

**Rancho Seco Nuclear Generating Station
Decommissioning Technical Basis Document**

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Comparison of Dose Impacts from Alternative Exposure Scenarios

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1.0 PURPOSE

The purpose of this Decommissioning Technical Basis Document (DTBD) is to evaluate the dose impacts of alternative exposure scenarios from exposure to industrial worker scenario DCGL soil contamination concentrations at the Rancho Seco Nuclear Generating Station (RSNGS) Industrial Area.

2.0 DISCUSSION

Single nuclide DCGL values were calculated in DTBD-04-005, DCGLs for RSNGS Industrial Area Surface Soils, [Reference 7.1] for radionuclides detected in Industrial Area surface soil using an industrial worker scenario. Although the industrial worker scenario is considered the most likely scenario for the RSNGS site and will be used for the License Termination Plan submittal to the Nuclear Regulatory Commission (NRC), this DTBD evaluates the dose impact from using a resident farmer scenario at specified times following license termination (partial site release) and the dose impact of maintaining an industrial area but allowing cattle grazing within impacted areas outside the industrial area and consumption of meat from the grazing cattle by an offsite member of the public.

RESRAD v6.22 was used in the probabilistic mode to perform the required calculations using the simplified mathematical model developed in DTBD-04-005. As in DTBD-04-005, sensitive RESRAD parameters for the alternative scenarios were identified following guidance published by the NRC. Sensitive parameters were then treated deterministically for dose calculations by assigning a parameter value selected from published statistical distributions for the parameter. Non-sensitive parameters were treated stochastically by assigning a statistical distribution for their value for use in the probabilistic calculations.

Alternative scenario dose calculations were performed by applying the unity rule for detected radionuclide DCGL concentrations calculated in DTBD-04-005 to obtain radionuclide mixture concentration values as discussed in Section 6.1. These concentration values were then used as input concentrations for RESRAD calculations to determine probabilistic mean dose at specified time periods following license termination using the simplified mathematical model modified to represent the alternative scenario. The potential dose from discounted radionuclides for the resident farmer alternative scenario was also calculated and added to the dose calculated for detected radionuclides.

3.0 DEFINITIONS

DCGL: A derived, radionuclide-specific activity concentration within a survey unit corresponding to the release criterion. The DCGL is based on the spatial distribution of the contaminant and hence is derived differently for the nonparametric statistical test ($DCGL_W$) and the Elevated Measurement Comparison ($DCGL_{EMC}$). DCGLs are derived from activity/dose relationships through various exposure pathway scenarios.

Deterministic treatment: While using RESRAD in the probabilistic mode, deterministic treatment is the assignment of a single conservative value to a parameter rather than a statistical distribution.

District: Sacramento Municipal Utility District (SMUD)

Impacted Area: Any area that is not classified as non-impacted. Areas with a reasonable possibility of containing residual radioactivity in excess of natural background or fallout levels.

Industrial Area: An approximately 87-acre fence-enclosed area containing the nuclear facility.

Non-Impacted Area: Areas where there is no reasonable possibility (extremely low probability) of residual contamination. Non-impacted areas are typically located off-site and may be used as background reference areas.

PRCC: Partial ranked correlation coefficient - Estimates nonlinear monotonic relationship and gives the unique contribution of an input parameter to the resultant dose.

RESRAD: RESRAD is a computer model designed to estimate radiation doses and risks from RESidual RADioactive materials for deriving limits for radionuclides in soil.

Stochastic treatment: While using RESRAD in the probabilistic mode, stochastic treatment is the assignment of a statistical distribution for the value of a RESRAD parameter.

Unity rule (mixture rule): A rule applied when more than one radionuclide is present at a concentration that is distinguishable from background and where a single concentration comparison does not apply. In this case, the mixture of radionuclides is compared against default concentrations by applying the unity rule. This is accomplished by determining: 1) the ratio between the concentration of each radionuclide in the mixture, and 2) the concentration for that radionuclide in an appropriate listing of default values. The sum of the ratios for all radionuclides in the mixture should not exceed 1.

4.0 TECHNICAL POSITION

This DTBD demonstrates compliance with the 10 CFR 20.1402 license termination TEDE dose limit of 25 mrem/year approximately 30 years after license termination under an industrial worker scenario if a resident farmer scenario were to be applied to the site. This is based on an unrealistic assumption that soils contained within the RSNIS Industrial Area and other impacted areas of the site were contaminated to the industrial worker scenario DCGL limits. This assumption is unrealistic because it assumes no application of the ALARA principle to license termination and because site

characterization samples have shown only very small areas of the site with a potential of soil contamination up to the industrial worker scenario DCGL limits.

Thus application of the industrial worker scenario to license termination is appropriate because the industrial worker scenario will be applicable for at least 30 years after license termination for the following reasons:

- The RSNGS site is owned by the District and is not a tax burden on the District because it is a tax exempt governmental organization.
- The RSNGS switchyard is one of only three interties connecting the District's transmission system with the Western Grid transmission system.
- A 50-acre photovoltaic generating facility and a 500 Mwe gas-fired generating facility due to start up in 2006 are located on the site and connected to the RSNGS switchyard.
- The District does not plan to demolish the major concrete structures on the RSNGS site.

Although a maximum potential peak of the mean dose of 5.13 mrem/year has been calculated for the cattle grazing alternative exposure scenario, this dose does not need to be accounted for in the industrial worker scenario dose limit because the offsite member of the public is distinctly different from the industrial worker and the two different scenarios do not impact each other.

