+11
Te-131	4.8410E+01	8.4319E-10	3.8762E+15	1.7912E+12
Te-133	4.6436E-06	4.0894E-17	1.8516E+08	1.7181E+05

Te-134	1.7202E-07	5.1244E-18	2.3030E+07	6.3648E+03
Te-125m	1.1298E+01	6.2732E-07	3.0222E+18	4.1804E+11
Te-133m	2.6786E-05	1.0496E-15	4.7527E+09	9.9108E+05
Ba-137m	2.7236E+03	5.0643E-09	2.2261E+16	1.0077E+14
Pd-109	1.5944E+01	7.4459E-09	4.1138E+16	5.8991E+11
Rh-106	1.9675E+02	5.5274E-11	3.1403E+14	7.2798E+12
Rh-103m	2.0590E+02	6.3297E-09	3.7008E+16	7.6182E+12
Eu-154	1.6499E-01	6.2546E-07	2.4459E+18	6.1048E+09
Eu-155	1.1176E-01	2.4034E-07	9.3378E+17	4.1351E+09
Eu-156	2.5578E+00	4.6419E-08	1.7919E+17	9.4640E+10
Nb-97	3.4228E-01	1.2731E-11	7.9038E+13	1.2664E+10
Nb-95m	1.1639E-01	3.0556E-10	1.9370E+15	4.3065E+09
Pm-147	1.7130E+00	1.8479E-06	7.5703E+18	6.3382E+10
Pm-148	2.4960E+00	1.5192E-08	6.1817E+16	9.2352E+10
Pm-149	4.3928E+00	1.1086E-08	4.4807E+16	1.6253E+11
Pm-151	1.1832E+00	1.6191E-09	6.4572E+15	4.3778E+10
Pm-148m	3.9029E-01	1.8270E-08	7.4340E+16	1.4441E+10
Pr-144	3.4482E+01	4.5633E-10	1.9084E+15	1.2759E+12
Pr-144m	6.3453E-01	3.4988E-12	1.4632E+13	2.3477E+10
Sm-153	4.0993E+00	9.3464E-09	3.6788E+16	1.5167E+11
Y-91m	1.3017E+02	3.1316E-09	2.0724E+16	4.8162E+12
Br-82	9.5465E+01	8.8179E-08	6.4759E+17	3.5322E+12
Br-83	2.5001E+00	1.5826E-10	1.1482E+15	9.2503E+10
Am-242	4.2456E-01	5.2522E-10	1.3070E+15	1.5709E+10
Np-238	1.0269E+01	3.9623E-08	1.0026E+17	3.7994E+11
Pu-243	5.4080E-01	2.0783E-10	5.1505E+14	2.0010E+10

SIRWT Water Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.8275E+19	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.9824E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.4688E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	3.3105E-02	0.0000E+00	0.0000E+00

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 24.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	2.2511E-03	2.7666E-11	1.9373E+14	8.3291E+07
Sr-89	4.5024E-02	1.5498E-09	1.0486E+16	1.6659E+09
Sr-90	5.3462E-03	3.9193E-08	2.6225E+17	1.9781E+08
Sr-91	9.7370E-03	2.6861E-12	1.7776E+13	3.6027E+08
Sr-92	1.3037E-04	1.0372E-14	6.7893E+10	4.8237E+06
Y-90	1.2244E-03	2.2505E-12	1.5059E+13	4.5303E+07
Y-91	8.6191E-04	3.5146E-11	2.3258E+14	3.1891E+07
Y-92	1.2799E-03	1.3302E-13	8.7070E+11	4.7357E+07
Y-93	1.3405E-04	4.0179E-14	2.6018E+11	4.9599E+06
Zr-95	7.7297E-04	3.5981E-11	2.2809E+14	2.8600E+07
Zr-97	2.8487E-04	1.4902E-13	9.2516E+11	1.0540E+07
Nb-95	7.8929E-04	2.0185E-11	1.2795E+14	2.9204E+07
Mo-99	8.4011E-03	1.7516E-11	1.0655E+14	3.1084E+08
Tc-99m	8.0464E-03	1.5302E-12	9.3084E+12	2.9772E+08
Ru-103	9.7818E-03	3.0309E-10	1.7721E+15	3.6193E+08

Ru-105	1.7620E-04	2.6212E-14	1.5034E+11	6.5193E+06
Ru-106	4.5696E-03	1.3659E-09	7.7598E+15	1.6907E+08
Rh-105	4.9595E-03	5.8758E-12	3.3700E+13	1.8350E+08
Sb-127	1.2026E-02	4.5032E-11	2.1354E+14	4.4496E+08
Sb-129	8.6288E-04	1.5344E-13	7.1633E+11	3.1926E+07
Te-127	1.2787E-02	4.8453E-12	2.2976E+13	4.7313E+08
Te-127m	1.9352E-03	2.0516E-10	9.7283E+14	7.1601E+07
Te-129	4.7740E-03	2.2796E-13	1.0642E+12	1.7664E+08
Te-129m	5.8864E-03	1.9540E-10	9.1217E+14	2.1780E+08
Te-131m	1.0102E-02	1.2669E-11	5.8239E+13	3.7378E+08
Te-132	1.3388E-01	4.4099E-10	2.0119E+15	4.9536E+09
Cs-134	2.4272E-01	1.8760E-07	8.4309E+17	8.9806E+09
Cs-136	6.6432E-02	9.0641E-10	4.0136E+15	2.4580E+09
Cs-137	1.3118E-01	1.5081E-06	6.6292E+18	4.8536E+09
Ba-139	4.7364E-07	2.8956E-17	1.2545E+08	1.7525E+04
Ba-140	7.5430E-02	1.0303E-09	4.4320E+15	2.7909E+09
La-140	2.5874E-02	4.6551E-11	2.0024E+14	9.5735E+08
La-141	2.6976E-05	4.7700E-15	2.0373E+10	9.9811E+05
La-142	1.5047E-08	1.0511E-18	4.4579E+06	5.5675E+02
Ce-141	1.8839E-03	6.6116E-11	2.8238E+14	6.9703E+07
Ce-143	1.0716E-03	1.6137E-12	6.7955E+12	3.9649E+07
Ce-144	1.6080E-03	5.0415E-10	2.1084E+15	5.9496E+07
Pr-143	7.3456E-04	1.0909E-11	4.5939E+13	2.7179E+07
Nd-147	2.8308E-04	3.4992E-12	1.4335E+13	1.0474E+07
Np-239	2.1546E-02	9.2875E-11	2.3402E+14	7.9721E+08
Pu-238	6.2191E-06	3.6327E-10	9.1919E+14	2.3011E+05
Pu-239	5.6425E-07	9.0779E-09	2.2874E+16	2.0877E+04
Pu-240	8.5432E-07	3.7492E-09	9.4076E+15	3.1610E+04
Pu-241	2.4049E-04	2.3346E-09	5.8337E+15	8.8982E+06
Am-241	1.2012E-07	3.4999E-11	8.7456E+13	4.4445E+03
Cm-242	3.5808E-05	1.0804E-11	2.6886E+13	1.3249E+06
Cm-244	3.7563E-06	4.6430E-11	1.1459E+14	1.3898E+05
Cs-134m	1.8931E-04	2.3475E-14	1.0550E+11	7.0045E+06
Sb-124	2.6589E-04	1.5201E-11	7.3823E+13	9.8379E+06
Sb-125	2.4747E-03	2.3968E-09	1.1547E+16	9.1562E+07
Sb-126	1.6543E-04	1.9795E-12	9.4608E+12	6.1209E+06
Te-131	2.3123E-03	4.0275E-14	1.8515E+11	8.5556E+07
Te-125m	5.3966E-04	2.9964E-11	1.4436E+14	1.9967E+07
Te-133m	1.2794E-09	5.0136E-20	2.2701E+05	4.7339E+01
Ba-137m	1.4541E-01	2.7039E-13	1.1885E+12	5.3803E+09
Pd-109	7.6154E-04	3.5565E-13	1.9649E+12	2.8177E+07
Rh-106	9.3978E-03	2.6402E-15	1.4999E+10	3.4772E+08
Rh-103m	9.8347E-03	3.0234E-13	1.7677E+12	3.6388E+08
Eu-154	7.8809E-06	2.9875E-11	1.1683E+14	2.9159E+05
Eu-155	5.3382E-06	1.1480E-11	4.4602E+13	1.9751E+05
Eu-156	1.2217E-04	2.2172E-12	8.5591E+12	4.5205E+06
Nb-97	1.6349E-05	6.0809E-16	3.7753E+09	6.0490E+05
Nb-95m	5.5595E-06	1.4595E-14	9.2519E+10	2.0570E+05
Pm-147	8.1823E-05	8.8264E-11	3.6159E+14	3.0274E+06
Pm-148	1.1922E-04	7.2565E-13	2.9527E+12	4.4112E+06
Pm-149	2.0982E-04	5.2953E-13	2.1402E+12	7.7633E+06
Pm-151	5.6514E-05	7.7336E-14	3.0843E+11	2.0910E+06
Pm-148m	1.8642E-05	8.7265E-13	3.5508E+12	6.8975E+05
Pr-144	1.6470E-03	2.1797E-14	9.1154E+10	6.0941E+07
Pr-144m	3.0308E-05	1.6712E-16	6.9890E+08	1.1214E+06
Sm-153	1.9580E-04	4.4643E-13	1.7572E+12	7.2446E+06
Y-91m	6.2174E-03	1.4958E-13	9.8988E+11	2.3005E+08
Am-242	2.0279E-05	2.5087E-14	6.2429E+10	7.5032E+05
Np-238	4.9048E-04	1.8926E-12	4.7889E+12	1.8148E+07
Pu-243	2.5831E-05	9.9268E-15	2.4601E+10	9.5575E+05

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7600E-06

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Bq
I-131	1.0373E+00	8.3669E-09	3.8463E+16	3.8380E+10
I-132	1.3343E-02	1.2927E-12	5.8976E+12	4.9370E+08
I-133	1.0029E+00	8.8531E-10	4.0086E+15	3.7107E+10
I-134	2.1406E-08	8.0241E-19	3.6061E+06	7.9201E+02
I-135	1.6702E-01	4.7560E-11	2.1216E+14	6.1798E+09
Xe-133	1.7602E-01	9.4035E-10	4.2578E+15	6.5126E+09
Xe-135	4.2184E-01	1.6519E-10	7.3687E+14	1.5608E+10
I-130	1.4693E-02	7.5336E-12	3.4899E+13	5.4365E+08
Kr-83m	4.8687E-04	2.3598E-14	1.7122E+11	1.8014E+07
Xe-131m	6.5820E-04	7.8581E-12	3.6124E+13	2.4353E+07
Xe-133m	1.1376E-02	2.5352E-11	1.1479E+14	4.2090E+08
Xe-135m	2.7487E-02	3.0175E-13	1.3461E+12	1.0170E+09
Br-82	4.9722E-03	4.5927E-12	3.3729E+13	1.8397E+08
Br-83	1.3021E-04	8.2426E-15	5.9805E+10	4.8179E+06

SIRWT Air Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.1471E+15	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.1476E+16	0.0000E+00	0.0000E+00
Organic I (atoms)	1.2828E+15	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 24.0000	Ci	kg	Atoms	Bq
Rb-86	2.2511E-03	2.7666E-11	1.9373E+14	8.3291E+07
Sr-89	4.5024E-02	1.5498E-09	1.0486E+16	1.6659E+09
Sr-90	5.3462E-03	3.9193E-08	2.6225E+17	1.9781E+08
Sr-91	9.7370E-03	2.6861E-12	1.7776E+13	3.6027E+08
Sr-92	1.3037E-04	1.0372E-14	6.7893E+10	4.8237E+06
Y-90	1.2244E-03	2.2505E-12	1.5059E+13	4.5303E+07
Y-91	8.6191E-04	3.5146E-11	2.3258E+14	3.1891E+07
Y-92	1.2799E-03	1.3302E-13	8.7070E+11	4.7357E+07
Y-93	1.3405E-04	4.0179E-14	2.6018E+11	4.9599E+06
Zr-95	7.7297E-04	3.5981E-11	2.2809E+14	2.8600E+07
Zr-97	2.8487E-04	1.4902E-13	9.2516E+11	1.0540E+07
Nb-95	7.8929E-04	2.0185E-11	1.2795E+14	2.9204E+07
Mo-99	8.4011E-03	1.7516E-11	1.0655E+14	3.1084E+08
Tc-99m	8.0464E-03	1.5302E-12	9.3084E+12	2.9772E+08
Ru-103	9.7818E-03	3.0309E-10	1.7721E+15	3.6193E+08
Ru-105	1.7620E-04	2.6212E-14	1.5034E+11	6.5193E+06
Ru-106	4.5696E-03	1.3659E-09	7.7598E+15	1.6907E+08
Rh-105	4.9595E-03	5.8758E-12	3.3700E+13	1.8350E+08
Sb-127	1.2026E-02	4.5032E-11	2.1354E+14	4.4496E+08
Sb-129	8.6288E-04	1.5344E-13	7.1633E+11	3.1926E+07
Te-127	1.2787E-02	4.8453E-12	2.2976E+13	4.7313E+08
Te-127m	1.9352E-03	2.0516E-10	9.7283E+14	7.1601E+07
Te-129	4.7740E-03	2.2796E-13	1.0642E+12	1.7664E+08
Te-129m	5.8864E-03	1.9540E-10	9.1217E+14	2.1780E+08
Te-131m	1.0102E-02	1.2669E-11	5.8239E+13	3.7378E+08
Te-132	1.3388E-01	4.4099E-10	2.0119E+15	4.9536E+09
Cs-134	2.4272E-01	1.8760E-07	8.4309E+17	8.9806E+09
Cs-136	6.6432E-02	9.0641E-10	4.0136E+15	2.4580E+09
Cs-137	1.3118E-01	1.5081E-06	6.6292E+18	4.8536E+09
Ba-139	4.7364E-07	2.8956E-17	1.2545E+08	1.7525E+04
Ba-140	7.5430E-02	1.0303E-09	4.4320E+15	2.7909E+09
La-140	2.5874E-02	4.6551E-11	2.0024E+14	9.5735E+08
La-141	2.6976E-05	4.7700E-15	2.0373E+10	9.9811E+05

La-142	1.5047E-08	1.0511E-18	4.4579E+06	5.5675E+02
Ce-141	1.8839E-03	6.6116E-11	2.8238E+14	6.9703E+07
Ce-143	1.0716E-03	1.6137E-12	6.7955E+12	3.9649E+07
Ce-144	1.6080E-03	5.0415E-10	2.1084E+15	5.9496E+07
Pr-143	7.3456E-04	1.0909E-11	4.5939E+13	2.7179E+07
Nd-147	2.8308E-04	3.4992E-12	1.4335E+13	1.0474E+07
Np-239	2.1546E-02	9.2875E-11	2.3402E+14	7.9721E+08
Pu-238	6.2191E-06	3.6327E-10	9.1919E+14	2.3011E+05
Pu-239	5.6425E-07	9.0779E-09	2.2874E+16	2.0877E+04
Pu-240	8.5432E-07	3.7492E-09	9.4076E+15	3.1610E+04
Pu-241	2.4049E-04	2.3346E-09	5.8337E+15	8.8982E+06
Am-241	1.2012E-07	3.4999E-11	8.7456E+13	4.4445E+03
Cm-242	3.5808E-05	1.0804E-11	2.6886E+13	1.3249E+06
Cm-244	3.7563E-06	4.6430E-11	1.1459E+14	1.3898E+05
Cs-134m	1.8931E-04	2.3475E-14	1.0550E+11	7.0045E+06
Sb-124	2.6589E-04	1.5201E-11	7.3823E+13	9.8379E+06
Sb-125	2.4747E-03	2.3968E-09	1.1547E+16	9.1562E+07
Sb-126	1.6543E-04	1.9795E-12	9.4608E+12	6.1209E+06
Te-131	2.3123E-03	4.0275E-14	1.8515E+11	8.5556E+07
Te-125m	5.3966E-04	2.9964E-11	1.4436E+14	1.9967E+07
Te-133m	1.2794E-09	5.0136E-20	2.2701E+05	4.7339E+01
Ba-137m	1.4541E-01	2.7039E-13	1.1885E+12	5.3803E+09
Pd-109	7.6154E-04	3.5565E-13	1.9649E+12	2.8177E+07
Rh-106	9.3978E-03	2.6402E-15	1.4999E+10	3.4772E+08
Rh-103m	9.8347E-03	3.0234E-13	1.7677E+12	3.6388E+08
Eu-154	7.8809E-06	2.9875E-11	1.1683E+14	2.9159E+05
Eu-155	5.3382E-06	1.1480E-11	4.4602E+13	1.9751E+05
Eu-156	1.2217E-04	2.2172E-12	8.5591E+12	4.5205E+06
Nb-97	1.6349E-05	6.0809E-16	3.7753E+09	6.0490E+05
Nb-95m	5.5595E-06	1.4595E-14	9.2519E+10	2.0570E+05
Pm-147	8.1823E-05	8.8264E-11	3.6159E+14	3.0274E+06
Pm-148	1.1922E-04	7.2565E-13	2.9527E+12	4.4112E+06
Pm-149	2.0982E-04	5.2953E-13	2.1402E+12	7.7633E+06
Pm-151	5.6514E-05	7.7336E-14	3.0843E+11	2.0910E+06
Pm-148m	1.8642E-05	8.7265E-13	3.5508E+12	6.8975E+05
Pr-144	1.6470E-03	2.1797E-14	9.1154E+10	6.0941E+07
Pr-144m	3.0308E-05	1.6712E-16	6.9890E+08	1.1214E+06
Sm-153	1.9580E-04	4.4643E-13	1.7572E+12	7.2446E+06
Y-91m	6.2174E-03	1.4958E-13	9.8988E+11	2.3005E+08
Am-242	2.0279E-05	2.5087E-14	6.2429E+10	7.5032E+05
Np-238	4.9048E-04	1.8926E-12	4.7889E+12	1.8148E+07
Pu-243	2.5831E-05	9.9268E-15	2.4601E+10	9.5575E+05

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7600E-06

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 24.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 72.0000

EAB Doses:

Time (h) = 72.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	6.0925E-08	1.1685E-04	1.0920E-07	3.6374E-06
Accumulated dose (rem)	3.0560E-07	2.0911E-04	4.8449E-07	6.7689E-06

LPZ Doses:

Time (h) = 72.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	9.8000E-10	1.8795E-06	1.7565E-09	5.8509E-08
Accumulated dose (rem)	2.7528E-08	1.1017E-05	4.1974E-08	3.7165E-07

Control Room Doses:

Time (h) = 72.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.9461E-10	1.5526E-05	2.4296E-08	4.7561E-07
Accumulated dose (rem)	6.8888E-09	6.7990E-05	3.7333E-07	2.1247E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Bq
Rb-86	5.2516E+04	6.4542E-04	4.5195E+21	1.9431E+15
Sr-89	1.3839E+06	4.7634E-02	3.2232E+23	5.1204E+16
Sr-90	1.6896E+05	1.2386E+00	8.2880E+24	6.2515E+15
Sr-91	9.2731E+03	2.5581E-06	1.6929E+19	3.4311E+14
Sr-92	1.9190E-02	1.5267E-12	9.9936E+12	7.1003E+08
Y-90	9.1338E+04	1.6788E-04	1.1233E+21	3.3795E+15
Y-91	2.8535E+04	1.1635E-03	7.7000E+21	1.0558E+15
Y-92	4.3493E+00	4.5200E-10	2.9587E+15	1.6093E+11
Y-93	1.5719E+02	4.7115E-08	3.0509E+17	5.8161E+12
Zr-95	2.3908E+04	1.1129E-03	7.0548E+21	8.8461E+14
Zr-97	1.2573E+03	6.5771E-07	4.0833E+18	4.6521E+13
Nb-95	2.4918E+04	6.3723E-04	4.0394E+21	9.2195E+14
Mo-99	1.6040E+05	3.3443E-04	2.0343E+21	5.9347E+15
Tc-99m	1.5478E+05	2.9436E-05	1.7906E+20	5.7269E+15
Ru-103	2.9846E+05	9.2477E-03	5.4069E+22	1.1043E+16
Ru-105	3.1004E+00	4.6123E-10	2.6453E+15	1.1471E+11
Ru-106	1.4389E+05	4.3009E-02	2.4435E+23	5.3240E+15
Rh-105	6.1489E+04	7.2850E-05	4.1782E+20	2.2751E+15
Sb-127	2.6518E+05	9.9298E-04	4.7085E+21	9.8115E+15
Sb-129	1.2330E+01	2.1926E-09	1.0236E+16	4.5621E+11
Te-127	3.0288E+05	1.1477E-04	5.4420E+20	1.1206E+16
Te-127m	6.1103E+04	6.4779E-03	3.0717E+22	2.2608E+15
Te-129	1.1694E+05	5.5841E-06	2.6069E+19	4.3269E+15
Te-129m	1.7857E+05	5.9275E-03	2.7671E+22	6.6070E+15
Te-131m	1.0533E+05	1.3209E-04	6.0724E+20	3.8973E+15
Te-132	2.7653E+06	9.1084E-03	4.1555E+22	1.0231E+17
I-131	2.3190E+07	1.8706E-01	8.5991E+23	8.5804E+17
I-132	2.8576E+06	2.7685E-04	1.2630E+21	1.0573E+17
I-133	5.3814E+06	4.7505E-03	2.1510E+22	1.9911E+17
I-135	2.8838E+04	8.2115E-06	3.6630E+19	1.0670E+15
Xe-133	6.5069E+06	3.4762E-02	1.5740E+23	2.4075E+17
Xe-135	5.1094E+05	2.0008E-04	8.9251E+20	1.8905E+16
Cs-134	6.0878E+06	4.7053E+00	2.1146E+25	2.2525E+17
Cs-136	1.5017E+06	2.0489E-02	9.0727E+22	5.5562E+16
Cs-137	3.2958E+06	3.7891E+01	1.6656E+26	1.2195E+17
Ba-139	4.9200E-10	3.0079E-20	1.3032E+05	1.8204E+01
Ba-140	2.1384E+06	2.9209E-02	1.2564E+23	7.9119E+16
La-140	1.6163E+06	2.9079E-03	1.2508E+22	5.9803E+16
La-141	1.4975E-01	2.6480E-11	1.1309E+14	5.5408E+09
Ce-141	5.7029E+04	2.0015E-03	8.5484E+21	2.1101E+15
Ce-143	1.2360E+04	1.8612E-05	7.8382E+19	4.5733E+14
Ce-144	5.0578E+04	1.5858E-02	6.6317E+22	1.8714E+15
Pr-143	2.3005E+04	3.4164E-04	1.4387E+21	8.5120E+14
Nd-147	7.8862E+03	9.7482E-05	3.9936E+20	2.9179E+14
Np-239	3.7802E+05	1.6294E-03	4.1057E+21	1.3987E+16
Pu-238	1.9711E+02	1.1513E-02	2.9132E+22	7.2929E+12
Pu-239	1.7916E+01	2.8824E-01	7.2628E+23	6.6289E+11
Pu-240	2.7003E+01	1.1850E-01	2.9735E+23	9.9912E+11
Pu-241	7.5994E+03	7.3772E-02	1.8434E+23	2.8118E+14
Am-241	3.8634E+00	1.1256E-03	2.8127E+21	1.4294E+11
Cm-242	1.1241E+03	3.3917E-04	8.4402E+20	4.1592E+13
Cm-244	1.1870E+02	1.4673E-03	3.6213E+21	4.3921E+12
I-130	2.6378E+04	1.3525E-05	6.2653E+19	9.7600E+14
Kr-83m	1.3277E-02	6.4352E-13	4.6691E+12	4.9125E+08
Xe-131m	4.6165E+04	5.5116E-04	2.5337E+21	1.7081E+15
Xe-133m	3.2450E+05	7.2320E-04	3.2746E+21	1.2007E+16

Xe-135m	4.7459E+03	5.2100E-08	2.3241E+17	1.7560E+14
Cs-134m	4.9519E-02	6.1405E-12	2.7596E+13	1.8322E+09
Sb-124	8.2129E+03	4.6952E-04	2.2802E+21	3.0388E+14
Sb-125	7.8111E+04	7.5654E-02	3.6448E+23	2.8901E+15
Sb-126	4.6758E+03	5.5948E-05	2.6740E+20	1.7300E+14
Te-131	2.4110E+04	4.1993E-07	1.9305E+18	8.9206E+14
Te-125m	1.7075E+04	9.4809E-04	4.5676E+21	6.3179E+14
Ba-137m	3.6535E+06	6.7934E-06	2.9862E+19	1.3518E+17
Pd-109	2.0199E+03	9.4335E-07	5.2119E+18	7.4738E+13
Rh-106	2.9593E+05	8.3136E-08	4.7232E+17	1.0949E+16
Rh-103m	3.0007E+05	9.2248E-06	5.3935E+19	1.1103E+16
Eu-154	2.4899E+02	9.4388E-04	3.6910E+21	9.2126E+12
Eu-155	1.6860E+02	3.6257E-04	1.4087E+21	6.2381E+12
Eu-156	3.5248E+03	6.3968E-05	2.4694E+20	1.3042E+14
Nb-97	7.2154E+01	2.6838E-09	1.6662E+16	2.6697E+12
Nb-95m	1.7360E+02	4.5575E-07	2.8891E+18	6.4233E+12
Pm-147	2.5947E+03	2.7989E-03	1.1466E+22	9.6002E+13
Pm-148	2.9170E+03	1.7755E-05	7.2243E+19	1.0793E+14
Pm-149	3.5434E+03	8.9426E-06	3.6143E+19	1.3111E+14
Pm-151	5.5356E+02	7.5752E-07	3.0211E+18	2.0482E+13
Pm-148m	5.6978E+02	2.6672E-05	1.0853E+20	2.1082E+13
Pr-144	5.1806E+04	6.8559E-07	2.8672E+18	1.9168E+15
Pr-144m	9.5331E+02	5.2566E-09	2.1983E+16	3.5272E+13
Sm-153	3.0353E+03	6.9205E-06	2.7239E+19	1.1231E+14
Y-91m	5.9212E+03	1.4245E-07	9.4272E+17	2.1909E+14
Br-82	5.1333E+04	4.7415E-05	3.4822E+20	1.8993E+15
Br-83	3.1049E-03	1.9654E-13	1.4260E+12	1.1488E+08
Am-242	8.0330E+01	9.9376E-08	2.4730E+17	2.9722E+12
Np-238	8.0542E+03	3.1078E-05	7.8638E+19	2.9801E+14
Pu-243	9.9173E-01	3.8112E-10	9.4450E+14	3.6694E+10

Containment Sump Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.6410E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.5663E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	2.6494E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4610E+01	0.0000E+00	0.0000E+00

Time (h) = 72.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	1.0747E-03	8.6684E-12	3.9849E+13	3.9763E+07
I-132	4.6128E-07	4.4689E-17	2.0388E+08	1.7067E+04
I-133	2.4929E-04	2.2006E-13	9.9642E+11	9.2236E+06
I-135	1.3393E-06	3.8137E-16	1.7012E+09	4.9555E+04
Xe-133	3.0428E-04	1.6256E-12	7.3605E+12	1.1258E+07
Xe-135	2.3957E-05	9.3813E-15	4.1849E+10	8.8642E+05
I-130	1.2251E-06	6.2815E-16	2.9099E+09	4.5329E+04
Xe-131m	2.1507E-06	2.5676E-14	1.1804E+11	7.9575E+04
Xe-133m	1.5149E-05	3.3762E-14	1.5287E+11	5.6052E+05
Br-82	2.3841E-06	2.2021E-15	1.6173E+10	8.8213E+04

Environment Transport Group Inventory:

Time (h) = 72.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	3.3216E+09	4.6134E+07	7.6733E+12
Elemental I (atoms)	1.7206E+10	2.3897E+08	3.9641E+13
Organic I (atoms)	5.3213E+08	7.3907E+06	1.2260E+12
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	2.6251E-07	2.1174E-15	9.7339E+09	9.7127E+03
I-133	6.0868E-08	5.3732E-17	2.4329E+08	2.2521E+03
I-135	3.2727E-10	9.3190E-20	4.1571E+05	1.2109E+01
I-130	2.9936E-10	1.5349E-19	7.1104E+05	1.1076E+01
Br-82	5.8257E-10	5.3810E-19	3.9518E+06	2.1555E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	9.6828E+09
Organic I (atoms)	2.9947E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	5.1694E-10	4.1698E-18	1.9169E+07	1.9127E+01
I-133	1.1993E-10	1.0587E-19	4.7939E+05	4.4376E+00
Xe-133	8.7819E-10	4.6917E-18	2.1243E+07	3.2493E+01
Xe-135	6.7665E-11	2.6497E-20	1.1820E+05	2.5036E+00

Xe-131m	8.9485E-12	1.0683E-19	4.9112E+05	3.3109E-01
Xe-133m	4.7833E-11	1.0660E-19	4.8269E+05	1.7698E+00

Control Room Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	2.2337E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9069E+07	0.0000E+00	0.0000E+00
Organic I (atoms)	5.8978E+05	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	9.2560E-08	7.4660E-16	3.4322E+09	3.4247E+03
I-133	2.1462E-08	1.8946E-17	8.5785E+07	7.9409E+02
I-135	1.1540E-10	3.2859E-20	1.4658E+05	4.2696E+00
I-130	1.0555E-10	5.4121E-20	2.5071E+05	3.9055E+00
Br-82	2.0541E-10	1.8973E-19	1.3934E+06	7.6003E+00

Time (h) = 72.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.4142E+09
Organic I (atoms)	0.0000E+00	1.0559E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	2.6251E-07	2.1174E-15	9.7339E+09	9.7127E+03
I-133	6.0868E-08	5.3732E-17	2.4329E+08	2.2521E+03
I-135	3.2727E-10	9.3190E-20	4.1571E+05	1.2109E+01
I-130	2.9936E-10	1.5349E-19	7.1104E+05	1.1076E+01
Br-82	5.8257E-10	5.3810E-19	3.9518E+06	2.1555E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	9.6828E+09
Organic I (atoms)	2.9947E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	3.5507E-07	2.8640E-15	1.3166E+10	1.3137E+04
I-133	8.2330E-08	7.2678E-17	3.2908E+08	3.0462E+03
I-135	4.4266E-10	1.2605E-19	5.6228E+05	1.6379E+01
I-130	4.0491E-10	2.0761E-19	9.6175E+05	1.4982E+01
Br-82	7.8798E-10	7.2783E-19	5.3453E+06	2.9155E+01

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Bq
Rb-86	5.6702E+01	6.9686E-07	4.8797E+18	2.0980E+12
Sr-89	1.3795E+03	4.7485E-05	3.2130E+20	5.1043E+13
Sr-90	1.6840E+02	1.2345E-03	8.2607E+21	6.2308E+12
Sr-91	9.2425E+00	2.5497E-09	1.6873E+16	3.4197E+11
Sr-92	1.9127E-05	1.5217E-15	9.9606E+09	7.0768E+05
Y-90	9.1109E+01	1.6746E-07	1.1205E+18	3.3710E+12
Y-91	2.8507E+01	1.1624E-06	7.6926E+18	1.0548E+12
Y-92	4.3575E-03	4.5285E-13	2.9643E+12	1.6123E+08
Y-93	1.5667E-01	4.6960E-11	3.0408E+14	5.7969E+09
Zr-95	2.3829E+01	1.1092E-06	7.0315E+18	8.8169E+11
Zr-97	1.2532E+00	6.5554E-10	4.0699E+15	4.6368E+10
Nb-95	2.4835E+01	6.3512E-07	4.0261E+18	9.1891E+11
Mo-99	1.5987E+02	3.3333E-07	2.0276E+18	5.9151E+12
Tc-99m	1.5427E+02	2.9339E-08	1.7847E+17	5.7080E+12
Ru-103	2.9748E+02	9.2172E-06	5.3890E+19	1.1007E+13
Ru-105	3.0902E-03	4.5971E-13	2.6366E+12	1.1434E+08
Ru-106	1.4342E+02	4.2867E-05	2.4354E+20	5.3064E+12
Rh-105	6.1286E+01	7.2609E-08	4.1644E+17	2.2676E+12
Sb-127	2.6430E+02	9.8970E-07	4.6930E+18	9.7791E+12
Sb-129	1.2289E-02	2.1854E-12	1.0202E+13	4.5471E+08
Te-127	3.0188E+02	1.1439E-07	5.4240E+17	1.1169E+13
Te-127m	6.0901E+01	6.4565E-06	3.0616E+19	2.2534E+12
Te-129	1.1656E+02	5.5657E-09	2.5982E+16	4.3127E+12
Te-129m	1.7798E+02	5.9079E-06	2.7580E+19	6.5851E+12
Te-131m	1.0498E+02	1.3166E-07	6.0524E+17	3.8844E+12
Te-132	2.7561E+03	9.0784E-06	4.1418E+19	1.0198E+14
I-131	2.4550E+04	1.9803E-04	9.1034E+20	9.0837E+14
I-132	2.8482E+03	2.7593E-07	1.2589E+18	1.0538E+14
I-133	5.6934E+03	5.0259E-06	2.2757E+19	2.1066E+14
I-135	3.0538E+01	8.6956E-09	3.8790E+16	1.1299E+12
Xe-133	6.9107E+03	3.6920E-05	1.6717E+20	2.5570E+14
Xe-135	5.4317E+02	2.1270E-07	9.4882E+17	2.0097E+13
Cs-134	6.5731E+03	5.0803E-03	2.2832E+22	2.4320E+14
Cs-136	1.6214E+03	2.2122E-05	9.7958E+19	5.9990E+13
Cs-137	3.5585E+03	4.0911E-02	1.7983E+23	1.3167E+14
Ba-140	2.1313E+03	2.9113E-05	1.2523E+20	7.8858E+13
La-140	1.6121E+03	2.9003E-06	1.2476E+19	5.9646E+13
La-141	1.6075E-04	2.8425E-14	1.2140E+11	5.9478E+06
Ce-141	5.6853E+01	1.9953E-06	8.5220E+18	2.1036E+12
Ce-143	1.2319E+01	1.8550E-08	7.8119E+16	4.5579E+11
Ce-144	5.0411E+01	1.5805E-05	6.6098E+19	1.8652E+12
Pr-143	2.2934E+01	3.4058E-07	1.4343E+18	8.4857E+11
Nd-147	7.8601E+00	9.7161E-08	3.9804E+17	2.9083E+11
Np-239	3.7677E+02	1.6241E-06	4.0922E+18	1.3940E+13
Pu-238	1.9645E-01	1.1475E-05	2.9036E+19	7.2688E+09
Pu-239	1.7857E-02	2.8729E-04	7.2388E+20	6.6070E+08
Pu-240	2.6914E-02	1.1811E-04	2.9637E+20	9.9582E+08
Pu-241	7.5743E+00	7.3528E-05	1.8373E+20	2.8025E+11
Am-241	3.8507E-03	1.1219E-06	2.8035E+18	1.4247E+08
Cm-242	1.1204E+00	3.3805E-07	8.4123E+17	4.1455E+10
Cm-244	1.1831E-01	1.4624E-06	3.6093E+18	4.3776E+09
I-130	2.7933E+01	1.4322E-08	6.6347E+16	1.0335E+12
Kr-83m	1.4060E-05	6.8147E-16	4.9445E+09	5.2023E+05
Xe-131m	4.8961E+01	5.8453E-07	2.6871E+18	1.8115E+12
Xe-133m	3.4440E+02	7.6753E-07	3.4753E+18	1.2743E+13

Xe-135m	5.0257E+00	5.5171E-11	2.4611E+14	1.8595E+11
Cs-134m	5.3466E-05	6.6299E-15	2.9796E+10	1.9782E+06
Sb-124	8.1858E+00	4.6797E-07	2.2727E+18	3.0287E+11
Sb-125	7.7853E+01	7.5404E-05	3.6328E+20	2.8806E+12
Sb-126	4.6604E+00	5.5764E-08	2.6652E+17	1.7243E+11
Te-131	2.4030E+01	4.1855E-10	1.9241E+15	8.8912E+11
Te-125m	1.7019E+01	9.4496E-07	4.5525E+18	6.2971E+11
Ba-137m	3.9447E+03	7.3349E-09	3.2242E+16	1.4595E+14
Pd-109	2.0133E+00	9.4023E-10	5.1947E+15	7.4491E+10
Rh-106	2.9495E+02	8.2861E-11	4.7076E+14	1.0913E+13
Rh-103m	2.9908E+02	9.1944E-09	5.3757E+16	1.1066E+13
Eu-154	2.4817E-01	9.4076E-07	3.6788E+18	9.1822E+09
Eu-155	1.6804E-01	3.6138E-07	1.4040E+18	6.2175E+09
Eu-156	3.5132E+00	6.3757E-08	2.4612E+17	1.2999E+11
Nb-97	7.1916E-02	2.6749E-12	1.6607E+13	2.6609E+09
Nb-95m	1.7303E-01	4.5425E-10	2.8795E+15	6.4021E+09
Pm-147	2.5861E+00	2.7897E-06	1.1428E+19	9.5685E+10
Pm-148	2.9074E+00	1.7696E-08	7.2005E+16	1.0757E+11
Pm-149	3.5317E+00	8.9131E-09	3.6024E+16	1.3067E+11
Pm-151	5.5174E-01	7.5501E-10	3.0111E+15	2.0414E+10
Pm-148m	5.6790E-01	2.6584E-08	1.0817E+17	2.1012E+10
Pr-144	5.1635E+01	6.8333E-10	2.8577E+15	1.9105E+12
Pr-144m	9.5016E-01	5.2392E-12	2.1911E+13	3.5156E+10
Sm-153	3.0253E+00	6.8976E-09	2.7149E+16	1.1193E+11
Y-91m	5.9017E+00	1.4198E-10	9.3961E+14	2.1836E+11
Br-82	5.4360E+01	5.0210E-08	3.6875E+17	2.0113E+12
Br-83	3.2880E-06	2.0813E-16	1.5101E+09	1.2165E+05
Am-242	8.0065E-02	9.9048E-11	2.4648E+14	2.9624E+09
Np-238	8.0276E+00	3.0976E-08	7.8378E+16	2.9702E+11
Pu-243	9.8845E-04	3.7986E-13	9.4138E+11	3.6573E+07

SIRWT Water Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.7428E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.0679E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.8045E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	4.8001E-02	0.0000E+00	0.0000E+00

Time (h) = 72.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 72.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 72.0000	Ci	kg	Atoms	Bq
Rb-86	5.3998E-03	6.6363E-11	4.6471E+14	1.9979E+08
Sr-89	1.2311E-01	4.2374E-09	2.8672E+16	4.5550E+09
Sr-90	1.5026E-02	1.1015E-07	7.3706E+17	5.5595E+08
Sr-91	8.2466E-04	2.2749E-13	1.5055E+12	3.0513E+07
Sr-92	1.7066E-09	1.3577E-19	8.8874E+05	6.3143E+01
Y-90	8.1335E-03	1.4949E-11	1.0003E+14	3.0094E+08
Y-91	2.5474E-03	1.0387E-10	6.8742E+14	9.4254E+07
Y-92	3.9012E-07	4.0543E-17	2.6538E+08	1.4434E+04
Y-93	1.3979E-05	4.1900E-15	2.7132E+10	5.1723E+05
Zr-95	2.1262E-03	9.8971E-11	6.2738E+14	7.8669E+07
Zr-97	1.1182E-04	5.8491E-14	3.6313E+11	4.1372E+06

Nb-95	2.2159E-03	5.6669E-11	3.5923E+14	8.1990E+07
Mo-99	1.4264E-02	2.9741E-11	1.8091E+14	5.2778E+08
Tc-99m	1.3765E-02	2.6177E-12	1.5924E+13	5.0930E+08
Ru-103	2.6542E-02	8.2240E-10	4.8084E+15	9.8206E+08
Ru-105	2.7572E-07	4.1017E-17	2.3525E+08	1.0202E+04
Ru-106	1.2796E-02	3.8248E-09	2.1730E+16	4.7346E+08
Rh-105	5.4683E-03	6.4786E-12	3.7157E+13	2.0233E+08
Sb-127	2.3582E-02	8.8306E-11	4.1873E+14	8.7254E+08
Sb-129	1.0965E-06	1.9499E-16	9.1029E+08	4.0571E+04
Te-127	2.6935E-02	1.0206E-11	4.8396E+13	9.9660E+08
Te-127m	5.4339E-03	5.7608E-10	2.7317E+15	2.0106E+08
Te-129	1.0400E-02	4.9660E-13	2.3183E+12	3.8480E+08
Te-129m	1.5880E-02	5.2713E-10	2.4608E+15	5.8756E+08
Te-131m	9.3672E-03	1.1747E-11	5.4002E+13	3.4659E+08
Te-132	2.4592E-01	8.1002E-10	3.6955E+15	9.0989E+09
Cs-134	6.2596E-01	4.8381E-07	2.1743E+18	2.3161E+10
Cs-136	1.5441E-01	2.1067E-09	9.3287E+15	5.7130E+09
Cs-137	3.3888E-01	3.8960E-06	1.7126E+19	1.2539E+10
Ba-140	1.9017E-01	2.5976E-09	1.1174E+16	7.0361E+09
La-140	1.4390E-01	2.5889E-10	1.1136E+15	5.3243E+09
La-141	1.5053E-08	2.6617E-18	1.1368E+07	5.5695E+02
Ce-141	5.0736E-03	1.7806E-10	7.6050E+14	1.8772E+08
Ce-143	1.0991E-03	1.6551E-12	6.9699E+12	4.0667E+07
Ce-144	4.4979E-03	1.4102E-09	5.8976E+15	1.6642E+08
Pr-143	2.0466E-03	3.0393E-11	1.2799E+14	7.5725E+07
Nd-147	7.0132E-04	8.6692E-12	3.5515E+13	2.5949E+07
Np-239	3.3617E-02	1.4491E-10	3.6513E+14	1.2438E+09
Pu-238	1.7529E-05	1.0239E-09	2.5908E+15	6.4856E+05
Pu-239	1.5933E-06	2.5633E-08	6.4589E+16	5.8951E+04
Pu-240	2.4014E-06	1.0539E-08	2.6444E+16	8.8852E+04
Pu-241	6.7582E-04	6.5605E-09	1.6394E+16	2.5005E+07
Am-241	3.4358E-07	1.0011E-10	2.5015E+14	1.2712E+04
Cm-242	9.9968E-05	3.0163E-11	7.5059E+13	3.6988E+06
Cm-244	1.0556E-05	1.3048E-10	3.2204E+14	3.9059E+05
Cs-134m	5.0916E-09	6.3138E-19	2.8375E+06	1.8839E+02
Sb-124	7.3038E-04	4.1755E-11	2.0278E+14	2.7024E+07
Sb-125	6.9465E-03	6.7280E-09	3.2413E+16	2.5702E+08
Sb-126	4.1582E-04	4.9755E-12	2.3780E+13	1.5385E+07
Te-131	2.1441E-03	3.7345E-14	1.7168E+11	7.9331E+07
Te-125m	1.5185E-03	8.4314E-11	4.0620E+14	5.6186E+07
Ba-137m	3.7566E-01	6.9851E-13	3.0705E+12	1.3899E+10
Pd-109	1.7963E-04	8.3892E-14	4.6350E+11	6.6465E+06
Rh-106	2.6317E-02	7.3933E-15	4.2003E+10	9.7373E+08
Rh-103m	2.6686E-02	8.2037E-13	4.7965E+12	9.8737E+08
Eu-154	2.2143E-05	8.3940E-11	3.2824E+14	8.1929E+05
Eu-155	1.4994E-05	3.2244E-11	1.2528E+14	5.5476E+05
Eu-156	3.1347E-04	5.6887E-12	2.1960E+13	1.1598E+07
Nb-97	6.4167E-06	2.3867E-16	1.4818E+09	2.3742E+05
Nb-95m	1.5439E-05	4.0530E-14	2.5693E+11	5.7123E+05
Pm-147	2.3074E-04	2.4891E-10	1.0197E+15	8.5375E+06
Pm-148	2.5941E-04	1.5789E-12	6.4246E+12	9.5981E+06
Pm-149	3.1512E-04	7.9527E-13	3.2142E+12	1.1659E+07
Pm-151	4.9229E-05	6.7366E-14	2.6867E+11	1.8215E+06
Pm-148m	5.0671E-05	2.3720E-12	9.6516E+12	1.8748E+06
Pr-144	4.6072E-03	6.0970E-14	2.5498E+11	1.7046E+08
Pr-144m	8.4778E-05	4.6747E-16	1.9550E+09	3.1368E+06
Sm-153	2.6993E-04	6.1544E-13	2.4224E+12	9.9874E+06
Y-91m	5.2658E-04	1.2669E-14	8.3837E+10	1.9483E+07
Am-242	7.1438E-06	8.8376E-15	2.1992E+10	2.6432E+05
Np-238	7.1626E-04	2.7638E-12	6.9933E+12	2.6502E+07
Pu-243	8.8195E-08	3.3893E-17	8.3995E+07	3.2632E+03