5.0 LIMITATIONS

None

6.0 TECHNICAL BASES

6.1 Radionuclides of Concern and Concentration Values for Alternative Scenario Dose Calculations

A site-specific suite of potential radionuclides for use at RSNGS was derived in DTBD-04-001, Radionuclides for Consideration During Rancho Seco Nuclear Generating Station Characterization or Final Status Surveys, [Reference 7.2]. This suite of potential radionuclides contained a total of 26 radionuclides. On May 28, 2004 RSNGS submitted a spent fuel pool cooler pad soil sample collected on March 8, 2004 to General Engineering Laboratories (GEL) for analysis of the entire suite of potentially present 26 radionuclides. This sample was known by onsite gamma spectroscopy to have the highest level of contamination of any soil samples collected during the site characterization process. Of the suite of 26 potential radionuclides, GEL positively identified only six radionuclides. These were C-14, Co-60, Ni-63, Sr-90, Cs-134, and Cs-137. Single nuclide DCGL concentration values were derived in DTBD-04-05 for each

of the six radionuclides detected by GEL. These single nuclide DCGL concentration values are provided in Table 6-1 below.

Table 6-1

Single Nuclide DCGL Values for Detectable Radionuclides

Radionuclide	Peak of the Mean Dose (mrem/y per pCi/g)	DCGL (pCi/g)
C-14	2.93E-06	8.33E+06
Co-60	1.93E+00	1.26E+01
Ni-63	1.60E-06	1.52E+07
Sr-90	3.76E-03	6.49E+03
Cs-134	1.09E+00	2.24E+01
Cs-137	4.62E-01	5.28E+01

The GEL measured activity concentrations, decayed from the date of analysis to July 1, 2008 to represent the radionuclide mixture at the approximate completion of final status surveys, are provided in Table 6-2.

Table 6-2

Detected Radionuclide Concentrations

Radionuclide	Analysis Date	Analysis Result (pCi/g)	Decayed Concentration (pCi/g)
C-14	06/24/04	4.74	4.74
Co-60	06/22/04	11.3	6.66
Ni-63	06/24/04	175	170
Sr-90	07/08/04	1.41	1.28
Cs-134	06/22/04	0.890	0.230
Cs-137	06/22/04	1040	948

Applying the unity rule to a mixture of the detected radionuclides using the single nuclide DCGL concentration values will result in an annual dose to the industrial worker under the industrial worker scenario of 25 millirem. This relationship is defined in the following equation:

$$\frac{C_{M(C-14)}}{DCGL_{C-14}} + \frac{C_{M(Co-60)}}{DCGL_{Co-60}} + \frac{C_{M(Ni-63)}}{DCGL_{Ni-63}} + \frac{C_{M(Sr-90)}}{DCGL_{Sr-90}} + \frac{C_{M(Cs-134)}}{DCGL_{Cs-134}} + \frac{C_{M(Cs-137)}}{DCGL_{Cs-137}} \leq 1$$

Equation 1

where:

$C_{M(x)}$ = the mixture concentration of radionuclide "x"

Applying the decayed radionuclide concentrations of Table 6-2 and the single nuclide DCGL values of Table 6-1 and solving the unity rule equation results in the following:

$$\frac{4.74}{8.33E+06} + \frac{6.66}{1.26E+01} + \frac{170}{1.52E+07} + \frac{1.28}{6.49E+03} + \frac{0.230}{2.24E+01} + \frac{948}{5.28E+01} = 18.5$$

Equation 2

Dividing both sides of Equation 2 by 18.5 to maintain the unity rule results in :

$$\frac{0.256}{8.33E+06} + \frac{0.360}{1.26E+01} + \frac{9.18}{1.52E+07} + \frac{0.0692}{6.49E+03} + \frac{0.0124}{2.24E+01} + \frac{51.2}{5.28E+01} = 1$$

Equation 3

Results of the radionuclide mixture concentrations calculated in Equation 3 are provided in Table 6-3. Use of these radionuclide mixture concentrations with the industrial worker scenario results in an annual dose to the industrial worker of 25 millirem¹.

Table 6-3
Maximum Allowable Radionuclide Mixture Concentrations for
Alternative Scenario Evaluations

Radionuclide	Mixture Conc. (pCi/g)	Radionuclide	Mixture Conc. (pCi/g)
C-14	2.56E-01	Sr-90	6.92E-02
Co-60	3.60E-01	Cs-134	1.24E-02
Ni-63	9.19E+00	Cs-137	5.12E+01

6.2 Mathematical Hydrogeological Model

The RSNBS site consists of an approximately 87-acre fence-enclosed Industrial Area containing the nuclear facility surrounded by District-owned and District-controlled property totaling 2,480 acres. RESRAD v6.22 requires that the hydrogeological conditions of the site be described in a simplified mathematical model from the surface down to the first saturated potable groundwater zone. RESRAD allows for the modeling of an uncontaminated cover, a contaminated soil zone, up to five unsaturated (vadose) zones and a saturated zone. The current RSNBS hydrogeological information used to develop the simplified

¹ The actual calculated peak of the mean dose for the industrial worker scenario as developed in DTBD-04-005 is 24.3 millirem/year (electronic file Industrial Worker Dose.RAD). The remaining 0.7 millirem/year is attributed to rounding error and potential dose from discounted radionuclides (0.6 millirem/year) as discussed in DTBD-04-005.

mathematical model is based on the original siting study performed in 1967 and 1968 and described in the RSNGS Final Safety Analysis Report (FSAR).

The site-specific simplified mathematical model for RSNGS was developed in DTB-04-005 and includes:

- A contaminated silt layer 15 cm thick,
- An unsaturated silt layer 1 foot (0.305 meters) thick,
- An unsaturated fine sand layer 10 feet (3.05 meters) thick,
- An unsaturated siltstone layer 84 feet (25.6 meters) thick,
- An unsaturated sandstone layer 35.5 feet (10.8 meters) thick, and
- An underlying saturated sandstone layer.

Parameters for this simplified mathematical model are provided in Attachment 8.1, RESRAD v6.22 Parameters for Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario. The conceptual model for this calculation is depicted by RESRAD as Figure 6-1 below.

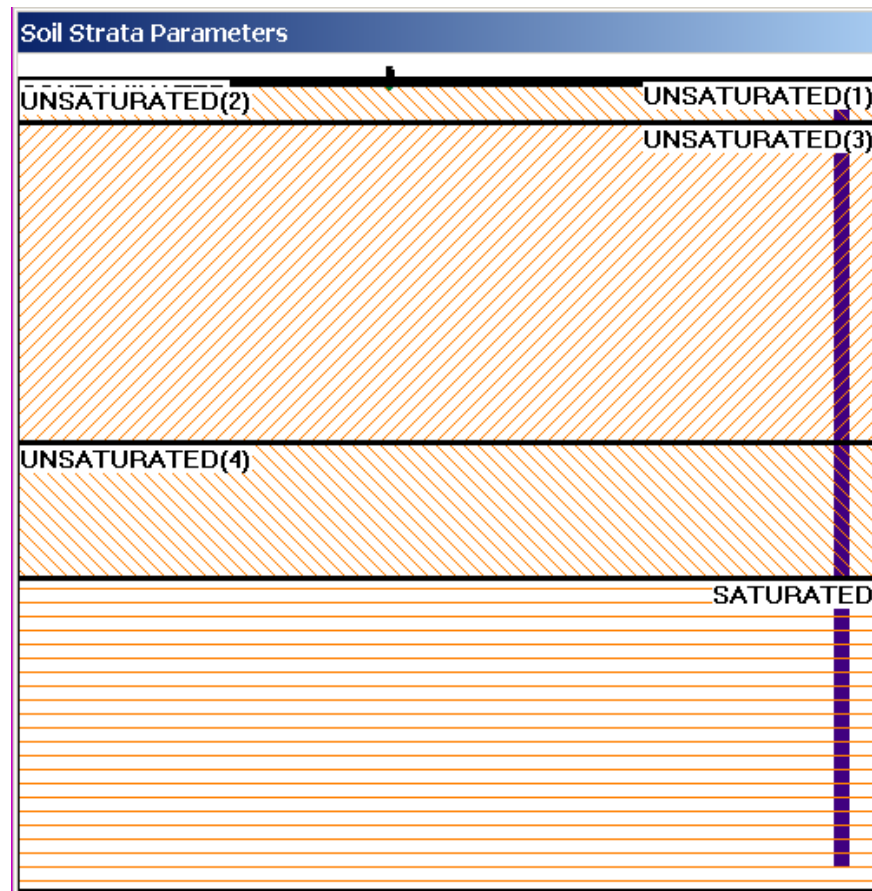


Figure 6-1
Site Conceptual Model

6.3 Resident Farmer Alternative Exposure Scenario

Although it is considered most likely that the District will maintain the RSN GS site for industrial purposes, the impact of releasing the site to the public at some period of time after license termination (or partial site release) under the industrial worker scenario and allowing a member of the public to establish a subsistence farm on the site has been evaluated.

The resident farmer exposure scenario calculates potential dose from the same exposure pathways used in the industrial worker exposure scenario including:

- Direct exposure to external radiation from the contaminated soil material;
- Internal dose from inhalation of airborne radionuclides; and
- Internal dose from ingestion of:

- o Drinking water from a contaminated well, and
- o Contaminated soil.

In addition to potential dose calculated from the above exposure pathways, the resident farmer exposure scenario also calculates potential dose from the additional exposure pathways of:

- Internal dose from ingestion of:
 - o Plant foods grown in the contaminated soil and irrigated with contaminated water,
 - o Meat and milk from livestock fed with contaminated fodder and water, and
 - o Fish from a contaminated pond.

6.3.1 Sensitivity Analysis of Detectable Radionuclides for the Resident Farmer Scenario

A sensitivity analysis was performed first to identify the parameters that are sensitive in the resident farmer scenario for the detectable radionuclides following the same methodology as that used in DTBD-04-005. As shown schematically in Attachment 8.2, RESRAD Parameter Selection Process, the parameter selection process starts with the selection of the RESRAD parameter to be evaluated. The selected parameter must then be classified as behavioral, metabolic or physical. Some parameters may belong to more than one of these types.

Physical parameters are determined by the source, its location, and geological characteristics of the site (i.e., these parameters are source- and site-specific). These include the geohydrological, geochemical, and meteorological characteristics of the site that are unaffected by human activities. The characteristics of atmospheric and biospheric transport up to, but not including, uptake by, or exposure of, the dose receptor, would also be considered physical input parameters.

A behavioral parameter is any parameter whose value would depend on the receptor's behavior and the scenario definition. For the same group of receptors, a parameter value could change if the scenario changed (e.g., parameters for recreational use could be different from those for residential use). Examples of behavioral parameters are exposure duration, indoor and outdoor time fractions and storage times for foodstuffs.

If a parameter represents the metabolic characteristics of the potential receptor and is independent of scenario, it is classified as a metabolic parameter. The parameter values may be different in different population age groups. According to the recommendations of the International Commission on Radiological Protection, Report 43 (ICRP 1985) [Reference 7.3], parameters representing metabolic characteristics are defined by average values for the general population. These values are not expected to be modified for a site-specific analysis because the parameter values would not depend on site conditions. Examples of metabolic parameters are dose conversion factors, ingestion of foodstuffs and inhalation rate.