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway
Time (h) = 72.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.5593E-06

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Bq
I-131	2.2994E+00	1.8548E-08	8.5265E+16	8.5079E+10
I-132	1.3636E-02	1.3210E-12	6.0267E+12	5.0452E+08
I-133	5.3349E-01	4.7094E-10	2.1324E+15	1.9739E+10
I-135	2.8636E-03	8.1541E-13	3.6374E+12	1.0595E+08
Xe-133	6.4918E-01	3.4682E-09	1.5704E+16	2.4020E+10
Xe-135	5.1065E-02	1.9996E-11	8.9201E+13	1.8894E+09
I-130	2.6194E-03	1.3431E-12	6.2216E+12	9.6918E+07
Kr-83m	1.3185E-09	6.3905E-20	4.6367E+05	4.8784E+01
Xe-131m	4.5936E-03	5.4842E-11	2.5211E+14	1.6996E+08
Xe-133m	3.2337E-02	7.2067E-11	3.2632E+14	1.1965E+09
Xe-135m	4.7127E-04	5.1736E-15	2.3079E+10	1.7437E+07
Br-82	5.0975E-03	4.7084E-12	3.4579E+13	1.8861E+08
Br-83	3.0832E-10	1.9517E-20	1.4161E+05	1.1408E+01

SIRWT Air Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.6371E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.4824E+16	0.0000E+00	0.0000E+00
Organic I (atoms)	2.6234E+15	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 72.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 72.0000	Ci	kg	Atoms	Bq
Rb-86	5.3998E-03	6.6363E-11	4.6471E+14	1.9979E+08
Sr-89	1.2311E-01	4.2374E-09	2.8672E+16	4.5550E+09
Sr-90	1.5026E-02	1.1015E-07	7.3706E+17	5.5595E+08
Sr-91	8.2466E-04	2.2749E-13	1.5055E+12	3.0513E+07
Sr-92	1.7066E-09	1.3577E-19	8.8874E+05	6.3143E+01
Y-90	8.1335E-03	1.4949E-11	1.0003E+14	3.0094E+08
Y-91	2.5474E-03	1.0387E-10	6.8742E+14	9.4254E+07
Y-92	3.9012E-07	4.0543E-17	2.6538E+08	1.4434E+04
Y-93	1.3979E-05	4.1900E-15	2.7132E+10	5.1723E+05
Zr-95	2.1262E-03	9.8971E-11	6.2738E+14	7.8669E+07
Zr-97	1.1182E-04	5.8491E-14	3.6313E+11	4.1372E+06
Nb-95	2.2159E-03	5.6669E-11	3.5923E+14	8.1990E+07
Mo-99	1.4264E-02	2.9741E-11	1.8091E+14	5.2778E+08
Tc-99m	1.3765E-02	2.6177E-12	1.5924E+13	5.0930E+08
Ru-103	2.6542E-02	8.2240E-10	4.8084E+15	9.8206E+08
Ru-105	2.7572E-07	4.1017E-17	2.3525E+08	1.0202E+04
Ru-106	1.2796E-02	3.8248E-09	2.1730E+16	4.7346E+08
Rh-105	5.4683E-03	6.4786E-12	3.7157E+13	2.0233E+08
Sb-127	2.3582E-02	8.8306E-11	4.1873E+14	8.7254E+08
Sb-129	1.0965E-06	1.9499E-16	9.1029E+08	4.0571E+04
Te-127	2.6935E-02	1.0206E-11	4.8396E+13	9.9660E+08
Te-127m	5.4339E-03	5.7608E-10	2.7317E+15	2.0106E+08
Te-129	1.0400E-02	4.9660E-13	2.3183E+12	3.8480E+08
Te-129m	1.5880E-02	5.2713E-10	2.4608E+15	5.8756E+08
Te-131m	9.3672E-03	1.1747E-11	5.4002E+13	3.4659E+08
Te-132	2.4592E-01	8.1002E-10	3.6955E+15	9.0989E+09
Cs-134	6.2596E-01	4.8381E-07	2.1743E+18	2.3161E+10
Cs-136	1.5441E-01	2.1067E-09	9.3287E+15	5.7130E+09
Cs-137	3.3888E-01	3.8960E-06	1.7126E+19	1.2539E+10
Ba-140	1.9017E-01	2.5976E-09	1.1174E+16	7.0361E+09
La-140	1.4390E-01	2.5889E-10	1.1136E+15	5.3243E+09
La-141	1.5053E-08	2.6617E-18	1.1368E+07	5.5695E+02
Ce-141	5.0736E-03	1.7806E-10	7.6050E+14	1.8772E+08

Ce-143	1.0991E-03	1.6551E-12	6.9699E+12	4.0667E+07
Ce-144	4.4979E-03	1.4102E-09	5.8976E+15	1.6642E+08
Pr-143	2.0466E-03	3.0393E-11	1.2799E+14	7.5725E+07
Nd-147	7.0132E-04	8.6692E-12	3.5515E+13	2.5949E+07
Np-239	3.3617E-02	1.4491E-10	3.6513E+14	1.2438E+09
Pu-238	1.7529E-05	1.0239E-09	2.5908E+15	6.4856E+05
Pu-239	1.5933E-06	2.5633E-08	6.4589E+16	5.8951E+04
Pu-240	2.4014E-06	1.0539E-08	2.6444E+16	8.8852E+04
Pu-241	6.7582E-04	6.5605E-09	1.6394E+16	2.5005E+07
Am-241	3.4358E-07	1.0011E-10	2.5015E+14	1.2712E+04
Cm-242	9.9968E-05	3.0163E-11	7.5059E+13	3.6988E+06
Cm-244	1.0556E-05	1.3048E-10	3.2204E+14	3.9059E+05
Cs-134m	5.0916E-09	6.3138E-19	2.8375E+06	1.8839E+02
Sb-124	7.3038E-04	4.1755E-11	2.0278E+14	2.7024E+07
Sb-125	6.9465E-03	6.7280E-09	3.2413E+16	2.5702E+08
Sb-126	4.1582E-04	4.9755E-12	2.3780E+13	1.5385E+07
Te-131	2.1441E-03	3.7345E-14	1.7168E+11	7.9331E+07
Te-125m	1.5185E-03	8.4314E-11	4.0620E+14	5.6186E+07
Ba-137m	3.7566E-01	6.9851E-13	3.0705E+12	1.3899E+10
Pd-109	1.7963E-04	8.3892E-14	4.6350E+11	6.6465E+06
Rh-106	2.6317E-02	7.3933E-15	4.2003E+10	9.7373E+08
Rh-103m	2.6686E-02	8.2037E-13	4.7965E+12	9.8737E+08
Eu-154	2.2143E-05	8.3940E-11	3.2824E+14	8.1929E+05
Eu-155	1.4994E-05	3.2244E-11	1.2528E+14	5.5476E+05
Eu-156	3.1347E-04	5.6887E-12	2.1960E+13	1.1598E+07
Nb-97	6.4167E-06	2.3867E-16	1.4818E+09	2.3742E+05
Nb-95m	1.5439E-05	4.0530E-14	2.5693E+11	5.7123E+05
Pm-147	2.3074E-04	2.4891E-10	1.0197E+15	8.5375E+06
Pm-148	2.5941E-04	1.5789E-12	6.4246E+12	9.5981E+06
Pm-149	3.1512E-04	7.9527E-13	3.2142E+12	1.1659E+07
Pm-151	4.9229E-05	6.7366E-14	2.6867E+11	1.8215E+06
Pm-148m	5.0671E-05	2.3720E-12	9.6516E+12	1.8748E+06
Pr-144	4.6072E-03	6.0970E-14	2.5498E+11	1.7046E+08
Pr-144m	8.4778E-05	4.6747E-16	1.9550E+09	3.1368E+06
Sm-153	2.6993E-04	6.1544E-13	2.4224E+12	9.9874E+06
Y-91m	5.2658E-04	1.2669E-14	8.3837E+10	1.9483E+07
Am-242	7.1438E-06	8.8376E-15	2.1992E+10	2.6432E+05
Np-238	7.1626E-04	2.7638E-12	6.9933E+12	2.6502E+07
Pu-243	8.8195E-08	3.3893E-17	8.3995E+07	3.2632E+03

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 72.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.5593E-06

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 72.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 96.0000

EAB Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.2068E-08	9.0096E-05	5.5530E-08	2.7803E-06
Accumulated dose (rem)	3.3766E-07	2.9921E-04	5.4002E-07	9.5492E-06

LPZ Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	5.1583E-10	1.4492E-06	8.9322E-10	4.4722E-08

Accumulated dose (rem)	2.8044E-08	1.2467E-05	4.2867E-08	4.1638E-07

Control Room Doses:

Time (h) = 96.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	9.3490E-11	1.1970E-05	5.9320E-09	3.6522E-07
Accumulated dose (rem)	6.9823E-09	7.9960E-05	3.7926E-07	2.4899E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	5.0592E+04	6.2178E-04	4.3540E+21	1.8719E+15
Sr-89	1.3648E+06	4.6977E-02	3.1787E+23	5.0497E+16
Sr-90	1.6892E+05	1.2383E+00	8.2861E+24	6.2500E+15
Sr-91	1.6094E+03	4.4397E-07	2.9380E+18	5.9547E+13
Sr-92	4.1405E-05	3.2941E-15	2.1563E+10	1.5320E+06
Y-90	1.0909E+05	2.0051E-04	1.3417E+21	4.0363E+15
Y-91	2.8248E+04	1.1519E-03	7.6227E+21	1.0452E+15
Y-92	4.0015E-02	4.1586E-12	2.7221E+13	1.4806E+09
Y-93	3.0272E+01	9.0734E-09	5.8754E+16	1.1201E+12
Zr-95	2.3647E+04	1.1007E-03	6.9776E+21	8.7493E+14
Zr-97	4.6976E+02	2.4573E-07	1.5256E+18	1.7381E+13
Nb-95	2.4891E+04	6.3656E-04	4.0352E+21	9.2098E+14
Mo-99	1.2464E+05	2.5988E-04	1.5808E+21	4.6117E+15
Tc-99m	1.2028E+05	2.2875E-05	1.3915E+20	4.4504E+15
Ru-103	2.9319E+05	9.0844E-03	5.3114E+22	1.0848E+16
Ru-105	7.3140E-02	1.0881E-11	6.2405E+13	2.7062E+09
Ru-106	1.4360E+05	4.2921E-02	2.4385E+23	5.3131E+15
Rh-105	3.8407E+04	4.5503E-05	2.6098E+20	1.4211E+15
Sb-127	2.2145E+05	8.2923E-04	3.9321E+21	8.1936E+15
Sb-129	2.6212E-01	4.6613E-11	2.1760E+14	9.6985E+09
Te-127	2.6277E+05	9.9566E-05	4.7213E+20	9.7223E+15
Te-127m	6.0976E+04	6.4644E-03	3.0653E+22	2.2561E+15
Te-129	1.1452E+05	5.4686E-06	2.5529E+19	4.2374E+15
Te-129m	1.7489E+05	5.8055E-03	2.7102E+22	6.4710E+15
Te-131m	6.0487E+04	7.5855E-05	3.4871E+20	2.2380E+15
Te-132	2.2350E+06	7.3618E-03	3.3586E+22	8.2695E+16
I-131	2.1278E+07	1.7163E-01	7.8899E+23	7.8728E+17
I-132	2.3097E+06	2.2376E-04	1.0208E+21	8.5457E+16
I-133	2.4181E+06	2.1346E-03	9.6654E+21	8.9470E+16
I-135	2.3275E+03	6.6275E-07	2.9564E+18	8.6117E+13
Xe-133	6.1783E+06	3.3007E-02	1.4945E+23	2.2860E+17
Xe-135	8.8107E+04	3.4502E-05	1.5391E+20	3.2600E+15
Cs-134	6.0812E+06	4.7002E+00	2.1123E+25	2.2500E+17
Cs-136	1.4240E+06	1.9430E-02	8.6037E+22	5.2690E+16
Cs-137	3.2951E+06	3.7882E+01	1.6652E+26	1.2192E+17
Ba-140	2.0248E+06	2.7658E-02	1.1897E+23	7.4917E+16
La-140	1.7721E+06	3.1883E-03	1.3715E+22	6.5569E+16
La-141	2.1724E-03	3.8414E-13	1.6407E+12	8.0380E+07
Ce-141	5.5816E+04	1.9589E-03	8.3666E+21	2.0652E+15
Ce-143	7.4648E+03	1.1241E-05	4.7338E+19	2.7620E+14
Ce-144	5.0446E+04	1.5816E-02	6.6145E+22	1.8665E+15
Pr-143	2.2338E+04	3.3173E-04	1.3970E+21	8.2651E+14
Nd-147	7.4025E+03	9.1503E-05	3.7486E+20	2.7389E+14
Np-239	2.8159E+05	1.2138E-03	3.0584E+21	1.0419E+16
Pu-238	1.9724E+02	1.1521E-02	2.9152E+22	7.2979E+12
Pu-239	1.7939E+01	2.8861E-01	7.2721E+23	6.6373E+11
Pu-240	2.6999E+01	1.1848E-01	2.9730E+23	9.9895E+11
Pu-241	7.5971E+03	7.3750E-02	1.8429E+23	2.8109E+14
Am-241	3.8961E+00	1.1352E-03	2.8365E+21	1.4415E+11
Cm-242	1.1193E+03	3.3773E-04	8.4043E+20	4.1415E+13
Cm-244	1.1867E+02	1.4669E-03	3.6203E+21	4.3909E+12
I-130	6.8652E+03	3.5200E-06	1.6306E+19	2.5401E+14
Kr-83m	1.2614E-05	6.1137E-16	4.4358E+09	4.6671E+05
Xe-131m	5.7496E+04	6.8642E-04	3.1555E+21	2.1273E+15
Xe-133m	2.6492E+05	5.9040E-04	2.6733E+21	9.8020E+15
Xe-135m	3.8304E+02	4.2050E-09	1.8758E+16	1.4173E+13
Cs-134m	1.5974E-04	1.9808E-14	8.9021E+10	5.9104E+06
Sb-124	8.1175E+03	4.6407E-04	2.2538E+21	3.0035E+14
Sb-125	7.8045E+04	7.5590E-02	3.6417E+23	2.8877E+15

Sb-126	4.4209E+03	5.2898E-05	2.5282E+20	1.6357E+14
Te-131	1.3845E+04	2.4115E-07	1.1086E+18	5.1227E+14
Te-125m	1.7081E+04	9.4841E-04	4.5692E+21	6.3201E+14
Ba-137m	3.6527E+06	6.7918E-06	2.9855E+19	1.3515E+17
Pd-109	5.8505E+02	2.7323E-07	1.5096E+18	2.1647E+13
Rh-106	2.9532E+05	8.2966E-08	4.7135E+17	1.0927E+16
Rh-103m	2.9478E+05	9.0620E-06	5.2983E+19	1.0907E+16
Eu-154	2.4890E+02	9.4352E-04	3.6896E+21	9.2091E+12
Eu-155	1.6851E+02	3.6237E-04	1.4079E+21	6.2347E+12
Eu-156	3.3671E+03	6.1104E-05	2.3588E+20	1.2458E+14
Nb-97	2.6958E+01	1.0027E-09	6.2252E+15	9.9745E+11
Nb-95m	1.7232E+02	4.5239E-07	2.8677E+18	6.3759E+12
Pm-147	2.5979E+03	2.8024E-03	1.1481E+22	9.6121E+13
Pm-148	2.5665E+03	1.5621E-05	6.3562E+19	9.4959E+13
Pm-149	2.5896E+03	6.5355E-06	2.6415E+19	9.5816E+13
Pm-151	3.0811E+02	4.2163E-07	1.6815E+18	1.1400E+13
Pm-148m	5.6020E+02	2.6224E-05	1.0671E+20	2.0728E+13
Pr-144	5.1671E+04	6.8381E-07	2.8597E+18	1.9118E+15
Pr-144m	9.5083E+02	5.2429E-09	2.1926E+16	3.5181E+13
Sm-153	2.1253E+03	4.8457E-06	1.9073E+19	7.8636E+13
Y-91m	1.0276E+03	2.4723E-08	1.6361E+17	3.8023E+13
Br-82	3.2038E+04	2.9592E-05	2.1733E+20	1.1854E+15
Br-83	2.9450E-06	1.8642E-16	1.3526E+09	1.0896E+05
Am-242	2.8433E+01	3.5175E-08	8.7532E+16	1.0520E+12
Np-238	5.8043E+03	2.2397E-05	5.6671E+19	2.1476E+14
Pu-243	3.4558E-02	1.3280E-11	3.2912E+13	1.2786E+09

Containment Sump Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.5544E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.7592E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	2.3997E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4591E+01	0.0000E+00	0.0000E+00

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 96.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
I-131	1.6146E-03	1.3024E-11	5.9870E+13	5.9740E+07
I-132	5.0546E-07	4.8969E-17	2.2341E+08	1.8702E+04
I-133	1.8349E-04	1.6197E-13	7.3340E+11	6.7890E+06
Xe-133	4.7236E-04	2.5235E-12	1.1426E+13	1.7477E+07
Xe-135	6.7515E-06	2.6438E-15	1.1794E+10	2.4981E+05
I-130	5.2205E-07	2.6767E-16	1.2400E+09	1.9316E+04
Xe-131m	4.3793E-06	5.2283E-14	2.4035E+11	1.6203E+05
Xe-133m	2.0222E-05	4.5068E-14	2.0406E+11	7.4822E+05
Br-82	2.4363E-06	2.2503E-15	1.6526E+10	9.0142E+04

Environment Transport Group Inventory:

Time (h) = 96.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	4.5846E+09	6.3676E+07	1.1882E+13

```
Elemental I (atoms)    2.2740E+10  3.1583E+08  5.8803E+13
Organic I (atoms)      7.0330E+08  9.7681E+06  1.8186E+12
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) =  96.0000       Ci           kg         Atoms         Bq
I-131                  3.3219E-07  2.6795E-15  1.2318E+10  1.2291E+04
I-133                  3.7740E-08  3.3315E-17  1.5085E+08  1.3964E+03
I-130                  1.0745E-10  5.5092E-20  2.5521E+05  3.9756E+00
Br-82                  5.0143E-10  4.6316E-19  3.4015E+06  1.8553E+01

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    1.2098E+10
Organic I (atoms)      3.7417E+08
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) =  96.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) =  96.0000       Ci           kg         Atoms         Bq
I-131                  6.9218E-10  5.5832E-18  2.5666E+07  2.5610E+01
I-133                  7.8658E-11  6.9436E-20  3.1440E+05  2.9103E+00
Xe-133                 1.0707E-09  5.7202E-18  2.5901E+07  3.9617E+01
Xe-131m                1.4007E-11  1.6722E-19  7.6873E+05  5.1825E-01
Xe-133m                4.9218E-11  1.0969E-19  4.9666E+05  1.8211E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) =  96.0000    Atmosphere     Sump        Pool
```

Noble gases (atoms)	2.7193E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.5210E+07	0.0000E+00	0.0000E+00
Organic I (atoms)	7.7969E+05	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 96.0000	Ci	kg	Atoms	Bq
I-131	1.1748E-07	9.4763E-16	4.3563E+09	4.3468E+03
I-133	1.3347E-08	1.1782E-17	5.3348E+07	4.9383E+02
Br-82	1.7733E-10	1.6380E-19	1.2029E+06	6.5614E+00

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.2786E+09
Organic I (atoms)	0.0000E+00	1.3233E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 96.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 96.0000	Ci	kg	Atoms	Bq
I-131	3.3219E-07	2.6795E-15	1.2318E+10	1.2291E+04
I-133	3.7740E-08	3.3315E-17	1.5085E+08	1.3964E+03
I-130	1.0745E-10	5.5092E-20	2.5521E+05	3.9756E+00
Br-82	5.0143E-10	4.6316E-19	3.4015E+06	1.8553E+01

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 96.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.2098E+10
Organic I (atoms)	3.7417E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 96.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 96.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
I-131	4.4967E-07	3.6271E-15	1.6674E+10	1.6638E+04
I-133	5.1086E-08	4.5097E-17	2.0420E+08	1.8902E+03
I-130	1.4545E-10	7.4576E-20	3.4547E+05	5.3816E+00
Br-82	6.7877E-10	6.2696E-19	4.6044E+06	2.5114E+01

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	6.3090E+01	7.7537E-07	5.4295E+18	2.3343E+12
Sr-89	1.5888E+03	5.4689E-05	3.7005E+20	5.8787E+13
Sr-90	1.9662E+02	1.4414E-03	9.6451E+21	7.2750E+12
Sr-91	1.8733E+00	5.1678E-10	3.4199E+15	6.9313E+10
Sr-92	4.8196E-08	3.8344E-18	2.5099E+07	1.7832E+03
Y-90	1.2704E+02	2.3350E-07	1.5624E+18	4.7004E+12
Y-91	3.2947E+01	1.3435E-06	8.8906E+18	1.2190E+12
Y-92	4.6783E-05	4.8619E-15	3.1825E+10	1.7310E+06
Y-93	3.5236E-02	1.0561E-11	6.8390E+13	1.3037E+09
Zr-95	2.7525E+01	1.2812E-06	8.1219E+18	1.0184E+12
Zr-97	5.4681E-01	2.8604E-10	1.7758E+15	2.0232E+10
Nb-95	2.8974E+01	7.4095E-07	4.6970E+18	1.0720E+12
Mo-99	1.4508E+02	3.0250E-07	1.8401E+18	5.3680E+12
Tc-99m	1.4001E+02	2.6626E-08	1.6197E+17	5.1803E+12
Ru-103	3.4127E+02	1.0574E-05	6.1825E+19	1.2627E+13
Ru-105	8.5135E-05	1.2665E-14	7.2639E+10	3.1500E+06
Ru-106	1.6715E+02	4.9960E-05	2.8384E+20	6.1844E+12
Rh-105	4.4706E+01	5.2966E-08	3.0378E+17	1.6541E+12
Sb-127	2.5777E+02	9.6523E-07	4.5770E+18	9.5374E+12
Sb-129	3.0511E-04	5.4258E-14	2.5329E+11	1.1289E+07
Te-127	3.0586E+02	1.1590E-07	5.4956E+17	1.1317E+13
Te-127m	7.0977E+01	7.5246E-06	3.5681E+19	2.6261E+12
Te-129	1.3331E+02	6.3655E-09	2.9716E+16	4.9324E+12
Te-129m	2.0357E+02	6.7576E-06	3.1546E+19	7.5322E+12
Te-131m	7.0407E+01	8.8296E-08	4.0590E+17	2.6051E+12
Te-132	2.6015E+03	8.5692E-06	3.9094E+19	9.6257E+13
I-131	2.6085E+04	2.1041E-04	9.6726E+20	9.6516E+14
I-132	2.6885E+03	2.6045E-07	1.1883E+18	9.9473E+13
I-133	2.9629E+03	2.6156E-06	1.1843E+19	1.0963E+14
I-135	2.8541E+00	8.1271E-10	3.6254E+15	1.0560E+11
Xe-133	7.5936E+03	4.0568E-05	1.8369E+20	2.8096E+14
Xe-135	1.0838E+02	4.2441E-08	1.8932E+17	4.0101E+12
Cs-134	7.5834E+03	5.8612E-03	2.6341E+22	2.8059E+14
Cs-136	1.7758E+03	2.4230E-05	1.0729E+20	6.5705E+13
Cs-137	4.1090E+03	4.7240E-02	2.0765E+23	1.5203E+14
Ba-140	2.3569E+03	3.2194E-05	1.3848E+20	8.7204E+13
La-140	2.0635E+03	3.7125E-06	1.5969E+19	7.6350E+13
La-141	2.6955E-06	4.7663E-16	2.0357E+09	9.9734E+04
Ce-141	6.4983E+01	2.2806E-06	9.7406E+18	2.4044E+12
Ce-143	8.6887E+00	1.3084E-08	5.5099E+16	3.2148E+11
Ce-144	5.8720E+01	1.8410E-05	7.6993E+19	2.1726E+12
Pr-143	2.6006E+01	3.8620E-07	1.6264E+18	9.6223E+11
Nd-147	8.6165E+00	1.0651E-07	4.3634E+17	3.1881E+11
Np-239	3.2777E+02	1.4128E-06	3.5600E+18	1.2127E+13
Pu-238	2.2959E-01	1.3411E-05	3.3934E+19	8.4948E+09
Pu-239	2.0881E-02	3.3594E-04	8.4647E+20	7.7259E+08
Pu-240	3.1427E-02	1.3792E-04	3.4606E+20	1.1628E+09
Pu-241	8.8431E+00	8.5845E-05	2.1451E+20	3.2719E+11
Am-241	4.5351E-03	1.3213E-06	3.3018E+18	1.6780E+08
Cm-242	1.3029E+00	3.9311E-07	9.7826E+17	4.8207E+10
Cm-244	1.3813E-01	1.7074E-06	4.2141E+18	5.1110E+09
I-130	8.4185E+00	4.3164E-09	1.9996E+16	3.1148E+11
Kr-83m	1.5468E-08	7.4970E-19	5.4395E+06	5.7231E+02
Xe-131m	7.0570E+01	8.4252E-07	3.8731E+18	2.6111E+12
Xe-133m	3.2539E+02	7.2517E-07	3.2835E+18	1.2039E+13
Xe-135m	4.6971E-01	5.1564E-12	2.3002E+13	1.7379E+10
Cs-134m	1.9920E-07	2.4701E-17	1.1101E+08	7.3704E+03
Sb-124	9.4488E+00	5.4017E-07	2.6234E+18	3.4961E+11
Sb-125	9.0844E+01	8.7987E-05	4.2389E+20	3.3612E+12
Sb-126	5.1459E+00	6.1573E-08	2.9429E+17	1.9040E+11
Te-131	1.6116E+01	2.8070E-10	1.2904E+15	5.9628E+11
Te-125m	1.9883E+01	1.1040E-06	5.3185E+18	7.3566E+11
Ba-137m	4.5549E+03	8.4696E-09	3.7230E+16	1.6853E+14
Pd-109	6.8100E-01	3.1804E-10	1.7571E+15	2.5197E+10
Rh-106	3.4376E+02	9.6572E-11	5.4865E+14	1.2719E+13
Rh-103m	3.4312E+02	1.0548E-08	6.1672E+16	1.2695E+13

Eu-154	2.8971E-01	1.0983E-06	4.2947E+18	1.0719E+10
Eu-155	1.9614E-01	4.2180E-07	1.6388E+18	7.2572E+09
Eu-156	3.9193E+00	7.1126E-08	2.7457E+17	1.4501E+11
Nb-97	3.1379E-02	1.1672E-12	7.2462E+12	1.1610E+09
Nb-95m	2.0058E-01	5.2658E-10	3.3381E+15	7.4216E+09
Pm-147	3.0239E+00	3.2620E-06	1.3363E+19	1.1189E+11
Pm-148	2.9874E+00	1.8183E-08	7.3987E+16	1.1053E+11
Pm-149	3.0143E+00	7.6074E-09	3.0747E+16	1.1153E+11
Pm-151	3.5864E-01	4.9077E-10	1.9573E+15	1.3270E+10
Pm-148m	6.5208E-01	3.0525E-08	1.2421E+17	2.4127E+10
Pr-144	6.0146E+01	7.9595E-10	3.3287E+15	2.2254E+12
Pr-144m	1.1068E+00	6.1028E-12	2.5522E+13	4.0950E+10
Sm-153	2.4739E+00	5.6404E-09	2.2201E+16	9.1533E+10
Y-91m	1.1962E+00	2.8778E-11	1.9044E+14	4.4259E+10
Br-82	3.9287E+01	3.6288E-08	2.6650E+17	1.4536E+12
Br-83	3.6113E-09	2.2860E-19	1.6586E+06	1.3362E+02
Am-242	3.3096E-02	4.0943E-11	1.0189E+14	1.2246E+09
Np-238	6.7563E+00	2.6070E-08	6.5966E+16	2.4998E+11
Pu-243	4.0226E-05	1.5459E-14	3.8310E+10	1.4883E+06

SIRWT Water Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.9103E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.5117E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.9418E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	5.5440E-02	0.0000E+00	0.0000E+00

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 96.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	7.5465E-03	9.2746E-11	6.4945E+14	2.7922E+08
Sr-89	1.8015E-01	6.2008E-09	4.1958E+16	6.6655E+09
Sr-90	2.2291E-02	1.6342E-07	1.0935E+18	8.2477E+08
Sr-91	2.1238E-04	5.8587E-14	3.8771E+11	7.8580E+06
Y-90	1.4406E-02	2.6479E-11	1.7718E+14	5.3303E+08
Y-91	3.7400E-03	1.5251E-10	1.0092E+15	1.3838E+08
Y-92	5.3190E-09	5.5277E-19	3.6183E+06	1.9680E+02
Y-93	3.9947E-06	1.1974E-15	7.7533E+09	1.4781E+05
Zr-95	3.1205E-03	1.4525E-10	9.2078E+14	1.1546E+08
Zr-97	6.1991E-05	3.2428E-14	2.0132E+11	2.2937E+06
Nb-95	3.2847E-03	8.4002E-11	5.3250E+14	1.2154E+08
Mo-99	1.6448E-02	3.4294E-11	2.0861E+14	6.0857E+08
Tc-99m	1.5873E-02	3.0186E-12	1.8362E+13	5.8729E+08
Ru-103	3.8690E-02	1.1988E-09	7.0091E+15	1.4315E+09
Ru-105	9.6518E-09	1.4358E-18	8.2351E+06	3.5712E+02
Ru-106	1.8949E-02	5.6640E-09	3.2179E+16	7.0113E+08
Rh-105	5.0683E-03	6.0047E-12	3.4439E+13	1.8753E+08
Sb-127	2.9223E-02	1.0943E-10	5.1889E+14	1.0812E+09
Sb-129	3.4590E-08	6.1512E-18	2.8716E+07	1.2798E+03
Te-127	3.4675E-02	1.3139E-11	6.2303E+13	1.2830E+09
Te-127m	8.0466E-03	8.5307E-10	4.0451E+15	2.9772E+08
Te-129	1.5113E-02	7.2165E-13	3.3689E+12	5.5918E+08

Te-129m	2.3079E-02	7.6610E-10	3.5764E+15	8.5393E+08
Te-131m	7.9821E-03	1.0010E-11	4.6017E+13	2.9534E+08
Te-132	2.9494E-01	9.7148E-10	4.4321E+15	1.0913E+10
Cs-134	9.0709E-01	7.0109E-07	3.1508E+18	3.3562E+10
Cs-136	2.1241E-01	2.8982E-09	1.2833E+16	7.8593E+09
Cs-137	4.9150E-01	5.6506E-06	2.4838E+19	1.8185E+10
Ba-140	2.6720E-01	3.6498E-09	1.5700E+16	9.8863E+09
La-140	2.3399E-01	4.2098E-10	1.8109E+15	8.6577E+09
La-141	3.1850E-10	5.6318E-20	2.4054E+05	1.1784E+01
Ce-141	7.3681E-03	2.5859E-10	1.1044E+15	2.7262E+08
Ce-143	9.8501E-04	1.4833E-12	6.2464E+12	3.6445E+07
Ce-144	6.6570E-03	2.0872E-09	8.7287E+15	2.4631E+08
Pr-143	2.9487E-03	4.3789E-11	1.8441E+14	1.0910E+08
Nd-147	9.7685E-04	1.2075E-11	4.9468E+13	3.6144E+07
Np-239	3.7159E-02	1.6017E-10	4.0359E+14	1.3749E+09
Pu-238	2.6028E-05	1.5204E-09	3.8470E+15	9.6305E+05
Pu-239	2.3672E-06	3.8085E-08	9.5964E+16	8.7588E+04
Pu-240	3.5628E-06	1.5636E-08	3.9233E+16	1.3182E+05
Pu-241	1.0025E-03	9.7322E-09	2.4319E+16	3.7094E+07
Am-241	5.1415E-07	1.4980E-10	3.7433E+14	1.9023E+04
Cm-242	1.4771E-04	4.4567E-11	1.1090E+14	5.4652E+06
Cm-244	1.5660E-05	1.9357E-10	4.7775E+14	5.7943E+05
Sb-124	1.0712E-03	6.1240E-11	2.9741E+14	3.9635E+07
Sb-125	1.0299E-02	9.9750E-09	4.8057E+16	3.8106E+08
Sb-126	5.8339E-04	6.9805E-12	3.3363E+13	2.1585E+07
Te-131	1.8270E-03	3.1823E-14	1.4629E+11	6.7600E+07
Te-125m	2.2541E-03	1.2516E-10	6.0296E+14	8.3401E+07
Ba-137m	5.4484E-01	1.0131E-12	4.4532E+12	2.0159E+10
Pd-109	7.7205E-05	3.6056E-14	1.9921E+11	2.8566E+06
Rh-106	3.8972E-02	1.0948E-14	6.2201E+10	1.4419E+09
Rh-103m	3.8899E-02	1.1958E-12	6.9918E+12	1.4393E+09
Eu-154	3.2845E-05	1.2451E-10	4.8689E+14	1.2153E+06
Eu-155	2.2236E-05	4.7820E-11	1.8579E+14	8.2275E+05
Eu-156	4.4433E-04	8.0635E-12	3.1128E+13	1.6440E+07
Nb-97	3.5575E-06	1.3232E-16	8.2150E+08	1.3163E+05
Nb-95m	2.2740E-05	5.9699E-14	3.7844E+11	8.4139E+05
Pm-147	3.4282E-04	3.6981E-10	1.5150E+15	1.2684E+07
Pm-148	3.3868E-04	2.0614E-12	8.3879E+12	1.2531E+07
Pm-149	3.4173E-04	8.6245E-13	3.4858E+12	1.2644E+07
Pm-151	4.0659E-05	5.5639E-14	2.2190E+11	1.5044E+06
Pm-148m	7.3926E-05	3.4606E-12	1.4081E+13	2.7353E+06
Pr-144	6.8187E-03	9.0237E-14	3.7738E+11	2.5229E+08
Pr-144m	1.2547E-04	6.9187E-16	2.8934E+09	4.6425E+06
Sm-153	2.8046E-04	6.3946E-13	2.5169E+12	1.0377E+07
Y-91m	1.3561E-04	3.2625E-15	2.1591E+10	5.0176E+06
Am-242	3.7521E-06	4.6417E-15	1.1551E+10	1.3883E+05
Np-238	7.6596E-04	2.9556E-12	7.4785E+12	2.8340E+07
Pu-243	4.5604E-09	1.7525E-18	4.3432E+06	1.6873E+02

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway
Time (h) = 96.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.6170E-06

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Bq
I-131	3.0765E+00	2.4816E-08	1.1408E+17	1.1383E+11
I-132	1.4890E-02	1.4425E-12	6.5812E+12	5.5094E+08
I-133	3.4961E-01	3.0863E-10	1.3974E+15	1.2936E+10
I-135	3.3699E-04	9.5957E-14	4.2805E+11	1.2468E+07
Xe-133	8.9782E-01	4.7965E-09	2.1718E+16	3.3219E+10
Xe-135	1.2823E-02	5.0212E-12	2.2399E+13	4.7444E+08
I-130	9.9397E-04	5.0964E-13	2.3609E+12	3.6777E+07
Xe-131m	8.3336E-03	9.9492E-11	4.5737E+14	3.0834E+08
Xe-133m	3.8455E-02	8.5702E-11	3.8805E+14	1.4228E+09

Xe-135m	5.5459E-05	6.0882E-16	2.7158E+09	2.0520E+06
Br-82	4.6386E-03	4.2845E-12	3.1466E+13	1.7163E+08

SIRWT Air Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	2.2586E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1205E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	3.4656E+15	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 96.0000	Ci	kg	Atoms	Bq
Rb-86	7.5465E-03	9.2746E-11	6.4945E+14	2.7922E+08
Sr-89	1.8015E-01	6.2008E-09	4.1958E+16	6.6655E+09
Sr-90	2.2291E-02	1.6342E-07	1.0935E+18	8.2477E+08
Sr-91	2.1238E-04	5.8587E-14	3.8771E+11	7.8580E+06
Y-90	1.4406E-02	2.6479E-11	1.7718E+14	5.3303E+08
Y-91	3.7400E-03	1.5251E-10	1.0092E+15	1.3838E+08
Y-92	5.3190E-09	5.5277E-19	3.6183E+06	1.9680E+02
Y-93	3.9947E-06	1.1974E-15	7.7533E+09	1.4781E+05
Zr-95	3.1205E-03	1.4525E-10	9.2078E+14	1.1546E+08
Zr-97	6.1991E-05	3.2428E-14	2.0132E+11	2.2937E+06
Nb-95	3.2847E-03	8.4002E-11	5.3250E+14	1.2154E+08
Mo-99	1.6448E-02	3.4294E-11	2.0861E+14	6.0857E+08
Tc-99m	1.5873E-02	3.0186E-12	1.8362E+13	5.8729E+08
Ru-103	3.8690E-02	1.1988E-09	7.0091E+15	1.4315E+09
Ru-105	9.6518E-09	1.4358E-18	8.2351E+06	3.5712E+02
Ru-106	1.8949E-02	5.6640E-09	3.2179E+16	7.0113E+08
Rh-105	5.0683E-03	6.0047E-12	3.4439E+13	1.8753E+08
Sb-127	2.9223E-02	1.0943E-10	5.1889E+14	1.0812E+09
Sb-129	3.4590E-08	6.1512E-18	2.8716E+07	1.2798E+03
Te-127	3.4675E-02	1.3139E-11	6.2303E+13	1.2830E+09
Te-127m	8.0466E-03	8.5307E-10	4.0451E+15	2.9772E+08
Te-129	1.5113E-02	7.2165E-13	3.3689E+12	5.5918E+08
Te-129m	2.3079E-02	7.6610E-10	3.5764E+15	8.5393E+08
Te-131m	7.9821E-03	1.0010E-11	4.6017E+13	2.9534E+08
Te-132	2.9494E-01	9.7148E-10	4.4321E+15	1.0913E+10
Cs-134	9.0709E-01	7.0109E-07	3.1508E+18	3.3562E+10
Cs-136	2.1241E-01	2.8982E-09	1.2833E+16	7.8593E+09
Cs-137	4.9150E-01	5.6506E-06	2.4838E+19	1.8185E+10
Ba-140	2.6720E-01	3.6498E-09	1.5700E+16	9.8863E+09
La-140	2.3399E-01	4.2098E-10	1.8109E+15	8.6577E+09
La-141	3.1850E-10	5.6318E-20	2.4054E+05	1.1784E+01
Ce-141	7.3681E-03	2.5859E-10	1.1044E+15	2.7262E+08
Ce-143	9.8501E-04	1.4833E-12	6.2464E+12	3.6445E+07
Ce-144	6.6570E-03	2.0872E-09	8.7287E+15	2.4631E+08
Pr-143	2.9487E-03	4.3789E-11	1.8441E+14	1.0910E+08
Nd-147	9.7685E-04	1.2075E-11	4.9468E+13	3.6144E+07
Np-239	3.7159E-02	1.6017E-10	4.0359E+14	1.3749E+09
Pu-238	2.6028E-05	1.5204E-09	3.8470E+15	9.6305E+05
Pu-239	2.3672E-06	3.8085E-08	9.5964E+16	8.7588E+04
Pu-240	3.5628E-06	1.5636E-08	3.9233E+16	1.3182E+05
Pu-241	1.0025E-03	9.7322E-09	2.4319E+16	3.7094E+07
Am-241	5.1415E-07	1.4980E-10	3.7433E+14	1.9023E+04
Cm-242	1.4771E-04	4.4567E-11	1.1090E+14	5.4652E+06
Cm-244	1.5660E-05	1.9357E-10	4.7775E+14	5.7943E+05
Sb-124	1.0712E-03	6.1240E-11	2.9741E+14	3.9635E+07
Sb-125	1.0299E-02	9.9750E-09	4.8057E+16	3.8106E+08
Sb-126	5.8339E-04	6.9805E-12	3.3363E+13	2.1585E+07
Te-131	1.8270E-03	3.1823E-14	1.4629E+11	6.7600E+07