In 1999, the NRC tasked Argonne National Laboratory (Argonne) with adapting the existing RESRAD code for use in site-specific dose modeling and analysis in accordance with the NRC's guidance in the Standard Review Plan (SRP) for Decommissioning to demonstrate compliance with the license termination rule. For this reason, Argonne revised and customized the code to be consistent with the current NRC guidance for both deterministic and probabilistic dose modeling being developed in the SRP for Decommissioning. The first step in the procedure used by Argonne to develop the probabilistic code involved listing and classifying the parameters. The parameter classification has been documented in Attachment A to NUREG/CR-6697, Development of Probabilistic RESRAD 6.0 and RESRAD-BUILD 3.0 Computer Codes, [Reference 7.4]. The assigned classification for each parameter selected for performing sensitivity analyses is listed in Attachment 8.1.

If the parameters were classified as behavioral or metabolic, site-specific parameter values or the default values used in RESRAD v6.22 were used for performing sensitivity analyses. These parameter values are also provided in Attachment 8.1.

If the parameters were classified as physical, then they were reviewed to determine if measured, site-specific values or look-up values based on soil type for the parameters are available. Measured, site-specific values or look-up values for physical parameters are provided in Attachment 8.1.

If measured or look-up, site-specific values for physical parameters were not available; the parameters were then ranked by priority as 1, 2, or 3 where 1 represents high priority, 2 represents medium priority and 3 represents low priority. This ranking was the second step in the procedure used by Argonne to develop the probabilistic code. The parameter ranking has been documented in Attachment B to NUREG/CR-6697. The assigned priority ranking for each physical parameter for which measured, site-specific values are not available is provided in Attachment 8.1.

If the physical parameters were ranked as priority 3, the assigned default values in RESRAD v6.22 were used for performing sensitivity analyses. These parameter values are also provided in Attachment 8.1. Two exceptions to this assignment exist. These are for the parameters of field capacity and inhalation rate for which statistical parameter distributions were developed by Argonne.

Argonne developed statistical parameter distributions for the physical parameters ranked as priority 1 or 2. These parameter distributions have been documented in Attachment C to NUREG/CR-6697. The parameter distributions for RSNGS priority 1 and 2 physical parameters, where measured site-specific values for physical parameters were not available, are listed in Attachment 8.3, RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario.

Once the parameter values listed in Attachment 8.1 and the statistical parameter distributions listed in Attachment 8.3 were loaded into RESRAD v6.22, the code was run in the uncorrelated parameter probabilistic mode for the radionuclides and concentrations provided in Table 6-3 to identify the sensitive parameters (electronic file Uncorrelated ParSens1RF.RAD). This approach identified the sensitive parameters for the entire mixture using the resident farmer scenario, not just individual radionuclide parameter sensitivity. The uncertainty analysis input settings for this calculation were:

- Latin Hypercube sampling
- Random seed – 1000
- Number of observations – 300
- Number of repetitions – 1
- Grouping of observations – correlated or uncorrelated

The absolute value of the calculated partial ranked correlation coefficient (PRCC) of the peak of the mean dose was then used to classify the parameters with statistical distributions as sensitive or non-sensitive. PRCC was chosen because NUREG/CR-6692, Probabilistic Modules for the RESRAD and RESRAD-BUILD Computer Codes, [Reference 7.5] recommends that it be used when nonlinear relationships, widely disparate scales or long tails are present in the inputs and outputs. The calculated PRCC values for both sensitive and non-sensitive parameters are listed in Attachment 8.3. If the absolute value of the PRCC was greater than 0.25, then the parameter was classified as sensitive. If the absolute value of the PRCC was equal to or less than 0.25, then the parameter was classified as non-sensitive. The sensitive parameters for

each radionuclide and the sensitive parameter PRCC values are listed in Attachment 8.3.

Finally, values for use in dose modeling for the physical parameters with sensitive parameters were selected based on sensitivity of the calculated PRCC following the guidance of NUREG/CR-6676, Probabilistic Dose Analysis Using Parameter Distributions Developed for RESRAD and RESRAD-BUILD Computer, [Reference 7.6]. If the absolute value of the PRCC was greater than 0.25, then the parameter value at either the 75% quartile or the 25% quartile was selected based on TEDE correlation with the parameter. If the PRCC value of the peak of the mean dose was negative, the parameter to dose correlation is negative and the parameter value at the 25th quartile was selected. If the PRCC value was positive, the parameter to dose correlation is positive and the parameter value at the 75th quartile was selected.

The parameter values were obtained from the RESRAD probabilistic calculation results using the interactive output feature of the uncertainty results. A double click on the left mouse button opens the interactive output dropdown window. From the interactive output dropdown window the "Results" folder is selected. From the "Results" folder the "Graphics" sub-folder is selected. The "Cumulative Density" is then selected as the Plot Type and the "Input Vector" is selected as the Primary Object. The parameter value is determined by a right mouse button click on the plot and selecting "Edit Chart Data" from the dropdown window. This opens the Data Grid Editor dropdown window. From this window, 0.25 or 0.75 is selected, as appropriate from the C2 column, which represents the appropriate quartile value. The corresponding parameter value is contained in the C1 column.