Te-125m	2.2541E-03	1.2516E-10	6.0296E+14	8.3401E+07
Ba-137m	5.4484E-01	1.0131E-12	4.4532E+12	2.0159E+10
Pd-109	7.7205E-05	3.6056E-14	1.9921E+11	2.8566E+06
Rh-106	3.8972E-02	1.0948E-14	6.2201E+10	1.4419E+09
Rh-103m	3.8899E-02	1.1958E-12	6.9918E+12	1.4393E+09
Eu-154	3.2845E-05	1.2451E-10	4.8689E+14	1.2153E+06
Eu-155	2.2236E-05	4.7820E-11	1.8579E+14	8.2275E+05
Eu-156	4.4433E-04	8.0635E-12	3.1128E+13	1.6440E+07
Nb-97	3.5575E-06	1.3232E-16	8.2150E+08	1.3163E+05
Nb-95m	2.2740E-05	5.9699E-14	3.7844E+11	8.4139E+05
Pm-147	3.4282E-04	3.6981E-10	1.5150E+15	1.2684E+07
Pm-148	3.3868E-04	2.0614E-12	8.3879E+12	1.2531E+07
Pm-149	3.4173E-04	8.6245E-13	3.4858E+12	1.2644E+07
Pm-151	4.0659E-05	5.5639E-14	2.2190E+11	1.5044E+06
Pm-148m	7.3926E-05	3.4606E-12	1.4081E+13	2.7353E+06
Pr-144	6.8187E-03	9.0237E-14	3.7738E+11	2.5229E+08
Pr-144m	1.2547E-04	6.9187E-16	2.8934E+09	4.6425E+06
Sm-153	2.8046E-04	6.3946E-13	2.5169E+12	1.0377E+07
Y-91m	1.3561E-04	3.2625E-15	2.1591E+10	5.0176E+06
Am-242	3.7521E-06	4.6417E-15	1.1551E+10	1.3883E+05
Np-238	7.6596E-04	2.9556E-12	7.4785E+12	2.8340E+07
Pu-243	4.5604E-09	1.7525E-18	4.3432E+06	1.6873E+02

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	6.6170E-06

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 96.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 168.0000

EAB Doses:

Time (h) = 168.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.2479E-07	4.1387E-04	2.1101E-07	1.2732E-05
Accumulated dose (rem)	4.6246E-07	7.1308E-04	7.5103E-07	2.2281E-05

LPZ Doses:

Time (h) = 168.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	5.8809E-10	1.9503E-06	9.9439E-10	5.9998E-08
Accumulated dose (rem)	2.8632E-08	1.4417E-05	4.3862E-08	4.7637E-07

Control Room Doses:

Time (h) = 168.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.7671E-10	2.7661E-05	1.0949E-08	8.4278E-07
Accumulated dose (rem)	7.1590E-09	1.0762E-04	3.9021E-07	3.3327E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Bq
Rb-86	4.5235E+04	5.5593E-04	3.8929E+21	1.6737E+15
Sr-89	1.3091E+06	4.5059E-02	3.0489E+23	4.8436E+16
Sr-90	1.6880E+05	1.2375E+00	8.2803E+24	6.2457E+15
Sr-91	8.4130E+00	2.3208E-09	1.5359E+16	3.1128E+11
Y-90	1.4142E+05	2.5993E-04	1.7392E+21	5.2324E+15
Y-91	2.7259E+04	1.1115E-03	7.3559E+21	1.0086E+15

Y-92	3.0256E-08	3.1444E-18	2.0582E+07	1.1195E+03
Y-93	2.1620E-01	6.4803E-11	4.1963E+14	7.9995E+09
Zr-95	2.2879E+04	1.0650E-03	6.7511E+21	8.4653E+14
Zr-97	2.4500E+01	1.2816E-08	7.9567E+16	9.0650E+11
Nb-95	2.4786E+04	6.3386E-04	4.0181E+21	9.1708E+14
Mo-99	5.8485E+04	1.2194E-04	7.4177E+20	2.1639E+15
Tc-99m	5.6440E+04	1.0734E-05	6.5292E+19	2.0883E+15
Ru-103	2.7793E+05	8.6117E-03	5.0350E+22	1.0284E+16
Ru-105	9.6022E-07	1.4285E-16	8.1928E+08	3.5528E+04
Ru-106	1.4272E+05	4.2658E-02	2.4235E+23	5.2805E+15
Rh-105	9.3591E+03	1.1088E-05	6.3596E+19	3.4629E+14
Sb-127	1.2897E+05	4.8294E-04	2.2900E+21	4.7719E+15
Sb-129	2.5184E-06	4.4784E-16	2.0907E+09	9.3180E+04
Te-127	1.7740E+05	6.7221E-05	3.1875E+20	6.5639E+15
Te-127m	6.0362E+04	6.3994E-03	3.0345E+22	2.2334E+15
Te-129	1.0760E+05	5.1378E-06	2.3985E+19	3.9811E+15
Te-129m	1.6431E+05	5.4543E-03	2.5463E+22	6.0796E+15
Te-131m	1.1454E+04	1.4365E-05	6.6035E+19	4.2381E+14
Te-132	1.1800E+06	3.8869E-03	1.7733E+22	4.3661E+16
I-131	1.6427E+07	1.3250E-01	6.0912E+23	6.0780E+17
I-132	1.2195E+06	1.1814E-04	5.3898E+20	4.5120E+16
I-133	2.1940E+05	1.9368E-04	8.7695E+20	8.1177E+15
I-135	1.2237E+00	3.4845E-10	1.5544E+15	4.5277E+10
Xe-133	4.4827E+06	2.3948E-02	1.0844E+23	1.6586E+17
Xe-135	3.8590E+02	1.5111E-07	6.7408E+17	1.4278E+13
Cs-134	6.0614E+06	4.6848E+00	2.1054E+25	2.2427E+17
Cs-136	1.2144E+06	1.6570E-02	7.3372E+22	4.4933E+16
Cs-137	3.2928E+06	3.7856E+01	1.6640E+26	1.2183E+17
Ba-140	1.7190E+06	2.3481E-02	1.0100E+23	6.3603E+16
La-140	1.8179E+06	3.2707E-03	1.4069E+22	6.7264E+16
La-141	6.6325E-09	1.1728E-18	5.0090E+06	2.4540E+02
Ce-141	5.2331E+04	1.8366E-03	7.8441E+21	1.9362E+15
Ce-143	1.6444E+03	2.4762E-06	1.0428E+19	6.0843E+13
Ce-144	5.0054E+04	1.5693E-02	6.5630E+22	1.8520E+15
Pr-143	1.9689E+04	2.9239E-04	1.2313E+21	7.2850E+14
Nd-147	6.1223E+03	7.5678E-05	3.1003E+20	2.2652E+14
Np-239	1.1639E+05	5.0170E-04	1.2641E+21	4.3064E+15
Pu-238	1.9744E+02	1.1533E-02	2.9182E+22	7.3053E+12
Pu-239	1.7974E+01	2.8917E-01	7.2863E+23	6.6504E+11
Pu-240	2.6985E+01	1.1843E-01	2.9716E+23	9.9845E+11
Pu-241	7.5903E+03	7.3683E-02	1.8412E+23	2.8084E+14
Am-241	3.9940E+00	1.1637E-03	2.9079E+21	1.4778E+11
Cm-242	1.1047E+03	3.3330E-04	8.2941E+20	4.0872E+13
Cm-244	1.1858E+02	1.4657E-03	3.6174E+21	4.3873E+12
I-130	1.2102E+02	6.2051E-08	2.8745E+17	4.4778E+12
Xe-131m	8.1486E+04	9.7284E-04	4.4722E+21	3.0150E+15
Xe-133m	1.1597E+05	2.5844E-04	1.1702E+21	4.2907E+15
Xe-135m	2.0139E-01	2.2108E-12	9.8621E+12	7.4514E+09
Sb-124	7.8380E+03	4.4809E-04	2.1762E+21	2.9000E+14
Sb-125	7.7845E+04	7.5397E-02	3.6324E+23	2.8803E+15
Sb-126	3.7364E+03	4.4708E-05	2.1368E+20	1.3825E+14
Te-131	2.6218E+03	4.5666E-08	2.0993E+17	9.7008E+13
Te-125m	1.7097E+04	9.4929E-04	4.5734E+21	6.3259E+14
Ba-137m	3.6501E+06	6.7871E-06	2.9834E+19	1.3505E+17
Pd-109	1.4215E+01	6.6387E-09	3.6678E+16	5.2596E+11
Rh-106	2.9351E+05	8.2457E-08	4.6846E+17	1.0860E+16
Rh-103m	2.7944E+05	8.5904E-06	5.0226E+19	1.0339E+16
Eu-154	2.4861E+02	9.4243E-04	3.6854E+21	9.1986E+12
Eu-155	1.6823E+02	3.6178E-04	1.4056E+21	6.2244E+12
Eu-156	2.9348E+03	5.3260E-05	2.0560E+20	1.0859E+14
Nb-97	1.4060E+00	5.2295E-11	3.2467E+14	5.2021E+10
Nb-95m	1.6799E+02	4.4102E-07	2.7957E+18	6.2157E+12
Pm-147	2.6055E+03	2.8107E-03	1.1514E+22	9.6405E+13
Pm-148	1.7496E+03	1.0649E-05	4.3332E+19	6.4737E+13
Pm-149	1.0109E+03	2.5511E-06	1.0311E+19	3.7402E+13
Pm-151	5.3127E+01	7.2700E-08	2.8994E+17	1.9657E+12
Pm-148m	5.3243E+02	2.4924E-05	1.0141E+20	1.9700E+13
Pr-144	5.1269E+04	6.7848E-07	2.8374E+18	1.8970E+15
Pr-144m	9.4342E+02	5.2021E-09	2.1755E+16	3.4907E+13
Sm-153	7.2961E+02	1.6635E-06	6.5476E+18	2.6995E+13

Y-91m	5.3720E+00	1.2924E-10	8.5528E+14	1.9876E+11
Br-82	7.7883E+03	7.1938E-06	5.2832E+19	2.8817E+14
Am-242	1.2608E+00	1.5598E-09	3.8815E+15	4.6651E+10
Np-238	2.1724E+03	8.3827E-06	2.1211E+19	8.0380E+13
Pu-243	1.4622E-06	5.6193E-16	1.3926E+09	5.4102E+04

Containment Sump Transport Group Inventory:

Time (h) = 168.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.1408E+23	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.9227E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	1.8318E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4533E+01	0.0000E+00	0.0000E+00

Time (h) = 168.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	3.9805E-03	3.2107E-11	1.4760E+14	1.4728E+08
I-132	3.8723E-07	3.7514E-17	1.7115E+08	1.4327E+04
I-133	5.3174E-05	4.6940E-14	2.1254E+11	1.9674E+06
Xe-133	1.0919E-03	5.8335E-12	2.6413E+13	4.0401E+07
Xe-131m	1.9782E-05	2.3618E-13	1.0857E+12	7.3195E+05
Xe-133m	2.8212E-05	6.2873E-14	2.8468E+11	1.0438E+06
Br-82	1.8904E-06	1.7461E-15	1.2823E+10	6.9944E+04

Environment Transport Group Inventory:

Time (h) = 168.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	7.4554E+09	1.0355E+08	2.7784E+13
Elemental I (atoms)	3.8538E+10	5.3525E+08	1.4339E+14
Organic I (atoms)	1.1919E+09	1.6554E+07	4.4347E+12
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	5.5265E-07	4.4578E-15	2.0493E+10	2.0448E+04
I-133	7.3819E-09	6.5165E-18	2.9506E+07	2.7313E+02
Br-82	2.6256E-10	2.4251E-19	1.7810E+06	9.7146E+00

Control Room Filtered Makeup Transport Group Inventory:

Pathway

Time (h) = 168.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.9908E+10
Organic I (atoms)	6.1572E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway
Time (h) = 168.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

	Pathway
Time (h) = 168.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

	Pathway
Time (h) = 168.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	8.9430E-10	7.2136E-18	3.3161E+07	3.3089E+01
Xe-133	1.1728E-09	6.2654E-18	2.8369E+07	4.3393E+01
Xe-131m	2.9482E-11	3.5198E-19	1.6181E+06	1.0909E+00
Xe-133m	3.1365E-11	6.9901E-20	3.1651E+05	1.1605E+00

Control Room Transport Group Inventory:

			Overlying
Time (h) = 168.0000	Atmosphere	Sump	Pool
Noble gases (atoms)	3.0304E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.2216E+07	0.0000E+00	0.0000E+00
Organic I (atoms)	9.9638E+05	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	1.9756E-07	1.5936E-15	7.3257E+09	7.3098E+03
I-133	2.6389E-09	2.3295E-18	1.0548E+07	9.7639E+01
Br-82	9.3857E-11	8.6693E-20	6.3668E+05	3.4727E+00

	Deposition	Recirculating
Time (h) = 168.0000	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.1168E+09
Organic I (atoms)	0.0000E+00	2.2011E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway
Time (h) = 168.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	5.5265E-07	4.4578E-15	2.0493E+10	2.0448E+04
I-133	7.3819E-09	6.5165E-18	2.9506E+07	2.7313E+02
Br-82	2.6256E-10	2.4251E-19	1.7810E+06	9.7146E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	1.9908E+10
Organic I (atoms)	6.1572E+08
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	7.5021E-07	6.0513E-15	2.7818E+10	2.7758E+04
I-133	1.0021E-08	8.8460E-18	4.0054E+07	3.7077E+02
Br-82	3.5641E-10	3.2921E-19	2.4177E+06	1.3187E+01

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Bq
Rb-86	7.9119E+01	9.7237E-07	6.8090E+18	2.9274E+12
Sr-89	2.1812E+03	7.5078E-05	5.0801E+20	8.0704E+13
Sr-90	2.8123E+02	2.0617E-03	1.3795E+22	1.0406E+13
Sr-91	1.4016E-02	3.8666E-12	2.5588E+13	5.1860E+08
Y-90	2.3563E+02	4.3310E-07	2.8980E+18	8.7184E+12
Y-91	4.5479E+01	1.8545E-06	1.2272E+19	1.6827E+12
Y-93	3.6020E-04	1.0796E-13	6.9912E+11	1.3328E+07
Zr-95	3.8118E+01	1.7743E-06	1.1248E+19	1.4103E+12
Zr-97	4.0818E-02	2.1352E-11	1.3256E+14	1.5103E+09
Nb-95	4.1294E+01	1.0560E-06	6.6943E+18	1.5279E+12
Mo-99	9.7439E+01	2.0316E-07	1.2358E+18	3.6052E+12
Tc-99m	9.4031E+01	1.7883E-08	1.0878E+17	3.4792E+12
Ru-103	4.6305E+02	1.4347E-05	8.3886E+19	1.7133E+13
Ru-105	1.5998E-09	2.3799E-19	1.3650E+06	5.9191E+01
Ru-106	2.3777E+02	7.1070E-05	4.0377E+20	8.7975E+12
Rh-105	1.5593E+01	1.8474E-08	1.0595E+17	5.7693E+11
Sb-127	2.1487E+02	8.0459E-07	3.8152E+18	7.9501E+12
Sb-129	4.1957E-09	7.4612E-19	3.4831E+06	1.5524E+02
Te-127	2.9556E+02	1.1199E-07	5.3105E+17	1.0936E+13
Te-127m	1.0057E+02	1.0662E-05	5.0556E+19	3.7210E+12
Te-129	1.7926E+02	8.5598E-09	3.9960E+16	6.6327E+12
Te-129m	2.7375E+02	9.0871E-06	4.2422E+19	1.0129E+13
Te-131m	1.9084E+01	2.3932E-08	1.1002E+17	7.0609E+11

Te-132	1.9660E+03	6.4757E-06	2.9544E+19	7.2741E+13
I-131	2.8386E+04	2.2896E-04	1.0526E+21	1.0503E+15
I-132	2.0317E+03	1.9683E-07	8.9797E+17	7.5172E+13
I-133	3.7898E+02	3.3455E-07	1.5148E+18	1.4022E+13
I-135	2.1150E-03	6.0223E-13	2.6865E+12	7.8253E+07
Xe-133	7.7591E+03	4.1452E-05	1.8769E+20	2.8709E+14
Xe-135	6.6835E-01	2.6172E-10	1.1675E+15	2.4729E+10
Cs-134	1.0602E+04	8.1942E-03	3.6826E+22	3.9227E+14
Cs-136	2.1241E+03	2.8982E-05	1.2833E+20	7.8593E+13
Cs-137	5.7594E+03	6.6214E-02	2.9106E+23	2.1310E+14
Ba-140	2.8639E+03	3.9120E-05	1.6828E+20	1.0597E+14
La-140	3.0290E+03	5.4495E-06	2.3441E+19	1.1207E+14
Ce-141	8.7197E+01	3.0602E-06	1.3070E+19	3.2263E+12
Ce-143	2.7396E+00	4.1253E-09	1.7373E+16	1.0136E+11
Ce-144	8.3391E+01	2.6146E-05	1.0934E+20	3.0855E+12
Pr-143	3.2807E+01	4.8720E-07	2.0517E+18	1.2139E+12
Nd-147	1.0200E+01	1.2608E-07	5.1652E+17	3.7740E+11
Np-239	1.9391E+02	8.3586E-07	2.1061E+18	7.1747E+12
Pu-238	3.2895E-01	1.9214E-05	4.8619E+19	1.2171E+10
Pu-239	2.9945E-02	4.8177E-04	1.2139E+21	1.1080E+09
Pu-240	4.4959E-02	1.9730E-04	4.9508E+20	1.6635E+09
Pu-241	1.2646E+01	1.2276E-04	3.0675E+20	4.6790E+11
Am-241	6.6543E-03	1.9388E-06	4.8447E+18	2.4621E+08
Cm-242	1.8404E+00	5.5529E-07	1.3818E+18	6.8095E+10
Cm-244	1.9755E-01	2.4418E-06	6.0267E+18	7.3094E+09
I-130	2.0916E-01	1.0724E-10	4.9680E+14	7.7391E+09
Xe-131m	1.4088E+02	1.6819E-06	7.7318E+18	5.2125E+12
Xe-133m	2.0062E+02	4.4710E-07	2.0244E+18	7.4228E+12
Xe-135m	3.4806E-04	3.8210E-15	1.7045E+10	1.2878E+07
Sb-124	1.3058E+01	7.4653E-07	3.6256E+18	4.8316E+11
Sb-125	1.2969E+02	1.2561E-04	6.0517E+20	4.7987E+12
Sb-126	6.2251E+00	7.4486E-08	3.5601E+17	2.3033E+11
Te-131	4.3681E+00	7.6082E-11	3.4975E+14	1.6162E+11
Te-125m	2.8485E+01	1.5816E-06	7.6195E+18	1.0539E+12
Ba-137m	6.3844E+03	1.1871E-08	5.2183E+16	2.3622E+14
Pd-109	2.3683E-02	1.1060E-11	6.1108E+13	8.7627E+08
Rh-106	4.8900E+02	1.3738E-10	7.8047E+14	1.8093E+13
Rh-103m	4.6555E+02	1.4312E-08	8.3678E+16	1.7225E+13
Eu-154	4.1419E-01	1.5701E-06	6.1400E+18	1.5325E+10
Eu-155	2.8027E-01	6.0274E-07	2.3418E+18	1.0370E+10
Eu-156	4.8895E+00	8.8733E-08	3.4254E+17	1.8091E+11
Nb-97	2.3424E-03	8.7126E-14	5.4091E+11	8.6670E+07
Nb-95m	2.7988E-01	7.3476E-10	4.6577E+15	1.0356E+10
Pm-147	4.3410E+00	4.6827E-06	1.9184E+19	1.6062E+11
Pm-148	2.9150E+00	1.7742E-08	7.2194E+16	1.0785E+11
Pm-149	1.6841E+00	4.2503E-09	1.7178E+16	6.2313E+10
Pm-151	8.8511E-02	1.2112E-10	4.8305E+14	3.2749E+09
Pm-148m	8.8705E-01	4.1524E-08	1.6896E+17	3.2821E+10
Pr-144	8.5417E+01	1.1304E-09	4.7273E+15	3.1604E+12
Pr-144m	1.5718E+00	8.6669E-12	3.6245E+13	5.8156E+10
Sm-153	1.2156E+00	2.7715E-09	1.0909E+16	4.4976E+10
Y-91m	8.9500E-03	2.1532E-13	1.4249E+12	3.3115E+08
Br-82	1.3461E+01	1.2433E-08	9.1311E+16	4.9805E+11
Am-242	2.1006E-03	2.5987E-12	6.4668E+12	7.7723E+07
Np-238	3.6194E+00	1.3966E-08	3.5338E+16	1.3392E+11
Pu-243	2.4361E-09	9.3619E-19	2.3201E+06	9.0137E+01

SIRWT Water Transport Group Inventory:

Time (h) = 168.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.9745E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0234E+21	0.0000E+00	0.0000E+00
Organic I (atoms)	3.1652E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	7.7729E-02	0.0000E+00	0.0000E+00

Time (h) = 168.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00

Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 168.0000	Ci	kg	Atoms	Bq
Rb-86	1.4847E-02	1.8246E-10	1.2777E+15	5.4932E+08
Sr-89	3.9421E-01	1.3569E-08	9.1815E+16	1.4586E+10
Sr-90	5.0823E-02	3.7259E-07	2.4931E+18	1.8805E+09
Sr-91	2.5330E-06	6.9876E-16	4.6242E+09	9.3721E+04
Y-90	4.2586E-02	7.8274E-11	5.2375E+14	1.5757E+09
Y-91	8.2268E-03	3.3546E-10	2.2200E+15	3.0439E+08
Y-93	6.5095E-08	1.9511E-17	1.2634E+08	2.4085E+03
Zr-95	6.8885E-03	3.2065E-10	2.0326E+15	2.5488E+08
Zr-97	7.3766E-06	3.8587E-15	2.3956E+10	2.7293E+05
Nb-95	7.4626E-03	1.9084E-10	1.2098E+15	2.7612E+08
Mo-99	1.7609E-02	3.6715E-11	2.2333E+14	6.5153E+08
Tc-99m	1.6993E-02	3.2317E-12	1.9658E+13	6.2875E+08
Ru-103	8.3682E-02	2.5929E-09	1.5160E+16	3.0962E+09
Ru-106	4.2970E-02	1.2844E-08	7.2968E+16	1.5899E+09
Rh-105	2.8179E-03	3.3385E-12	1.9148E+13	1.0426E+08
Sb-127	3.8831E-02	1.4540E-10	6.8948E+14	1.4367E+09
Te-127	5.3413E-02	2.0239E-11	9.5971E+13	1.9763E+09
Te-127m	1.8174E-02	1.9267E-09	9.1363E+15	6.7244E+08
Te-129	3.2396E-02	1.5469E-12	7.2215E+12	1.1987E+09
Te-129m	4.9472E-02	1.6422E-09	7.6664E+15	1.8305E+09
Te-131m	3.4488E-03	4.3250E-12	1.9882E+13	1.2760E+08
Te-132	3.5529E-01	1.1703E-09	5.3391E+15	1.3146E+10
Cs-134	1.9894E+00	1.5376E-06	6.9103E+18	7.3609E+10
Cs-136	3.9859E-01	5.4384E-09	2.4082E+16	1.4748E+10
Cs-137	1.0807E+00	1.2425E-05	5.4616E+19	3.9987E+10
Ba-140	5.1756E-01	7.0697E-09	3.0411E+16	1.9150E+10
La-140	5.4742E-01	9.8487E-10	4.2364E+15	2.0255E+10
Ce-141	1.5760E-02	5.5310E-10	2.3623E+15	5.8310E+08
Ce-143	4.9508E-04	7.4551E-13	3.1395E+12	1.8318E+07
Ce-144	1.5070E-02	4.7250E-09	1.9760E+16	5.5760E+08
Pr-143	5.9294E-03	8.8053E-11	3.7081E+14	2.1939E+08
Nd-147	1.8433E-03	2.2786E-11	9.3345E+13	6.8203E+07
Np-239	3.5043E-02	1.5105E-10	3.8061E+14	1.2966E+09
Pu-238	5.9446E-05	3.4724E-09	8.7863E+15	2.1995E+06
Pu-239	5.4117E-06	8.7065E-08	2.1938E+17	2.0023E+05
Pu-240	8.1248E-06	3.5656E-08	8.9469E+16	3.0062E+05
Pu-241	2.2853E-03	2.2185E-08	5.5436E+16	8.4557E+07
Am-241	1.2026E-06	3.5038E-10	8.7554E+14	4.4495E+04
Cm-242	3.3259E-04	1.0035E-10	2.4972E+14	1.2306E+07
Cm-244	3.5701E-05	4.4129E-10	1.0891E+15	1.3209E+06
Sb-124	2.3599E-03	1.3491E-10	6.5521E+14	8.7316E+07
Sb-125	2.3438E-02	2.2701E-08	1.0937E+17	8.6721E+08
Sb-126	1.1250E-03	1.3461E-11	6.4337E+13	4.1624E+07
Te-131	7.8940E-04	1.3749E-14	6.3207E+10	2.9208E+07
Te-125m	5.1477E-03	2.8582E-10	1.3770E+15	1.9046E+08
Ba-137m	1.1980E+00	2.2276E-12	9.7920E+12	4.4327E+10
Pd-109	4.2800E-06	1.9988E-15	1.1043E+10	1.5836E+05
Rh-106	8.8372E-02	2.4826E-14	1.4105E+11	3.2697E+09
Rh-103m	8.4134E-02	2.5864E-12	1.5122E+13	3.1129E+09
Eu-154	7.4852E-05	2.8375E-10	1.1096E+15	2.7695E+06
Eu-155	5.0651E-05	1.0893E-10	4.2320E+14	1.8741E+06
Eu-156	8.8362E-04	1.6036E-11	6.1903E+13	3.2694E+07
Nb-97	4.2332E-07	1.5745E-17	9.7753E+07	1.5663E+04
Nb-95m	5.0580E-05	1.3278E-13	8.4173E+11	1.8714E+06
Pm-147	7.8449E-04	8.4625E-10	3.4668E+15	2.9026E+07

Pm-148	5.2679E-04	3.2064E-12	1.3047E+13	1.9491E+07
Pm-149	3.0435E-04	7.6811E-13	3.1045E+12	1.1261E+07
Pm-151	1.5996E-05	2.1889E-14	8.7296E+10	5.9184E+05
Pm-148m	1.6031E-04	7.5041E-12	3.0534E+13	5.9313E+06
Pr-144	1.5436E-02	2.0428E-13	8.5431E+11	5.7114E+08
Pr-144m	2.8405E-04	1.5663E-15	6.5502E+09	1.0510E+07
Sm-153	2.1967E-04	5.0086E-13	1.9714E+12	8.1279E+06
Y-91m	1.6174E-06	3.8912E-17	2.5751E+08	5.9845E+04
Am-242	3.7962E-07	4.6963E-16	1.1687E+09	1.4046E+04
Np-238	6.5408E-04	2.5239E-12	6.3862E+12	2.4201E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 168.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.4563E-05

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Bq
I-131	5.2709E+00	4.2516E-08	1.9545E+17	1.9502E+11
I-132	1.1325E-02	1.0971E-12	5.0053E+12	4.1901E+08
I-133	7.0398E-02	6.2144E-11	2.8138E+14	2.6047E+09
I-135	3.9304E-07	1.1192E-16	4.9924E+08	1.4542E+04
Xe-133	1.4433E+00	7.7109E-09	3.4914E+16	5.3403E+10
Xe-135	1.2438E-04	4.8707E-14	2.1727E+11	4.6022E+06
I-130	3.8870E-05	1.9930E-14	9.2324E+10	1.4382E+06
Xe-131m	2.6177E-02	3.1252E-10	1.4367E+15	9.6855E+08
Xe-133m	3.7305E-02	8.3138E-11	3.7644E+14	1.3803E+09
Xe-135m	6.4683E-08	7.1008E-19	3.1676E+06	2.3933E+03
Br-82	2.5015E-03	2.3106E-12	1.6969E+13	9.2556E+07

SIRWT Air Transport Group Inventory:

Time (h) = 168.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.6728E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.8988E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	5.8725E+15	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 168.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 168.0000	Ci	kg	Atoms	Bq
Rb-86	1.4847E-02	1.8246E-10	1.2777E+15	5.4932E+08
Sr-89	3.9421E-01	1.3569E-08	9.1815E+16	1.4586E+10
Sr-90	5.0823E-02	3.7259E-07	2.4931E+18	1.8805E+09
Sr-91	2.5330E-06	6.9876E-16	4.6242E+09	9.3721E+04
Y-90	4.2586E-02	7.8274E-11	5.2375E+14	1.5757E+09
Y-91	8.2268E-03	3.3546E-10	2.2200E+15	3.0439E+08
Y-93	6.5095E-08	1.9511E-17	1.2634E+08	2.4085E+03
Zr-95	6.8885E-03	3.2065E-10	2.0326E+15	2.5488E+08
Zr-97	7.3766E-06	3.8587E-15	2.3956E+10	2.7293E+05
Nb-95	7.4626E-03	1.9084E-10	1.2098E+15	2.7612E+08
Mo-99	1.7609E-02	3.6715E-11	2.2333E+14	6.5153E+08
Tc-99m	1.6993E-02	3.2317E-12	1.9658E+13	6.2875E+08
Ru-103	8.3682E-02	2.5929E-09	1.5160E+16	3.0962E+09
Ru-106	4.2970E-02	1.2844E-08	7.2968E+16	1.5899E+09
Rh-105	2.8179E-03	3.3385E-12	1.9148E+13	1.0426E+08
Sb-127	3.8831E-02	1.4540E-10	6.8948E+14	1.4367E+09

Te-127	5.3413E-02	2.0239E-11	9.5971E+13	1.9763E+09
Te-127m	1.8174E-02	1.9267E-09	9.1363E+15	6.7244E+08
Te-129	3.2396E-02	1.5469E-12	7.2215E+12	1.1987E+09
Te-129m	4.9472E-02	1.6422E-09	7.6664E+15	1.8305E+09
Te-131m	3.4488E-03	4.3250E-12	1.9882E+13	1.2760E+08
Te-132	3.5529E-01	1.1703E-09	5.3391E+15	1.3146E+10
Cs-134	1.9894E+00	1.5376E-06	6.9103E+18	7.3609E+10
Cs-136	3.9859E-01	5.4384E-09	2.4082E+16	1.4748E+10
Cs-137	1.0807E+00	1.2425E-05	5.4616E+19	3.9987E+10
Ba-140	5.1756E-01	7.0697E-09	3.0411E+16	1.9150E+10
La-140	5.4742E-01	9.8487E-10	4.2364E+15	2.0255E+10
Ce-141	1.5760E-02	5.5310E-10	2.3623E+15	5.8310E+08
Ce-143	4.9508E-04	7.4551E-13	3.1395E+12	1.8318E+07
Ce-144	1.5070E-02	4.7250E-09	1.9760E+16	5.5760E+08
Pr-143	5.9294E-03	8.8053E-11	3.7081E+14	2.1939E+08
Nd-147	1.8433E-03	2.2786E-11	9.3345E+13	6.8203E+07
Np-239	3.5043E-02	1.5105E-10	3.8061E+14	1.2966E+09
Pu-238	5.9446E-05	3.4724E-09	8.7863E+15	2.1995E+06
Pu-239	5.4117E-06	8.7065E-08	2.1938E+17	2.0023E+05
Pu-240	8.1248E-06	3.5656E-08	8.9469E+16	3.0062E+05
Pu-241	2.2853E-03	2.2185E-08	5.5436E+16	8.4557E+07
Am-241	1.2026E-06	3.5038E-10	8.7554E+14	4.4495E+04
Cm-242	3.3259E-04	1.0035E-10	2.4972E+14	1.2306E+07
Cm-244	3.5701E-05	4.4129E-10	1.0891E+15	1.3209E+06
Sb-124	2.3599E-03	1.3491E-10	6.5521E+14	8.7316E+07
Sb-125	2.3438E-02	2.2701E-08	1.0937E+17	8.6721E+08
Sb-126	1.1250E-03	1.3461E-11	6.4337E+13	4.1624E+07
Te-131	7.8940E-04	1.3749E-14	6.3207E+10	2.9208E+07
Te-125m	5.1477E-03	2.8582E-10	1.3770E+15	1.9046E+08
Ba-137m	1.1980E+00	2.2276E-12	9.7920E+12	4.4327E+10
Pd-109	4.2800E-06	1.9988E-15	1.1043E+10	1.5836E+05
Rh-106	8.8372E-02	2.4826E-14	1.4105E+11	3.2697E+09
Rh-103m	8.4134E-02	2.5864E-12	1.5122E+13	3.1129E+09
Eu-154	7.4852E-05	2.8375E-10	1.1096E+15	2.7695E+06
Eu-155	5.0651E-05	1.0893E-10	4.2320E+14	1.8741E+06
Eu-156	8.8362E-04	1.6036E-11	6.1903E+13	3.2694E+07
Nb-97	4.2332E-07	1.5745E-17	9.7753E+07	1.5663E+04
Nb-95m	5.0580E-05	1.3278E-13	8.4173E+11	1.8714E+06
Pm-147	7.8449E-04	8.4625E-10	3.4668E+15	2.9026E+07
Pm-148	5.2679E-04	3.2064E-12	1.3047E+13	1.9491E+07
Pm-149	3.0435E-04	7.6811E-13	3.1045E+12	1.1261E+07
Pm-151	1.5996E-05	2.1889E-14	8.7296E+10	5.9184E+05
Pm-148m	1.6031E-04	7.5041E-12	3.0534E+13	5.9313E+06
Pr-144	1.5436E-02	2.0428E-13	8.5431E+11	5.7114E+08
Pr-144m	2.8405E-04	1.5663E-15	6.5502E+09	1.0510E+07
Sm-153	2.1967E-04	5.0086E-13	1.9714E+12	8.1279E+06
Y-91m	1.6174E-06	3.8912E-17	2.5751E+08	5.9845E+04
Am-242	3.7962E-07	4.6963E-16	1.1687E+09	1.4046E+04
Np-238	6.5408E-04	2.5239E-12	6.3862E+12	2.4201E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 168.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.4563E-05

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 168.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 240.0000

EAB Doses:

Time (h) = 240.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.7440E-07	6.1767E-04	2.9185E-07	1.8981E-05
Accumulated dose (rem)	6.3685E-07	1.3307E-03	1.0429E-06	4.1262E-05

LPZ Doses:

Time (h) = 240.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	8.2183E-10	2.9107E-06	1.3753E-09	8.9446E-08
Accumulated dose (rem)	2.9454E-08	1.7328E-05	4.5237E-08	5.6582E-07

Control Room Doses:

Time (h) = 240.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	2.4446E-10	4.1278E-05	1.4885E-08	1.2571E-06
Accumulated dose (rem)	7.4035E-09	1.4890E-04	4.0509E-07	4.5898E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 240.0000	Ci	kg	Atoms	Bq
Rb-86	4.0444E+04	4.9706E-04	3.4806E+21	1.4964E+15
Sr-89	1.2556E+06	4.3220E-02	2.9245E+23	4.6459E+16
Sr-90	1.6868E+05	1.2366E+00	8.2746E+24	6.2413E+15
Sr-91	4.3978E-02	1.2132E-11	8.0287E+13	1.6272E+09
Y-90	1.5617E+05	2.8704E-04	1.9206E+21	5.7782E+15
Y-91	2.6294E+04	1.0722E-03	7.0955E+21	9.7289E+14
Y-93	1.5441E-03	4.6283E-13	2.9970E+12	5.7133E+07
Zr-95	2.2136E+04	1.0304E-03	6.5319E+21	8.1904E+14
Zr-97	1.2778E+00	6.6841E-10	4.1497E+15	4.7278E+10
Nb-95	2.4643E+04	6.3021E-04	3.9949E+21	9.1179E+14
Mo-99	2.7443E+04	5.7219E-05	3.4806E+20	1.0154E+15
Tc-99m	2.6483E+04	5.0365E-06	3.0637E+19	9.7988E+14
Ru-103	2.6347E+05	8.1636E-03	4.7730E+22	9.7484E+15
Ru-106	1.4184E+05	4.2397E-02	2.4087E+23	5.2481E+15
Rh-105	2.2807E+03	2.7020E-06	1.5497E+19	8.4385E+13
Sb-127	7.5110E+04	2.8126E-04	1.3337E+21	2.7791E+15
Te-127	1.2720E+05	4.8200E-05	2.2856E+20	4.7066E+15
Te-127m	5.9523E+04	6.3104E-03	2.9923E+22	2.2024E+15
Te-129	1.0109E+05	4.8271E-06	2.2534E+19	3.7403E+15
Te-129m	1.5437E+05	5.1244E-03	2.3922E+22	5.7119E+15
Te-131m	2.1691E+03	2.7202E-06	1.2505E+19	8.0258E+13
Te-132	6.2304E+05	2.0522E-03	9.3626E+21	2.3052E+16
I-131	1.2678E+07	1.0226E-01	4.7011E+23	4.6909E+17
I-132	6.4385E+05	6.2376E-05	2.8457E+20	2.3823E+16
I-133	1.9906E+04	1.7572E-05	7.9567E+19	7.3653E+14
I-135	6.4337E-04	1.8320E-13	8.1723E+11	2.3805E+07
Xe-133	3.0626E+06	1.6362E-02	7.4085E+22	1.1332E+17
Xe-135	1.6035E+00	6.2791E-10	2.8010E+15	5.9330E+10
Cs-134	6.0416E+06	4.6696E+00	2.0986E+25	2.2354E+17
Cs-136	1.0356E+06	1.4131E-02	6.2571E+22	3.8319E+16
Cs-137	3.2905E+06	3.7830E+01	1.6629E+26	1.2175E+17
Ba-140	1.4594E+06	1.9935E-02	8.5750E+22	5.3998E+16
La-140	1.6341E+06	2.9400E-03	1.2646E+22	6.0463E+16
Ce-141	4.9063E+04	1.7219E-03	7.3543E+21	1.8153E+15
Ce-143	3.6224E+02	5.4548E-07	2.2972E+18	1.3403E+13
Ce-144	4.9664E+04	1.5571E-02	6.5119E+22	1.8376E+15
Pr-143	1.7000E+04	2.5245E-04	1.0631E+21	6.2899E+14
Nd-147	5.0634E+03	6.2590E-05	2.5641E+20	1.8735E+14
Np-239	4.8108E+04	2.0737E-04	5.2252E+20	1.7800E+15
Pu-238	1.9749E+02	1.1536E-02	2.9189E+22	7.3071E+12
Pu-239	1.7983E+01	2.8932E-01	7.2901E+23	6.6538E+11
Pu-240	2.6972E+01	1.1837E-01	2.9701E+23	9.9796E+11
Pu-241	7.5835E+03	7.3617E-02	1.8396E+23	2.8059E+14
Am-241	4.0919E+00	1.1922E-03	2.9791E+21	1.5140E+11
Cm-242	1.0901E+03	3.2891E-04	8.1848E+20	4.0333E+13
Cm-244	1.1848E+02	1.4645E-03	3.6144E+21	4.3837E+12
I-130	2.1334E+00	1.0939E-09	5.0672E+15	7.8935E+10
Xe-131m	9.4039E+04	1.1227E-03	5.1611E+21	3.4794E+15
Xe-133m	4.6043E+04	1.0261E-04	4.6462E+20	1.7036E+15

Xe-135m	1.0588E-04	1.1624E-15	5.1851E+09	3.9176E+06
Sb-124	7.5680E+03	4.3265E-04	2.1012E+21	2.8002E+14
Sb-125	7.7647E+04	7.5204E-02	3.6231E+23	2.8729E+15
Sb-126	3.1580E+03	3.7787E-05	1.8060E+20	1.1685E+14
Te-131	4.9650E+02	8.6478E-09	3.9754E+16	1.8370E+13
Te-125m	1.7111E+04	9.5006E-04	4.5771E+21	6.3310E+14
Ba-137m	3.6476E+06	6.7824E-06	2.9814E+19	1.3496E+17
Pd-109	3.4539E-01	1.6130E-10	8.9119E+14	1.2779E+10
Rh-106	2.9171E+05	8.1952E-08	4.6559E+17	1.0793E+16
Rh-103m	2.6489E+05	8.1434E-06	4.7612E+19	9.8011E+15
Eu-154	2.4832E+02	9.4135E-04	3.6811E+21	9.1880E+12
Eu-155	1.6795E+02	3.6118E-04	1.4033E+21	6.2142E+12
Eu-156	2.5580E+03	4.6423E-05	1.7921E+20	9.4648E+13
Nb-97	7.3327E-02	2.7274E-12	1.6933E+13	2.7131E+09
Nb-95m	1.6325E+02	4.2856E-07	2.7167E+18	6.0401E+12
Pm-147	2.6107E+03	2.8162E-03	1.1537E+22	9.6595E+13
Pm-148	1.1949E+03	7.2732E-06	2.9595E+19	4.4213E+13
Pm-149	3.9458E+02	9.9583E-07	4.0249E+18	1.4600E+13
Pm-151	9.1605E+00	1.2536E-08	4.9994E+16	3.3894E+11
Pm-148m	5.0603E+02	2.3688E-05	9.6387E+19	1.8723E+13
Pr-144	5.0870E+04	6.7320E-07	2.8154E+18	1.8822E+15
Pr-144m	9.3608E+02	5.1616E-09	2.1586E+16	3.4635E+13
Sm-153	2.5047E+02	5.7108E-07	2.2478E+18	9.2674E+12
Y-91m	2.8082E-02	6.7560E-13	4.4709E+12	1.0390E+09
Br-82	1.8933E+03	1.7488E-06	1.2843E+19	7.0053E+13
Am-242	5.5911E-02	6.9168E-11	1.7212E+14	2.0687E+09
Np-238	8.1309E+02	3.1374E-06	7.9387E+18	3.0084E+13

Containment Sump Transport Group Inventory:

Time (h) = 240.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	7.9711E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.5638E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	1.4115E+22	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4479E+01	0.0000E+00	0.0000E+00

Time (h) = 240.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 240.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 240.0000	Ci	kg	Atoms	Bq
I-131	7.1604E-03	5.7757E-11	2.6551E+14	2.6494E+08
I-132	2.8392E-07	2.7506E-17	1.2549E+08	1.0505E+04
I-133	1.1244E-05	9.9258E-15	4.4943E+10	4.1603E+05
Xe-133	1.7367E-03	9.2784E-12	4.2012E+13	6.4260E+07
Xe-131m	5.3174E-05	6.3483E-13	2.9184E+12	1.9674E+06
Xe-133m	2.6083E-05	5.8129E-14	2.6320E+11	9.6507E+05
Br-82	1.0707E-06	9.8893E-16	7.2628E+09	3.9614E+04

Environment Transport Group Inventory:

Time (h) = 240.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	9.2717E+09	1.2877E+08	4.5193E+13
Elemental I (atoms)	5.2913E+10	7.3490E+08	2.5760E+14

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Organic I (atoms)      1.6365E+09  2.2729E+07  7.9669E+12
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 240.0000       Ci           kg         Atoms         Bq
I-131                  8.6947E-07  7.0133E-15  3.2241E+10  3.2171E+04
I-133                  1.3653E-09  1.2052E-18  5.4572E+06  5.0516E+01
Br-82                  1.3004E-10  1.2011E-19  8.8211E+05  4.8114E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    3.1280E+10
Organic I (atoms)      9.6741E+08
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 240.0000       Ci           kg         Atoms         Bq
I-131                  1.2300E-09  9.9218E-18  4.5611E+07  4.5512E+01
Xe-133                 1.4035E-09  7.4980E-18  3.3950E+07  5.1929E+01
Xe-131m                5.6492E-11  6.7444E-19  3.1004E+06  2.0902E+00
Xe-133m                2.1326E-11  4.7527E-20  2.1520E+05  7.8905E-01

Control Room Transport Group Inventory:

                                                Overlying
Time (h) = 240.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    3.7266E+07  0.0000E+00  0.0000E+00
Elemental I (atoms)    4.4252E+07  0.0000E+00  0.0000E+00
Organic I (atoms)      1.3686E+06  0.0000E+00  0.0000E+00
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Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Recirculating Filter Inventory

Time (h) = 240.0000       Ci           kg         Atoms         Bq
I-131                  3.1228E-07  2.5189E-15  1.1580E+10  1.1555E+04
I-133                  4.9037E-10  4.3288E-19  1.9600E+06  1.8144E+01
Br-82                  4.6705E-11  4.3140E-20  3.1682E+05  1.7281E+00

                       Deposition Recirculating
Time (h) = 240.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  1.1234E+10
Organic I (atoms)      0.0000E+00  3.4746E+08
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 240.0000       Ci           kg         Atoms         Bq
I-131                  8.6947E-07  7.0133E-15  3.2241E+10  3.2171E+04
I-133                  1.3653E-09  1.2052E-18  5.4572E+06  5.0516E+01
Br-82                  1.3004E-10  1.2011E-19  8.8211E+05  4.8114E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    3.1280E+10
Organic I (atoms)      9.6741E+08
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 240.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 240.0000       Ci           kg         Atoms         Bq
I-131                  1.1818E-06  9.5322E-15  4.3820E+10  4.3725E+04
I-133                  1.8557E-09  1.6381E-18  7.4172E+06  6.8660E+01
Br-82                  1.7674E-10  1.6325E-19  1.1989E+06  6.5395E+00

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 240.0000       Ci           kg         Atoms         Bq
Rb-86                  9.1054E+01  1.1190E-06  7.8361E+18  3.3690E+12
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Sr-89	2.7228E+03	9.3720E-05	6.3415E+20	1.0074E+14
Sr-90	3.6575E+02	2.6813E-03	1.7941E+22	1.3533E+13
Sr-91	9.5357E-05	2.6305E-14	1.7408E+11	3.5282E+06
Y-90	3.3862E+02	6.2240E-07	4.1646E+18	1.2529E+13
Y-91	5.7074E+01	2.3273E-06	1.5401E+19	2.1118E+12
Y-93	3.3481E-06	1.0035E-15	6.4983E+09	1.2388E+05
Zr-95	4.7997E+01	2.2342E-06	1.4163E+19	1.7759E+12
Zr-97	2.7706E-03	1.4493E-12	8.9977E+12	1.0251E+08
Nb-95	5.3433E+01	1.3665E-06	8.6621E+18	1.9770E+12
Mo-99	5.9504E+01	1.2407E-07	7.5468E+17	2.2016E+12
Tc-99m	5.7423E+01	1.0921E-08	6.6429E+16	2.1246E+12
Ru-103	5.7127E+02	1.7701E-05	1.0349E+20	2.1137E+13
Ru-106	3.0755E+02	9.1927E-05	5.2226E+20	1.1379E+13
Rh-105	4.9451E+00	5.8587E-09	3.3602E+16	1.8297E+11
Sb-127	1.6286E+02	6.0984E-07	2.8918E+18	6.0258E+12
Te-127	2.7581E+02	1.0451E-07	4.9557E+17	1.0205E+13
Te-127m	1.2906E+02	1.3683E-05	6.4880E+19	4.7753E+12
Te-129	2.1919E+02	1.0466E-08	4.8860E+16	8.1100E+12
Te-129m	3.3473E+02	1.1111E-05	5.1870E+19	1.2385E+13
Te-131m	4.7032E+00	5.8982E-09	2.7114E+16	1.7402E+11
Te-132	1.3509E+03	4.4497E-06	2.0301E+19	4.9984E+13
I-131	2.8275E+04	2.2807E-04	1.0485E+21	1.0462E+15
I-132	1.3960E+03	1.3525E-07	6.1703E+17	5.1654E+13
I-133	4.4383E+01	3.9180E-08	1.7740E+17	1.6422E+12
I-135	1.4351E-06	4.0864E-16	1.8229E+09	5.3098E+04
Xe-133	6.8392E+03	3.6538E-05	1.6544E+20	2.5305E+14
Xe-135	3.5825E-03	1.4029E-12	6.2579E+12	1.3255E+08
Cs-134	1.3602E+04	1.0513E-02	4.7246E+22	5.0327E+14
Cs-136	2.3316E+03	3.1813E-05	1.4087E+20	8.6269E+13
Cs-137	7.4081E+03	8.5168E-02	3.7437E+23	2.7410E+14
Ba-140	3.1643E+03	4.3224E-05	1.8593E+20	1.1708E+14
La-140	3.5433E+03	6.3748E-06	2.7421E+19	1.3110E+14
Ce-141	1.0639E+02	3.7339E-06	1.5948E+19	3.9365E+12
Ce-143	7.8542E-01	1.1827E-09	4.9807E+15	2.9060E+10
Ce-144	1.0768E+02	3.3762E-05	1.4120E+20	3.9843E+12
Pr-143	3.6863E+01	5.4743E-07	2.3054E+18	1.3639E+12
Nd-147	1.0979E+01	1.3571E-07	5.5597E+17	4.0622E+11
Np-239	1.0431E+02	4.4964E-07	1.1330E+18	3.8595E+12
Pu-238	4.2821E-01	2.5013E-05	6.3290E+19	1.5844E+10
Pu-239	3.8992E-02	6.2733E-04	1.5807E+21	1.4427E+09
Pu-240	5.8482E-02	2.5665E-04	6.4399E+20	2.1638E+09
Pu-241	1.6443E+01	1.5962E-04	3.9887E+20	6.0839E+11
Am-241	8.8724E-03	2.5851E-06	6.4596E+18	3.2828E+08
Cm-242	2.3636E+00	7.1315E-07	1.7747E+18	8.7453E+10
Cm-244	2.5689E-01	3.1753E-06	7.8370E+18	9.5050E+09
I-130	4.7587E-03	2.4399E-12	1.1303E+13	1.7607E+08
Xe-131m	2.0979E+02	2.5046E-06	1.1514E+19	7.7622E+12
Xe-133m	1.0277E+02	2.2905E-07	1.0371E+18	3.8026E+12
Xe-135m	2.3618E-07	2.5927E-18	1.1566E+07	8.7385E+03
Sb-124	1.6410E+01	9.3811E-07	4.5560E+18	6.0715E+11
Sb-125	1.6836E+02	1.6306E-04	7.8559E+20	6.2293E+12
Sb-126	6.8474E+00	8.1932E-08	3.9159E+17	2.5335E+11
Te-131	1.0765E+00	1.8751E-11	8.6198E+13	3.9832E+10
Te-125m	3.7101E+01	2.0600E-06	9.9243E+18	1.3727E+12
Ba-137m	8.2120E+03	1.5270E-08	6.7121E+16	3.0384E+14
Pd-109	7.4890E-04	3.4975E-13	1.9323E+12	2.7709E+07
Rh-106	6.3251E+02	1.7769E-10	1.0095E+15	2.3403E+13
Rh-103m	5.7436E+02	1.7657E-08	1.0324E+17	2.1251E+13
Eu-154	5.3843E-01	2.0411E-06	7.9817E+18	1.9922E+10
Eu-155	3.6416E-01	7.8313E-07	3.0427E+18	1.3474E+10
Eu-156	5.5465E+00	1.0066E-07	3.8857E+17	2.0522E+11
Nb-97	1.5899E-04	5.9137E-15	3.6715E+10	5.8827E+06
Nb-95m	3.5396E-01	9.2924E-10	5.8905E+15	1.3097E+10
Pm-147	5.6606E+00	6.1063E-06	2.5016E+19	2.0944E+11
Pm-148	2.5910E+00	1.5770E-08	6.4169E+16	9.5865E+10
Pm-149	8.5556E-01	2.1592E-09	8.7269E+15	3.1656E+10
Pm-151	1.9862E-02	2.7180E-11	1.0840E+14	7.3491E+08
Pm-148m	1.0972E+00	5.1362E-08	2.0899E+17	4.0597E+10
Pr-144	1.1030E+02	1.4597E-09	6.1044E+15	4.0811E+12
Pr-144m	2.0297E+00	1.1192E-11	4.6804E+13	7.5098E+10

Sm-153	5.4309E-01	1.2382E-09	4.8738E+15	2.0094E+10
Y-91m	6.0889E-05	1.4649E-15	9.6942E+09	2.2529E+06
Br-82	4.2232E+00	3.9009E-09	2.8648E+16	1.5626E+11
Am-242	1.2123E-04	1.4997E-13	3.7321E+11	4.4855E+06
Np-238	1.7630E+00	6.8028E-09	1.7213E+16	6.5231E+10

SIRWT Water Transport Group Inventory:

Time (h) = 240.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.7799E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0178E+21	0.0000E+00	0.0000E+00
Organic I (atoms)	3.1478E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	9.9974E-02	0.0000E+00	0.0000E+00

Time (h) = 240.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 240.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 240.0000	Ci	kg	Atoms	Bq
Rb-86	2.3514E-02	2.8899E-10	2.0236E+15	8.7003E+08
Sr-89	6.8285E-01	2.3504E-08	1.5904E+17	2.5265E+10
Sr-90	9.1722E-02	6.7241E-07	4.4993E+18	3.3937E+09
Sr-91	2.3913E-08	6.5968E-18	4.3656E+07	8.8479E+02
Y-90	8.4921E-02	1.5609E-10	1.0444E+15	3.1421E+09
Y-91	1.4324E-02	5.8409E-10	3.8653E+15	5.2999E+08
Y-93	8.3963E-10	2.5166E-19	1.6296E+06	3.1066E+01
Zr-95	1.2037E-02	5.6029E-10	3.5517E+15	4.4535E+08
Zr-97	6.9479E-07	3.6345E-16	2.2564E+09	2.5707E+04
Nb-95	1.3400E-02	3.4267E-10	2.1722E+15	4.9579E+08
Mo-99	1.4922E-02	3.1113E-11	1.8926E+14	5.5212E+08
Tc-99m	1.4400E-02	2.7386E-12	1.6659E+13	5.3281E+08
Ru-103	1.4326E-01	4.4389E-09	2.5953E+16	5.3007E+09
Ru-106	7.7126E-02	2.3053E-08	1.3097E+17	2.8537E+09
Rh-105	1.2401E-03	1.4692E-12	8.4266E+12	4.5884E+07
Sb-127	4.0841E-02	1.5293E-10	7.2519E+14	1.5111E+09
Te-127	6.9167E-02	2.6209E-11	1.2428E+14	2.5592E+09
Te-127m	3.2366E-02	3.4313E-09	1.6270E+16	1.1975E+09
Te-129	5.4968E-02	2.6247E-12	1.2253E+13	2.0338E+09
Te-129m	8.3941E-02	2.7864E-09	1.3008E+16	3.1058E+09
Te-131m	1.1795E-03	1.4791E-12	6.7996E+12	4.3640E+07
Te-132	3.3878E-01	1.1159E-09	5.0909E+15	1.2535E+10
Cs-134	3.5126E+00	2.7149E-06	1.2201E+19	1.2997E+11
Cs-136	6.0212E-01	8.2155E-09	3.6379E+16	2.2279E+10
Cs-137	1.9131E+00	2.1994E-05	9.6681E+19	7.0785E+10
Ba-140	7.9355E-01	1.0839E-08	4.6626E+16	2.9361E+10
La-140	8.8858E-01	1.5987E-09	6.8767E+15	3.2877E+10
Ce-141	2.6683E-02	9.3645E-10	3.9996E+15	9.8726E+08
Ce-143	1.9696E-04	2.9659E-13	1.2490E+12	7.2875E+06
Ce-144	2.7005E-02	8.4668E-09	3.5408E+16	9.9918E+08
Pr-143	9.2451E-03	1.3729E-10	5.7818E+14	3.4207E+08
Nd-147	2.7532E-03	3.4033E-11	1.3942E+14	1.0187E+08
Np-239	2.6159E-02	1.1276E-10	2.8412E+14	9.6788E+08
Pu-238	1.0739E-04	6.2726E-09	1.5872E+16	3.9733E+06
Pu-239	9.7784E-06	1.5732E-07	3.9640E+17	3.6180E+05
Pu-240	1.4666E-05	6.4362E-08	1.6150E+17	5.4264E+05

Pu-241	4.1235E-03	4.0029E-08	1.0003E+17	1.5257E+08
Am-241	2.2250E-06	6.4828E-10	1.6199E+15	8.2325E+04
Cm-242	5.9274E-04	1.7884E-10	4.4505E+14	2.1931E+07
Cm-244	6.4423E-05	7.9630E-10	1.9653E+15	2.3836E+06
Sb-124	4.1151E-03	2.3526E-10	1.1425E+15	1.5226E+08
Sb-125	4.2220E-02	4.0892E-08	1.9701E+17	1.5622E+09
Sb-126	1.7172E-03	2.0547E-11	9.8202E+13	6.3535E+07
Te-131	2.6997E-04	4.7022E-15	2.1616E+10	9.9889E+06
Te-125m	9.3040E-03	5.1659E-10	2.4888E+15	3.4425E+08
Ba-137m	2.1207E+00	3.9433E-12	1.7334E+13	7.8467E+10
Pd-109	1.8781E-07	8.7709E-17	4.8458E+08	6.9488E+03
Rh-106	1.5862E-01	4.4561E-14	2.5316E+11	5.8689E+09
Rh-103m	1.4404E-01	4.4280E-12	2.5889E+13	5.3294E+09
Eu-154	1.3503E-04	5.1186E-10	2.0016E+15	4.9960E+06
Eu-155	9.1323E-05	1.9639E-10	7.6303E+14	3.3790E+06
Eu-156	1.3909E-03	2.5242E-11	9.7444E+13	5.1465E+07
Nb-97	3.9872E-08	1.4830E-18	9.2072E+06	1.4753E+03
Nb-95m	8.8766E-05	2.3303E-13	1.4772E+12	3.2843E+06
Pm-147	1.4196E-03	1.5313E-09	6.2733E+15	5.2524E+07
Pm-148	6.4975E-04	3.9548E-12	1.6092E+13	2.4041E+07
Pm-149	2.1456E-04	5.4148E-13	2.1885E+12	7.9386E+06
Pm-151	4.9810E-06	6.8162E-15	2.7184E+10	1.8430E+05
Pm-148m	2.7515E-04	1.2880E-11	5.2410E+13	1.0181E+07
Pr-144	2.7661E-02	3.6605E-13	1.5308E+12	1.0234E+09
Pr-144m	5.0899E-04	2.8066E-15	1.1737E+10	1.8833E+07
Sm-153	1.3619E-04	3.1052E-13	1.2222E+12	5.0392E+06
Y-91m	1.5270E-08	3.6736E-19	2.4311E+06	5.6497E+02
Am-242	3.0402E-08	3.7610E-17	9.3592E+07	1.1249E+03
Np-238	4.4212E-04	1.7060E-12	4.3167E+12	1.6358E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 240.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	2.5786E-05

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 240.0000	Ci	kg	Atoms	Bq
I-131	7.2395E+00	5.8395E-08	2.6844E+17	2.6786E+11
I-132	8.2667E-03	8.0087E-13	3.6538E+12	3.0587E+08
I-133	1.1366E-02	1.0033E-11	4.5431E+13	4.2054E+08
I-135	3.6764E-10	1.0468E-19	4.6698E+05	1.3603E+01
Xe-133	1.7534E+00	9.3675E-09	4.2415E+16	6.4876E+10
Xe-135	9.1881E-07	3.5979E-16	1.6050E+09	3.3996E+04
I-130	1.2191E-06	6.2505E-16	2.8955E+09	4.5105E+04
Xe-131m	5.3735E-02	6.4152E-10	2.9491E+15	1.9882E+09
Xe-133m	2.6341E-02	5.8704E-11	2.6581E+14	9.7462E+08
Br-82	1.0819E-03	9.9931E-13	7.3390E+12	4.0030E+07

SIRWT Air Transport Group Inventory:

Time (h) = 240.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.5630E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.6044E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	8.0550E+15	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 240.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 240.0000	Ci	kg	Atoms	Bq
Rb-86	2.3514E-02	2.8899E-10	2.0236E+15	8.7003E+08
Sr-89	6.8285E-01	2.3504E-08	1.5904E+17	2.5265E+10
Sr-90	9.1722E-02	6.7241E-07	4.4993E+18	3.3937E+09
Sr-91	2.3913E-08	6.5968E-18	4.3656E+07	8.8479E+02
Y-90	8.4921E-02	1.5609E-10	1.0444E+15	3.1421E+09
Y-91	1.4324E-02	5.8409E-10	3.8653E+15	5.2999E+08
Y-93	8.3963E-10	2.5166E-19	1.6296E+06	3.1066E+01
Zr-95	1.2037E-02	5.6029E-10	3.5517E+15	4.4535E+08
Zr-97	6.9479E-07	3.6345E-16	2.2564E+09	2.5707E+04
Nb-95	1.3400E-02	3.4267E-10	2.1722E+15	4.9579E+08
Mo-99	1.4922E-02	3.1113E-11	1.8926E+14	5.5212E+08
Tc-99m	1.4400E-02	2.7386E-12	1.6659E+13	5.3281E+08
Ru-103	1.4326E-01	4.4389E-09	2.5953E+16	5.3007E+09
Ru-106	7.7126E-02	2.3053E-08	1.3097E+17	2.8537E+09
Rh-105	1.2401E-03	1.4692E-12	8.4266E+12	4.5884E+07
Sb-127	4.0841E-02	1.5293E-10	7.2519E+14	1.5111E+09
Te-127	6.9167E-02	2.6209E-11	1.2428E+14	2.5592E+09
Te-127m	3.2366E-02	3.4313E-09	1.6270E+16	1.1975E+09
Te-129	5.4968E-02	2.6247E-12	1.2253E+13	2.0338E+09
Te-129m	8.3941E-02	2.7864E-09	1.3008E+16	3.1058E+09
Te-131m	1.1795E-03	1.4791E-12	6.7996E+12	4.3640E+07
Te-132	3.3878E-01	1.1159E-09	5.0909E+15	1.2535E+10
Cs-134	3.5126E+00	2.7149E-06	1.2201E+19	1.2997E+11
Cs-136	6.0212E-01	8.2155E-09	3.6379E+16	2.2279E+10
Cs-137	1.9131E+00	2.1994E-05	9.6681E+19	7.0785E+10
Ba-140	7.9355E-01	1.0839E-08	4.6626E+16	2.9361E+10
La-140	8.8858E-01	1.5987E-09	6.8767E+15	3.2877E+10
Ce-141	2.6683E-02	9.3645E-10	3.9996E+15	9.8726E+08
Ce-143	1.9696E-04	2.9659E-13	1.2490E+12	7.2875E+06
Ce-144	2.7005E-02	8.4668E-09	3.5408E+16	9.9918E+08
Pr-143	9.2451E-03	1.3729E-10	5.7818E+14	3.4207E+08
Nd-147	2.7532E-03	3.4033E-11	1.3942E+14	1.0187E+08
Np-239	2.6159E-02	1.1276E-10	2.8412E+14	9.6788E+08
Pu-238	1.0739E-04	6.2726E-09	1.5872E+16	3.9733E+06
Pu-239	9.7784E-06	1.5732E-07	3.9640E+17	3.6180E+05
Pu-240	1.4666E-05	6.4362E-08	1.6150E+17	5.4264E+05
Pu-241	4.1235E-03	4.0029E-08	1.0003E+17	1.5257E+08
Am-241	2.2250E-06	6.4828E-10	1.6199E+15	8.2325E+04
Cm-242	5.9274E-04	1.7884E-10	4.4505E+14	2.1931E+07
Cm-244	6.4423E-05	7.9630E-10	1.9653E+15	2.3836E+06
Sb-124	4.1151E-03	2.3526E-10	1.1425E+15	1.5226E+08
Sb-125	4.2220E-02	4.0892E-08	1.9701E+17	1.5622E+09
Sb-126	1.7172E-03	2.0547E-11	9.8202E+13	6.3535E+07
Te-131	2.6997E-04	4.7022E-15	2.1616E+10	9.9889E+06
Te-125m	9.3040E-03	5.1659E-10	2.4888E+15	3.4425E+08
Ba-137m	2.1207E+00	3.9433E-12	1.7334E+13	7.8467E+10
Pd-109	1.8781E-07	8.7709E-17	4.8458E+08	6.9488E+03
Rh-106	1.5862E-01	4.4561E-14	2.5316E+11	5.8689E+09
Rh-103m	1.4404E-01	4.4280E-12	2.5889E+13	5.3294E+09
Eu-154	1.3503E-04	5.1186E-10	2.0016E+15	4.9960E+06
Eu-155	9.1323E-05	1.9639E-10	7.6303E+14	3.3790E+06
Eu-156	1.3909E-03	2.5242E-11	9.7444E+13	5.1465E+07
Nb-97	3.9872E-08	1.4830E-18	9.2072E+06	1.4753E+03
Nb-95m	8.8766E-05	2.3303E-13	1.4772E+12	3.2843E+06
Pm-147	1.4196E-03	1.5313E-09	6.2733E+15	5.2524E+07
Pm-148	6.4975E-04	3.9548E-12	1.6092E+13	2.4041E+07
Pm-149	2.1456E-04	5.4148E-13	2.1885E+12	7.9386E+06
Pm-151	4.9810E-06	6.8162E-15	2.7184E+10	1.8430E+05
Pm-148m	2.7515E-04	1.2880E-11	5.2410E+13	1.0181E+07
Pr-144	2.7661E-02	3.6605E-13	1.5308E+12	1.0234E+09
Pr-144m	5.0899E-04	2.8066E-15	1.1737E+10	1.8833E+07
Sm-153	1.3619E-04	3.1052E-13	1.2222E+12	5.0392E+06
Y-91m	1.5270E-08	3.6736E-19	2.4311E+06	5.6497E+02
Am-242	3.0402E-08	3.7610E-17	9.3592E+07	1.1249E+03
Np-238	4.4212E-04	1.7060E-12	4.3167E+12	1.6358E+07

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 240.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	2.5786E-05

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 240.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 336.0000

EAB Doses:

Time (h) = 336.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.0034E-07	1.0808E-03	5.0099E-07	3.3206E-05
Accumulated dose (rem)	9.3719E-07	2.4115E-03	1.5439E-06	7.4468E-05

LPZ Doses:

Time (h) = 336.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.4153E-09	5.0932E-06	2.3609E-09	1.5648E-07
Accumulated dose (rem)	3.0869E-08	2.2421E-05	4.7598E-08	7.2230E-07

Control Room Doses:

Time (h) = 336.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.1699E-10	7.2259E-05	2.5107E-08	2.2004E-06
Accumulated dose (rem)	7.8205E-09	2.2116E-04	4.3020E-07	6.7902E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Bq
Rb-86	3.4837E+04	4.2814E-04	2.9980E+21	1.2890E+15
Sr-89	1.1878E+06	4.0884E-02	2.7664E+23	4.3947E+16
Sr-90	1.6853E+05	1.2355E+00	8.2669E+24	6.2355E+15
Sr-91	3.9899E-05	1.1007E-14	7.2839E+10	1.4763E+06
Y-90	1.6414E+05	3.0170E-04	2.0188E+21	6.0733E+15
Y-91	2.5061E+04	1.0219E-03	6.7626E+21	9.2725E+14
Y-93	2.1238E-06	6.3658E-16	4.1221E+09	7.8582E+04
Zr-95	2.1183E+04	9.8606E-04	6.2507E+21	7.8378E+14
Zr-97	2.4898E-02	1.3024E-11	8.0861E+13	9.2124E+08
Nb-95	2.4401E+04	6.2401E-04	3.9557E+21	9.0283E+14
Mo-99	1.0006E+04	2.0863E-05	1.2691E+20	3.7024E+14
Tc-99m	9.6565E+03	1.8365E-06	1.1171E+19	3.5729E+14
Ru-103	2.4535E+05	7.6021E-03	4.4448E+22	9.0780E+15
Ru-106	1.4068E+05	4.2050E-02	2.3890E+23	5.2053E+15
Rh-105	3.4713E+02	4.1127E-07	2.3588E+18	1.2844E+13
Sb-127	3.6530E+04	1.3679E-04	6.4864E+20	1.3516E+15
Te-127	9.0563E+04	3.4316E-05	1.6272E+20	3.3508E+15
Te-127m	5.8225E+04	6.1728E-03	2.9270E+22	2.1543E+15
Te-129	9.3021E+04	4.4418E-06	2.0736E+19	3.4418E+15
Te-129m	1.4205E+05	4.7154E-03	2.2013E+22	5.2560E+15
Te-131m	2.3588E+02	2.9581E-07	1.3599E+18	8.7277E+12
Te-132	2.6587E+05	8.7575E-04	3.9954E+21	9.8372E+15
I-131	8.9745E+06	7.2390E-02	3.3278E+23	3.3206E+17
I-132	2.7475E+05	2.6618E-05	1.2144E+20	1.0166E+16
I-133	8.1158E+02	7.1643E-07	3.2439E+18	3.0028E+13
I-135	2.7301E-08	7.7739E-18	3.4678E+07	1.0101E+03
Xe-133	1.8162E+06	9.7031E-03	4.3935E+22	6.7201E+16
Xe-135	1.0618E-03	4.1577E-13	1.8547E+12	3.9285E+07
Cs-134	6.0154E+06	4.6493E+00	2.0895E+25	2.2257E+17
Cs-136	8.3753E+05	1.1428E-02	5.0602E+22	3.0989E+16
Cs-137	3.2875E+06	3.7795E+01	1.6614E+26	1.2164E+17

Ba-140	1.1732E+06	1.6025E-02	6.8933E+22	4.3408E+16
La-140	1.3424E+06	2.4151E-03	1.0389E+22	4.9669E+16
Ce-141	4.5021E+04	1.5800E-03	6.7484E+21	1.6658E+15
Ce-143	4.8193E+01	7.2571E-08	3.0562E+17	1.7831E+12
Ce-144	4.9149E+04	1.5410E-02	6.4444E+22	1.8185E+15
Pr-143	1.3875E+04	2.0604E-04	8.6771E+20	5.1337E+14
Nd-147	3.9309E+03	4.8590E-05	1.9906E+20	1.4544E+14
Np-239	1.4812E+04	6.3849E-05	1.6088E+20	5.4806E+14
Pu-238	1.9747E+02	1.1535E-02	2.9187E+22	7.3065E+12
Pu-239	1.7980E+01	2.8927E-01	7.2888E+23	6.6526E+11
Pu-240	2.6954E+01	1.1829E-01	2.9681E+23	9.9729E+11
Pu-241	7.5745E+03	7.3529E-02	1.8374E+23	2.8026E+14
Am-241	4.2222E+00	1.2302E-03	3.0740E+21	1.5622E+11
Cm-242	1.0710E+03	3.2314E-04	8.0412E+20	3.9626E+13
Cm-244	1.1835E+02	1.4629E-03	3.6105E+21	4.3789E+12
I-130	9.7877E-03	5.0185E-12	2.3248E+13	3.6215E+08
Xe-131m	9.9003E+04	1.1820E-03	5.4335E+21	3.6631E+15
Xe-133m	1.3049E+04	2.9082E-05	1.3168E+20	4.8282E+14
Xe-135m	4.4930E-09	4.9324E-20	2.2002E+05	1.6624E+02
Sb-124	7.2226E+03	4.1290E-04	2.0053E+21	2.6723E+14
Sb-125	7.7382E+04	7.4948E-02	3.6108E+23	2.8631E+15
Sb-126	2.5236E+03	3.0196E-05	1.4432E+20	9.3372E+13
Te-131	5.3992E+01	9.4041E-10	4.3231E+15	1.9977E+12
Te-125m	1.7126E+04	9.5089E-04	4.5811E+21	6.3366E+14
Ba-137m	3.6442E+06	6.7762E-06	2.9786E+19	1.3484E+17
Pd-109	2.4307E-03	1.1352E-12	6.2717E+12	8.9935E+07
Rh-106	2.8933E+05	8.1282E-08	4.6179E+17	1.0705E+16
Rh-103m	2.4668E+05	7.5833E-06	4.4338E+19	9.1270E+15
Eu-154	2.4794E+02	9.3991E-04	3.6755E+21	9.1739E+12
Eu-155	1.6758E+02	3.6039E-04	1.4002E+21	6.2005E+12
Eu-156	2.1298E+03	3.8652E-05	1.4921E+20	7.8804E+13
Nb-97	1.4288E-03	5.3146E-14	3.2995E+11	5.2867E+07
Nb-95m	1.5670E+02	4.1139E-07	2.6078E+18	5.7980E+12
Pm-147	2.6143E+03	2.8201E-03	1.1553E+22	9.6730E+13
Pm-148	7.2162E+02	4.3922E-06	1.7872E+19	2.6700E+13
Pm-149	1.1257E+02	2.8409E-07	1.1482E+18	4.1650E+12
Pm-151	8.7915E-01	1.2031E-09	4.7980E+15	3.2529E+10
Pm-148m	4.7286E+02	2.2135E-05	9.0068E+19	1.7496E+13
Pr-144	5.0343E+04	6.6622E-07	2.7862E+18	1.8627E+15
Pr-144m	9.2638E+02	5.1081E-09	2.1362E+16	3.4276E+13
Sm-153	6.0207E+01	1.3727E-07	5.4031E+17	2.2277E+12
Y-91m	2.5477E-05	6.1293E-16	4.0562E+09	9.4265E+05
Br-82	2.8726E+02	2.6533E-07	1.9486E+18	1.0629E+13
Am-242	8.7758E-04	1.0857E-12	2.7016E+12	3.2470E+07
Np-238	2.1931E+02	8.4625E-07	2.1413E+18	8.1145E+12

Containment Sump Transport Group Inventory:

Time (h) = 336.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.9500E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.2292E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	9.9872E+21	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4409E+01	0.0000E+00	0.0000E+00

Time (h) = 336.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 336.0000	Ci	kg	Atoms	Bq
I-131	1.1941E-02	9.6314E-11	4.4276E+14	4.4180E+08
I-132	1.6434E-07	1.5921E-17	7.2636E+07	6.0806E+03
I-133	1.0798E-06	9.5321E-16	4.3161E+09	3.9953E+04
Xe-133	2.4240E-03	1.2950E-11	5.8637E+13	8.9689E+07
Xe-131m	1.3182E-04	1.5738E-12	7.2347E+12	4.8774E+06
Xe-133m	1.7402E-05	3.8782E-14	1.7560E+11	6.4387E+05
Br-82	3.8253E-07	3.5333E-16	2.5949E+09	1.4154E+04

Environment Transport Group Inventory:

Time (h) = 336.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.0248E+10	1.4234E+08	6.6047E+13
Elemental I (atoms)	6.6700E+10	9.2639E+08	4.2949E+14
Organic I (atoms)	2.0629E+09	2.8651E+07	1.3283E+13
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 336.0000	Ci	kg	Atoms	Bq
I-131	1.3600E-06	1.0970E-14	5.0429E+10	5.0319E+04
I-133	1.2298E-10	1.0857E-19	4.9158E+05	4.5504E+00
Br-82	4.3574E-11	4.0248E-20	2.9558E+05	1.6122E+00

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	4.8917E+10
Organic I (atoms)	1.5129E+09
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00

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Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 336.0000       Ci           kg         Atoms         Bq
I-131                  1.5514E-09  1.2514E-17  5.7526E+07  5.7401E+01
Xe-133                 1.4784E-09  7.8981E-18  3.5762E+07  5.4700E+01
Xe-131m                1.0178E-10  1.2151E-18  5.5857E+06  3.7657E+00
Xe-133m                1.0640E-11  2.3714E-20  1.0737E+05  3.9370E-01

Control Room Transport Group Inventory:

                                                Overlying
Time (h) = 336.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    4.1455E+07  0.0000E+00  0.0000E+00
Elemental I (atoms)    5.5802E+07  0.0000E+00  0.0000E+00
Organic I (atoms)      1.7258E+06  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Recirculating Filter Inventory

Time (h) = 336.0000       Ci           kg         Atoms         Bq
I-131                  4.8978E-07  3.9506E-15  1.8161E+10  1.8122E+04
I-133                  4.4291E-11  3.9098E-20  1.7703E+05  1.6388E+00
Br-82                  1.5692E-11  1.4495E-20  1.0645E+05  5.8062E-01

                       Deposition Recirculating
Time (h) = 336.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  1.7617E+10
Organic I (atoms)      0.0000E+00  5.4484E+08
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 336.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 336.0000       Ci           kg         Atoms         Bq
I-131                  1.3600E-06  1.0970E-14  5.0429E+10  5.0319E+04
I-133                  1.2298E-10  1.0857E-19  4.9158E+05  4.5504E+00
Br-82                  4.3574E-11  4.0248E-20  2.9558E+05  1.6122E+00

Control Room Filtered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 336.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    4.8917E+10
Organic I (atoms)      1.5129E+09
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 336.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:
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	Pathway
Time (h) = 336.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Bq
I-131	1.8498E-06	1.4920E-14	6.8590E+10	6.8441E+04
I-133	1.6728E-10	1.4766E-19	6.6861E+05	6.1892E+00
Br-82	5.9266E-11	5.4742E-20	4.0203E+05	2.1928E+00

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Bq
Rb-86	1.0177E+02	1.2507E-06	8.7581E+18	3.7654E+12
Sr-89	3.3713E+03	1.1604E-04	7.8519E+20	1.2474E+14
Sr-90	4.7831E+02	3.5065E-03	2.3463E+22	1.7697E+13
Sr-91	1.1324E-07	3.1239E-17	2.0673E+08	4.1899E+03
Y-90	4.6587E+02	8.5628E-07	5.7296E+18	1.7237E+13
Y-91	7.1185E+01	2.9027E-06	1.9209E+19	2.6338E+12
Y-93	6.0278E-09	1.8067E-18	1.1699E+07	2.2303E+02
Zr-95	6.0122E+01	2.7986E-06	1.7741E+19	2.2245E+12
Zr-97	7.0666E-05	3.6965E-14	2.2950E+11	2.6146E+06
Nb-95	6.9254E+01	1.7711E-06	1.1227E+19	2.5624E+12
Mo-99	2.8400E+01	5.9214E-08	3.6020E+17	1.0508E+12
Tc-99m	2.7407E+01	5.2122E-09	3.1705E+16	1.0141E+12
Ru-103	6.9635E+02	2.1576E-05	1.2615E+20	2.5765E+13
Ru-106	3.9928E+02	1.1935E-04	6.7804E+20	1.4773E+13
Rh-105	9.8522E-01	1.1672E-09	6.6946E+15	3.6453E+10
Sb-127	1.0368E+02	3.8823E-07	1.8409E+18	3.8361E+12
Te-127	2.5703E+02	9.7395E-08	4.6183E+17	9.5103E+12
Te-127m	1.6525E+02	1.7519E-05	8.3074E+19	6.1144E+12
Te-129	2.6401E+02	1.2607E-08	5.8851E+16	9.7683E+12
Te-129m	4.0317E+02	1.3383E-05	6.2477E+19	1.4917E+13
Te-131m	6.6948E-01	8.3957E-10	3.8595E+15	2.4771E+10
Te-132	7.5459E+02	2.4855E-06	1.1340E+19	2.7920E+13
I-131	2.6028E+04	2.0994E-04	9.6512E+20	9.6302E+14
I-132	7.7980E+02	7.5546E-08	3.4466E+17	2.8853E+13
I-133	2.3532E+00	2.0773E-09	9.4059E+15	8.7068E+10
I-135	7.9187E-11	2.2548E-20	1.0058E+05	2.9299E+00
Xe-133	5.2726E+03	2.8168E-05	1.2754E+20	1.9509E+14
Xe-135	3.0834E-06	1.2074E-15	5.3861E+09	1.1409E+05
Cs-134	1.7573E+04	1.3582E-02	6.1039E+22	6.5019E+14
Cs-136	2.4467E+03	3.3383E-05	1.4782E+20	9.0527E+13
Cs-137	9.6037E+03	1.1041E-01	4.8533E+23	3.5534E+14
Ba-140	3.3297E+03	4.5482E-05	1.9564E+20	1.2320E+14
La-140	3.8099E+03	6.8545E-06	2.9485E+19	1.4097E+14
Ce-141	1.2779E+02	4.4848E-06	1.9155E+19	4.7281E+12
Ce-143	1.3678E-01	2.0596E-10	8.6738E+14	5.0608E+09
Ce-144	1.3949E+02	4.3735E-05	1.8290E+20	5.1613E+12
Pr-143	3.9382E+01	5.8483E-07	2.4629E+18	1.4571E+12
Nd-147	1.1157E+01	1.3791E-07	5.6496E+17	4.1279E+11
Np-239	4.2040E+01	1.8121E-07	4.5661E+17	1.5555E+12
Pu-238	5.6046E-01	3.2738E-05	8.2837E+19	2.0737E+10
Pu-239	5.1031E-02	8.2100E-04	2.0687E+21	1.8881E+09
Pu-240	7.6500E-02	3.3572E-04	8.4240E+20	2.8305E+09
Pu-241	2.1498E+01	2.0869E-04	5.2147E+20	7.9541E+11
Am-241	1.1983E-02	3.4915E-06	8.7245E+18	4.4338E+08
Cm-242	3.0396E+00	9.1711E-07	2.2822E+18	1.1246E+11
Cm-244	3.3590E-01	4.1519E-06	1.0247E+19	1.2428E+10
I-130	2.8389E-05	1.4556E-14	6.7430E+10	1.0504E+06
Xe-131m	2.8717E+02	3.4285E-06	1.5761E+19	1.0625E+13
Xe-133m	3.7870E+01	8.4398E-08	3.8215E+17	1.4012E+12
Sb-124	2.0499E+01	1.1719E-06	5.6914E+18	7.5846E+11
Sb-125	2.1962E+02	2.1272E-04	1.0248E+21	8.1261E+12
Sb-126	7.1623E+00	8.5701E-08	4.0960E+17	2.6500E+11
Te-131	1.5324E-01	2.6691E-12	1.2270E+13	5.6698E+09

Te-125m	4.8606E+01	2.6988E-06	1.3002E+19	1.7984E+12
Ba-137m	1.0646E+04	1.9795E-08	8.7014E+16	3.9390E+14
Pd-109	6.8986E-06	3.2218E-15	1.7800E+10	2.5525E+05
Rh-106	8.2117E+02	2.3069E-10	1.3106E+15	3.0383E+13
Rh-103m	7.0011E+02	2.1523E-08	1.2584E+17	2.5904E+13
Eu-154	7.0371E-01	2.6676E-06	1.0432E+19	2.6037E+10
Eu-155	4.7562E-01	1.0228E-06	3.9740E+18	1.7598E+10
Eu-156	6.0449E+00	1.0970E-07	4.2348E+17	2.2366E+11
Nb-97	4.0553E-06	1.5084E-16	9.3645E+08	1.5005E+05
Nb-95m	4.4475E-01	1.1676E-09	7.4014E+15	1.6456E+10
Pm-147	7.4199E+00	8.0040E-06	3.2790E+19	2.7454E+11
Pm-148	2.0481E+00	1.2466E-08	5.0723E+16	7.5779E+10
Pm-149	3.1948E-01	8.0629E-10	3.2588E+15	1.1821E+10
Pm-151	2.4952E-03	3.4145E-12	1.3618E+13	9.2321E+07
Pm-148m	1.3421E+00	6.2823E-08	2.5563E+17	4.9656E+10
Pr-144	1.4288E+02	1.8909E-09	7.9076E+15	5.2866E+12
Pr-144m	2.6292E+00	1.4498E-11	6.0630E+13	9.7281E+10
Sm-153	1.7088E-01	3.8960E-10	1.5335E+15	6.3225E+09
Y-91m	7.2308E-08	1.7396E-18	1.1512E+07	2.6754E+03
Br-82	8.3319E-01	7.6960E-10	5.6520E+15	3.0828E+10
Am-242	2.4907E-06	3.0813E-15	7.6677E+09	9.2156E+04
Np-238	6.2244E-01	2.4018E-09	6.0773E+15	2.3030E+10

SIRWT Water Transport Group Inventory:

Time (h) = 336.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.4369E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.3651E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.8964E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	1.2957E-01	0.0000E+00	0.0000E+00