The input parameter selection portion of the deterministic Summary Report for this calculation is provided as Attachment 8.4, Input Parameter Selections from the Sensitivity Analysis Deterministic Summary Report for Detected Radionuclides. The input parameter selection portion of the Probabilistic Summary Report is provided as Attachment 8.5, Input Parameter Selections from the Sensitivity Analysis Probabilistic Summary Report for Detected Radionuclides.

RESRAD v6.22 Probabilistic Output Report excerpt for peak of the mean dose PRCC values is also provided in Attachment 8.6, RESRAD v6.22 Probabilistic Parameter Sensitivity Analysis Results for Detected Radionuclides. If the absolute value of the PRCC was greater than 0.25, then the parameter was classified as sensitive. If the absolute value of the PRCC was equal to or less than 0.25, then the parameter was classified as non-sensitive. The PRCC values for each parameter and the sensitive parameter values assigned are listed in Attachment 8.3. The sensitive

parameters identified under the resident farmer scenario for detected radionuclides, in decreasing order of importance, include:

1. External gamma shielding factor,
2. Plant transfer factor for Cs,
3. Depth of roots,
4. Density of contaminated zone, and
5. Meat transfer factor for Cs.

6.3.2 Calculated Dose from Detected Radionuclides for a Resident Farmer Scenario

Once the sensitive parameters were identified for the resident farmer scenario, the parameter sensitivity model (electronic file Uncorrelated ParSens1RF.RAD) was revised by replacing the sensitive parameter statistical distributions with the deterministically assigned sensitive parameter values and running the model to calculate dose under the resident farmer scenario for industrial worker scenario maximum allowable radionuclide soil concentrations from Table 6-3 (electronic file RF DCGL Dose.RAD). The dose factor library used for this calculation was the "RSNGS RF DCGL Dose" library containing the sensitive parameter values for plant, meat and milk transfer factors. The dose calculation times specified were 0, 1, 3, 25, 50, 75, 100, 300, 500 and 1000 years. This calculation assumes uniform contamination over the entire impacted area of the site and assumes that there has been no ALARA reduction from soil contamination limits. The input parameter selection portion of the deterministic Summary Report for this calculation is provided as Attachment 8.7, Input Parameter Selections from the Resident Farmer Scenario Maximum Allowable Soil Contamination Value Dose Calculation Deterministic Summary Report. The probabilistic Summary Report is provided as Attachment 8.8, Resident Farmer Scenario Maximum Allowable Soil Contamination Value Dose Calculation Probabilistic Summary Report.

It is highly unlikely that the District would consider public transfer of all or any portion of the impacted area of the site immediately upon completion of the FSS (time of partial site release) targeted as July 1, 2008. Class B and C radioactive waste will be stored onsite in the Interim Onsite (Radwaste) Storage Building (IOSB) under the existing 10 CFR Part 50 license for an indefinite period of time awaiting permanent disposal. Also, the Independent Spent Fuel Storage Installation (ISFSI) will be used to store spent fuel and greater than Class C radioactive waste under a 10 CFR Part 72 license for an indefinite period of time until transfer to the Department of Energy for permanent disposal. Twenty five years

following completion of the FSS is considered the earliest time that the District could consider public transfer of all or any portion of the impacted area of the site. Therefore, calculated dose for the one year period starting July 1, 2033 will be compared to the dose from the industrial worker scenario.

6.3.3 Calculated Dose from Discounted Radionuclides for a Resident Farmer Scenario

Discounted Radionuclides

As discussed in Section 6.1, only six of the potential radionuclides derived in DTBD-04-001 are considered to be radionuclides of concern for RSNGS Industrial Area surface soil. This leaves 20 discounted radionuclides to be evaluated for potential dose using the resident farmer scenario. This potential dose is based on the MDA value for each hard-to-detect radionuclide analyzed by GEL for the spent fuel pool cooler pad soil sample decayed, as for the radionuclides of concern, to a FSS date of July 1, 2008. The MDA value for readily detectable radionuclides is based on the average MDA from 17 spent fuel pool cooler pad surface soil samples analyzed by onsite gamma spectroscopy. A decay period of 1705 days was applied to these average MDA values to correspond to an approximate date of July 1, 2008. The resulting concentrations are provided in Table 6-4 below.

Table 6-4
Discounted Radionuclide Concentrations for Dose Evaluation

Radionuclide	Analysis Date	Analysis MDA (pCi/g)	Decayed Conc. (pCi/g)
H-3	06/24/04	6.82	5.44
<i>Na-22</i>	<i>Various</i>	<i>0.0328</i>	<i>0.00946</i>
Fe-55	06/24/04	3.56	1.27
Ni-59	06/22/04	3.58	3.58
<i>Nb-94</i>	<i>Various</i>	<i>0.0395</i>	<i>0.0395</i>
Tc-99	06/28/04	2.35	2.35
<i>Ag-108m</i>	<i>Various</i>	<i>0.0564</i>	<i>0.0550</i>
<i>Sb-125</i>	<i>Various</i>	<i>0.403</i>	<i>0.125</i>
Pm-147	06/25/04	2.76	0.955
<i>Eu-152</i>	<i>Various</i>	<i>0.223</i>	<i>0.176</i>
<i>Eu-154</i>	<i>Various</i>	<i>0.0904</i>	<i>0.0626</i>
<i>Eu-155</i>	<i>Various</i>	<i>0.300</i>	<i>0.156</i>
Np-237	06/22/04	0.441	0.441
Pu-238	06/22/04	0.851	0.824
Pu-239	06/22/04	0.207*	0.207
Pu-240	06/22/04	0.207*	0.207
Pu-241	07/04/04	59.0	48.7
Am-241	06/25/04	0.762	0.757
Pu-242	06/22/04	0.594	0.594
Cm-244	06/25/04	0.560**	0.480

Note: Values in bold italics are the average MDA from onsite gamma isotopic analysis of 17 spent fuel cooler pad surface soil samples and decayed for an average period of 1705 days.