Time (h) = 336.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 336.0000	Ci	kg	Atoms	Bq
Rb-86	3.5921E-02	4.4147E-10	3.0914E+15	1.3291E+09
Sr-89	1.1630E+00	4.0030E-08	2.7086E+17	4.3030E+10
Sr-90	1.6499E-01	1.2096E-06	8.0934E+18	6.1047E+09
Y-90	1.6070E-01	2.9538E-10	1.9764E+15	5.9460E+09
Y-91	2.4570E-02	1.0019E-09	6.6303E+15	9.0910E+08
Zr-95	2.0739E-02	9.6537E-10	6.1196E+15	7.6734E+08
Zr-97	2.4376E-08	1.2751E-17	7.9164E+07	9.0191E+02
Nb-95	2.3889E-02	6.1092E-10	3.8727E+15	8.8389E+08
Mo-99	9.7965E-03	2.0426E-11	1.2425E+14	3.6247E+08
Tc-99m	9.4539E-03	1.7979E-12	1.0937E+13	3.4979E+08
Ru-103	2.4020E-01	7.4426E-09	4.3515E+16	8.8875E+09
Ru-106	1.3773E-01	4.1168E-08	2.3389E+17	5.0961E+09
Rh-105	3.3985E-04	4.0264E-13	2.3093E+12	1.2574E+07
Sb-127	3.5764E-02	1.3392E-10	6.3503E+14	1.3233E+09
Te-127	8.8664E-02	3.3596E-11	1.5931E+14	3.2805E+09
Te-127m	5.7004E-02	6.0433E-09	2.8656E+16	2.1091E+09
Te-129	9.1069E-02	4.3486E-12	2.0301E+13	3.3696E+09
Te-129m	1.3907E-01	4.6165E-09	2.1551E+16	5.1457E+09
Te-131m	2.3093E-04	2.8961E-13	1.3313E+12	8.5446E+06

Te-132	2.6029E-01	8.5738E-10	3.9116E+15	9.6309E+09
Cs-134	6.2027E+00	4.7941E-06	2.1545E+19	2.2950E+11
Cs-136	8.6361E-01	1.1783E-08	5.2177E+16	3.1954E+10
Cs-137	3.3898E+00	3.8972E-05	1.7131E+20	1.2542E+11
Ba-140	1.1486E+00	1.5689E-08	6.7487E+16	4.2497E+10
La-140	1.3142E+00	2.3645E-09	1.0171E+16	4.8627E+10
Ce-141	4.4082E-02	1.5471E-09	6.6077E+15	1.6311E+09
Ce-143	4.7180E-05	7.1046E-14	2.9920E+11	1.7457E+06
Ce-144	4.8118E-02	1.5086E-08	6.3092E+16	1.7804E+09
Pr-143	1.3585E-02	2.0175E-10	8.4961E+14	5.0266E+08
Nd-147	3.8484E-03	4.7571E-11	1.9488E+14	1.4239E+08
Np-239	1.4502E-02	6.2510E-11	1.5751E+14	5.3656E+08
Pu-238	1.9333E-04	1.1293E-08	2.8575E+16	7.1532E+06
Pu-239	1.7603E-05	2.8320E-07	7.1359E+17	6.5131E+05
Pu-240	2.6388E-05	1.1581E-07	2.9058E+17	9.7637E+05
Pu-241	7.4156E-03	7.1987E-08	1.7988E+17	2.7438E+08
Am-241	4.1336E-06	1.2044E-09	3.0095E+15	1.5294E+05
Cm-242	1.0485E-03	3.1636E-10	7.8725E+14	3.8794E+07
Cm-244	1.1587E-04	1.4322E-09	3.5347E+15	4.2871E+06
Sb-124	7.0710E-03	4.0424E-10	1.9632E+15	2.6163E+08
Sb-125	7.5759E-02	7.3376E-08	3.5350E+17	2.8031E+09
Sb-126	2.4706E-03	2.9562E-11	1.4129E+14	9.1413E+07
Te-131	5.2859E-05	9.2068E-16	4.2324E+09	1.9558E+06
Te-125m	1.6767E-02	9.3094E-10	4.4850E+15	6.2037E+08
Ba-137m	3.7577E+00	6.9872E-12	3.0714E+13	1.3904E+11
Pd-109	2.3797E-09	1.1113E-18	6.1401E+06	8.8048E+01
Rh-106	2.8326E-01	7.9577E-14	4.5210E+11	1.0481E+10
Rh-103m	2.4150E-01	7.4242E-12	4.3408E+13	8.9356E+09
Eu-154	2.4274E-04	9.2019E-10	3.5984E+15	8.9815E+06
Eu-155	1.6407E-04	3.5283E-10	1.3708E+15	6.0704E+06
Eu-156	2.0852E-03	3.7841E-11	1.4608E+14	7.7151E+07
Nb-97	1.3989E-09	5.2031E-20	3.2303E+05	5.1758E+01
Nb-95m	1.5342E-04	4.0275E-13	2.5531E+12	5.6764E+06
Pm-147	2.5595E-03	2.7610E-09	1.1311E+16	9.4700E+07
Pm-148	7.0648E-04	4.3000E-12	1.7497E+13	2.6140E+07
Pm-149	1.1021E-04	2.7813E-13	1.1241E+12	4.0776E+06
Pm-151	8.6071E-07	1.1778E-15	4.6973E+09	3.1846E+04
Pm-148m	4.6294E-04	2.1671E-11	8.8179E+13	1.7129E+07
Pr-144	4.9287E-02	6.5225E-13	2.7277E+12	1.8236E+09
Pr-144m	9.0694E-04	5.0009E-15	2.0914E+10	3.3557E+07
Sm-153	5.8944E-05	1.3439E-13	5.2897E+11	2.1809E+06
Am-242	8.5917E-10	1.0629E-18	2.6450E+06	3.1789E+01
Np-238	2.1471E-04	8.2850E-13	2.0964E+12	7.9443E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.5690E-05

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Bq
I-131	9.1207E+00	7.3569E-08	3.3820E+17	3.3747E+11
I-132	4.7687E-03	4.6199E-13	2.1077E+12	1.7644E+08
I-133	8.2469E-04	7.2801E-13	3.2964E+12	3.0514E+07
Xe-133	1.8495E+00	9.8807E-09	4.4739E+16	6.8431E+10
Xe-135	1.0819E-09	4.2366E-19	1.8899E+06	4.0030E+01
I-130	9.9519E-09	5.1026E-18	2.3638E+07	3.6822E+02
Xe-131m	1.0065E-01	1.2017E-09	5.5242E+15	3.7242E+09
Xe-133m	1.3280E-02	2.9597E-11	1.3401E+14	4.9137E+08
Br-82	2.9208E-04	2.6978E-13	1.9813E+12	1.0807E+07

SIRWT Air Transport Group Inventory:

Time (h) = 336.0000	Atmosphere	Sump	Overlying Pool

Noble gases (atoms)	5.0397E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.2806E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	1.0146E+16	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 336.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 336.0000	Ci	kg	Atoms	Bq
Rb-86	3.5921E-02	4.4147E-10	3.0914E+15	1.3291E+09
Sr-89	1.1630E+00	4.0030E-08	2.7086E+17	4.3030E+10
Sr-90	1.6499E-01	1.2096E-06	8.0934E+18	6.1047E+09
Y-90	1.6070E-01	2.9538E-10	1.9764E+15	5.9460E+09
Y-91	2.4570E-02	1.0019E-09	6.6303E+15	9.0910E+08
Zr-95	2.0739E-02	9.6537E-10	6.1196E+15	7.6734E+08
Zr-97	2.4376E-08	1.2751E-17	7.9164E+07	9.0191E+02
Nb-95	2.3889E-02	6.1092E-10	3.8727E+15	8.8389E+08
Mo-99	9.7965E-03	2.0426E-11	1.2425E+14	3.6247E+08
Tc-99m	9.4539E-03	1.7979E-12	1.0937E+13	3.4979E+08
Ru-103	2.4020E-01	7.4426E-09	4.3515E+16	8.8875E+09
Ru-106	1.3773E-01	4.1168E-08	2.3389E+17	5.0961E+09
Rh-105	3.3985E-04	4.0264E-13	2.3093E+12	1.2574E+07
Sb-127	3.5764E-02	1.3392E-10	6.3503E+14	1.3233E+09
Te-127	8.8664E-02	3.3596E-11	1.5931E+14	3.2805E+09
Te-127m	5.7004E-02	6.0433E-09	2.8656E+16	2.1091E+09
Te-129	9.1069E-02	4.3486E-12	2.0301E+13	3.3696E+09
Te-129m	1.3907E-01	4.6165E-09	2.1551E+16	5.1457E+09
Te-131m	2.3093E-04	2.8961E-13	1.3313E+12	8.5446E+06
Te-132	2.6029E-01	8.5738E-10	3.9116E+15	9.6309E+09
Cs-134	6.2027E+00	4.7941E-06	2.1545E+19	2.2950E+11
Cs-136	8.6361E-01	1.1783E-08	5.2177E+16	3.1954E+10
Cs-137	3.3898E+00	3.8972E-05	1.7131E+20	1.2542E+11
Ba-140	1.1486E+00	1.5689E-08	6.7487E+16	4.2497E+10
La-140	1.3142E+00	2.3645E-09	1.0171E+16	4.8627E+10
Ce-141	4.4082E-02	1.5471E-09	6.6077E+15	1.6311E+09
Ce-143	4.7180E-05	7.1046E-14	2.9920E+11	1.7457E+06
Ce-144	4.8118E-02	1.5086E-08	6.3092E+16	1.7804E+09
Pr-143	1.3585E-02	2.0175E-10	8.4961E+14	5.0266E+08
Nd-147	3.8484E-03	4.7571E-11	1.9488E+14	1.4239E+08
Np-239	1.4502E-02	6.2510E-11	1.5751E+14	5.3656E+08
Pu-238	1.9333E-04	1.1293E-08	2.8575E+16	7.1532E+06
Pu-239	1.7603E-05	2.8320E-07	7.1359E+17	6.5131E+05
Pu-240	2.6388E-05	1.1581E-07	2.9058E+17	9.7637E+05
Pu-241	7.4156E-03	7.1987E-08	1.7988E+17	2.7438E+08
Am-241	4.1336E-06	1.2044E-09	3.0095E+15	1.5294E+05
Cm-242	1.0485E-03	3.1636E-10	7.8725E+14	3.8794E+07
Cm-244	1.1587E-04	1.4322E-09	3.5347E+15	4.2871E+06
Sb-124	7.0710E-03	4.0424E-10	1.9632E+15	2.6163E+08
Sb-125	7.5759E-02	7.3376E-08	3.5350E+17	2.8031E+09
Sb-126	2.4706E-03	2.9562E-11	1.4129E+14	9.1413E+07
Te-131	5.2859E-05	9.2068E-16	4.2324E+09	1.9558E+06
Te-125m	1.6767E-02	9.3094E-10	4.4850E+15	6.2037E+08
Ba-137m	3.7577E+00	6.9872E-12	3.0714E+13	1.3904E+11
Pd-109	2.3797E-09	1.1113E-18	6.1401E+06	8.8048E+01
Rh-106	2.8326E-01	7.9577E-14	4.5210E+11	1.0481E+10
Rh-103m	2.4150E-01	7.4242E-12	4.3408E+13	8.9356E+09
Eu-154	2.4274E-04	9.2019E-10	3.5984E+15	8.9815E+06
Eu-155	1.6407E-04	3.5283E-10	1.3708E+15	6.0704E+06
Eu-156	2.0852E-03	3.7841E-11	1.4608E+14	7.7151E+07
Nb-97	1.3989E-09	5.2031E-20	3.2303E+05	5.1758E+01
Nb-95m	1.5342E-04	4.0275E-13	2.5531E+12	5.6764E+06
Pm-147	2.5595E-03	2.7610E-09	1.1311E+16	9.4700E+07
Pm-148	7.0648E-04	4.3000E-12	1.7497E+13	2.6140E+07
Pm-149	1.1021E-04	2.7813E-13	1.1241E+12	4.0776E+06

Pm-151	8.6071E-07	1.1778E-15	4.6973E+09	3.1846E+04
Pm-148m	4.6294E-04	2.1671E-11	8.8179E+13	1.7129E+07
Pr-144	4.9287E-02	6.5225E-13	2.7277E+12	1.8236E+09
Pr-144m	9.0694E-04	5.0009E-15	2.0914E+10	3.3557E+07
Sm-153	5.8944E-05	1.3439E-13	5.2897E+11	2.1809E+06
Am-242	8.5917E-10	1.0629E-18	2.6450E+06	3.1789E+01
Np-238	2.1471E-04	8.2850E-13	2.0964E+12	7.9443E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	4.5690E-05

SIRWT Leakage Transport Group Inventory:

Time (h) = 336.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 432.0000

EAB Doses:

Time (h) = 432.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.4833E-07	1.2619E-03	5.7974E-07	3.8766E-05
Accumulated dose (rem)	1.2855E-06	3.6734E-03	2.1236E-06	1.1323E-04

LPZ Doses:

Time (h) = 432.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.6415E-09	5.9464E-06	2.7320E-09	1.8268E-07
Accumulated dose (rem)	3.2510E-08	2.8367E-05	5.0330E-08	9.0498E-07

Control Room Doses:

Time (h) = 432.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.7893E-10	8.4389E-05	2.8569E-08	2.5697E-06
Accumulated dose (rem)	8.2994E-09	3.0555E-04	4.5877E-07	9.3599E-06

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Bq
Rb-86	3.0007E+04	3.6878E-04	2.5824E+21	1.1102E+15
Sr-89	1.1236E+06	3.8674E-02	2.6168E+23	4.1572E+16
Sr-90	1.6837E+05	1.2343E+00	8.2592E+24	6.2297E+15
Sr-91	3.6198E-08	9.9857E-18	6.6083E+07	1.3393E+03
Y-90	1.6686E+05	3.0669E-04	2.0522E+21	6.1739E+15
Y-91	2.3885E+04	9.7395E-04	6.4453E+21	8.8374E+14
Y-93	2.9212E-09	8.7557E-19	5.6697E+06	1.0808E+02
Zr-95	2.0271E+04	9.4361E-04	5.9816E+21	7.5004E+14
Zr-97	4.8516E-04	2.5379E-13	1.5756E+12	1.7951E+07
Nb-95	2.4107E+04	6.1649E-04	3.9080E+21	8.9195E+14
Mo-99	3.6486E+03	7.6074E-06	4.6275E+19	1.3500E+14
Tc-99m	3.5210E+03	6.6962E-07	4.0733E+18	1.3028E+14
Ru-103	2.2848E+05	7.0793E-03	4.1391E+22	8.4536E+15
Ru-106	1.3953E+05	4.1707E-02	2.3695E+23	5.1628E+15
Rh-105	5.2836E+01	6.2598E-08	3.5902E+17	1.9549E+12
Sb-127	1.7766E+04	6.6528E-05	3.1547E+20	6.5736E+14
Te-127	7.2004E+04	2.7283E-05	1.2937E+20	2.6641E+15
Te-127m	5.6840E+04	6.0259E-03	2.8574E+22	2.1031E+15
Te-129	8.5596E+04	4.0872E-06	1.9081E+19	3.1671E+15
Te-129m	1.3071E+05	4.3390E-03	2.0256E+22	4.8364E+15
Te-131m	2.5651E+01	3.2169E-08	1.4788E+17	9.4910E+11

Te-132	1.1346E+05	3.7371E-04	1.7050E+21	4.1979E+15
I-131	6.3527E+06	5.1242E-02	2.3556E+23	2.3505E+17
I-132	1.1725E+05	1.1359E-05	5.1822E+19	4.3382E+15
I-133	3.3088E+01	2.9209E-08	1.3225E+17	1.2243E+12
Xe-133	1.0728E+06	5.7312E-03	2.5950E+22	3.9693E+16
Xe-135	7.0237E-07	2.7504E-16	1.2269E+09	2.5988E+04
Cs-134	5.9893E+06	4.6291E+00	2.0804E+25	2.2160E+17
Cs-136	6.7732E+05	9.2415E-03	4.0922E+22	2.5061E+16
Cs-137	3.2844E+06	3.7760E+01	1.6598E+26	1.2152E+17
Ba-140	9.4311E+05	1.2882E-02	5.5414E+22	3.4895E+16
La-140	1.0846E+06	1.9514E-03	8.3939E+21	4.0132E+16
Ce-141	4.1312E+04	1.4499E-03	6.1924E+21	1.5285E+15
Ce-143	6.4117E+00	9.6549E-09	4.0660E+16	2.3723E+11
Ce-144	4.8640E+04	1.5250E-02	6.3776E+22	1.7997E+15
Pr-143	1.1305E+04	1.6789E-04	7.0701E+20	4.1829E+14
Nd-147	3.0517E+03	3.7722E-05	1.5454E+20	1.1291E+14
Np-239	4.5607E+03	1.9659E-05	4.9535E+19	1.6875E+14
Pu-238	1.9743E+02	1.1532E-02	2.9180E+22	7.3048E+12
Pu-239	1.7971E+01	2.8912E-01	7.2851E+23	6.6492E+11
Pu-240	2.6936E+01	1.1821E-01	2.9661E+23	9.9663E+11
Pu-241	7.5654E+03	7.3442E-02	1.8352E+23	2.7992E+14
Am-241	4.3522E+00	1.2681E-03	3.1686E+21	1.6103E+11
Cm-242	1.0522E+03	3.1747E-04	7.9001E+20	3.8931E+13
Cm-244	1.1822E+02	1.4613E-03	3.6066E+21	4.3742E+12
I-130	4.4905E-05	2.3024E-14	1.0666E+11	1.6615E+06
Xe-131m	9.5757E+04	1.1432E-03	5.2554E+21	3.5430E+15
Xe-133m	3.6763E+03	8.1930E-06	3.7097E+19	1.3602E+14
Sb-124	6.8929E+03	3.9405E-04	1.9138E+21	2.5504E+14
Sb-125	7.7119E+04	7.4693E-02	3.5985E+23	2.8534E+15
Sb-126	2.0166E+03	2.4130E-05	1.1533E+20	7.4614E+13
Te-131	5.8714E+00	1.0227E-10	4.7012E+14	2.1724E+11
Te-125m	1.7137E+04	9.5153E-04	4.5842E+21	6.3409E+14
Ba-137m	3.6409E+06	6.7700E-06	2.9759E+19	1.3471E+17
Pd-109	1.7106E-05	7.9886E-15	4.4136E+10	6.3291E+05
Rh-106	2.8697E+05	8.0619E-08	4.5802E+17	1.0618E+16
Rh-103m	2.2971E+05	7.0618E-06	4.1288E+19	8.4993E+15
Eu-154	2.4756E+02	9.3847E-04	3.6699E+21	9.1599E+12
Eu-155	1.6721E+02	3.5960E-04	1.3971E+21	6.1869E+12
Eu-156	1.7733E+03	3.2182E-05	1.2423E+20	6.5613E+13
Nb-97	2.7842E-05	1.0356E-15	6.4293E+09	1.0302E+06
Nb-95m	1.5018E+02	3.9426E-07	2.4993E+18	5.5567E+12
Pm-147	2.6151E+03	2.8209E-03	1.1556E+22	9.6757E+13
Pm-148	4.3877E+02	2.6706E-06	1.0867E+19	1.6234E+13
Pm-149	3.2113E+01	8.1045E-08	3.2756E+17	1.1882E+12
Pm-151	8.4373E-02	1.1546E-10	4.6047E+14	3.1218E+09
Pm-148m	4.4186E+02	2.0684E-05	8.4164E+19	1.6349E+13
Pr-144	4.9821E+04	6.5932E-07	2.7573E+18	1.8434E+15
Pr-144m	9.1677E+02	5.0551E-09	2.1141E+16	3.3921E+13
Sm-153	1.4472E+01	3.2997E-08	1.2988E+17	5.3547E+11
Y-91m	2.3114E-08	5.5607E-19	3.6800E+06	8.5521E+02
Br-82	4.3583E+01	4.0256E-08	2.9564E+17	1.6126E+12
Am-242	1.3774E-05	1.7040E-14	4.2404E+10	5.0965E+05
Np-238	5.9154E+01	2.2826E-07	5.7756E+17	2.1887E+12

Containment Sump Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.1243E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.2854E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	7.0684E+21	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4342E+01	0.0000E+00	0.0000E+00

Time (h) = 432.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	1.6447E-02	1.3266E-10	6.0986E+14	6.0854E+08
I-132	8.6920E-08	8.4207E-18	3.8417E+07	3.2160E+03
Xe-133	2.7844E-03	1.4876E-11	6.7355E+13	1.0302E+08
Xe-131m	2.4805E-04	2.9614E-12	1.3614E+13	9.1778E+06
Xe-133m	9.5354E-06	2.1251E-14	9.6223E+10	3.5281E+05

Environment Transport Group Inventory:

Time (h) = 432.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	1.0042E+10	1.3947E+08	8.1065E+13
Elemental I (atoms)	7.3330E+10	1.0185E+09	5.9157E+14
Organic I (atoms)	2.2679E+09	3.1499E+07	1.8296E+13
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	1.8288E-06	1.4751E-14	6.7813E+10	6.7666E+04

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.5779E+10
Organic I (atoms)	2.0344E+09
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 432.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	1.7060E-09	1.3761E-17	6.3259E+07	6.3122E+01
Xe-133	1.3560E-09	7.2442E-18	3.2801E+07	5.0172E+01
Xe-131m	1.4961E-10	1.7861E-18	8.2110E+06	5.5355E+00

Control Room Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.1059E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.1362E+07	0.0000E+00	0.0000E+00
Organic I (atoms)	1.8978E+06	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	6.5941E-07	5.3189E-15	2.4451E+10	2.4398E+04

Time (h) = 432.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3718E+10
Organic I (atoms)	0.0000E+00	7.3353E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 432.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	1.8288E-06	1.4751E-14	6.7813E+10	6.7666E+04

Control Room Filtered Makeup Transport Group Inventory:

	Pathway Filter
Time (h) = 432.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	6.5779E+10
Organic I (atoms)	2.0344E+09
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

	Pathway Filter
Time (h) = 432.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Pathway

Time (h) = 432.0000	Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	2.4882E-06	2.0070E-14	9.2264E+10	9.2064E+04
Br-82	1.7083E-11	1.5779E-20	1.1588E+05	6.3206E-01

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Bq
Rb-86	1.0777E+02	1.3245E-06	9.2747E+18	3.9875E+12
Sr-89	3.9421E+03	1.3569E-04	9.1814E+20	1.4586E+14
Sr-90	5.9071E+02	4.3305E-03	2.8977E+22	2.1856E+13
Sr-91	1.2700E-10	3.5034E-20	2.3184E+05	4.6989E+00
Y-90	5.8542E+02	1.0760E-06	7.1999E+18	2.1660E+13
Y-91	8.3854E+01	3.4193E-06	2.2628E+19	3.1026E+12
Zr-95	7.1120E+01	3.3106E-06	2.0986E+19	2.6315E+12
Zr-97	1.7021E-06	8.9040E-16	5.5279E+09	6.2980E+04
Nb-95	8.4576E+01	2.1629E-06	1.3711E+19	3.1293E+12
Mo-99	1.2801E+01	2.6690E-08	1.6235E+17	4.7363E+11
Tc-99m	1.2353E+01	2.3493E-09	1.4291E+16	4.5707E+11
Ru-103	8.0159E+02	2.4837E-05	1.4522E+20	2.9659E+13
Ru-106	4.8954E+02	1.4633E-04	8.3131E+20	1.8113E+13
Rh-105	1.8537E-01	2.1962E-10	1.2596E+15	6.8587E+09
Sb-127	6.2332E+01	2.3341E-07	1.1068E+18	2.3063E+12
Te-127	2.5262E+02	9.5721E-08	4.5389E+17	9.3469E+12
Te-127m	1.9942E+02	2.1141E-05	1.0025E+20	7.3785E+12
Te-129	3.0031E+02	1.4340E-08	6.6942E+16	1.1111E+13
Te-129m	4.5860E+02	1.5223E-05	7.1066E+19	1.6968E+13
Te-131m	8.9996E-02	1.1286E-10	5.1883E+14	3.3298E+09
Te-132	3.9805E+02	1.3111E-06	5.9817E+18	1.4728E+13
I-131	2.2682E+04	1.8295E-04	8.4105E+20	8.3923E+14
I-132	4.1135E+02	3.9851E-08	1.8181E+17	1.5220E+13
I-133	1.1812E-01	1.0427E-10	4.7212E+14	4.3704E+09
Xe-133	3.8334E+03	2.0479E-05	9.2729E+19	1.4183E+14
Xe-135	2.5105E-09	9.8309E-19	4.3854E+06	9.2890E+01
Cs-134	2.1511E+04	1.6626E-02	7.4719E+22	7.9591E+14
Cs-136	2.4326E+03	3.3192E-05	1.4697E+20	9.0008E+13
Cs-137	1.1796E+04	1.3562E-01	5.9614E+23	4.3646E+14
Ba-140	3.3088E+03	4.5197E-05	1.9442E+20	1.2243E+14
La-140	3.8053E+03	6.8463E-06	2.9449E+19	1.4080E+14
Ce-141	1.4495E+02	5.0871E-06	2.1727E+19	5.3631E+12
Ce-143	2.2494E-02	3.3873E-11	1.4265E+14	8.3229E+08
Ce-144	1.7065E+02	5.3503E-05	2.2375E+20	6.3139E+12
Pr-143	3.9666E+01	5.8905E-07	2.4806E+18	1.4676E+12
Nd-147	1.0706E+01	1.3234E-07	5.4217E+17	3.9614E+11
Np-239	1.6001E+01	6.8972E-08	1.7379E+17	5.9203E+11
Pu-238	6.9266E-01	4.0460E-05	1.0238E+20	2.5628E+10
Pu-239	6.3049E-02	1.0144E-03	2.5559E+21	2.3328E+09
Pu-240	9.4502E-02	4.1473E-04	1.0406E+21	3.4966E+09
Pu-241	2.6543E+01	2.5766E-04	6.4385E+20	9.8207E+11
Am-241	1.5269E-02	4.4489E-06	1.1117E+19	5.6496E+08
Cm-242	3.6915E+00	1.1138E-06	2.7717E+18	1.3658E+11
Cm-244	4.1477E-01	5.1268E-06	1.2653E+19	1.5346E+10
I-130	1.6035E-07	8.2214E-17	3.8085E+08	5.9328E+03
Xe-131m	3.4193E+02	4.0822E-06	1.8766E+19	1.2652E+13
Xe-133m	1.3133E+01	2.9268E-08	1.3252E+17	4.8591E+11
Sb-124	2.4183E+01	1.3825E-06	6.7142E+18	8.9477E+11
Sb-125	2.7057E+02	2.6205E-04	1.2625E+21	1.0011E+13
Sb-126	7.0750E+00	8.4656E-08	4.0461E+17	2.6178E+11
Te-131	2.0599E-02	3.5879E-13	1.6494E+12	7.6218E+08
Te-125m	6.0125E+01	3.3384E-06	1.6083E+19	2.2246E+12
Ba-137m	1.3077E+04	2.4315E-08	1.0688E+17	4.8383E+14
Pd-109	6.0013E-08	2.8027E-17	1.5485E+08	2.2205E+03
Rh-106	1.0068E+03	2.8284E-10	1.6069E+15	3.7252E+13

Rh-103m	8.0592E+02	2.4776E-08	1.4486E+17	2.9819E+13
Eu-154	8.6856E-01	3.2925E-06	1.2875E+19	3.2137E+10
Eu-155	5.8665E-01	1.2616E-06	4.9017E+18	2.1706E+10
Eu-156	6.2215E+00	1.1291E-07	4.3586E+17	2.3020E+11
Nb-97	9.7681E-08	3.6332E-18	2.2557E+07	3.6142E+03
Nb-95m	5.2690E-01	1.3832E-09	8.7685E+15	1.9495E+10
Pm-147	9.1747E+00	9.8970E-06	4.0545E+19	3.3946E+11
Pm-148	1.5394E+00	9.3696E-09	3.8125E+16	5.6957E+10
Pm-149	1.1267E-01	2.8434E-10	1.1492E+15	4.1686E+09
Pm-151	2.9602E-04	4.0508E-13	1.6155E+12	1.0953E+07
Pm-148m	1.5502E+00	7.2568E-08	2.9528E+17	5.7358E+10
Pr-144	1.7479E+02	2.3131E-09	9.6737E+15	6.4673E+12
Pr-144m	3.2164E+00	1.7735E-11	7.4171E+13	1.1901E+11
Sm-153	5.0775E-02	1.1577E-10	4.5566E+14	1.8787E+09
Br-82	1.5563E-01	1.4375E-10	1.0557E+15	5.7581E+09
Am-242	4.8326E-08	5.9784E-17	1.4877E+08	1.7881E+03
Np-238	2.0754E-01	8.0082E-10	2.0263E+15	7.6789E+09

SIRWT Water Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.1163E+20	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.1600E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	2.5237E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	1.5909E-01	0.0000E+00	0.0000E+00

Time (h) = 432.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 432.0000	Ci	kg	Atoms	Bq
Rb-86	4.7911E-02	5.8883E-10	4.1232E+15	1.7727E+09
Sr-89	1.7193E+00	5.9181E-08	4.0044E+17	6.3615E+10
Sr-90	2.5763E-01	1.8887E-06	1.2638E+19	9.5322E+09
Y-90	2.5532E-01	4.6928E-10	3.1401E+15	9.4468E+09
Y-91	3.6590E-02	1.4920E-09	9.8738E+15	1.3538E+09
Zr-95	3.1018E-02	1.4438E-09	9.1526E+15	1.1477E+09
Zr-97	7.4236E-10	3.8833E-19	2.4109E+06	2.7467E+01
Nb-95	3.6886E-02	9.4330E-10	5.9797E+15	1.3648E+09
Mo-99	5.5828E-03	1.1640E-11	7.0807E+13	2.0656E+08
Tc-99m	5.3876E-03	1.0246E-12	6.2326E+12	1.9934E+08
Ru-103	3.4960E-01	1.0832E-08	6.3333E+16	1.2935E+10
Ru-106	2.1350E-01	6.3817E-08	3.6256E+17	7.8997E+09
Rh-105	8.0845E-05	9.5782E-14	5.4935E+11	2.9913E+06
Sb-127	2.7185E-02	1.0180E-10	4.8270E+14	1.0058E+09
Te-127	1.1017E-01	4.1747E-11	1.9796E+14	4.0765E+09
Te-127m	8.6972E-02	9.2204E-09	4.3722E+16	3.2180E+09
Te-129	1.3097E-01	6.2540E-12	2.9196E+13	4.8460E+09
Te-129m	2.0001E-01	6.6392E-09	3.0994E+16	7.4003E+09
Te-131m	3.9250E-05	4.9222E-14	2.2628E+11	1.4522E+06
Te-132	1.7360E-01	5.7183E-10	2.6088E+15	6.4233E+09
Cs-134	9.5631E+00	7.3913E-06	3.3218E+19	3.5383E+11
Cs-136	1.0815E+00	1.4756E-08	6.5340E+16	4.0015E+10
Cs-137	5.2443E+00	6.0291E-05	2.6502E+20	1.9404E+11
Ba-140	1.4431E+00	1.9712E-08	8.4791E+16	5.3394E+10

La-140	1.6596E+00	2.9859E-09	1.2844E+16	6.1406E+10
Ce-141	6.3219E-02	2.2187E-09	9.4763E+15	2.3391E+09
Ce-143	9.8104E-06	1.4773E-14	6.2213E+10	3.6298E+05
Ce-144	7.4425E-02	2.3334E-08	9.7585E+16	2.7537E+09
Pr-143	1.7300E-02	2.5691E-10	1.0819E+15	6.4011E+08
Nd-147	4.6694E-03	5.7719E-11	2.3646E+14	1.7277E+08
Np-239	6.9785E-03	3.0081E-11	7.5795E+13	2.5820E+08
Pu-238	3.0209E-04	1.7646E-08	4.4649E+16	1.1177E+07
Pu-239	2.7498E-05	4.4239E-07	1.1147E+18	1.0174E+06
Pu-240	4.1215E-05	1.8087E-07	4.5386E+17	1.5250E+06
Pu-241	1.1576E-02	1.1237E-07	2.8080E+17	4.2831E+08
Am-241	6.6594E-06	1.9403E-09	4.8484E+15	2.4640E+05
Cm-242	1.6100E-03	4.8576E-10	1.2088E+15	5.9569E+07
Cm-244	1.8089E-04	2.2359E-09	5.5185E+15	6.6930E+06
Sb-124	1.0547E-02	6.0295E-10	2.9283E+15	3.9024E+08
Sb-125	1.1800E-01	1.1429E-07	5.5062E+17	4.3661E+09
Sb-126	3.0856E-03	3.6921E-11	1.7646E+14	1.1417E+08
Te-131	8.9840E-06	1.5648E-16	7.1935E+08	3.3241E+05
Te-125m	2.6222E-02	1.4560E-09	7.0144E+15	9.7023E+08
Ba-137m	5.8134E+00	1.0810E-11	4.7516E+13	2.1510E+11
Rh-106	4.3910E-01	1.2336E-13	7.0082E+11	1.6247E+10
Rh-103m	3.5149E-01	1.0805E-11	6.3176E+13	1.3005E+10
Eu-154	3.7880E-04	1.4360E-09	5.6154E+15	1.4016E+07
Eu-155	2.5586E-04	5.5023E-10	2.1378E+15	9.4667E+06
Eu-156	2.7134E-03	4.9242E-11	1.9009E+14	1.0040E+08
Nb-95m	2.2980E-04	6.0327E-13	3.8242E+12	8.5025E+06
Pm-147	4.0014E-03	4.3164E-09	1.7683E+16	1.4805E+08
Pm-148	6.7137E-04	4.0864E-12	1.6627E+13	2.4841E+07
Pm-149	4.9137E-05	1.2401E-13	5.0121E+11	1.8181E+06
Pm-151	1.2910E-07	1.7667E-16	7.0458E+08	4.7768E+03
Pm-148m	6.7610E-04	3.1649E-11	1.2878E+14	2.5016E+07
Pr-144	7.6232E-02	1.0088E-12	4.2190E+12	2.8206E+09
Pr-144m	1.4028E-03	7.7350E-15	3.2348E+10	5.1903E+07
Sm-153	2.2144E-05	5.0489E-14	1.9873E+11	8.1934E+05
Np-238	9.0513E-05	3.4926E-13	8.8374E+11	3.3490E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	7.0671E-05

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Bq
I-131	1.0018E+01	8.0804E-08	3.7146E+17	3.7065E+11
I-132	2.5156E-03	2.4371E-13	1.1119E+12	9.3077E+07
I-133	5.2169E-05	4.6053E-14	2.0852E+11	1.9303E+06
Xe-133	1.6944E+00	9.0520E-09	4.0987E+16	6.2692E+10
I-130	7.0836E-11	3.6320E-20	1.6825E+05	2.6209E+00
Xe-131m	1.5104E-01	1.8032E-09	8.2894E+15	5.5884E+09
Xe-133m	5.8036E-03	1.2934E-11	5.8564E+13	2.1473E+08
Br-82	6.8750E-05	6.3503E-14	4.6637E+11	2.5438E+06

SIRWT Air Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.9335E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.6032E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	1.1144E+16	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 432.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00

Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 432.0000	Ci	kg	Atoms	Bq
Rb-86	4.7911E-02	5.8883E-10	4.1232E+15	1.7727E+09
Sr-89	1.7193E+00	5.9181E-08	4.0044E+17	6.3615E+10
Sr-90	2.5763E-01	1.8887E-06	1.2638E+19	9.5322E+09
Y-90	2.5532E-01	4.6928E-10	3.1401E+15	9.4468E+09
Y-91	3.6590E-02	1.4920E-09	9.8738E+15	1.3538E+09
Zr-95	3.1018E-02	1.4438E-09	9.1526E+15	1.1477E+09
Zr-97	7.4236E-10	3.8833E-19	2.4109E+06	2.7467E+01
Nb-95	3.6886E-02	9.4330E-10	5.9797E+15	1.3648E+09
Mo-99	5.5828E-03	1.1640E-11	7.0807E+13	2.0656E+08
Tc-99m	5.3876E-03	1.0246E-12	6.2326E+12	1.9934E+08
Ru-103	3.4960E-01	1.0832E-08	6.3333E+16	1.2935E+10
Ru-106	2.1350E-01	6.3817E-08	3.6256E+17	7.8997E+09
Rh-105	8.0845E-05	9.5782E-14	5.4935E+11	2.9913E+06
Sb-127	2.7185E-02	1.0180E-10	4.8270E+14	1.0058E+09
Te-127	1.1017E-01	4.1747E-11	1.9796E+14	4.0765E+09
Te-127m	8.6972E-02	9.2204E-09	4.3722E+16	3.2180E+09
Te-129	1.3097E-01	6.2540E-12	2.9196E+13	4.8460E+09
Te-129m	2.0001E-01	6.6392E-09	3.0994E+16	7.4003E+09
Te-131m	3.9250E-05	4.9222E-14	2.2628E+11	1.4522E+06
Te-132	1.7360E-01	5.7183E-10	2.6088E+15	6.4233E+09
Cs-134	9.5631E+00	7.3913E-06	3.3218E+19	3.5383E+11
Cs-136	1.0815E+00	1.4756E-08	6.5340E+16	4.0015E+10
Cs-137	5.2443E+00	6.0291E-05	2.6502E+20	1.9404E+11
Ba-140	1.4431E+00	1.9712E-08	8.4791E+16	5.3394E+10
La-140	1.6596E+00	2.9859E-09	1.2844E+16	6.1406E+10
Ce-141	6.3219E-02	2.2187E-09	9.4763E+15	2.3391E+09
Ce-143	9.8104E-06	1.4773E-14	6.2213E+10	3.6298E+05
Ce-144	7.4425E-02	2.3334E-08	9.7585E+16	2.7537E+09
Pr-143	1.7300E-02	2.5691E-10	1.0819E+15	6.4011E+08
Nd-147	4.6694E-03	5.7719E-11	2.3646E+14	1.7277E+08
Np-239	6.9785E-03	3.0081E-11	7.5795E+13	2.5820E+08
Pu-238	3.0209E-04	1.7646E-08	4.4649E+16	1.1177E+07
Pu-239	2.7498E-05	4.4239E-07	1.1147E+18	1.0174E+06
Pu-240	4.1215E-05	1.8087E-07	4.5386E+17	1.5250E+06
Pu-241	1.1576E-02	1.1237E-07	2.8080E+17	4.2831E+08
Am-241	6.6594E-06	1.9403E-09	4.8484E+15	2.4640E+05
Cm-242	1.6100E-03	4.8576E-10	1.2088E+15	5.9569E+07
Cm-244	1.8089E-04	2.2359E-09	5.5185E+15	6.6930E+06
Sb-124	1.0547E-02	6.0295E-10	2.9283E+15	3.9024E+08
Sb-125	1.1800E-01	1.1429E-07	5.5062E+17	4.3661E+09
Sb-126	3.0856E-03	3.6921E-11	1.7646E+14	1.1417E+08
Te-131	8.9840E-06	1.5648E-16	7.1935E+08	3.3241E+05
Te-125m	2.6222E-02	1.4560E-09	7.0144E+15	9.7023E+08
Ba-137m	5.8134E+00	1.0810E-11	4.7516E+13	2.1510E+11
Rh-106	4.3910E-01	1.2336E-13	7.0082E+11	1.6247E+10
Rh-103m	3.5149E-01	1.0805E-11	6.3176E+13	1.3005E+10
Eu-154	3.7880E-04	1.4360E-09	5.6154E+15	1.4016E+07
Eu-155	2.5586E-04	5.5023E-10	2.1378E+15	9.4667E+06
Eu-156	2.7134E-03	4.9242E-11	1.9009E+14	1.0040E+08
Nb-95m	2.2980E-04	6.0327E-13	3.8242E+12	8.5025E+06
Pm-147	4.0014E-03	4.3164E-09	1.7683E+16	1.4805E+08
Pm-148	6.7137E-04	4.0864E-12	1.6627E+13	2.4841E+07
Pm-149	4.9137E-05	1.2401E-13	5.0121E+11	1.8181E+06
Pm-151	1.2910E-07	1.7667E-16	7.0458E+08	4.7768E+03
Pm-148m	6.7610E-04	3.1649E-11	1.2878E+14	2.5016E+07
Pr-144	7.6232E-02	1.0088E-12	4.2190E+12	2.8206E+09
Pr-144m	1.4028E-03	7.7350E-15	3.2348E+10	5.1903E+07
Sm-153	2.2144E-05	5.0489E-14	1.9873E+11	8.1934E+05
Np-238	9.0513E-05	3.4926E-13	8.8374E+11	3.3490E+06

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway
Time (h) = 432.0000	Filter

Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	7.0671E-05

SIRWT Leakage Transport Group Inventory:

Time (h) = 432.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 624.0000

EAB Doses:

Time (h) = 624.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	7.1994E-07	2.6214E-03	1.1953E-06	8.0528E-05
Accumulated dose (rem)	2.0055E-06	6.2948E-03	3.3189E-06	1.9376E-04

LPZ Doses:

Time (h) = 624.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.3927E-09	1.2353E-05	5.6329E-09	3.7948E-07
Accumulated dose (rem)	3.5903E-08	4.0720E-05	5.5963E-08	1.2845E-06

Control Room Doses:

Time (h) = 624.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	9.7818E-10	1.7535E-04	5.7799E-08	5.3397E-06
Accumulated dose (rem)	9.2776E-09	4.8090E-04	5.1657E-07	1.4700E-05