*Half of the Pu-239/Pu-240 combined MDA

**Half of the Cm-243/Cm-244 combined MDA

Identification of Discounted Radionuclide Sensitive Parameters

In order to calculate potential dose from discounted radionuclides, the discounted radionuclides must first be evaluated to identify sensitive RESRAD parameters to be treated deterministically in the dose calculation. The site-specific mathematical model developed in Section 6.3.1 was used with uncorrelated parameter distributions to perform the sensitivity analysis. The RESRAD v6.22 parameters used are provided in Attachment 8.9, Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted

Radionuclides – Resident Farmer Scenario, and the probabilistic parameter distributions and sensitivity analysis results are provided in Attachment 8.10, RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Discounted Radionuclides - Resident Farmer Scenario. Due to the large number of radionuclides involved in the sensitivity analysis, two RESRAD calculations had to be performed, one calculation for transuranic discounted radionuclides (electronic file Uncorrelated ParSens2RF.RAD) and one for non-transuranic discounted radionuclides (electronic file Uncorrelated ParSens3RF.RAD). RESRAD summary report deterministic and probabilistic input parameters for both calculations are provided in Attachment 8.11, Input Parameter Selections from the Sensitivity Analysis Deterministic Summary Report for Discounted Radionuclides - Resident Farmer Scenario, and probabilistic report results of both calculations are provided in Attachment 8.12, RESRAD v6.22 Probabilistic Parameter Sensitivity Analysis Results for Discounted Radionuclides - Resident Farmer Scenario, and summarized in Attachment 8.10.

The sensitive parameters identified under the resident farmer scenario for discounted radionuclides in the electronic file Uncorrelated ParSens2RF.RAD calculation, in decreasing order of importance, include:

1. Depth of roots,
2. Plant transfer factor for Np,
3. Plant transfer factor for Pu,
4. Fruit, vegetable and grain consumption,
5. K_d of Np-227 in the contaminated zone,
6. Drinking water intake,
7. Density of unsaturated zone 1,
8. K_d of Pa-231 in unsaturated zone 3,
9. K_d of Th-229 in unsaturated zone 1,
10. K_d of Th-228 in the contaminated zone,
11. Plant transfer factor for Am, and
12. K_d of Th-232 in the saturated zone.

The sensitive parameters identified under the resident farmer scenario for discounted radionuclides in the electronic file Uncorrelated ParSens3RF.RAD calculation, in decreasing order of importance, include:

1. Plant transfer factor for Tc
2. Depth of roots

3. External gamma shielding factor
4. K_d of Tc-99 in contaminated zone
5. Density of contaminated zone
6. Fruit, vegetable and grain consumption
7. Contaminated zone erosion rate
8. K_d of H-3 in unsaturated zone 1

For parameters common to both Uncorrelated ParSens2RF.RAD and Uncorrelated ParSens3RF.RAD the PRCC value with the highest absolute value from each calculation was entered into Attachment 8.10 and used to determine parameter sensitivity.

Calculation of Potential Dose from Discounted Radionuclides

Potential dose from discounted radionuclides was calculated using RESRAD v6.22 in the probabilistic mode using the decayed radionuclide concentrations provided in Table 6-4 and selecting the mean dose at specified times following license termination. The site-specific mathematical model developed in Section 6.2 was used with uncorrelated parameter distributions to perform the dose calculations. The RESRAD v6.22 parameters used were taken from Attachment 8.9 and the probabilistic parameter distributions and sensitive parameter value assignments were taken from Attachment 8.10. Due to the large number of radionuclides involved in the calculations, two RESRAD calculations had to be performed, one calculation for transuranic discounted radionuclides (electronic file DiscNuc RF Dose1.RAD) and one for non-transuranic discounted radionuclides (electronic file DiscNuc RF Dose2.RAD). Sensitive parameters were treated deterministically and non-sensitive parameters were treated stochastically. Deterministic and probabilistic input parameters for both calculations are provided in Attachment 8.13, Input Parameter Selections from the Dose Calculation Deterministic and Probabilistic Summary Reports for Discounted Radionuclides - Resident Farmer Scenario, and results of both calculations are provided in Attachment 8.14, RESRAD v6.22 Probabilistic Dose Calculation Results for Discounted Radionuclides - Resident Farmer Scenario. The dose factor library used for this calculation was the "RSNGS RF Dis Nuclide Dose" library containing the sensitive parameter values for plant transfer factors. The dose calculation times specified were 0, 1, 3, 25, 50, 75, 100, 300, 500 and 1000 years. The potential dose from transuranic and non-transuranic discounted radionuclides was summed and is provided in Table 6-5. Table 6-5 contains the probabilistic peak mean dose at the specified calculated times. A plot of the total dose versus years following license termination is shown in Figure 6-2.