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Bq
Rb-86	2.2263E+04	2.7361E-04	1.9159E+21	8.2372E+14
Sr-89	1.0054E+06	3.4606E-02	2.3416E+23	3.7199E+16
Sr-90	1.6806E+05	1.2320E+00	8.2439E+24	6.2181E+15
Y-90	1.6792E+05	3.0865E-04	2.0652E+21	6.2131E+15
Y-91	2.1696E+04	8.8470E-04	5.8547E+21	8.0276E+14
Zr-95	1.8564E+04	8.6411E-04	5.4777E+21	6.8685E+14
Zr-97	1.8421E-07	9.6362E-17	5.9826E+08	6.8159E+03
Nb-95	2.3389E+04	5.9814E-04	3.7916E+21	8.6539E+14
Mo-99	4.8509E+02	1.0114E-06	6.1524E+18	1.7948E+13
Tc-99m	4.6813E+02	8.9027E-08	5.4155E+17	1.7321E+13
Ru-103	1.9813E+05	6.1390E-03	3.5893E+22	7.3308E+15
Ru-106	1.3726E+05	4.1029E-02	2.3309E+23	5.0788E+15
Rh-105	1.2240E+00	1.4502E-09	8.3174E+15	4.5290E+10
Sb-127	4.2025E+03	1.5736E-05	7.4620E+19	1.5549E+14
Te-127	5.6814E+04	2.1528E-05	1.0208E+20	2.1021E+15
Te-127m	5.4030E+04	5.7280E-03	2.7161E+22	1.9991E+15
Te-129	7.2477E+04	3.4608E-06	1.6156E+19	2.6816E+15
Te-129m	1.1068E+05	3.6740E-03	1.7151E+22	4.0951E+15
Te-131m	3.0335E-01	3.8042E-10	1.7488E+15	1.1224E+10
Te-132	2.0661E+04	6.8055E-05	3.1048E+20	7.6445E+14
I-131	3.1831E+06	2.5675E-02	1.1803E+23	1.1777E+17
I-132	2.1351E+04	2.0685E-06	9.4369E+18	7.8999E+14
I-133	5.4998E-02	4.8550E-11	2.1983E+14	2.0349E+09
Xe-133	3.7291E+05	1.9922E-03	9.0207E+21	1.3798E+16
Cs-134	5.9374E+06	4.5890E+00	2.0624E+25	2.1968E+17
Cs-136	4.4297E+05	6.0441E-03	2.6763E+22	1.6390E+16
Cs-137	3.2784E+06	3.7691E+01	1.6568E+26	1.2130E+17
Ba-140	6.0947E+05	8.3251E-03	3.5811E+22	2.2550E+16
La-140	7.0198E+05	1.2629E-03	5.4326E+21	2.5973E+16
Ce-141	3.4785E+04	1.2208E-03	5.2141E+21	1.2871E+15
Ce-143	1.1349E-01	1.7089E-10	7.1967E+14	4.1990E+09
Ce-144	4.7636E+04	1.4935E-02	6.2460E+22	1.7625E+15
Pr-143	7.5011E+03	1.1139E-04	4.6911E+20	2.7754E+14

Nd-147	1.8392E+03	2.2734E-05	9.3136E+19	6.8050E+13
Np-239	4.3236E+02	1.8637E-06	4.6960E+18	1.5997E+13
Pu-238	1.9731E+02	1.1525E-02	2.9163E+22	7.3005E+12
Pu-239	1.7948E+01	2.8875E-01	7.2758E+23	6.6407E+11
Pu-240	2.6900E+01	1.1805E-01	2.9622E+23	9.9531E+11
Pu-241	7.5473E+03	7.3266E-02	1.8308E+23	2.7925E+14
Am-241	4.6115E+00	1.3436E-03	3.3574E+21	1.7062E+11
Cm-242	1.0156E+03	3.0643E-04	7.6253E+20	3.7577E+13
Cm-244	1.1796E+02	1.4581E-03	3.5987E+21	4.3647E+12
I-130	9.4519E-10	4.8463E-19	2.2450E+06	3.4972E+01
Xe-131m	7.8461E+04	9.3672E-04	4.3062E+21	2.9030E+15
Xe-133m	2.9123E+02	6.4905E-07	2.9388E+18	1.0776E+13
Sb-124	6.2779E+03	3.5890E-04	1.7430E+21	2.3228E+14
Sb-125	7.6595E+04	7.4186E-02	3.5740E+23	2.8340E+15
Sb-126	1.2877E+03	1.5408E-05	7.3644E+19	4.7646E+13
Te-131	6.9434E-02	1.2094E-12	5.5595E+12	2.5691E+09
Te-125m	1.7151E+04	9.5227E-04	4.5878E+21	6.3458E+14
Ba-137m	3.6342E+06	6.7575E-06	2.9704E+19	1.3446E+17
Pd-109	8.4716E-10	3.9564E-19	2.1859E+06	3.1345E+01
Rh-106	2.8230E+05	7.9307E-08	4.5057E+17	1.0445E+16
Rh-103m	1.9920E+05	6.1238E-06	3.5805E+19	7.3705E+15
Eu-154	2.4681E+02	9.3560E-04	3.6587E+21	9.1319E+12
Eu-155	1.6648E+02	3.5802E-04	1.3910E+21	6.1597E+12
Eu-156	1.2293E+03	2.2309E-05	8.6122E+19	4.5485E+13
Nb-97	1.0571E-08	3.9320E-19	2.4412E+06	3.9114E+02
Nb-95m	1.3768E+02	3.6144E-07	2.2912E+18	5.0941E+12
Pm-147	2.6103E+03	2.8158E-03	1.1535E+22	9.6581E+13
Pm-148	1.6812E+02	1.0233E-06	4.1637E+18	6.2204E+12
Pm-149	2.6135E+00	6.5957E-09	2.6658E+16	9.6699E+10
Pm-151	7.7713E-04	1.0634E-12	4.2412E+12	2.8754E+07
Pm-148m	3.8583E+02	1.8061E-05	7.3491E+19	1.4276E+13
Pr-144	4.8793E+04	6.4572E-07	2.7004E+18	1.8053E+15
Pr-144m	8.9786E+02	4.9509E-09	2.0705E+16	3.3221E+13
Sm-153	8.3621E-01	1.9066E-09	7.5043E+15	3.0940E+10
Br-82	1.0032E+00	9.2666E-10	6.8055E+15	3.7120E+10
Am-242	3.3934E-09	4.1980E-18	1.0447E+07	1.2556E+02
Np-238	4.3036E+00	1.6606E-08	4.2019E+16	1.5923E+11

Containment Sump Transport Group Inventory:

Time (h) = 624.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	1.3330E+22	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1450E+23	0.0000E+00	0.0000E+00
Organic I (atoms)	3.5412E+21	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4212E+01	0.0000E+00	0.0000E+00

Time (h) = 624.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	2.2356E-02	1.8033E-10	8.2898E+14	8.2718E+08
Xe-133	2.6240E-03	1.4018E-11	6.3475E+13	9.7088E+07
Xe-131m	5.5126E-04	6.5814E-12	3.0255E+13	2.0397E+07
Xe-133m	2.0482E-06	4.5648E-15	2.0669E+10	7.5785E+04

Environment Transport Group Inventory:

Time (h) = 624.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	8.2310E+09	1.1432E+08	9.3750E+13
Elemental I (atoms)	7.0626E+10	9.8091E+08	8.0411E+14
Organic I (atoms)	2.1843E+09	3.0338E+07	2.4869E+13
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	2.4455E-06	1.9726E-14	9.0681E+10	9.0484E+04

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	8.7961E+10
Organic I (atoms)	2.7204E+09
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

SIRWT Leakage Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	1.6435E-09	1.3257E-17	6.0941E+07	6.0809E+01
Xe-133	9.0606E-10	4.8405E-18	2.1918E+07	3.3524E+01
Xe-131m	2.2893E-10	2.7332E-18	1.2565E+07	8.4706E+00

Control Room Transport Group Inventory:

Overlying

Time (h) = 624.0000	Atmosphere	Sump	Pool
Noble gases (atoms)	3.4489E+07	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.9113E+07	0.0000E+00	0.0000E+00
Organic I (atoms)	1.8282E+06	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Recirculating Filter Inventory

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	8.8265E-07	7.1196E-15	3.2729E+10	3.2658E+04

Time (h) = 624.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.1747E+10
Organic I (atoms)	0.0000E+00	9.8187E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	2.4455E-06	1.9726E-14	9.0681E+10	9.0484E+04

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	8.7961E+10
Organic I (atoms)	2.7204E+09
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	3.3282E-06	2.6846E-14	1.2341E+11	1.2314E+05

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Bq
Rb-86	1.0982E+02	1.3497E-06	9.4515E+18	4.0635E+12
Sr-89	4.8761E+03	1.6784E-04	1.1357E+21	1.8042E+14
Sr-90	8.1506E+02	5.9752E-03	3.9982E+22	3.0157E+13

Y-90	8.1441E+02	1.4969E-06	1.0016E+19	3.0133E+13
Y-91	1.0527E+02	4.2928E-06	2.8408E+19	3.8952E+12
Zr-95	9.0032E+01	4.1909E-06	2.6566E+19	3.3312E+12
Zr-97	8.9342E-10	4.6735E-19	2.9015E+06	3.3056E+01
Nb-95	1.1343E+02	2.9009E-06	1.8389E+19	4.1971E+12
Mo-99	2.3526E+00	4.9053E-09	2.9839E+16	8.7047E+10
Tc-99m	2.2704E+00	4.3177E-10	2.6265E+15	8.4004E+10
Ru-103	9.6091E+02	2.9774E-05	1.7408E+20	3.5554E+13
Ru-106	6.6572E+02	1.9899E-04	1.1305E+21	2.4632E+13
Rh-105	5.9365E-03	7.0333E-12	4.0338E+13	2.1965E+08
Sb-127	2.0382E+01	7.6320E-08	3.6190E+17	7.5412E+11
Te-127	2.7554E+02	1.0441E-07	4.9509E+17	1.0195E+13
Te-127m	2.6204E+02	2.7780E-05	1.3173E+20	9.6955E+12
Te-129	3.5150E+02	1.6784E-08	7.8355E+16	1.3006E+13
Te-129m	5.3679E+02	1.7818E-05	8.3182E+19	1.9861E+13
Te-131m	1.4712E-03	1.8450E-12	8.4815E+12	5.4434E+07
Te-132	1.0020E+02	3.3006E-07	1.5058E+18	3.7075E+12
I-131	1.5635E+04	1.2612E-04	5.7976E+20	5.7850E+14
I-132	1.0355E+02	1.0032E-08	4.5768E+16	3.8314E+12
I-133	2.7012E-04	2.3845E-13	1.0797E+12	9.9943E+06
Xe-133	1.8328E+03	9.7915E-06	4.4335E+19	6.7813E+13
Cs-134	2.9290E+04	2.2638E-02	1.0174E+23	1.0837E+15
Cs-136	2.1853E+03	2.9816E-05	1.3203E+20	8.0855E+13
Cs-137	1.6173E+04	1.8593E-01	8.1731E+23	5.9839E+14
Ba-140	2.9559E+03	4.0376E-05	1.7368E+20	1.0937E+14
La-140	3.4045E+03	6.1251E-06	2.6347E+19	1.2597E+14
Ce-141	1.6871E+02	5.9211E-06	2.5289E+19	6.2424E+12
Ce-143	5.5039E-04	8.2880E-13	3.4903E+12	2.0364E+07
Ce-144	2.3103E+02	7.2435E-05	3.0293E+20	8.5481E+12
Pr-143	3.6381E+01	5.4027E-07	2.2752E+18	1.3461E+12
Nd-147	8.9198E+00	1.1026E-07	4.5170E+17	3.3003E+11
Np-239	2.0969E+00	9.0387E-09	2.2775E+16	7.7585E+10
Pu-238	9.5694E-01	5.5897E-05	1.4144E+20	3.5407E+10
Pu-239	8.7045E-02	1.4004E-03	3.5287E+21	3.2207E+09
Pu-240	1.3046E-01	5.7254E-04	1.4366E+21	4.8271E+09
Pu-241	3.6604E+01	3.5533E-04	8.8791E+20	1.3543E+12
Am-241	2.2365E-02	6.5163E-06	1.6283E+19	8.2751E+08
Cm-242	4.9255E+00	1.4861E-06	3.6982E+18	1.8224E+11
Cm-244	5.7211E-01	7.0716E-06	1.7453E+19	2.1168E+10
Xe-131m	3.8542E+02	4.6014E-06	2.1153E+19	1.4261E+13
Xe-133m	1.4311E+00	3.1894E-09	1.4441E+16	5.2950E+10
Sb-124	3.0447E+01	1.7406E-06	8.4534E+18	1.1265E+12
Sb-125	3.7148E+02	3.5979E-04	1.7334E+21	1.3745E+13
Sb-126	6.2453E+00	7.4729E-08	3.5716E+17	2.3108E+11
Te-131	3.3675E-04	5.8653E-15	2.6963E+10	1.2460E+07
Te-125m	8.3179E+01	4.6184E-06	2.2250E+19	3.0776E+12
Ba-137m	1.7928E+04	3.3336E-08	1.4653E+17	6.6333E+14
Rh-106	1.3691E+03	3.8463E-10	2.1852E+15	5.0658E+13
Rh-103m	9.6611E+02	2.9700E-08	1.7365E+17	3.5746E+13
Eu-154	1.1970E+00	4.5376E-06	1.7744E+19	4.4289E+10
Eu-155	8.0741E-01	1.7363E-06	6.7461E+18	2.9874E+10
Eu-156	5.9621E+00	1.0820E-07	4.1768E+17	2.2060E+11
Nb-95m	6.6772E-01	1.7529E-09	1.1112E+16	2.4706E+10
Pm-147	1.2660E+01	1.3656E-05	5.5946E+19	4.6841E+11
Pm-148	8.1535E-01	4.9627E-09	2.0193E+16	3.0168E+10
Pm-149	1.2675E-02	3.1989E-11	1.2929E+14	4.6898E+08
Pm-151	3.7690E-06	5.1576E-15	2.0569E+10	1.3945E+05
Pm-148m	1.8712E+00	8.7595E-08	3.5642E+17	6.9235E+10
Pr-144	2.3664E+02	3.1317E-09	1.3097E+16	8.7557E+12
Pr-144m	4.3545E+00	2.4011E-11	1.0042E+14	1.6112E+11
Sm-153	4.0555E-03	9.2467E-12	3.6395E+13	1.5006E+08
Br-82	4.9283E-03	4.5521E-12	3.3431E+13	1.8235E+08
Np-238	2.0872E-02	8.0538E-11	2.0379E+14	7.7227E+08

SIRWT Water Transport Group Inventory:

Time (h) = 624.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	6.5503E+19	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.6241E+20	0.0000E+00	0.0000E+00

Organic I (atoms)	1.7394E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	2.1794E-01	0.0000E+00	0.0000E+00

Time (h) = 624.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 624.0000	Ci	kg	Atoms	Bq
Rb-86	6.8115E-02	8.3713E-10	5.8620E+15	2.5202E+09
Sr-89	2.9805E+00	1.0259E-07	6.9419E+17	1.1028E+11
Sr-90	4.9820E-01	3.6523E-06	2.4438E+19	1.8433E+10
Y-90	4.9779E-01	9.1496E-10	6.1222E+15	1.8418E+10
Y-91	6.4374E-02	2.6249E-09	1.7371E+16	2.3818E+09
Zr-95	5.5031E-02	2.5616E-09	1.6238E+16	2.0361E+09
Nb-95	6.9335E-02	1.7731E-09	1.1240E+16	2.5654E+09
Mo-99	1.4380E-03	2.9983E-12	1.8238E+13	5.3207E+07
Tc-99m	1.3877E-03	2.6392E-13	1.6054E+12	5.1346E+07
Ru-103	5.8734E-01	1.8199E-08	1.0640E+17	2.1732E+10
Ru-106	4.0691E-01	1.2163E-07	6.9099E+17	1.5056E+10
Rh-105	3.6286E-06	4.2990E-15	2.4656E+10	1.3426E+05
Sb-127	1.2458E-02	4.6650E-11	2.2121E+14	4.6094E+08
Te-127	1.6842E-01	6.3818E-11	3.0261E+14	6.2316E+09
Te-127m	1.6017E-01	1.6980E-08	8.0518E+16	5.9262E+09
Te-129	2.1485E-01	1.0259E-11	4.7894E+13	7.9495E+09
Te-129m	3.2810E-01	1.0891E-08	5.0844E+16	1.2140E+10
Te-131m	8.9925E-07	1.1277E-15	5.1842E+09	3.3272E+04
Te-132	6.1248E-02	2.0174E-10	9.2040E+14	2.2662E+09
Cs-134	1.8166E+01	1.4041E-05	6.3101E+19	6.7215E+11
Cs-136	1.3553E+00	1.8492E-08	8.1885E+16	5.0147E+10
Cs-137	1.0031E+01	1.1532E-04	5.0691E+20	3.7113E+11
Ba-140	1.8067E+00	2.4679E-08	1.0616E+17	6.6849E+10
La-140	2.0810E+00	3.7439E-09	1.6104E+16	7.6996E+10
Ce-141	1.0313E-01	3.6193E-09	1.5458E+16	3.8157E+09
Ce-143	3.3641E-07	5.0659E-16	2.1334E+09	1.2447E+04
Ce-144	1.4121E-01	4.4275E-08	1.8516E+17	5.2249E+09
Pr-143	2.2238E-02	3.3024E-10	1.3908E+15	8.2281E+08
Nd-147	5.4521E-03	6.7395E-11	2.7609E+14	2.0173E+08
Np-239	1.2817E-03	5.5248E-12	1.3921E+13	4.7423E+07
Pu-238	5.8492E-04	3.4166E-08	8.6451E+16	2.1642E+07
Pu-239	5.3205E-05	8.5599E-07	2.1569E+18	1.9686E+06
Pu-240	7.9744E-05	3.4996E-07	8.7812E+17	2.9505E+06
Pu-241	2.2374E-02	2.1719E-07	5.4272E+17	8.2782E+08
Am-241	1.3670E-05	3.9830E-09	9.9528E+15	5.0581E+05
Cm-242	3.0106E-03	9.0838E-10	2.2605E+15	1.1139E+08
Cm-244	3.4970E-04	4.3224E-09	1.0668E+16	1.2939E+07
Sb-124	1.8610E-02	1.0639E-09	5.1670E+15	6.8858E+08
Sb-125	2.2706E-01	2.1992E-07	1.0595E+18	8.4012E+09
Sb-126	3.8174E-03	4.5677E-11	2.1831E+14	1.4124E+08
Te-131	2.0583E-07	3.5851E-18	1.6481E+07	7.6158E+03
Te-125m	5.0842E-02	2.8229E-09	1.3600E+16	1.8812E+09
Ba-137m	1.1119E+01	2.0675E-11	9.0883E+13	4.1141E+11
Rh-106	8.3686E-01	2.3510E-13	1.3357E+12	3.0964E+10
Rh-103m	5.9052E-01	1.8154E-11	1.0614E+14	2.1849E+10
Eu-154	7.3164E-04	2.7735E-09	1.0846E+16	2.7071E+07
Eu-155	4.9352E-04	1.0613E-09	4.1235E+15	1.8260E+07
Eu-156	3.6442E-03	6.6134E-11	2.5530E+14	1.3484E+08

Nb-95m	4.0814E-04	1.0715E-12	6.7921E+12	1.5101E+07
Pm-147	7.7380E-03	8.3472E-09	3.4196E+16	2.8631E+08
Pm-148	4.9837E-04	3.0334E-12	1.2343E+13	1.8440E+07
Pm-149	7.7475E-06	1.9553E-14	7.9026E+10	2.8666E+05
Pm-151	2.3037E-09	3.1525E-18	1.2573E+07	8.5238E+01
Pm-148m	1.1438E-03	5.3541E-11	2.1786E+14	4.2319E+07
Pr-144	1.4464E-01	1.9142E-12	8.0052E+12	5.3518E+09
Pr-144m	2.6616E-03	1.4677E-14	6.1378E+10	9.8481E+07
Sm-153	2.4789E-06	5.6519E-15	2.2246E+10	9.1719E+04
Np-238	1.2758E-05	4.9228E-14	1.2456E+11	4.7204E+05

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 624.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.3509E-04

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Bq
I-131	9.6387E+00	7.7747E-08	3.5741E+17	3.5663E+11
I-132	6.2657E-04	6.0701E-14	2.7693E+11	2.3183E+07
I-133	1.6652E-07	1.4700E-16	6.6558E+08	6.1611E+03
Xe-133	1.1305E+00	6.0397E-09	2.7347E+16	4.1829E+10
Xe-131m	2.3762E-01	2.8369E-09	1.3041E+16	8.7919E+09
Xe-133m	8.8259E-04	1.9670E-12	8.9062E+12	3.2656E+07
Br-82	3.0386E-06	2.8067E-15	2.0612E+10	1.1243E+05

SIRWT Air Transport Group Inventory:

Time (h) = 624.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	4.0397E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.4668E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	1.0722E+16	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 624.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 624.0000	Ci	kg	Atoms	Bq
Rb-86	6.8115E-02	8.3713E-10	5.8620E+15	2.5202E+09
Sr-89	2.9805E+00	1.0259E-07	6.9419E+17	1.1028E+11
Sr-90	4.9820E-01	3.6523E-06	2.4438E+19	1.8433E+10
Y-90	4.9779E-01	9.1496E-10	6.1222E+15	1.8418E+10
Y-91	6.4374E-02	2.6249E-09	1.7371E+16	2.3818E+09
Zr-95	5.5031E-02	2.5616E-09	1.6238E+16	2.0361E+09
Nb-95	6.9335E-02	1.7731E-09	1.1240E+16	2.5654E+09
Mo-99	1.4380E-03	2.9983E-12	1.8238E+13	5.3207E+07
Tc-99m	1.3877E-03	2.6392E-13	1.6054E+12	5.1346E+07
Ru-103	5.8734E-01	1.8199E-08	1.0640E+17	2.1732E+10
Ru-106	4.0691E-01	1.2163E-07	6.9099E+17	1.5056E+10
Rh-105	3.6286E-06	4.2990E-15	2.4656E+10	1.3426E+05
Sb-127	1.2458E-02	4.6650E-11	2.2121E+14	4.6094E+08
Te-127	1.6842E-01	6.3818E-11	3.0261E+14	6.2316E+09
Te-127m	1.6017E-01	1.6980E-08	8.0518E+16	5.9262E+09
Te-129	2.1485E-01	1.0259E-11	4.7894E+13	7.9495E+09
Te-129m	3.2810E-01	1.0891E-08	5.0844E+16	1.2140E+10
Te-131m	8.9925E-07	1.1277E-15	5.1842E+09	3.3272E+04
Te-132	6.1248E-02	2.0174E-10	9.2040E+14	2.2662E+09
Cs-134	1.8166E+01	1.4041E-05	6.3101E+19	6.7215E+11

Cs-136	1.3553E+00	1.8492E-08	8.1885E+16	5.0147E+10
Cs-137	1.0031E+01	1.1532E-04	5.0691E+20	3.7113E+11
Ba-140	1.8067E+00	2.4679E-08	1.0616E+17	6.6849E+10
La-140	2.0810E+00	3.7439E-09	1.6104E+16	7.6996E+10
Ce-141	1.0313E-01	3.6193E-09	1.5458E+16	3.8157E+09
Ce-143	3.3641E-07	5.0659E-16	2.1334E+09	1.2447E+04
Ce-144	1.4121E-01	4.4275E-08	1.8516E+17	5.2249E+09
Pr-143	2.2238E-02	3.3024E-10	1.3908E+15	8.2281E+08
Nd-147	5.4521E-03	6.7395E-11	2.7609E+14	2.0173E+08
Np-239	1.2817E-03	5.5248E-12	1.3921E+13	4.7423E+07
Pu-238	5.8492E-04	3.4166E-08	8.6451E+16	2.1642E+07
Pu-239	5.3205E-05	8.5599E-07	2.1569E+18	1.9686E+06
Pu-240	7.9744E-05	3.4996E-07	8.7812E+17	2.9505E+06
Pu-241	2.2374E-02	2.1719E-07	5.4272E+17	8.2782E+08
Am-241	1.3670E-05	3.9830E-09	9.9528E+15	5.0581E+05
Cm-242	3.0106E-03	9.0838E-10	2.2605E+15	1.1139E+08
Cm-244	3.4970E-04	4.3224E-09	1.0668E+16	1.2939E+07
Sb-124	1.8610E-02	1.0639E-09	5.1670E+15	6.8858E+08
Sb-125	2.2706E-01	2.1992E-07	1.0595E+18	8.4012E+09
Sb-126	3.8174E-03	4.5677E-11	2.1831E+14	1.4124E+08
Te-131	2.0583E-07	3.5851E-18	1.6481E+07	7.6158E+03
Te-125m	5.0842E-02	2.8229E-09	1.3600E+16	1.8812E+09
Ba-137m	1.1119E+01	2.0675E-11	9.0883E+13	4.1141E+11
Rh-106	8.3686E-01	2.3510E-13	1.3357E+12	3.0964E+10
Rh-103m	5.9052E-01	1.8154E-11	1.0614E+14	2.1849E+10
Eu-154	7.3164E-04	2.7735E-09	1.0846E+16	2.7071E+07
Eu-155	4.9352E-04	1.0613E-09	4.1235E+15	1.8260E+07
Eu-156	3.6442E-03	6.6134E-11	2.5530E+14	1.3484E+08
Nb-95m	4.0814E-04	1.0715E-12	6.7921E+12	1.5101E+07
Pm-147	7.7380E-03	8.3472E-09	3.4196E+16	2.8631E+08
Pm-148	4.9837E-04	3.0334E-12	1.2343E+13	1.8440E+07
Pm-149	7.7475E-06	1.9553E-14	7.9026E+10	2.8666E+05
Pm-151	2.3037E-09	3.1525E-18	1.2573E+07	8.5238E+01
Pm-148m	1.1438E-03	5.3541E-11	2.1786E+14	4.2319E+07
Pr-144	1.4464E-01	1.9142E-12	8.0052E+12	5.3518E+09
Pr-144m	2.6616E-03	1.4677E-14	6.1378E+10	9.8481E+07
Sm-153	2.4789E-06	5.6519E-15	2.2246E+10	9.1719E+04
Np-238	1.2758E-05	4.9228E-14	1.2456E+11	4.7204E+05

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 624.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.3509E-04

SIRWT Leakage Transport Group Inventory:

	Pathway Filter
Time (h) = 624.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Detailed model information at time (H) = 720.0000

EAB Doses:

Time (h) = 720.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	3.2974E-07	1.2046E-03	5.4660E-07	3.7005E-05
Accumulated dose (rem)	2.3352E-06	7.4994E-03	3.8655E-06	2.3077E-04

LPZ Doses:

Time (h) = 720.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	1.5539E-09	5.6768E-06	2.5758E-09	1.7439E-07
Accumulated dose (rem)	3.7457E-08	4.6397E-05	5.8538E-08	1.4589E-06

Control Room Doses:

Time (h) = 720.0000	Whole Body	Thyroid	Skin	TEDE
Delta dose (rem)	4.4382E-10	8.0598E-05	2.6069E-08	2.4543E-06
Accumulated dose (rem)	9.7214E-09	5.6150E-04	5.4264E-07	1.7154E-05

Containment Sump Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	1.9176E+04	2.3567E-04	1.6503E+21	7.0951E+14
Sr-89	9.5103E+05	3.2735E-02	2.2150E+23	3.5188E+16
Sr-90	1.6790E+05	1.2309E+00	8.2362E+24	6.2124E+15
Y-90	1.6789E+05	3.0859E-04	2.0649E+21	6.2120E+15
Y-91	2.0678E+04	8.4319E-04	5.5800E+21	7.6509E+14
Zr-95	1.7764E+04	8.2691E-04	5.2419E+21	6.5728E+14
Zr-97	3.5895E-09	1.8777E-18	1.1657E+07	1.3281E+02
Nb-95	2.2978E+04	5.8762E-04	3.7250E+21	8.5018E+14
Mo-99	1.7688E+02	3.6879E-07	2.2433E+18	6.5444E+12
Tc-99m	1.7069E+02	3.2462E-08	1.9746E+17	6.3156E+12
Ru-103	1.8450E+05	5.7168E-03	3.3425E+22	6.8267E+15
Ru-106	1.3614E+05	4.0694E-02	2.3119E+23	5.0373E+15
Rh-105	1.8631E-01	2.2073E-10	1.2660E+15	6.8934E+09
Sb-127	2.0439E+03	7.6535E-06	3.6292E+19	7.5623E+13
Te-127	5.3484E+04	2.0266E-05	9.6097E+19	1.9789E+15
Te-127m	5.2651E+04	5.5818E-03	2.6468E+22	1.9481E+15
Te-129	6.6692E+04	3.1845E-06	1.4866E+19	2.4676E+15
Te-129m	1.0185E+05	3.3807E-03	1.5782E+22	3.7683E+15
Te-131m	3.2988E-02	4.1369E-11	1.9017E+14	1.2205E+09
Te-132	8.8167E+03	2.9041E-05	1.3249E+20	3.2622E+14
I-131	2.2531E+06	1.8174E-02	8.3548E+22	8.3366E+16
I-132	9.1113E+03	8.8269E-07	4.0270E+18	3.3712E+14
I-133	2.2423E-03	1.9794E-12	8.9626E+12	8.2964E+07
Xe-133	2.1972E+05	1.1738E-03	5.3150E+21	8.1295E+15
Cs-134	5.9117E+06	4.5691E+00	2.0534E+25	2.1873E+17
Cs-136	3.5824E+05	4.8879E-03	2.1644E+22	1.3255E+16
Cs-137	3.2754E+06	3.7656E+01	1.6552E+26	1.2119E+17
Ba-140	4.8994E+05	6.6924E-03	2.8788E+22	1.8128E+16
La-140	5.6435E+05	1.0153E-03	4.3675E+21	2.0881E+16
Ce-141	3.1920E+04	1.1202E-03	4.7846E+21	1.1810E+15
Ce-143	1.5098E-02	2.2736E-11	9.5746E+13	5.5864E+08
Ce-144	4.7142E+04	1.4781E-02	6.1813E+22	1.7443E+15
Pr-143	6.1099E+03	9.0734E-05	3.8211E+20	2.2607E+14
Nd-147	1.4278E+03	1.7649E-05	7.2304E+19	5.2829E+13
Np-239	1.3312E+02	5.7382E-07	1.4459E+18	4.9255E+12
Pu-238	1.9725E+02	1.1522E-02	2.9154E+22	7.2982E+12
Pu-239	1.7936E+01	2.8856E-01	7.2709E+23	6.6363E+11
Pu-240	2.6882E+01	1.1797E-01	2.9602E+23	9.9464E+11
Pu-241	7.5383E+03	7.3179E-02	1.8286E+23	2.7892E+14
Am-241	4.7407E+00	1.3813E-03	3.4515E+21	1.7541E+11
Cm-242	9.9777E+02	3.0105E-04	7.4916E+20	3.6917E+13
Cm-244	1.1784E+02	1.4565E-03	3.5948E+21	4.3599E+12
Xe-131m	6.8278E+04	8.1515E-04	3.7473E+21	2.5263E+15
Xe-133m	8.1964E+01	1.8267E-07	8.2710E+17	3.0327E+12
Sb-124	5.9913E+03	3.4251E-04	1.6634E+21	2.2168E+14
Sb-125	7.6334E+04	7.3933E-02	3.5619E+23	2.8244E+15
Sb-126	1.0290E+03	1.2313E-05	5.8849E+19	3.8074E+13
Te-131	7.5507E-03	1.3151E-13	6.0458E+11	2.7937E+08
Te-125m	1.7153E+04	9.5238E-04	4.5883E+21	6.3465E+14
Ba-137m	3.6308E+06	6.7513E-06	2.9677E+19	1.3434E+17
Rh-106	2.8000E+05	7.8660E-08	4.4689E+17	1.0360E+16
Rh-103m	1.8550E+05	5.7027E-06	3.3342E+19	6.8636E+15
Eu-154	2.4643E+02	9.3417E-04	3.6531E+21	9.1179E+12
Eu-155	1.6611E+02	3.5723E-04	1.3879E+21	6.1462E+12
Eu-156	1.0235E+03	1.8575E-05	7.1705E+19	3.7871E+13
Nb-95m	1.3177E+02	3.4594E-07	2.1929E+18	4.8756E+12
Pm-147	2.6057E+03	2.8108E-03	1.1515E+22	9.6411E+13
Pm-148	1.0715E+02	6.5218E-07	2.6537E+18	3.9646E+12
Pm-149	7.4557E-01	1.8816E-09	7.6050E+15	2.7586E+10
Pm-151	7.4582E-05	1.0206E-13	4.0704E+11	2.7595E+06

Pm-148m	3.6054E+02	1.6877E-05	6.8673E+19	1.3340E+13
Pr-144	4.8287E+04	6.3902E-07	2.6724E+18	1.7866E+15
Pr-144m	8.8855E+02	4.8995E-09	2.0490E+16	3.2877E+13
Sm-153	2.0100E-01	4.5829E-10	1.8039E+15	7.4372E+09
Br-82	1.5221E-01	1.4059E-10	1.0325E+15	5.6319E+09
Am-242	5.3263E-11	6.5891E-20	1.6397E+05	1.9707E+00
Np-238	1.1608E+00	4.4791E-09	1.1334E+16	4.2949E+10

Containment Sump Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	9.0631E+21	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.1045E+22	0.0000E+00	0.0000E+00
Organic I (atoms)	2.5065E+21	0.0000E+00	0.0000E+00
Aerosols (kg)	4.4149E+01	0.0000E+00	0.0000E+00

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Environment Integral Nuclide Release:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
I-131	2.3420E-02	1.8891E-10	8.6842E+14	8.6653E+08
Xe-133	2.2876E-03	1.2221E-11	5.5337E+13	8.4641E+07
Xe-131m	7.0992E-04	8.4756E-12	3.8963E+13	2.6267E+07
Xe-133m	8.5299E-07	1.9010E-15	8.6075E+09	3.1560E+04

Environment Transport Group Inventory:

Time (h) = 720.0000	Present Release	Release Rate/s	Integral Release
Noble gases (atoms)	7.1438E+09	9.9219E+07	9.4308E+13
Elemental I (atoms)	6.3828E+10	8.8649E+08	8.4237E+14
Organic I (atoms)	1.9740E+09	2.7417E+07	2.6053E+13
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 720.0000	Ci	kg	Atoms	Bq
I-131	2.5539E-06	2.0600E-14	9.4699E+10	9.4493E+04

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	9.1858E+10

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Organic I (atoms)      2.8410E+09
Aerosols (kg)          0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Exhaust Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

SIRWT Leakage Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Control Room Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000       Ci           kg         Atoms         Bq
I-131                  1.4854E-09  1.1982E-17  5.5081E+07  5.4961E+01
Xe-133                 6.8164E-10  3.6416E-18  1.6489E+07  2.5221E+01
Xe-131m                2.5185E-10  3.0067E-18  1.3822E+07  9.3183E+00

Control Room Transport Group Inventory:

                                                Overlying
Time (h) = 720.0000    Atmosphere     Sump        Pool
Noble gases (atoms)    3.0313E+07  0.0000E+00  0.0000E+00
Elemental I (atoms)    5.3428E+07  0.0000E+00  0.0000E+00
Organic I (atoms)      1.6524E+06  0.0000E+00  0.0000E+00
Aerosols (kg)          0.0000E+00  0.0000E+00  0.0000E+00

                       Recirculating Filter Inventory

Time (h) = 720.0000       Ci           kg         Atoms         Bq
I-131                  9.2198E-07  7.4368E-15  3.4187E+10  3.4113E+04

                       Deposition Recirculating
Time (h) = 720.0000     Surfaces     Filter
Noble gases (atoms)    0.0000E+00  0.0000E+00
Elemental I (atoms)    0.0000E+00  3.3162E+10
Organic I (atoms)      0.0000E+00  1.0256E+09
Aerosols (kg)          0.0000E+00  0.0000E+00

Control Room Unfiltered Makeup Transport Group Inventory:

                        Pathway
Time (h) = 720.0000      Filter
Noble gases (atoms)    0.0000E+00
Elemental I (atoms)    0.0000E+00
Organic I (atoms)      0.0000E+00
Aerosols (kg)          0.0000E+00

Filter Pathway Nuclide Inventory for Control Room Filtered Makeup

Time (h) = 720.0000       Ci           kg         Atoms         Bq
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I-131	2.5539E-06	2.0600E-14	9.4699E+10	9.4493E+04

Control Room Filtered Makeup Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	9.1858E+10
Organic I (atoms)	2.8410E+09
Aerosols (kg)	0.0000E+00

Control Room Unfiltered Inleakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Exhaust Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Control Room Total Filter Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
I-131	3.4759E-06	2.8037E-14	1.2889E+11	1.2861E+05

SIRWT Water Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	1.0747E+02	1.3208E-06	9.2490E+18	3.9764E+12
Sr-89	5.2510E+03	1.8074E-04	1.2230E+21	1.9429E+14
Sr-90	9.2702E+02	6.7960E-03	4.5474E+22	3.4300E+13
Y-90	9.2697E+02	1.7038E-06	1.1401E+19	3.4298E+13
Y-91	1.1422E+02	4.6574E-06	3.0821E+19	4.2260E+12
Zr-95	9.8081E+01	4.5656E-06	2.8941E+19	3.6290E+12
Nb-95	1.2687E+02	3.2444E-06	2.0566E+19	4.6940E+12
Mo-99	9.7657E-01	2.0362E-09	1.2386E+16	3.6133E+10
Tc-99m	9.4242E-01	1.7923E-10	1.0902E+15	3.4870E+10
Ru-103	1.0187E+03	3.1564E-05	1.8455E+20	3.7691E+13
Ru-106	7.5168E+02	2.2468E-04	1.2765E+21	2.7812E+13
Rh-105	1.0286E-03	1.2187E-12	6.9896E+12	3.8060E+07
Sb-127	1.1285E+01	4.2256E-08	2.0037E+17	4.1753E+11
Te-127	2.9529E+02	1.1189E-07	5.3057E+17	1.0926E+13
Te-127m	2.9070E+02	3.0818E-05	1.4614E+20	1.0756E+13
Te-129	3.6822E+02	1.7583E-08	8.2081E+16	1.3624E+13
Te-129m	5.6231E+02	1.8666E-05	8.7137E+19	2.0805E+13
Te-131m	1.8213E-04	2.2841E-13	1.0500E+12	6.7389E+06
Te-132	4.8679E+01	1.6034E-07	7.3152E+17	1.8011E+12
I-131	1.2580E+04	1.0147E-04	4.6647E+20	4.6546E+14
I-132	5.0305E+01	4.8735E-09	2.2234E+16	1.8613E+12
I-133	1.2518E-05	1.1050E-14	5.0035E+10	4.6317E+05
Xe-133	1.2274E+03	6.5572E-06	2.9690E+19	4.5413E+13
Cs-134	3.3132E+04	2.5608E-02	1.1508E+23	1.2259E+15
Cs-136	2.0077E+03	2.7394E-05	1.2130E+20	7.4286E+13
Cs-137	1.8357E+04	2.1104E-01	9.2768E+23	6.7920E+14
Ba-140	2.7051E+03	3.6950E-05	1.5894E+20	1.0009E+14
La-140	3.1159E+03	5.6058E-06	2.4114E+19	1.1529E+14
Ce-141	1.7624E+02	6.1853E-06	2.6418E+19	6.5209E+12
Ce-143	8.3360E-05	1.2553E-13	5.2863E+11	3.0843E+06
Ce-144	2.6028E+02	8.1607E-05	3.4128E+20	9.6305E+12
Pr-143	3.3735E+01	5.0098E-07	2.1098E+18	1.2482E+12
Nd-147	7.8832E+00	9.7446E-08	3.9920E+17	2.9168E+11

Np-239	7.3500E-01	3.1682E-09	7.9830E+15	2.7195E+10
Pu-238	1.0891E+00	6.3614E-05	1.6096E+20	4.0295E+10
Pu-239	9.9028E-02	1.5932E-03	4.0144E+21	3.6640E+09
Pu-240	1.4842E-01	6.5136E-04	1.6344E+21	5.4916E+09
Pu-241	4.1621E+01	4.0403E-04	1.0096E+21	1.5400E+12
Am-241	2.6175E-02	7.6263E-06	1.9057E+19	9.6846E+08
Cm-242	5.5089E+00	1.6622E-06	4.1363E+18	2.0383E+11
Cm-244	6.5060E-01	8.0417E-06	1.9848E+19	2.4072E+10
Xe-131m	3.8123E+02	4.5515E-06	2.0923E+19	1.4106E+13
Xe-133m	4.5779E-01	1.0202E-09	4.6196E+15	1.6938E+10
Sb-124	3.3079E+01	1.8911E-06	9.1842E+18	1.2239E+12
Sb-125	4.2146E+02	4.0820E-04	1.9666E+21	1.5594E+13
Sb-126	5.6815E+00	6.7982E-08	3.2492E+17	2.1021E+11
Te-131	4.1689E-05	7.2612E-16	3.3380E+09	1.5425E+06
Te-125m	9.4704E+01	5.2583E-06	2.5333E+19	3.5040E+12
Ba-137m	2.0349E+04	3.7837E-08	1.6632E+17	7.5291E+14
Rh-106	1.5459E+03	4.3430E-10	2.4674E+15	5.7199E+13
Rh-103m	1.0242E+03	3.1486E-08	1.8409E+17	3.7895E+13
Eu-154	1.3606E+00	5.1578E-06	2.0169E+19	5.0342E+10
Eu-155	9.1715E-01	1.9723E-06	7.6631E+18	3.3935E+10
Eu-156	5.6512E+00	1.0256E-07	3.9590E+17	2.0909E+11
Nb-95m	7.2755E-01	1.9100E-09	1.2108E+16	2.6919E+10
Pm-147	1.4387E+01	1.5519E-05	6.3578E+19	5.3231E+11
Pm-148	5.9160E-01	3.6008E-09	1.4652E+16	2.1889E+10
Pm-149	4.1164E-03	1.0389E-11	4.1989E+13	1.5231E+08
Pm-151	4.1179E-07	5.6350E-16	2.2473E+09	1.5236E+04
Pm-148m	1.9906E+00	9.3182E-08	3.7916E+17	7.3652E+10
Pr-144	2.6660E+02	3.5282E-09	1.4755E+16	9.8644E+12
Pr-144m	4.9059E+00	2.7051E-11	1.1313E+14	1.8152E+11
Sm-153	1.1098E-03	2.5303E-12	9.9595E+12	4.1062E+07
Br-82	8.4990E-04	7.8503E-13	5.7653E+12	3.1446E+07
Np-238	6.4090E-03	2.4730E-11	6.2575E+13	2.3713E+08

SIRWT Water Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	5.0618E+19	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.5250E+20	0.0000E+00	0.0000E+00
Organic I (atoms)	1.3995E+19	0.0000E+00	0.0000E+00
Aerosols (kg)	2.4727E-01	0.0000E+00	0.0000E+00