Table 6-5
Calculated Dose Using a Resident Farmer Scenario

Years Following License Termination	Detected Nuclide Dose (mrem/y)	Discounted Nuclide Potential Dose (mrem/y)	Total Dose (mrem/y)
25	29.0	1.36	30.4
50	10.7	0.950	11.6
75	4.45	0.667	5.12
100	1.96	0.459	2.42
300	0.009	0.006	0.015
500	0.000	0.004	0.004
1000	0.000	0.003	0.003

6.4 Cattle Grazing Alternative Exposure Scenario

Portions of the non-impacted area of the 2,480 acre site are open range areas that are leased to local ranchers for cattle grazing. Typically, the open range areas produce an abundance of native grass during the winter and spring rainy season. After the rainy season is over the grass quits growing, dries out and becomes dormant. Portions of the impacted area of the site are also open range areas (e.g., the south storm drain outfall area and the liquid effluent pathway area). These impacted range areas are not routinely leased for cattle grazing; however, there are no provisions or expectations to preclude cattle grazing in the impacted range areas in the future. Therefore, the dose impact of maintaining an industrial worker scenario but allowing cattle grazing within impacted range areas outside the Industrial Area and consumption of meat from the grazing cattle by an offsite member of the public was evaluated.

Although characterization soil samples have shown this not to be the case, a basic assumption was made that all impacted open range areas are contaminated to the industrial worker scenario maximum allowable radionuclide soil concentrations from Table 6-3, similar to the assumption made in Section 6.3.2 to calculate dose from detected radionuclides under a resident farmer scenario.

To perform this evaluation, electronic file "RF DCGL Dose.RAD" described in Section 6.3.2 was modified and saved as electronic file "Grazing DCGL Dose.RAD." These modifications included:

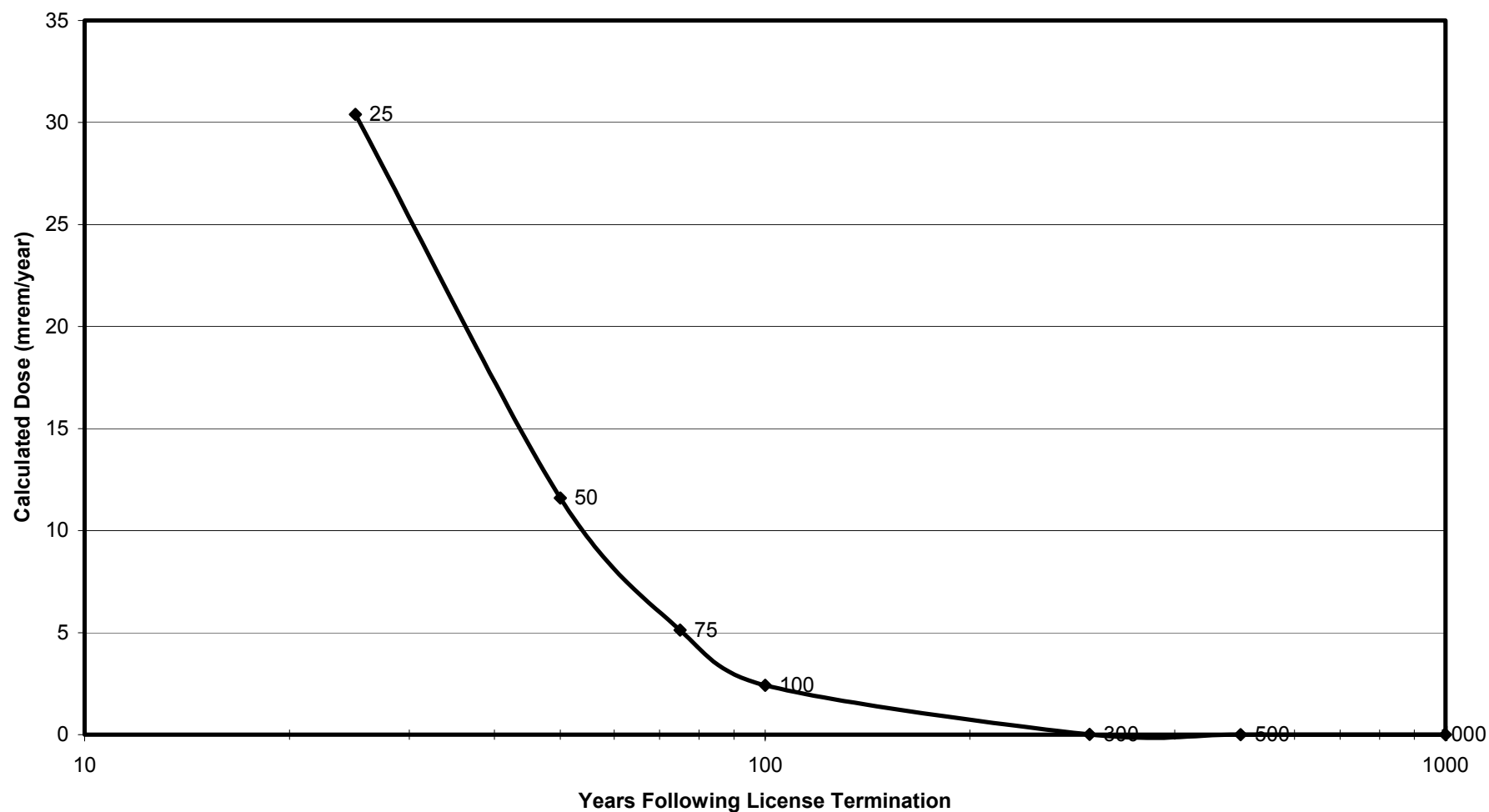
- Suppression of all pathways except meat ingestion,
- Turning off irrigation because the open range areas are not irrigated,
- Setting the "livestock water intake for meat" parameter to "0" because livestock drinking water is not provided from RSNGS wells, and

- Setting the “fraction of grain in beef cattle feed” parameter to “0” because no grain for cattle feed is grown on the RSNGS site.

With the above modifications, the calculated dose should represent the maximum potential dose that a member of the public whether residing onsite or offsite could receive from consuming meat from cattle grazing on impacted open range areas that are contaminated to the industrial worker scenario maximum allowable radionuclide soil concentrations. The calculation showed that the maximum potential peak of the mean dose is 5.13 mrem/year.