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

SIRWT Backleakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	7.4724E-02	9.1835E-10	6.4307E+15	2.7648E+09
Sr-89	3.6030E+00	1.2402E-07	8.3916E+17	1.3331E+11
Sr-90	6.3607E-01	4.6630E-06	3.1201E+19	2.3534E+10
Y-90	6.3603E-01	1.1690E-09	7.8224E+15	2.3533E+10
Y-91	7.8398E-02	3.1968E-09	2.1155E+16	2.9007E+09
Zr-95	6.7297E-02	3.1326E-09	1.9858E+16	2.4900E+09
Nb-95	8.7047E-02	2.2261E-09	1.4111E+16	3.2207E+09
Mo-99	6.7006E-04	1.3971E-12	8.4984E+12	2.4792E+07
Tc-99m	6.4663E-04	1.2298E-13	7.4805E+11	2.3925E+07

Ru-103	6.9896E-01	2.1657E-08	1.2662E+17	2.5862E+10
Ru-106	5.1576E-01	1.5416E-07	8.7583E+17	1.9083E+10
Rh-105	7.0579E-07	8.3619E-16	4.7959E+09	2.6114E+04
Sb-127	7.7429E-03	2.8994E-11	1.3748E+14	2.8649E+08
Te-127	2.0261E-01	7.6774E-11	3.6405E+14	7.4967E+09
Te-127m	1.9946E-01	2.1146E-08	1.0027E+17	7.3800E+09
Te-129	2.5265E-01	1.2064E-11	5.6319E+13	9.3480E+09
Te-129m	3.8582E-01	1.2807E-08	5.9788E+16	1.4275E+10
Te-131m	1.2497E-07	1.5672E-16	7.2044E+08	4.6238E+03
Te-132	3.3401E-02	1.1002E-10	5.0193E+14	1.2358E+09
Cs-134	2.3036E+01	1.7805E-05	8.0017E+19	8.5234E+11
Cs-136	1.3960E+00	1.9047E-08	8.4340E+16	5.1651E+10
Cs-137	1.2763E+01	1.4674E-04	6.4501E+20	4.7224E+11
Ba-140	1.8561E+00	2.5353E-08	1.0906E+17	6.8674E+10
La-140	2.1379E+00	3.8464E-09	1.6545E+16	7.9103E+10
Ce-141	1.2093E-01	4.2442E-09	1.8127E+16	4.4744E+09
Ce-143	5.7196E-08	8.6128E-17	3.6271E+08	2.1163E+03
Ce-144	1.7859E-01	5.5993E-08	2.3417E+17	6.6079E+09
Pr-143	2.3148E-02	3.4375E-10	1.4476E+15	8.5648E+08
Nd-147	5.4090E-03	6.6861E-11	2.7391E+14	2.0013E+08
Np-239	5.0431E-04	2.1738E-12	5.4775E+12	1.8659E+07
Pu-238	7.4725E-04	4.3648E-08	1.1044E+17	2.7648E+07
Pu-239	6.7947E-05	1.0932E-06	2.7545E+18	2.5140E+06
Pu-240	1.0184E-04	4.4692E-07	1.1214E+18	3.7680E+06
Pu-241	2.8558E-02	2.7722E-07	6.9273E+17	1.0566E+09
Am-241	1.7960E-05	5.2327E-09	1.3076E+16	6.6450E+05
Cm-242	3.7799E-03	1.1405E-09	2.8380E+15	1.3985E+08
Cm-244	4.4640E-04	5.5178E-09	1.3618E+16	1.6517E+07
Sb-124	2.2697E-02	1.2976E-09	6.3017E+15	8.3979E+08
Sb-125	2.8918E-01	2.8008E-07	1.3494E+18	1.0700E+10
Sb-126	3.8983E-03	4.6645E-11	2.2294E+14	1.4424E+08
Te-131	2.8604E-08	4.9822E-19	2.2903E+06	1.0584E+03
Te-125m	6.4980E-02	3.6079E-09	1.7382E+16	2.4043E+09
Ba-137m	1.4148E+01	2.6308E-11	1.1564E+14	5.2349E+11
Rh-106	1.0607E+00	2.9799E-13	1.6930E+12	3.9246E+10
Rh-103m	7.0274E-01	2.1604E-11	1.2631E+14	2.6001E+10
Eu-154	9.3356E-04	3.5389E-09	1.3839E+16	3.4542E+07
Eu-155	6.2929E-04	1.3533E-09	5.2579E+15	2.3284E+07
Eu-156	3.8775E-03	7.0367E-11	2.7164E+14	1.4347E+08
Nb-95m	4.9920E-04	1.3105E-12	8.3075E+12	1.8470E+07
Pm-147	9.8712E-03	1.0648E-08	4.3623E+16	3.6524E+08
Pm-148	4.0592E-04	2.4707E-12	1.0053E+13	1.5019E+07
Pm-149	2.8245E-06	7.1282E-15	2.8810E+10	1.0450E+05
Pm-151	2.8254E-10	3.8664E-19	1.5420E+06	1.0454E+01
Pm-148m	1.3658E-03	6.3936E-11	2.6016E+14	5.0535E+07
Pr-144	1.8293E-01	2.4208E-12	1.0124E+13	6.7683E+09
Pr-144m	3.3661E-03	1.8561E-14	7.7623E+10	1.2455E+08
Sm-153	7.6147E-07	1.7362E-15	6.8336E+09	2.8174E+04
Np-238	4.3975E-06	1.6968E-14	4.2935E+10	1.6271E+05

SIRWT Water to SIRWT Air Transport Group Inventory:

	Pathway Filter
Time (h) = 720.0000	
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7183E-04

SIRWT Air Compartment Atmosphere Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Bq
I-131	8.6938E+00	7.0125E-08	3.2237E+17	3.2167E+11
I-132	2.8180E-04	2.7300E-14	1.2455E+11	1.0427E+07
I-133	8.6507E-09	7.6365E-18	3.4577E+07	3.2008E+02
Xe-133	8.4865E-01	4.5338E-09	2.0529E+16	3.1400E+10
Xe-131m	2.6348E-01	3.1456E-09	1.4460E+16	9.7487E+09
Xe-133m	3.1648E-04	7.0532E-13	3.1936E+12	1.1710E+07
Br-82	5.8743E-07	5.4259E-16	3.9848E+09	2.1735E+04

SIRWT Air Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	Overlying Pool
Noble gases (atoms)	3.4993E+16	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1270E+17	0.0000E+00	0.0000E+00
Organic I (atoms)	9.6711E+15	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00	0.0000E+00

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Filter Pathway Nuclide Inventory for SIRWT Water to SIRWT Air

Time (h) = 720.0000	Ci	kg	Atoms	Bq
Rb-86	7.4724E-02	9.1835E-10	6.4307E+15	2.7648E+09
Sr-89	3.6030E+00	1.2402E-07	8.3916E+17	1.3331E+11
Sr-90	6.3607E-01	4.6630E-06	3.1201E+19	2.3534E+10
Y-90	6.3603E-01	1.1690E-09	7.8224E+15	2.3533E+10
Y-91	7.8398E-02	3.1968E-09	2.1155E+16	2.9007E+09
Zr-95	6.7297E-02	3.1326E-09	1.9858E+16	2.4900E+09
Nb-95	8.7047E-02	2.2261E-09	1.4111E+16	3.2207E+09
Mo-99	6.7006E-04	1.3971E-12	8.4984E+12	2.4792E+07
Tc-99m	6.4663E-04	1.2298E-13	7.4805E+11	2.3925E+07
Ru-103	6.9896E-01	2.1657E-08	1.2662E+17	2.5862E+10
Ru-106	5.1576E-01	1.5416E-07	8.7583E+17	1.9083E+10
Rh-105	7.0579E-07	8.3619E-16	4.7959E+09	2.6114E+04
Sb-127	7.7429E-03	2.8994E-11	1.3748E+14	2.8649E+08
Te-127	2.0261E-01	7.6774E-11	3.6405E+14	7.4967E+09
Te-127m	1.9946E-01	2.1146E-08	1.0027E+17	7.3800E+09
Te-129	2.5265E-01	1.2064E-11	5.6319E+13	9.3480E+09
Te-129m	3.8582E-01	1.2807E-08	5.9788E+16	1.4275E+10
Te-131m	1.2497E-07	1.5672E-16	7.2044E+08	4.6238E+03
Te-132	3.3401E-02	1.1002E-10	5.0193E+14	1.2358E+09
Cs-134	2.3036E+01	1.7805E-05	8.0017E+19	8.5234E+11
Cs-136	1.3960E+00	1.9047E-08	8.4340E+16	5.1651E+10
Cs-137	1.2763E+01	1.4674E-04	6.4501E+20	4.7224E+11
Ba-140	1.8561E+00	2.5353E-08	1.0906E+17	6.8674E+10
La-140	2.1379E+00	3.8464E-09	1.6545E+16	7.9103E+10
Ce-141	1.2093E-01	4.2442E-09	1.8127E+16	4.4744E+09
Ce-143	5.7196E-08	8.6128E-17	3.6271E+08	2.1163E+03
Ce-144	1.7859E-01	5.5993E-08	2.3417E+17	6.6079E+09
Pr-143	2.3148E-02	3.4375E-10	1.4476E+15	8.5648E+08
Nd-147	5.4090E-03	6.6861E-11	2.7391E+14	2.0013E+08
Np-239	5.0431E-04	2.1738E-12	5.4775E+12	1.8659E+07
Pu-238	7.4725E-04	4.3648E-08	1.1044E+17	2.7648E+07
Pu-239	6.7947E-05	1.0932E-06	2.7545E+18	2.5140E+06
Pu-240	1.0184E-04	4.4692E-07	1.1214E+18	3.7680E+06
Pu-241	2.8558E-02	2.7722E-07	6.9273E+17	1.0566E+09
Am-241	1.7960E-05	5.2327E-09	1.3076E+16	6.6450E+05
Cm-242	3.7799E-03	1.1405E-09	2.8380E+15	1.3985E+08
Cm-244	4.4640E-04	5.5178E-09	1.3618E+16	1.6517E+07
Sb-124	2.2697E-02	1.2976E-09	6.3017E+15	8.3979E+08
Sb-125	2.8918E-01	2.8008E-07	1.3494E+18	1.0700E+10
Sb-126	3.8983E-03	4.6645E-11	2.2294E+14	1.4424E+08
Te-131	2.8604E-08	4.9822E-19	2.2903E+06	1.0584E+03
Te-125m	6.4980E-02	3.6079E-09	1.7382E+16	2.4043E+09
Ba-137m	1.4148E+01	2.6308E-11	1.1564E+14	5.2349E+11
Rh-106	1.0607E+00	2.9799E-13	1.6930E+12	3.9246E+10
Rh-103m	7.0274E-01	2.1604E-11	1.2631E+14	2.6001E+10
Eu-154	9.3356E-04	3.5389E-09	1.3839E+16	3.4542E+07
Eu-155	6.2929E-04	1.3533E-09	5.2579E+15	2.3284E+07
Eu-156	3.8775E-03	7.0367E-11	2.7164E+14	1.4347E+08
Nb-95m	4.9920E-04	1.3105E-12	8.3075E+12	1.8470E+07
Pm-147	9.8712E-03	1.0648E-08	4.3623E+16	3.6524E+08
Pm-148	4.0592E-04	2.4707E-12	1.0053E+13	1.5019E+07

Pm-149	2.8245E-06	7.1282E-15	2.8810E+10	1.0450E+05
Pm-151	2.8254E-10	3.8664E-19	1.5420E+06	1.0454E+01
Pm-148m	1.3658E-03	6.3936E-11	2.6016E+14	5.0535E+07
Pr-144	1.8293E-01	2.4208E-12	1.0124E+13	6.7683E+09
Pr-144m	3.3661E-03	1.8561E-14	7.7623E+10	1.2455E+08
Sm-153	7.6147E-07	1.7362E-15	6.8336E+09	2.8174E+04
Np-238	4.3975E-06	1.6968E-14	4.2935E+10	1.6271E+05

SIRWT Water to SIRWT Air Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	1.7183E-04

SIRWT Leakage Transport Group Inventory:

Time (h) = 720.0000	Pathway Filter
Noble gases (atoms)	0.0000E+00
Elemental I (atoms)	0.0000E+00
Organic I (atoms)	0.0000E+00
Aerosols (kg)	0.0000E+00

Transport Group Totals in Model:

Noble Gases (atoms)	9.1137E+21
Elemental I (atoms)	8.1498E+22
Organic I (atoms)	2.5206E+21
Aerosols (kg)	4.4397E+01

37007

##
I-131 Summary
##

Time (hr)	Containment Sump I-131 (Curies)	Environment I-131 (Curies)	Control Room I-131 (Curies)
0.000	0.0000E+00	0.0000E+00	0.0000E+00
0.008	0.0000E+00	0.0000E+00	0.0000E+00
0.025	3.7414E+04	0.0000E+00	0.0000E+00
0.300	2.0940E+06	0.0000E+00	0.0000E+00
0.317	2.2188E+06	0.0000E+00	0.0000E+00
0.508	3.6499E+06	1.0185E-07	3.8026E-11
0.780	8.9641E+06	1.8024E-06	5.3694E-10
1.040	1.4183E+07	8.8724E-06	2.2473E-09
1.300	1.9392E+07	2.8166E-05	6.2034E-09
1.560	2.4593E+07	6.9582E-05	1.3518E-08
1.808	2.9551E+07	1.4167E-04	2.4682E-08
2.000	2.9761E+07	2.2782E-04	3.6717E-08
2.260	2.9734E+07	2.2920E-04	1.1098E-08
2.520	2.9707E+07	2.3059E-04	3.5888E-09
2.780	2.9680E+07	2.3198E-04	1.3897E-09
3.040	2.9652E+07	2.3339E-04	7.4743E-10
3.300	2.9625E+07	2.3480E-04	5.6168E-10
3.560	2.9598E+07	2.3623E-04	5.0978E-10
3.820	2.9571E+07	2.3766E-04	4.9713E-10
4.080	2.9544E+07	2.3911E-04	4.9599E-10
4.340	2.9516E+07	2.4057E-04	4.9823E-10
4.600	2.9489E+07	2.4204E-04	5.0147E-10
4.860	2.9462E+07	2.4352E-04	5.0500E-10
5.120	2.9435E+07	2.4501E-04	5.0863E-10
5.380	2.9408E+07	2.4651E-04	5.1228E-10
5.640	2.9381E+07	2.4803E-04	5.1594E-10
5.900	2.9354E+07	2.4955E-04	5.1962E-10

6.160	2.9327E+07	2.5109E-04	5.2330E-10
6.420	2.9300E+07	2.5263E-04	5.2698E-10
6.680	2.9273E+07	2.5419E-04	5.3067E-10
6.940	2.9246E+07	2.5576E-04	5.3437E-10
7.200	2.9219E+07	2.5734E-04	5.3807E-10
7.460	2.9192E+07	2.5893E-04	5.4177E-10
7.720	2.9165E+07	2.6053E-04	5.4548E-10
7.980	2.9139E+07	2.6214E-04	5.4920E-10
8.000	2.9136E+07	2.6226E-04	5.4949E-10
8.260	2.9110E+07	2.6389E-04	3.0953E-10
8.520	2.9083E+07	2.6553E-04	2.4026E-10
8.780	2.9056E+07	2.6718E-04	2.2103E-10
9.040	2.9029E+07	2.6884E-04	2.1648E-10
9.300	2.9003E+07	2.7051E-04	2.1623E-10
9.560	2.8976E+07	2.7220E-04	2.1724E-10
9.820	2.8949E+07	2.7390E-04	2.1863E-10
10.080	2.8923E+07	2.7561E-04	2.2013E-10
24.000	2.7528E+07	3.8510E-04	3.0535E-10
72.000	2.3190E+07	1.0747E-03	5.1694E-10
96.000	2.1278E+07	1.6146E-03	6.9218E-10
168.000	1.6427E+07	3.9805E-03	8.9430E-10
240.000	1.2678E+07	7.1604E-03	1.2300E-09
336.000	8.9745E+06	1.1941E-02	1.5514E-09
432.000	6.3527E+06	1.6447E-02	1.7060E-09
624.000	3.1831E+06	2.2356E-02	1.6435E-09
720.000	2.2531E+06	2.3420E-02	1.4854E-09

Time (hr)	SIRWT Water I-131 (Curies)	SIRWT Air I-131 (Curies)
0.000	0.0000E+00	0.0000E+00
0.008	0.0000E+00	0.0000E+00
0.025	0.0000E+00	0.0000E+00
0.300	0.0000E+00	0.0000E+00
0.317	0.0000E+00	0.0000E+00
0.508	3.4457E+02	1.8737E-03
0.780	1.3824E+03	1.5092E-02
1.040	3.2248E+03	5.0951E-02
1.300	5.8961E+03	1.2301E-01
1.560	9.3941E+03	2.4450E-01
1.808	1.3505E+04	4.1885E-01
2.000	1.6991E+04	5.9899E-01
2.260	1.7030E+04	6.0359E-01
2.520	1.7068E+04	6.0821E-01
2.780	1.7106E+04	6.1283E-01
3.040	1.7144E+04	6.1746E-01
3.300	1.7182E+04	6.2210E-01
3.560	1.7220E+04	6.2675E-01
3.820	1.7257E+04	6.3140E-01
4.080	1.7295E+04	6.3606E-01
4.340	1.7332E+04	6.4072E-01
4.600	1.7370E+04	6.4540E-01
4.860	1.7407E+04	6.5008E-01
5.120	1.7445E+04	6.5476E-01
5.380	1.7482E+04	6.5946E-01
5.640	1.7519E+04	6.6416E-01
5.900	1.7556E+04	6.6887E-01
6.160	1.7593E+04	6.7358E-01
6.420	1.7630E+04	6.7830E-01
6.680	1.7667E+04	6.8303E-01
6.940	1.7703E+04	6.8777E-01
7.200	1.7740E+04	6.9251E-01
7.460	1.7776E+04	6.9726E-01
7.720	1.7813E+04	7.0201E-01
7.980	1.7849E+04	7.0677E-01
8.000	1.7852E+04	7.0714E-01
8.260	1.7888E+04	7.1231E-01
8.520	1.7925E+04	7.1749E-01
8.780	1.7961E+04	7.2268E-01
9.040	1.7997E+04	7.2787E-01
9.300	1.8033E+04	7.3307E-01

9.560	1.8069E+04	7.3828E-01
9.820	1.8104E+04	7.4350E-01
10.080	1.8140E+04	7.4872E-01
24.000	1.9934E+04	1.0373E+00
72.000	2.4550E+04	2.2994E+00
96.000	2.6085E+04	3.0765E+00
168.000	2.8386E+04	5.2709E+00
240.000	2.8275E+04	7.2395E+00
336.000	2.6028E+04	9.1207E+00
432.000	2.2682E+04	1.0018E+01
624.000	1.5635E+04	9.6387E+00
720.000	1.2580E+04	8.6938E+00

```
#####################################################################
                        Cumulative Dose Summary
#####################################################################
```

	EAB		LPZ		Control Room	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.008	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.025	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.317	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.508	2.8768E-08	1.0294E-09	3.5547E-09	1.2720E-10	3.4465E-09	1.0918E-10
0.780	5.0798E-07	1.8027E-08	6.2767E-08	2.2275E-09	1.1383E-07	3.6013E-09
1.040	2.4953E-06	8.7956E-08	3.0832E-07	1.0868E-08	7.1354E-07	2.2552E-08
1.300	7.9048E-06	2.7691E-07	9.7673E-07	3.4216E-08	2.6232E-06	8.2829E-08
1.560	1.9487E-05	6.7874E-07	2.4079E-06	8.3867E-08	7.1698E-06	2.2620E-07
1.808	3.9598E-05	1.3722E-06	4.8928E-06	1.6955E-07	1.5672E-05	4.9406E-07
2.000	6.3577E-05	2.1951E-06	7.8558E-06	2.7124E-07	2.6316E-05	8.2915E-07
2.260	6.4020E-05	2.2103E-06	7.8807E-06	2.7209E-07	3.6431E-05	1.1474E-06
2.520	6.4463E-05	2.2253E-06	7.9055E-06	2.7293E-07	3.9546E-05	1.2453E-06
2.780	6.4907E-05	2.2403E-06	7.9305E-06	2.7377E-07	4.0614E-05	1.2789E-06
3.040	6.5352E-05	2.2552E-06	7.9555E-06	2.7461E-07	4.1086E-05	1.2938E-06
3.300	6.5800E-05	2.2702E-06	7.9807E-06	2.7546E-07	4.1383E-05	1.3032E-06
3.560	6.6250E-05	2.2852E-06	8.0060E-06	2.7630E-07	4.1631E-05	1.3110E-06
3.820	6.6702E-05	2.3003E-06	8.0314E-06	2.7715E-07	4.1864E-05	1.3183E-06
4.080	6.7156E-05	2.3153E-06	8.0569E-06	2.7799E-07	4.2094E-05	1.3256E-06
4.340	6.7612E-05	2.3304E-06	8.0826E-06	2.7884E-07	4.2325E-05	1.3329E-06
4.600	6.8070E-05	2.3455E-06	8.1083E-06	2.7969E-07	4.2555E-05	1.3401E-06
4.860	6.8531E-05	2.3607E-06	8.1342E-06	2.8054E-07	4.2787E-05	1.3474E-06
5.120	6.8994E-05	2.3759E-06	8.1602E-06	2.8140E-07	4.3020E-05	1.3547E-06
5.380	6.9458E-05	2.3911E-06	8.1864E-06	2.8225E-07	4.3254E-05	1.3621E-06
5.640	6.9926E-05	2.4064E-06	8.2126E-06	2.8311E-07	4.3489E-05	1.3695E-06
5.900	7.0395E-05	2.4217E-06	8.2390E-06	2.8397E-07	4.3725E-05	1.3769E-06
6.160	7.0866E-05	2.4371E-06	8.2655E-06	2.8484E-07	4.3962E-05	1.3843E-06
6.420	7.1340E-05	2.4525E-06	8.2921E-06	2.8570E-07	4.4201E-05	1.3918E-06
6.680	7.1816E-05	2.4680E-06	8.3189E-06	2.8657E-07	4.4440E-05	1.3993E-06
6.940	7.2294E-05	2.4835E-06	8.3458E-06	2.8745E-07	4.4681E-05	1.4068E-06
7.200	7.2775E-05	2.4991E-06	8.3728E-06	2.8832E-07	4.4923E-05	1.4144E-06
7.460	7.3257E-05	2.5147E-06	8.3999E-06	2.8920E-07	4.5166E-05	1.4220E-06
7.720	7.3742E-05	2.5304E-06	8.4272E-06	2.9008E-07	4.5410E-05	1.4296E-06
7.980	7.4229E-05	2.5462E-06	8.4546E-06	2.9097E-07	4.5655E-05	1.4373E-06
8.000	7.4267E-05	2.5474E-06	8.4567E-06	2.9104E-07	4.5674E-05	1.4379E-06
8.260	7.4519E-05	2.5558E-06	8.4662E-06	2.9136E-07	4.5855E-05	1.4436E-06
8.520	7.4772E-05	2.5643E-06	8.4758E-06	2.9168E-07	4.5974E-05	1.4473E-06
8.780	7.5027E-05	2.5728E-06	8.4854E-06	2.9200E-07	4.6076E-05	1.4505E-06
9.040	7.5282E-05	2.5813E-06	8.4951E-06	2.9232E-07	4.6173E-05	1.4536E-06
9.300	7.5540E-05	2.5898E-06	8.5048E-06	2.9264E-07	4.6269E-05	1.4566E-06
9.560	7.5798E-05	2.5984E-06	8.5146E-06	2.9297E-07	4.6365E-05	1.4596E-06
9.820	7.6058E-05	2.6070E-06	8.5245E-06	2.9329E-07	4.6461E-05	1.4626E-06
10.080	7.6319E-05	2.6157E-06	8.5343E-06	2.9362E-07	4.6558E-05	1.4657E-06
24.000	9.2265E-05	3.1315E-06	9.1378E-06	3.1314E-07	5.2464E-05	1.6491E-06
72.000	2.0911E-04	6.7689E-06	1.1017E-05	3.7165E-07	6.7990E-05	2.1247E-06
96.000	2.9921E-04	9.5492E-06	1.2467E-05	4.1638E-07	7.9960E-05	2.4899E-06
168.000	7.1308E-04	2.2281E-05	1.4417E-05	4.7637E-07	1.0762E-04	3.3327E-06
240.000	1.3307E-03	4.1262E-05	1.7328E-05	5.6582E-07	1.4890E-04	4.5898E-06
336.000	2.4115E-03	7.4468E-05	2.2421E-05	7.2230E-07	2.2116E-04	6.7902E-06

```
 432.000 3.6734E-03 1.1323E-04 2.8367E-05 9.0498E-07 3.0555E-04 9.3599E-06
 624.000 6.2948E-03 1.9376E-04 4.0720E-05 1.2845E-06 4.8090E-04 1.4700E-05
 720.000 7.4994E-03 2.3077E-04 4.6397E-05 1.4589E-06 5.6150E-04 1.7154E-05

#################################################################
                        Worst Two-Hour Dose
                   (Provided for Dose Location 1)
#################################################################

EAB
   Time   Whole Body    Thyroid        Skin        TEDE
   (hr)     (rem)        (rem)         (rem)       (rem)
    0.5   1.9982E-07   6.4401E-05   3.0046E-07   2.2231E-06

#################################################################
                      30 Day Control Room Skin Dose
#################################################################

Control Room
   Time     Skin
   (hr)     (rem)
  720.0   5.4264E-07
```

ATTACHMENT Q

MicroShield Cases for Energy Level Activities with Reduced Backleakage

C_SRW_03.MS5
C_SRW_04.MS5
C_SRW_05.MS5
C_SRW_07.MS5
C_SRW_13.MS5

C_SRW_03.MS5

```
MicroShield v5.05
Licensed To: Consumers Energy
With Serial: 5.05-00115
DB AST LOCA
The execution time was: 00:00:00
This case was run on Thursday, May 25, 2006 at 1:57:46 PM
Control Room SIRWT Shine - No Refill, No Leak @ 2.0000 hr
 1
 8  GEOMETRY
0 X
404.876 Y
0 Z
0 Length
701.04 Radius
0 Width
11.176 Height
0 Angle
SHIELD ARRAY:
2.54 Shield No:  1 thickness
55.88 Shield No:  2 thickness
121.92 Shield No:  3 thickness
30.48 Shield No:  4 thickness
0 Shield No:  5 thickness
0 Shield No:  6 thickness
0 Shield No:  7 thickness
0 Shield No:  8 thickness
0 Shield No:  9 thickness
0 Shield No:  10 thickness
182.88 Air gap thickness
0 Wall Cladding thickness
0 Top Cladding thickness
0 Transition Shield #
Sensitivity variable index (or 0):
0 SenseVar
1 # saved results or 1
# sensitivity cycles or 1 if none:
0 CURIESCONSTANT
1 NCycles
13 Number of Materials
15 shields for material #1:
0
0
0
0.00122
0
0
0
0
0
0
0
0.00122
0
0
0
15 shields for material #2:
0
0
0
0
0
0
0
0
0
0
0
```

```
0
0
0
0
15 shields for material #3:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #4:
0
0
2.35
0
2.35
0
0
0
0
0
0
0
0
0
15 shields for material #5:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #6:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #7:
0
```

```
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #8:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #9:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #10:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #11:
1
0
0
0
0
0
0
0
```

```
0
0
0
0
0
0
0
0
15 shields for material #12:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #13:
0
1.515
0
0
0
0
0
0
0
0
0
0
0
0
0
SAND.MT5
4/18/2006 7:56:32 AM
Sand, is the name of material #  13
1.515, is its default density; g/cm^3
0, is its effective atomic number
20, is its effective atomic weight
4.498, mu/rho at  .015 MeV
1.934, mu/rho at  .02 MeV
0.6576, mu/rho at  .03 MeV
0.3595, mu/rho at  .04 MeV
0.2555, mu/rho at  .05 MeV
0.2091, mu/rho at  .06 MeV
0.1693, mu/rho at  .08 MeV
0.1518, mu/rho at  .1 MeV
0.1305, mu/rho at  .15 MeV
0.1181, mu/rho at  .2 MeV
0.1021, mu/rho at  .3 MeV
0.09136, mu/rho at  .4 MeV
0.08339, mu/rho at  .5 MeV
0.07711, mu/rho at  .6 MeV
0.06774, mu/rho at  .8 MeV
0.06087, mu/rho at  1 MeV
0.04958, mu/rho at  1.5 MeV
0.04274, mu/rho at  2 MeV
0.03478, mu/rho at  3 MeV
0.03031, mu/rho at  4 MeV
0.02747, mu/rho at  5 MeV
0.02553, mu/rho at  6 MeV
0.02314, mu/rho at  8 MeV
0.02176, mu/rho at  10 MeV
```

```
0.02018, mu/rho at  15 MeV
BUILDUP MATERIAL INFORMATION
5, Case Buildup Material
0, High Z
1, GROUPING METHOD
25, DEFAULT GROUPS
0.015, LOWER MEV CUTOFF
0, PHOTONS BELOW
104, NUMBER OF ISOTOPES
Source input in curies: (or concentration) for infinite geometries.
13 0.0019174 ofAm-241
14 0.84536 ofAm-242
40 2160.5 ofBa-137m
41 486.27 ofBa-139
42 1275.8 ofBa-140
43 12.735 ofBa-141
61 115.94 ofBr-82
62 1163.4 ofBr-83
63 265.6 ofBr-84
81 30.809 ofCe-141
82 27.373 ofCe-143
83 25.933 ofCe-144
93 0.5767 ofCm-242
95 0.060451 ofCm-244
104 0 ofCo-58
106 0 ofCo-60
115 3614.3 ofCs-134
116 541.28 ofCs-134m
118 1037.5 ofCs-136
119 1951.9 ofCs-137
120 2632.3 ofCs-138
137 0.12684 ofEu-154
138 0.085929 ofEu-155
139 2.05 ofEu-156
174 763.88 ofI-130
175 16992 ofI-131
176 17876 ofI-132
177 31619 ofI-133
178 11314 ofI-134
179 25397 ofI-135
202 488.85 ofKr-83m
203 0 ofKr-85
204 0 ofKr-85m
205 0 ofKr-87
206 0 ofKr-88
209 34.968 ofLa-140
210 19.114 ofLa-141
211 4.7844 ofLa-142
224 170.33 ofMo-99
238 12.704 ofNb-95
239 0.089838 ofNb-95m
241 4.3286 ofNb-97
243 4.8265 ofNd-147
254 10.655 ofNp-238
255 454.08 ofNp-239
282 38.152 ofPd-109
287 1.3144 ofPm-147
288 2.1577 ofPm-148
289 0.30463 ofPm-148m
290 4.4999 ofPm-149
291 1.5557 ofPm-151
302 11.336 ofPr-143
303 24.537 ofPr-144
304 0.48274 ofPr-144m
313 0.099883 ofPu-238
314 0.0090509 ofPu-239
315 0.013747 ofPu-240
316 3.8703 ofPu-241
318 9.0164 ofPu-243
332 34.654 ofRb-86
```

```
334 781.83 ofRb-88
335 51.41 ofRb-89
346 157.01 ofRh-103m
347 110.83 ofRh-105
349 151.48 ofRh-106
355 159.97 ofRu-103
356 87.941 ofRu-105
357 73.658 ofRu-106
361 4.3239 ofSb-124
362 39.846 ofSb-125
363 2.802 ofSb-126
365 228.24 ofSb-127
366 473.77 ofSb-129
380 4.3674 ofSm-153
391 733.53 ofSr-89
392 86.033 ofSr-90
393 780.08 ofSr-91
394 582.85 ofSr-92
409 0.45825 ofTc-101
408 152.02 ofTc-99m
414 8.6796 ofTe-125m
415 228.67 ofTe-127
416 31.105 ofTe-127m
417 532.59 ofTe-129
418 95.972 ofTe-129m
419 119.77 ofTe-131
420 270.25 ofTe-131m
421 2618.2 ofTe-132
422 55.532 ofTe-133
423 306.31 ofTe-133m
424 424.13 ofTe-134
470 0.5365 ofXe-131m
471 201.47 ofXe-133
472 14.348 ofXe-133m
473 2214.5 ofXe-135
474 3815.9 ofXe-135m
476 0 ofXe-138
480 1.8139 ofY-90
482 9.6717 ofY-91
483 262.02 ofY-91m
484 127.25 ofY-92
485 9.7629 ofY-93
496 12.562 ofZr-95
497 11.301 ofZr-97
25 energies:
0.015
0.02
0.03
0.04
0.05
0.06
0.08
0.1
0.15
0.2
0.3
0.4
0.5
0.6
0.8
1
1.5
2
3
4
5
6
8
10
15
```

```
25 activities:
46102027594.4889
1142766047386.02
180113258380957
4327873737918.05
12766700938910.6
5226815942234.09
25957051442529.6
18204820286105.2
48618184201677.1
215322230435833
144137123823019
659875257040097
1.54262822487455E+15
1.35767444708659E+15
1.79107383883803E+15
893637380923606
809304859975435
185318162025962
10271917034336.8
729835865419.998
41476550598
0
0
0
0
End of source inputs.
20 Numerical Quadrature Order - Level  1
10 Numerical Quadrature Order - Level  2
10 Numerical Quadrature Order - Level  3
1, 1 = RESULTS EXIST  0 = NO
25 Results - reference (or single) case:
0
1.15146178026409E-311
9.77453078229186E-98
7.43892966760378E-48
4.88252162657325E-29
3.07290672544889E-21
9.59992860251845E-14
3.8080493876683E-11
7.04606204263414E-08
7.7824703074659E-06
2.52873619611151E-04
1.46550184460088E-02
0.223699712827945
0.85606863632855
10.3234965937093
26.0936132135219
351.69571753
422.573845747368
163.948693376756
35.4338512994214
4.11406070190359
0
0
0
0
1.03617268015074E-22
3.03116321963651E-21
7.04285622215593E-19
3.36577861798749E-20
2.5966528533345E-19
7.56318163201564E-19
8.10602508465264E-12
7.05882396604474E-09
2.57831795843846E-05
3.18909894635375E-03
7.30186203337695E-02
2.69883559670284
27.860029857737
```

```
76.2842188170512
543.234363479688
921.42471693356
6398.01459724273
5184.38438932163
1242.55899543194
199.98367763375
18.8357379013112
0
0
0
0
End of MicroShield 5 Case File:
H:\DATA\MYDOCU~1\DOSECO~1\ASTSUB~1\LOCA\MICROS~1\NOLEAK~1\C_SRW_03.MS5
```

C_SRW_04.MS5

```
MicroShield v5.05
Licensed To: Consumers Energy
With Serial: 5.05-00115
DB AST LOCA
The execution time was: 00:00:00
This case was run on Thursday, May 25, 2006 at 1:57:46 PM
Control Room SIRWT Shine - No Refill, No Leak @ 8.0000 hr
 1
 8  GEOMETRY
0 X
404.876 Y
0 Z
0 Length
701.04 Radius
0 Width
11.176 Height
0 Angle
SHIELD ARRAY:
2.54 Shield No:  1 thickness
55.88 Shield No:  2 thickness
121.92 Shield No:  3 thickness
30.48 Shield No:  4 thickness
0 Shield No:  5 thickness
0 Shield No:  6 thickness
0 Shield No:  7 thickness
0 Shield No:  8 thickness
0 Shield No:  9 thickness
0 Shield No:  10 thickness
182.88 Air gap thickness
0 Wall Cladding thickness
0 Top Cladding thickness
0 Transition Shield #
Sensitivity variable index (or 0):
0 SenseVar
1 # saved results or 1
# sensitivity cycles or 1 if none:
0 CURIESCONSTANT
1 NCycles
13 Number of Materials
15 shields for material #1:
0
0
0
0.00122
0
0
0
0
0
0
0
0.00122
0
0
0
15 shields for material #2:
0
0
0
0
0
0
0
0
0
0
0
```

```
0
0
0
0
15 shields for material #3:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #4:
0
0
2.35
0
2.35
0
0
0
0
0
0
0
0
0
15 shields for material #5:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #6:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #7:
0
```

```
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #8:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #9:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #10:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #11:
1
0
0
0
0
0
0
0
```

```
0
0
0
0
0
0
0
0
15 shields for material #12:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #13:
0
1.515
0
0
0
0
0
0
0
0
0
0
0
0
0
SAND.MT5
4/18/2006 7:56:32 AM
Sand, is the name of material #  13
1.515, is its default density; g/cm^3
0, is its effective atomic number
20, is its effective atomic weight
4.498, mu/rho at  .015 MeV
1.934, mu/rho at  .02 MeV
0.6576, mu/rho at  .03 MeV
0.3595, mu/rho at  .04 MeV
0.2555, mu/rho at  .05 MeV
0.2091, mu/rho at  .06 MeV
0.1693, mu/rho at  .08 MeV
0.1518, mu/rho at  .1 MeV
0.1305, mu/rho at  .15 MeV
0.1181, mu/rho at  .2 MeV
0.1021, mu/rho at  .3 MeV
0.09136, mu/rho at  .4 MeV
0.08339, mu/rho at  .5 MeV
0.07711, mu/rho at  .6 MeV
0.06774, mu/rho at  .8 MeV
0.06087, mu/rho at  1 MeV
0.04958, mu/rho at  1.5 MeV
0.04274, mu/rho at  2 MeV
0.03478, mu/rho at  3 MeV
0.03031, mu/rho at  4 MeV
0.02747, mu/rho at  5 MeV
0.02553, mu/rho at  6 MeV
0.02314, mu/rho at  8 MeV
0.02176, mu/rho at  10 MeV
```

```
0.02018, mu/rho at  15 MeV
BUILDUP MATERIAL INFORMATION
5, Case Buildup Material
0, High Z
1, GROUPING METHOD
25, DEFAULT GROUPS
0.015, LOWER MEV CUTOFF
0, PHOTONS BELOW
104, NUMBER OF ISOTOPES
Source input in curies: (or concentration) for infinite geometries.
13 0.0020795 ofAm-241
14 0.70562 ofAm-242
40 2316.5 ofBa-137m
41 25.748 ofBa-139
42 1361.9 ofBa-140
43 0.00001613 ofBa-141
61 110.6 ofBr-82
62 219.13 ofBr-83
63 0.11143 ofBr-84
81 33.232 ofCe-141
82 26.114 ofCe-143
83 28.046 ofCe-144
93 0.6241 ofCm-242
95 0.065413 ofCm-244
104 0 ofCo-58
106 0 ofCo-60
115 3868.8 ofCs-134
116 138.12 ofCs-134m
118 1096.2 ofCs-136
119 2089.7 ofCs-137
120 1.2181 ofCs-138
137 0.13725 ofEu-154
138 0.092977 ofEu-155
139 2.1932 ofEu-156
174 585.55 ofI-130
175 17853 ofI-131
176 5454.8 ofI-132
177 27799 ofI-133
178 117.19 ofI-134
179 14528 ofI-135
202 440.96 ofKr-83m
203 0 ofKr-85
204 0 ofKr-85m
205 0 ofKr-87
206 0 ofKr-88
209 168.41 ofLa-140
210 7.5055 ofLa-141
211 0.34876 ofLa-142
224 173.06 ofMo-99
238 13.746 ofNb-95
239 0.097114 ofNb-95m
241 0.67375 ofNb-97
243 5.1411 ofNd-147
254 10.624 ofNp-238
255 456.52 ofNp-239
282 30.289 ofPd-109
287 1.4231 ofPm-147
288 2.2612 ofPm-148
289 0.32826 ofPm-148m
290 4.5026 ofPm-149
291 1.4543 ofPm-151
302 12.464 ofPr-143
303 28.727 ofPr-144
304 0.52861 ofPr-144m
313 0.10815 ofPu-238
314 0.0098035 ofPu-239
315 0.014877 ofPu-240
316 4.188 ofPu-241
318 4.2156 ofPu-243
332 36.759 ofRb-86
```

```
334 0.00071211 ofRb-88
335 0.0000040832 ofRb-89
346 173.23 ofRh-103m
347 113.42 ofRh-105
349 163.85 ofRh-106
355 172.35 ofRu-103
356 37.296 ofRu-105
357 79.67 ofRu-106
361 4.6657 ofSb-124
362 43.111 ofSb-125
363 2.99 ofSb-126
365 236.12 ofSb-127
366 195.77 ofSb-129
380 4.3235 ofSm-153
391 791.06 ofSr-89
392 93.097 ofSr-90
393 544.88 ofSr-91
394 135.94 ofSr-92
409 0.000000011578 ofTc-101
408 160.32 ofTc-99m
414 9.3936 ofTe-125m
415 241.8 ofTe-127
416 33.674 ofTe-127m
417 275.46 ofTe-129
418 103.7 ofTe-129m
419 58.276 ofTe-131
420 254.59 ofTe-131m
421 2686.5 ofTe-132
422 0.63569 ofTe-133
423 3.6668 ofTe-133m
424 1.1726 ofTe-134
470 3.4556 ofXe-131m
471 1178.6 ofXe-133
472 81.908 ofXe-133m
473 8779.6 ofXe-135
474 2390.9 ofXe-135m
476 0 ofXe-138
480 7.6854 ofY-90
482 12.414 ofY-91
483 346.22 ofY-91m
484 234.62 ofY-92
485 6.9988 ofY-93
496 13.557 ofZr-95
497 9.5615 ofZr-97
25 energies:
0.015
0.02
0.03
0.04
0.05
0.06
0.08
0.1
0.15
0.2
0.3
0.4
0.5
0.6
0.8
1
1.5
2
3
4
5
6
8
10
15
```

```
25 activities:
60135080273.8764
1207813342228.33
183041922824491
4202957456248.56
13099635188687.6
5497000709346.66
36337776736968.2
17126470766327.9
19592145092671.4
403650094942835
109995608188341
589626153464852
1.12902336775816E+15
637295131576755
555089449264290
373721223398582
367713324695652
66787368121788.8
229614355943.763
633816501.176343
37777.862766
0
0
0
0
End of source inputs.
20 Numerical Quadrature Order - Level  1
10 Numerical Quadrature Order - Level  2
10 Numerical Quadrature Order - Level  3
1, 1 = RESULTS EXIST  0 = NO
25 Results - reference (or single) case:
0
1.21700404422228E-311
9.93346589351937E-98
7.22421835901442E-48
5.0098496404855E-29
3.23175153597022E-21
1.34391251264229E-13
3.58248230356945E-11
2.83942052007962E-08
1.45892733515714E-05
1.92975874959658E-04
1.30948721945359E-02
0.163722016148174
0.401840349428732
3.19945717168286
10.9124095088413
159.79540957916
152.292655431234
3.66484401224097
3.07720690608674E-02
3.74718770887861E-06
0
0
0
0
1.35157455213339E-22
3.20369981898146E-21
7.15737395829684E-19
3.26863147938268E-20
2.6643692253082E-19
7.95413790261329E-19
1.13477807909936E-11
6.64069957292526E-09
1.03900999937024E-05
5.97838917919533E-03
5.57228237920747E-02
2.41152253360096
20.3902821357901
```

```
35.8079666097907
168.359146957897
385.34195170551
2906.98269015071
1868.41583636023
27.7756705495679
0.173673233744492
1.71560535115085E-05
0
0
0
0
End of MicroShield 5 Case File:
H:\DATA\MYDOCU~1\DOSECO~1\ASTSUB~1\LOCA\MICROS~1\NOLEAK~1\C_SRW_04.MS5
```

C_SRW_05.MS5

```
MicroShield v5.05
Licensed To: Consumers Energy
With Serial: 5.05-00115
DB AST LOCA
The execution time was: 00:00:00
This case was run on Thursday, May 25, 2006 at 1:57:46 PM
Control Room SIRWT Shine - No Refill, No Leak @ 24.0000 hr
 1
 8  GEOMETRY
0 X
405.13 Y
0 Z
0 Length
701.04 Radius
0 Width
11.43 Height
0 Angle
SHIELD ARRAY:
2.54 Shield No:  1 thickness
55.88 Shield No:  2 thickness
121.92 Shield No:  3 thickness
30.48 Shield No:  4 thickness
0 Shield No:  5 thickness
0 Shield No:  6 thickness
0 Shield No:  7 thickness
0 Shield No:  8 thickness
0 Shield No:  9 thickness
0 Shield No:  10 thickness
182.88 Air gap thickness
0 Wall Cladding thickness
0 Top Cladding thickness
0 Transition Shield #
Sensitivity variable index (or 0):
0 SenseVar
1 # saved results or 1
# sensitivity cycles or 1 if none:
0 CURIESCONSTANT
1 NCycles
13 Number of Materials
15 shields for material #1:
0
0
0
0.00122
0
0
0
0
0
0
0
0.00122
0
0
0
15 shields for material #2:
0
0
0
0
0
0
0
0
0
0
0
```

```
0
0
0
0
15 shields for material #3:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #4:
0
0
2.35
0
2.35
0
0
0
0
0
0
0
0
0
15 shields for material #5:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #6:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #7:
0
```

```
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #8:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #9:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #10:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #11:
1
0
0
0
0
0
0
0
```

```
0
0
0
0
0
0
0
0
15 shields for material #12:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #13:
0
1.515
0
0
0
0
0
0
0
0
0
0
0
0
0
SAND.MT5
4/18/2006 7:56:32 AM
Sand, is the name of material #  13
1.515, is its default density; g/cm^3
0, is its effective atomic number
20, is its effective atomic weight
4.498, mu/rho at  .015 MeV
1.934, mu/rho at  .02 MeV
0.6576, mu/rho at  .03 MeV
0.3595, mu/rho at  .04 MeV
0.2555, mu/rho at  .05 MeV
0.2091, mu/rho at  .06 MeV
0.1693, mu/rho at  .08 MeV
0.1518, mu/rho at  .1 MeV
0.1305, mu/rho at  .15 MeV
0.1181, mu/rho at  .2 MeV
0.1021, mu/rho at  .3 MeV
0.09136, mu/rho at  .4 MeV
0.08339, mu/rho at  .5 MeV
0.07711, mu/rho at  .6 MeV
0.06774, mu/rho at  .8 MeV
0.06087, mu/rho at  1 MeV
0.04958, mu/rho at  1.5 MeV
0.04274, mu/rho at  2 MeV
0.03478, mu/rho at  3 MeV
0.03031, mu/rho at  4 MeV
0.02747, mu/rho at  5 MeV
0.02553, mu/rho at  6 MeV
0.02314, mu/rho at  8 MeV
0.02176, mu/rho at  10 MeV
```

```
0.02018, mu/rho at  15 MeV
BUILDUP MATERIAL INFORMATION
5, Case Buildup Material
0, High Z
1, GROUPING METHOD
25, DEFAULT GROUPS
0.015, LOWER MEV CUTOFF
0, PHOTONS BELOW
104, NUMBER OF ISOTOPES
Source input in curies: (or concentration) for infinite geometries.
13 0.0025149 ofAm-241
14 0.42458 ofAm-242
40 2723.7 ofBa-137m
41 0.0099165 ofBa-139
42 1579.3 ofBa-140
43 0 ofBa-141
61 95.47 ofBr-82
62 2.5002 ofBr-83
63 0 ofBr-84
81 39.433 ofCe-141
82 22.437 ofCe-143
83 33.667 ofCe-144
93 0.74972 ofCm-242
95 0.078646 ofCm-244
104 0 ofCo-58
106 0 ofCo-60
115 4546.3 ofCs-134
116 3.546 ofCs-134m
118 1244.4 ofCs-136
119 2457 ofCs-137
120 0.0000000015274 ofCs-138
137 0.165 ofEu-154
138 0.11177 ofEu-155
139 2.5579 ofEu-156
174 282.11 ofI-130
175 19935 ofI-131
176 2922.2 ofI-132
177 19281 ofI-133
178 0.00046567 ofI-134
179 3207 ofI-135
202 9.3343 ofKr-83m
203 0 ofKr-85
204 0 ofKr-85m
205 0 ofKr-87
206 0 ofKr-88
209 540.14 ofLa-140
210 0.5258 ofLa-141
211 0.00031505 ofLa-142
224 175.89 ofMo-99
238 16.525 ofNb-95
239 0.1164 ofNb-95m
241 0.3423 ofNb-97
243 5.9268 ofNd-147
254 10.269 ofNp-238
255 451.11 ofNp-239
282 15.945 ofPd-109
287 1.7131 ofPm-147
288 2.4961 ofPm-148
289 0.39031 ofPm-148m
290 4.393 ofPm-149
291 1.1833 ofPm-151
302 15.376 ofPr-143
303 34.484 ofPr-144
304 0.63456 ofPr-144m
313 0.13021 ofPu-238
314 0.011814 ofPu-239
315 0.017887 ofPu-240
316 5.0351 ofPu-241
318 0.54083 ofPu-243
332 42.165 ofRb-86
```

```
334 0 ofRb-88
335 0 ofRb-89
346 205.91 ofRh-103m
347 103.83 ofRh-105
349 196.76 ofRh-106
355 204.8 ofRu-103
356 3.6891 ofRu-105
357 95.673 ofRu-106
361 5.567 ofSb-124
362 51.811 ofSb-125
363 3.4636 ofSb-126
365 251.78 ofSb-127
366 18.066 ofSb-129
380 4.0995 ofSm-153
391 942.43 ofSr-89
392 111.94 ofSr-90
393 203.86 ofSr-91
394 2.7295 ofSr-92
409 0 ofTc-101
408 168.47 ofTc-99m
414 11.299 ofTe-125m
415 267.72 ofTe-127
416 40.517 ofTe-127m
417 99.954 ofTe-129
418 123.25 ofTe-129m
419 48.412 ofTe-131
420 211.51 ofTe-131m
421 2803 ofTe-132
422 0.0000046436 ofTe-133
423 0.000026787 ofTe-133m
424 0.00000017202 ofTe-134
470 12.582 ofXe-131m
471 3361.5 ofXe-133
472 217.36 ofXe-133m
473 8045.5 ofXe-135
474 527.78 ofXe-135m
476 0 ofXe-138
480 25.557 ofY-90
482 18.002 ofY-91
483 130.18 ofY-91m
484 26.622 ofY-92
485 2.8066 ofY-93
496 16.184 ofZr-95
497 5.9644 ofZr-97
25 energies:
0.015
0.02
0.03
0.04
0.05
0.06
0.08
0.1
0.15
0.2
0.3
0.4
0.5
0.6
0.8
1
1.5
2
3
4
5
6
8
10
15
```

```
25 activities:
23985431481.559
1328257509658.91
217692335123519
4699809057831.24
13668019578370.3
6170536885716.58
68225992035346.4
17035840469613.8
19631814564656.8
375386477896320
101390980342639
622405442100679
736054544403657
536009886234942
418086818380406
159668562027992
125347194787321
17169896803989.2
711631487090.11
305992.312499999
0
0
0
0
0
End of source inputs.
20 Numerical Quadrature Order - Level  1
10 Numerical Quadrature Order - Level  2
10 Numerical Quadrature Order - Level  3
1, 1 = RESULTS EXIST  0 = NO
25 Results - reference (or single) case:
0
1.30867429795522E-311
1.15719764701055E-97
7.92979787336422E-48
5.13752458750954E-29
3.56805638536326E-21
2.48387562689537E-13
3.50987610302599E-11
2.80521993833753E-08
1.3387928273407E-05
1.75735293779661E-04
1.36687617447818E-02
0.105623509703465
0.334649698016279
2.38831096107333
4.62396682383756
54.0922996767421
38.9111143836814
11.2999614320423
1.47890237841597E-05
0
0
0
0
0
5.39087977679099E-23
3.52317547296193E-21
8.51228738362789E-19
3.65503196104837E-20
2.77997441997224E-19
8.90097714516347E-19
2.09779921846307E-11
6.50887048650317E-09
1.02716085791485E-05
5.49032517957926E-03
5.07862370782696E-02
2.51924912148942
13.1649093242489
```

```
29.8432833700969
125.764797671884
163.391061013007
984.622281274161
477.642844817839
85.6821650638626
8.35022784690816E-05
0
0
0
0
0
End of MicroShield 5 Case File:
H:\DATA\MYDOCU~1\DOSECO~1\ASTSUB~1\LOCA\MICROS~1\NOLEAK~1\C_SRW_05.MS5
```

C_SRW_07.MS5

```
MicroShield v5.05
Licensed To: Consumers Energy
With Serial: 5.05-00115
DB AST LOCA
The execution time was: 00:00:00
This case was run on Thursday, May 25, 2006 at 1:57:47 PM
Control Room SIRWT Shine - No Refill, No Leak @ 96.0000 hr
 1
 8  GEOMETRY
0 X
405.638 Y
0 Z
0 Length
701.04 Radius
0 Width
11.938 Height
0 Angle
SHIELD ARRAY:
2.54 Shield No:  1 thickness
55.88 Shield No:  2 thickness
121.92 Shield No:  3 thickness
30.48 Shield No:  4 thickness
0 Shield No:  5 thickness
0 Shield No:  6 thickness
0 Shield No:  7 thickness
0 Shield No:  8 thickness
0 Shield No:  9 thickness
0 Shield No:  10 thickness
182.88 Air gap thickness
0 Wall Cladding thickness
0 Top Cladding thickness
0 Transition Shield #
Sensitivity variable index (or 0):
0 SenseVar
1 # saved results or 1
# sensitivity cycles or 1 if none:
0 CURIESCONSTANT
1 NCycles
13 Number of Materials
15 shields for material #1:
0
0
0
0.00122
0
0
0
0
0
0
0
0.00122
0
0
0
15 shields for material #2:
0
0
0
0
0
0
0
0
0
0
0
```

```
0
0
0
0
15 shields for material #3:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #4:
0
0
2.35
0
2.35
0
0
0
0
0
0
0
0
0
15 shields for material #5:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #6:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #7:
0
```

```
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #8:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #9:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #10:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #11:
1
0
0
0
0
0
0
0
```

```
0
0
0
0
0
0
0
0
15 shields for material #12:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #13:
0
1.515
0
0
0
0
0
0
0
0
0
0
0
0
0
SAND.MT5
4/18/2006 7:56:32 AM
Sand, is the name of material #  13
1.515, is its default density; g/cm^3
0, is its effective atomic number
20, is its effective atomic weight
4.498, mu/rho at  .015 MeV
1.934, mu/rho at  .02 MeV
0.6576, mu/rho at  .03 MeV
0.3595, mu/rho at  .04 MeV
0.2555, mu/rho at  .05 MeV
0.2091, mu/rho at  .06 MeV
0.1693, mu/rho at  .08 MeV
0.1518, mu/rho at  .1 MeV
0.1305, mu/rho at  .15 MeV
0.1181, mu/rho at  .2 MeV
0.1021, mu/rho at  .3 MeV
0.09136, mu/rho at  .4 MeV
0.08339, mu/rho at  .5 MeV
0.07711, mu/rho at  .6 MeV
0.06774, mu/rho at  .8 MeV
0.06087, mu/rho at  1 MeV
0.04958, mu/rho at  1.5 MeV
0.04274, mu/rho at  2 MeV
0.03478, mu/rho at  3 MeV
0.03031, mu/rho at  4 MeV
0.02747, mu/rho at  5 MeV
0.02553, mu/rho at  6 MeV
0.02314, mu/rho at  8 MeV
0.02176, mu/rho at  10 MeV
```

```
0.02018, mu/rho at  15 MeV
BUILDUP MATERIAL INFORMATION
5, Case Buildup Material
0, High Z
1, GROUPING METHOD
25, DEFAULT GROUPS
0.015, LOWER MEV CUTOFF
0, PHOTONS BELOW
104, NUMBER OF ISOTOPES
Source input in curies: (or concentration) for infinite geometries.
13 0.0045356 ofAm-241
14 0.0331 ofAm-242
40 4555.4 ofBa-137m
41 0 ofBa-139
42 2357.2 ofBa-140
43 0 ofBa-141
61 39.292 ofBr-82
62 0.0000000036113 ofBr-83
63 0 ofBr-84
81 64.99 ofCe-141
82 8.6897 ofCe-143
83 58.727 ofCe-144
93 1.303 ofCm-242
95 0.13815 ofCm-244
104 0 ofCo-58
106 0 ofCo-60
115 7584.3 ofCs-134
116 0.0000001992 ofCs-134m
118 1776 ofCs-136
119 4109.5 ofCs-137
120 0 ofCs-138
137 0.28974 ofEu-154
138 0.19616 ofEu-155
139 3.9197 ofEu-156
174 8.4195 ofI-130
175 26088 ofI-131
176 2688.5 ofI-132
177 2963.2 ofI-133
178 0 ofI-134
179 2.8544 ofI-135
202 0.000000015468 ofKr-83m
203 0 ofKr-85
204 0 ofKr-85m
205 0 ofKr-87
206 0 ofKr-88
209 2063.7 ofLa-140
210 0.0000026958 ofLa-141
211 0 ofLa-142
224 145.1 ofMo-99
238 28.977 ofNb-95
239 0.2006 ofNb-95m
241 0.031383 ofNb-97
243 8.6175 ofNd-147
254 6.7571 ofNp-238
255 327.81 ofNp-239
282 0.68108 ofPd-109
287 3.0242 ofPm-147
288 2.9877 ofPm-148
289 0.65215 ofPm-148m
290 3.0146 ofPm-149
291 0.35868 ofPm-151
302 26.009 ofPr-143
303 60.153 ofPr-144
304 1.1069 ofPr-144m
313 0.22962 ofPu-238
314 0.020883 ofPu-239
315 0.031431 ofPu-240
316 8.8441 ofPu-241
318 0.000040231 ofPu-243
332 63.098 ofRb-86
```

```
334 0 ofRb-88
335 0 ofRb-89
346 343.16 ofRh-103m
347 44.711 ofRh-105
349 343.8 ofRh-106
355 341.31 ofRu-103
356 0.000085145 ofRu-105
357 167.17 ofRu-106
361 9.4499 ofSb-124
362 90.854 ofSb-125
363 5.1465 ofSb-126
365 257.8 ofSb-127
366 0.00030514 ofSb-129
380 2.4742 ofSm-153
391 1589 ofSr-89
392 196.64 ofSr-90
393 1.8735 ofSr-91
394 0.000000048196 ofSr-92
409 0 ofTc-101
408 140.03 ofTc-99m
414 19.885 ofTe-125m
415 305.89 ofTe-127
416 70.985 ofTe-127m
417 133.33 ofTe-129
418 203.59 ofTe-129m
419 16.118 ofTe-131
420 70.415 ofTe-131m
421 2601.8 ofTe-132
422 0 ofTe-133
423 0 ofTe-133m
424 0 ofTe-134
470 70.578 ofXe-131m
471 7594.5 ofXe-133
472 325.43 ofXe-133m
473 108.39 ofXe-135
474 0.46977 ofXe-135m
476 0 ofXe-138
480 127.05 ofY-90
482 32.951 ofY-91
483 1.1963 ofY-91m
484 0.000046788 ofY-92
485 0.03524 ofY-93
496 27.528 ofZr-95
497 0.54687 ofZr-97
25 energies:
0.015
0.02
0.03
0.04
0.05
0.06
0.08
0.1
0.15
0.2
0.3
0.4
0.5
0.6
0.8
1
1.5
2
3
4
5
6
8
10
15
```

```
25 activities:
3644450846.0746
1641544429295.82
294720251532070
6767039557235.5
12699018590025.6
8515891619627.68
132690464816857
13245874763669.9
22085436987663.5
104961036984280
131178737319972
795770024556075
204281149651666
704805977666534
485090806503591
115562895248459
100643159060528
4113263233033.26
2718901223819.98
0
0
0
0
0
0
End of source inputs.
20 Numerical Quadrature Order - Level  1
10 Numerical Quadrature Order - Level  2
10 Numerical Quadrature Order - Level  3
1, 1 = RESULTS EXIST  0 = NO
25 Results - reference (or single) case:
0
1.54861035754279E-311
1.50467736670775E-97
1.10097861270991E-47
4.61352711615417E-29
4.76598079763474E-21
4.68321907080202E-13
2.64853130389049E-11
3.06883033444267E-08
3.64584439400267E-06
2.21964701661069E-04
1.70917182004495E-02
2.87104335466318E-02
0.431475181991948
2.72217840460607
3.29228464935944
42.8315504629543
9.207796726356
42.7326564295164
0
0
0
0
0
0
8.19113734881843E-24
4.35416252422128E-21
1.15242618780887E-18
5.2627129228071E-20
2.58288676253362E-19
1.22111291454087E-18
3.95693898997786E-11
4.91557427314746E-09
1.12509868533992E-05
1.49738476644479E-03
6.42493716194616E-02
3.15513258117994
3.58399319928929
```

```
38.5355288515292
143.546199105356
116.487568590575
780.557548990711
113.149150500718
324.324114457761
0
0
0
0
0
0
End of MicroShield 5 Case File:
H:\DATA\MYDOCU~1\DOSECO~1\ASTSUB~1\LOCA\MICROS~1\NOLEAK~1\C_SRW_07.MS5
```

C_SRW_13.MS5

```
MicroShield v5.05
Licensed To: Consumers Energy
With Serial: 5.05-00115
DB AST LOCA
The execution time was: 00:00:00
This case was run on Thursday, May 25, 2006 at 1:57:49 PM
Control Room SIRWT Shine - No Refill, No Leak @ 720.000 hr
 1
 8  GEOMETRY
0 X
410.21 Y
0 Z
0 Length
701.04 Radius
0 Width
16.51 Height
0 Angle
SHIELD ARRAY:
2.54 Shield No:  1 thickness
55.88 Shield No:  2 thickness
121.92 Shield No:  3 thickness
30.48 Shield No:  4 thickness
0 Shield No:  5 thickness
0 Shield No:  6 thickness
0 Shield No:  7 thickness
0 Shield No:  8 thickness
0 Shield No:  9 thickness
0 Shield No:  10 thickness
182.88 Air gap thickness
0 Wall Cladding thickness
0 Top Cladding thickness
0 Transition Shield #
Sensitivity variable index (or 0):
0 SenseVar
1 # saved results or 1
# sensitivity cycles or 1 if none:
0 CURIESCONSTANT
1 NCycles
13 Number of Materials
15 shields for material #1:
0
0
0
0.00122
0
0
0
0
0
0
0
0.00122
0
0
0
15 shields for material #2:
0
0
0
0
0
0
0
0
0
0
0
```

```
0
0
0
0
15 shields for material #3:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #4:
0
0
2.35
0
2.35
0
0
0
0
0
0
0
0
0
0
15 shields for material #5:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #6:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #7:
0
```

```
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #8:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #9:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #10:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #11:
1
0
0
0
0
0
0
0
```

```
0
0
0
0
0
0
0
0
15 shields for material #12:
0
0
0
0
0
0
0
0
0
0
0
0
0
0
0
15 shields for material #13:
0
1.515
0
0
0
0
0
0
0
0
0
0
0
0
0
SAND.MT5
4/18/2006 7:56:32 AM
Sand, is the name of material #  13
1.515, is its default density; g/cm^3
0, is its effective atomic number
20, is its effective atomic weight
4.498, mu/rho at  .015 MeV
1.934, mu/rho at  .02 MeV
0.6576, mu/rho at  .03 MeV
0.3595, mu/rho at  .04 MeV
0.2555, mu/rho at  .05 MeV
0.2091, mu/rho at  .06 MeV
0.1693, mu/rho at  .08 MeV
0.1518, mu/rho at  .1 MeV
0.1305, mu/rho at  .15 MeV
0.1181, mu/rho at  .2 MeV
0.1021, mu/rho at  .3 MeV
0.09136, mu/rho at  .4 MeV
0.08339, mu/rho at  .5 MeV
0.07711, mu/rho at  .6 MeV
0.06774, mu/rho at  .8 MeV
0.06087, mu/rho at  1 MeV
0.04958, mu/rho at  1.5 MeV
0.04274, mu/rho at  2 MeV
0.03478, mu/rho at  3 MeV
0.03031, mu/rho at  4 MeV
0.02747, mu/rho at  5 MeV
0.02553, mu/rho at  6 MeV
0.02314, mu/rho at  8 MeV
0.02176, mu/rho at  10 MeV
```

```
0.02018, mu/rho at  15 MeV
BUILDUP MATERIAL INFORMATION
5, Case Buildup Material
0, High Z
1, GROUPING METHOD
25, DEFAULT GROUPS
0.015, LOWER MEV CUTOFF
0, PHOTONS BELOW
104, NUMBER OF ISOTOPES
Source input in curies: (or concentration) for infinite geometries.
13 0.026193 ofAm-241
14 0 ofAm-242
40 20363 ofBa-137m
41 0 ofBa-139
42 2707 ofBa-140
43 0 ofBa-141
61 0.00085049 ofBr-82
62 0 ofBr-83
63 0 ofBr-84
81 176.36 ofCe-141
82 0.000083417 ofCe-143
83 260.46 ofCe-144
93 5.5127 ofCm-242
95 0.65105 ofCm-244
104 0 ofCo-58
106 0 ofCo-60
115 33155 ofCs-134
116 0 ofCs-134m
118 2009.1 ofCs-136
119 18370 ofCs-137
120 0 ofCs-138
137 1.3615 ofEu-154
138 0.91778 ofEu-155
139 5.6551 ofEu-156
174 0 ofI-130
175 12589 ofI-131
176 50.305 ofI-132
177 0.000012527 ofI-133
178 0 ofI-134
179 0 ofI-135
202 0 ofKr-83m
203 0 ofKr-85
204 0 ofKr-85m
205 0 ofKr-87
206 0 ofKr-88
209 3118 ofLa-140
210 0 ofLa-141
211 0 ofLa-142
224 0.97724 ofMo-99
238 126.96 ofNb-95
239 0.72805 ofNb-95m
241 0 ofNb-97
243 7.8886 ofNd-147
254 0.0064134 ofNp-238
255 0.7355 ofNp-239
282 0 ofPd-109
287 14.397 ofPm-147
288 0.59201 ofPm-148
289 1.992 ofPm-148m
290 0.0041192 ofPm-149
291 0.00000041207 ofPm-151
302 33.758 ofPr-143
303 266.78 ofPr-144
304 4.9093 ofPr-144m
313 1.0898 ofPu-238
314 0.099096 ofPu-239
315 0.14852 ofPu-240
316 41.65 ofPu-241
318 0 ofPu-243
332 107.54 ofRb-86
```

```
334 0 ofRb-88
335 0 ofRb-89
346 1024.9 ofRh-103m
347 0.0010293 ofRh-105
349 1547 ofRh-106
355 1019.4 ofRu-103
356 0 ofRu-105
357 752.2 ofRu-106
361 33.102 ofSb-124
362 421.75 ofSb-125
363 5.6854 ofSb-126
365 11.293 ofSb-127
366 0 ofSb-129
380 0.0011106 ofSm-153
391 5254.6 ofSr-89
392 927.66 ofSr-90
393 0 ofSr-91
394 0 ofSr-92
409 0 ofTc-101
408 0.94307 ofTc-99m
414 94.769 ofTe-125m
415 295.49 ofTe-127
416 290.9 ofTe-127m
417 368.47 ofTe-129
418 562.7 ofTe-129m
419 0.000041718 ofTe-131
420 0.00018225 ofTe-131m
421 48.712 ofTe-132
422 0 ofTe-133
423 0 ofTe-133m
424 0 ofTe-134
470 381.49 ofXe-131m
471 1228.2 ofXe-133
472 0.45811 ofXe-133m
473 0 ofXe-135
474 0 ofXe-135m
476 0 ofXe-138
480 927.61 ofY-90
482 114.3 ofY-91
483 0 ofY-91m
484 0 ofY-92
485 0 ofY-93
496 98.148 ofZr-95
497 0 ofZr-97
25 energies:
0.015
0.02
0.03
0.04
0.05
0.06
0.08
0.1
0.15
0.2
0.3
0.4
0.5
0.6
0.8
1
1.5
2
3
4
5
6
8
10
15
```

```
25 activities:
13147562402.8
3250354630077.01
155208341285249
18559556593407.5
388376973892.379
9325352366010.63
33735601240119.7
877000472655.677
21741469734472.3
15106516832632
105934395268831
392116429606249
147297051297087
2.22167663708739E+15
1.28720074103509E+15
123241361243060
148930281154322
1241753606762.19
4107929454799.98
0
0
0
0
0
0
End of source inputs.
20 Numerical Quadrature Order - Level  1
10 Numerical Quadrature Order - Level  2
10 Numerical Quadrature Order - Level  3
1, 1 = RESULTS EXIST  0 = NO
25 Results - reference (or single) case:
0
2.21747106047208E-311
5.8033381336306E-98
2.26072250472055E-47
1.07192310171263E-30
4.00100279832881E-21
9.23021413770682E-14
1.36973777910136E-12
2.39371586584773E-08
4.20563363546023E-07
1.46260568008017E-04
6.96877447463188E-03
1.73236239929056E-02
1.14885710754037
6.19350671468097
3.04570671708479
56.12922409379
2.49570214207898
58.9808365752491
0
0
0
0
0
0
2.89902909738764E-23
8.45820026356274E-21
5.95406291721905E-19
1.41603433437012E-19
7.74968238324935E-21
1.26139407438632E-18
7.82106158750904E-12
2.55694389020872E-10
8.85702592812306E-06
1.74679579783616E-04
4.28644218786607E-02
1.30260728309518
2.18930228033
```

```
103.847865091707
330.345881812383
108.934426081613
1032.96681209641
30.9484853697289
451.231251587184
0
0
0
0
0
0
End of MicroShield 5 Case File:
H:\DATA\MYDOCU~1\DOSECO~1\ASTSUB~1\LOCA\MICROS~1\NOLEAK~1\C_SRW_13.MS5
```

ATTACHMENT R

QADMOD-GP Input Files for Scenario 12

Inp_s12c1.dat
Inp_s12c2.dat
Inp_s12c3.dat
Inp_s12c4.dat
Inp_s12c5.dat

s12c1

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 12, Case 1 (2 h)
   21    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.83
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.83
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 2.6543+3 6.5794+4 1.0370+7 2.4917+5 7.3503+5 3.0093+5 1.4945+6 1.0481+6
 2.7991+6 1.2397+7 8.2986+6 3.7992+7 8.8815+7 7.8167+7 1.0312+8 5.1450+7
 4.6595+7 1.0670+7 5.9140+5 4.2020+4 2.3880+3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s12c2

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 12, Case 2 (8 h)
   21    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.87
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.87
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                       0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0      5.0
 3.4487+3 6.9267+4 1.0497+7 2.4104+5 7.5125+5 3.1525+5 2.0839+6 9.8219+5
 1.1236+6 2.3149+7 6.3082+6 3.3815+7 6.4749+7 3.6548+7 3.1834+7 2.1433+7
 2.1088+7 3.8302+6 1.3168+4 3.6349+1 2.1665-3
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s12c3

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 12, Case 3 (24 h)
   20    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   587.99
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   587.99
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0      4.0
 1.3614+3 7.5389+4 1.2356+7 2.6675+5 7.7577+5 3.5023+5 3.8724+6 9.6692+5
 1.1143+6 2.1306+7 5.7547+6 3.5326+7 4.1777+7 3.0423+7 2.3730+7 9.0624+6
 7.1144+6 9.7452+5 4.0391+4 1.7367-2
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s12c4

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 12, Case 4 (96 h)
   19    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   588.52
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   588.52
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 1.9768+2 8.9038+4 1.5986+7 3.6705+5 6.8880+5 4.6191+5 7.1972+6 7.1846+5
 1.1979+6 5.6931+6 7.1152+6 4.3163+7 1.1080+7 3.8229+7 2.6312+7 6.2682+6
 5.4589+6 2.2311+5 1.4747+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```

s12c5

```
QADMOD-GP, Palisades SIRWT to CR, Scenario 12, Case 5 (720 h)
   19    6    7    5   50  114    1   -3    0 -100  -62  -16         1
                            4    5
        1   731.52  1249.68       1.
       0.   701.04
   576.58   593.11
       0.       0.
  1    12   731.52   701.04  1249.68   701.04
  2    12   731.52  701.675  1249.68  701.675
  3     1   -30.48
  4     1    30.48
  5     1   365.76
  6     1   396.24
  7     1   716.28
  8     1   746.76
  9     1   1066.8
 10     1  1097.28
 11     1  1432.56
 12     1  1493.52
 13     2     76.2
 14     2    304.8
 15     2   365.76
 16     2    609.6
 17     2   670.56
 18     2    914.4
 19     2   975.36
 20     2   1219.2
 21     2  1280.16
 22     2    1524.
 23     2  1584.96
 24     2   1828.8
 25     2  1889.76
 26     2  2118.36
 27     3       0.
 28     3   365.76
 29     3   396.24
 30     3   518.16
 31     3   548.64
 32     3   574.04
 33     3   576.58
 34     3   593.11
 35     1    91.44
 36     1   182.88
 37     1  1107.44
 38     1  1198.88
 39     2   180.34
 40     2   238.76
 41     2   271.78
 42     2  1005.84
 43     2  1046.48
 44     2  1137.92
 45     2  1188.72
 46     2  1310.64
 47     2  1493.52
 48     2  1929.13
 49     2  2020.57
 50     3   487.68
  1     1  1 33 34                            731.52  1249.68   579.12
  2     2  1  2 33 34                        1432.8775  1249.68   579.12
  3     5  2 33 32                            731.52  1249.68   575.31
  4     3  2 32 31                            731.52  1249.68   561.34
  5     3  3 12 13 26 31 30                   731.52  1249.68    533.4
  6     3  3  4 13 26 30 29                        0  1249.68    457.2
  7     4  4  5 13 14 30 29                   198.12    190.5    457.2
  8     3  4 35 14 15 30 29                    60.96   335.28    457.2
  9     3 35 36 14 15 30 50                   137.16   335.28   502.92
 10     4 35 36 14 15 50 29                   137.16   335.28   441.96
```

11	3	36	5	14	15	30	29	274.32	335.28	457.2
12	4	4	5	15	16	30	29	198.12	487.68	457.2
13	3	4	35	16	17	30	29	60.96	640.08	457.2
14	3	35	36	16	17	30	50	137.16	640.08	502.92
15	4	35	36	16	17	50	29	137.16	640.08	441.96
16	3	36	5	16	17	30	29	274.32	640.08	457.2
17	4	4	5	17	18	30	29	198.12	792.48	457.2
18	3	4	35	18	19	30	29	60.96	944.88	457.2
19	3	35	36	18	19	30	50	137.16	944.88	502.92
20	4	35	36	18	19	50	29	137.16	944.88	441.96
21	3	36	5	18	19	30	29	274.32	944.88	457.2
22	4	4	5	19	20	30	29	198.12	1097.28	457.2
23	3	4	35	20	21	30	29	60.96	1249.68	457.2
24	3	35	36	20	21	30	50	137.16	1249.68	502.92
25	4	35	36	20	21	50	29	137.16	1249.68	441.96
26	3	36	5	20	21	30	29	274.32	1249.68	457.2
27	4	4	5	21	22	30	29	198.12	1402.08	457.2
28	3	4	35	22	23	30	29	60.96	1554.48	457.2
29	3	35	36	22	23	30	50	137.16	1554.48	502.92
30	4	35	36	22	23	50	29	137.16	1554.48	441.96
31	3	36	5	22	23	30	29	274.32	1554.48	457.2
32	4	4	5	23	24	30	29	198.12	1706.88	457.2
33	3	4	35	24	25	30	29	60.96	1859.28	457.2
34	3	35	36	24	25	30	50	137.16	1859.28	502.92
35	4	35	36	24	25	50	29	137.16	1859.28	441.96
36	3	36	5	24	25	30	29	274.32	1859.28	457.2
37	4	4	5	25	26	30	29	198.12	2004.06	457.2
38	3	5	6	13	39	30	29	381	128.27	457.2
39	3	5	6	39	41	30	50	381	226.06	502.92
40	4	5	6	39	41	50	29	381	226.06	441.96
41	3	5	6	41	43	30	29	381	640.08	457.2
42	3	5	6	43	44	30	50	381	1092.2	502.92
43	4	5	6	43	44	50	29	381	1092.2	441.96
44	3	5	6	44	48	30	29	381	1554.48	457.2
45	3	5	6	48	49	30	50	381	1974.85	502.92
46	4	5	6	48	49	50	29	381	1974.85	441.96
47	3	5	6	49	26	30	29	381	2087.88	457.2
48	4	6	7	13	14	30	29	556.26	190.5	457.2
49	3	6	7	14	15	30	29	556.26	335.28	457.2
50	4	6	7	15	16	30	29	556.26	487.68	457.2
51	3	6	7	16	17	30	29	556.26	640.08	457.2
52	4	6	7	17	18	30	29	556.26	792.48	457.2
53	3	6	7	18	19	30	29	556.26	944.88	457.2
54	4	6	7	19	20	30	29	556.26	1097.28	457.2
55	3	6	7	20	21	30	29	556.26	1249.68	457.2
56	4	6	7	21	22	30	29	556.26	1402.08	457.2
57	3	6	7	22	23	30	29	556.26	1554.48	457.2
58	4	6	7	23	24	30	29	556.26	1706.88	457.2
59	3	6	7	24	25	30	29	556.26	1859.28	457.2
60	4	6	7	25	26	30	29	556.26	2004.06	457.2
61	3	7	8	13	40	30	29	731.52	157.48	457.2
62	3	7	8	40	14	30	50	731.52	271.78	502.92
63	4	7	8	40	14	50	29	731.52	271.78	441.96
64	3	7	8	14	43	30	29	731.52	762	457.2
65	3	7	8	43	44	30	50	731.52	1092.2	502.92
66	4	7	8	43	44	50	29	731.52	1092.2	441.96
67	3	7	8	44	26	30	29	731.52	1554.48	457.2
68	4	8	9	13	14	30	29	906.78	190.5	457.2
69	3	8	9	14	15	30	29	906.78	335.28	457.2
70	4	8	9	15	16	30	29	906.78	487.68	457.2
71	3	8	9	16	17	30	29	906.78	640.08	457.2
72	4	8	9	17	18	30	29	906.78	792.48	457.2
73	3	8	9	18	19	30	29	906.78	944.88	457.2
74	4	8	9	19	20	30	29	906.78	1097.28	457.2
75	3	8	9	20	21	30	29	906.78	1249.68	457.2
76	4	8	9	21	22	30	29	906.78	1402.08	457.2
77	3	8	9	22	23	30	29	906.78	1554.48	457.2
78	4	8	9	23	24	30	29	906.78	1706.88	457.2
79	3	8	9	24	25	30	29	906.78	1859.28	457.2
80	4	8	9	25	26	30	29	906.78	2004.06	457.2

```
 81     3  9 10 13 43 30 29                    1082.04    457.2    457.2
 82     3  9 10 43 44 30 50                    1082.04   1092.2   502.92
 83     4  9 10 43 44 50 29                    1082.04   1092.2   441.96
 84     3  9 10 44 26 30 29                    1082.04     1524    457.2
 85     4 10 11 13 14 30 29                    1264.92    190.5    457.2
 86     3 10 11 14 15 30 29                    1264.92   335.28    457.2
 87     4 10 11 15 16 30 29                    1264.92   487.68    457.2
 88     3 10 11 16 17 30 29                    1264.92   640.08    457.2
 89     4 10 11 17 18 30 29                    1264.92   792.48    457.2
 90     3 10 11 18 19 30 29                    1264.92   944.88    457.2
 91     4 10 11 19 20 30 29                    1264.92  1097.28    457.2
 92     3 10 37 20 21 30 29                    1102.36  1249.68    457.2
 93     3 37 38 20 21 30 50                    1148.08  1249.68   502.92
 94     4 37 38 20 21 50 29                    1148.08  1249.68   441.96
 95     3 38 11 20 21 30 29                    1310.64  1249.68    457.2
 96     4 10 11 21 22 30 29                    1264.92  1402.08    457.2
 97     3 10 37 22 23 30 29                    1102.36  1554.48    457.2
 98     3 37 38 22 23 30 50                    1148.08  1554.48   502.92
 99     4 37 38 22 23 50 29                    1148.08  1554.48   441.96
100     3 38 11 22 23 30 29                    1310.64  1554.48    457.2
101     4 10 11 23 24 30 29                    1264.92  1706.88    457.2
102     3 10 11 24 25 30 29                    1264.92  1859.28    457.2
103     4 10 11 25 26 30 29                    1264.92  2004.06    457.2
104     3 11 12 13 42 30 29                    1463.04    457.2    457.2
105     3 11 12 42 45 30 50                    1463.04   1066.8   502.92
106     4 11 12 42 45 50 29                    1463.04   1066.8   441.96
107     3 11 12 45 46 30 29                    1463.04  1249.68    457.2
108     3 11 12 46 47 30 50                    1463.04   1371.6   502.92
109     4 11 12 46 47 50 29                    1463.04   1371.6   441.96
110     3 11 12 47 26 30 29                    1463.04  1859.28    457.2
111     3  3 12 13 26 29 28                     731.52  1249.68      381
112     4  3 12 13 26 28 27                     731.52  1249.68   182.88
113     4  3                                    -304.8       0.       0.
114     4  3 13                                  304.8       0.       0.
      1.0
             2.702
                       2.35
                              1.22-3
                                        0.7082   0.8068
   24    8   25   23    9    5
    0.015     0.02     0.03     0.04     0.05     0.06     0.08      0.1
     0.15      0.2      0.3      0.4      0.5      0.6      0.8       1.
      1.5      2.0      3.0
 5.1513+2 1.2735+5 6.0812+6 7.2718+5 1.5217+4 3.6538+5 1.3218+6 3.4362+4
 8.5185+5 5.9189+5 4.1506+6 1.5363+7 5.7712+6 8.7047+7 5.0434+7 4.8287+6
 5.8352+6 4.8653+4 1.6095+5
WATE EXP
 Photons Per                 mrem/hr    cm^2-sec
   731.52  1249.68    91.44    1
    749.3  1249.68    91.44    1
    762.0  1249.68    91.44    1
   883.92  1249.68    91.44    1
  1188.72  1249.68    91.44    1
   731.52   1282.7    91.44    1
    749.3   1282.7    91.44    1
    762.0   1282.7    91.44    1
   883.92   1282.7    91.44    1
  1188.72   1282.7    91.44    1
   731.52  1310.64    91.44    1
    749.3  1310.64    91.44    1
    762.0  1310.64    91.44    1
   883.92  1310.64    91.44    1
  1188.72  1310.64    91.44    1
   731.52  1402.08    91.44    1
    749.3  1402.08    91.44    1
    762.0  1402.08    91.44    1
   883.92  1402.08    91.44    1
  1188.72  1402.08    91.44    1
   731.52  1706.88    91.44    1
    749.3  1706.88    91.44    1
```

```
   762.0  1706.88    91.44    1
  883.92  1706.88    91.44    1
 1188.72  1706.88    91.44    1
  731.52  1216.66    91.44    1
   749.3  1216.66    91.44    1
   762.0  1216.66    91.44    1
  883.92  1216.66    91.44    1
 1188.72  1216.66    91.44    1
  731.52  1188.72    91.44    1
   749.3  1188.72    91.44    1
   762.0  1188.72    91.44    1
  883.92  1188.72    91.44    1
 1188.72  1188.72    91.44    1
  731.52  1097.28    91.44    1
   749.3  1097.28    91.44    1
   762.0  1097.28    91.44    1
  883.92  1097.28    91.44    1
 1188.72  1097.28    91.44    1
  731.52   792.48    91.44    1
   749.3   792.48    91.44    1
   762.0   792.48    91.44    1
  883.92   792.48    91.44    1
 1188.72   792.48    91.44    1
  713.74  1249.68    91.44    1
  701.04  1249.68    91.44    1
  579.12  1249.68    91.44    1
  274.32  1249.68    91.44    1
  713.74   1282.7    91.44    1
  701.04   1282.7    91.44    1
  579.12   1282.7    91.44    1
  274.32   1282.7    91.44    1
  713.74  1310.64    91.44    1
  701.04  1310.64    91.44    1
  579.12  1310.64    91.44    1
  274.32  1310.64    91.44    1
  713.74  1402.08    91.44    1
  701.04  1402.08    91.44    1
  579.12  1402.08    91.44    1
  274.32  1402.08    91.44    1
  713.74  1706.88    91.44    1
  701.04  1706.88    91.44    1
  579.12  1706.88    91.44    1
  274.32  1706.88    91.44    1
  713.74  1216.66    91.44    1
  701.04  1216.66    91.44    1
  579.12  1216.66    91.44    1
  274.32  1216.66    91.44    1
  713.74  1188.72    91.44    1
  701.04  1188.72    91.44    1
  579.12  1188.72    91.44    1
  274.32  1188.72    91.44    1
  713.74  1097.28    91.44    1
  701.04  1097.28    91.44    1
  579.12  1097.28    91.44    1
  274.32  1097.28    91.44    1
  713.74   792.48    91.44    1
  701.04   792.48    91.44    1
  579.12   792.48    91.44    1
  274.32   792.48    91.44    1
                             -1
```