The input parameter selection portion of the deterministic Summary Report for this calculation is provided as Attachment 8.15, Input Parameter Selections from the Deterministic Summary Report for Maximum Allowable Soil Contamination Value – Cattle Grazing Scenario. The probabilistic Summary Report is provided as Attachment 8.16, Cattle Grazing Scenario Maximum Allowable Soil Contamination Value Dose Calculation Probabilistic Summary Report.

Figure 6-2
Calculated Dose Using a Resident Farmer Scenario



7.0 REFERENCES

- 7.1 DTBD-04-005, DCGLs for RSNGS Industrial Area Surface Soils
- 7.2 DTBD-04-001, Radionuclides for Consideration During Rancho Seco Nuclear Generating Station Characterization or Final Status Surveys
- 7.3 International Commission on Radiological Protection, Principles of Monitoring for the Radiation Protection of the Population A Report of Committee 4 of the ICRP (adopted 1984), ICRP 43, 1985
- 7.4 Argonne National Laboratory, NUREG/CR-6697, "Development of Probabilistic RESRAD 6.0 and RESRAD-BUILD 3.0 Computer Codes", December 2000
- 7.5 U.S. Nuclear Regulatory Commission, NUREG/CR-6692, "Probabilistic Modules for the RESRAD and RESRAD-BUILD Computer Codes", November 2000
- 7.6 U.S. Nuclear Regulatory Commission, NUREG/CR-6676, "Probabilistic Dose Analysis Using Parameter Distributions Developed for RESRAD and RESRAD-BUILD Computer", May 2000

8.0 ATTACHMENTS

- 8.1 RESRAD v6.22 Parameters for Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario
- 8.2 RESRAD Parameter Selection Process
- 8.3 RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario
- 8.4 Input Parameter Selections from the Sensitivity Analysis Deterministic Summary Report for Detected Radionuclides
- 8.5 Input Parameter Selections from the Sensitivity Analysis Probabilistic Summary Report for Detected Radionuclides
- 8.6 RESRAD v6.22 Probabilistic Parameter Sensitivity Analysis Results for Detected Radionuclides
- 8.7 Input Parameter Selections from the Resident Farmer Scenario Maximum Allowable Soil Contamination Value Dose Calculation Deterministic Summary Report

- 8.8 Resident Farmer Scenario Maximum Allowable Soil Contamination Value Dose Calculation Probabilistic Summary Report
- 8.9 Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario
- 8.10 RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Discounted Radionuclides - Resident Farmer Scenario
- 8.11 Input Parameter Selections from the Sensitivity Analysis Deterministic Summary Report for Discounted Radionuclides - Resident Farmer Scenario
- 8.12 RESRAD v6.22 Probabilistic Parameter Sensitivity Analysis Results for Discounted Radionuclides - Resident Farmer Scenario
- 8.13 Input Parameter Selections from the Dose Calculation Deterministic and Probabilistic Summary Reports for Discounted Radionuclides - Resident Farmer Scenario
- 8.14 RESRAD v6.22 Probabilistic Dose Calculation Results for Discounted Radionuclides - Resident Farmer Scenario
- 8.15 Input Parameter Selections from the Deterministic Summary Report for Maximum Allowable Soil Contamination Value – Cattle Grazing Scenario
- 8.16 Cattle Grazing Scenario Maximum Allowable Soil Contamination Value Dose Calculation Probabilistic Summary Report

9.0 RESPONSIBLE INDIVIDUAL

Leon E. Brown

Attachment 8.1

RESRAD v6.22 Parameters for Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Contamination					
Thickness of contaminated zone	P	2	m	0.15	Assigned value
Area of contaminated zone	P	2	m ²	10,000	Default RESRAD v6.22 Physical value acceptable for this preliminary evaluation
Shape of the contaminated zone	P	3	-	Circular	Default RESRAD v6.22 Physical value acceptable for this evaluation
Initial concentration of C-14 in soil	P	2	pCi/g	0.256	Section 6.3, Table 6-3 of this DTBD
Initial concentration of Co-60 in soil	P	2	pCi/g	0.360	Section 6.3, Table 6-3 of this DTBD
Initial concentration of Ni-63 in soil	P	2	pCi/g	9.19	Section 6.3, Table 6-3 of this DTBD
Initial concentration of Sr-90 in soil	P	2	pCi/g	0.0692	Section 6.3, Table 6-3 of this DTBD
Initial concentration of Cs-134 in soil	P	2	pCi/g	0.0124	Section 6.3, Table 6-3 of this DTBD
Initial concentration of Cs-137 in soil	P	2	pCi/g	51.2	Section 6.3, Table 6-3 of this DTBD
Initial concentration of radionuclides present in ground water	P	3	pCi/L	0	Not Used for this evaluation
Leach rate	P	3	1/yr	0	Default Physical value to invoke the calculation of this parameter via a first-order leaching model that uses the value of the soil/water distribution coefficient in the contaminated zone
Solubility limit	P	3	mol/L	0	Default Physical value – not used by RESRAD v6.22 with leach rate flag set to 0
Time since placement of material	P	3	yr	0	Default RESRAD v6.22 Physical value acceptable for this evaluation
Times for calculation	P	3	yr	1, 3, 10, 30, 100, 300, 1000	Default RESRAD v6.22 Physical value acceptable for this evaluation
Contaminated zone density	P	1	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for silt
Contaminated zone distribution coefficient for C	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Contaminated zone distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Co	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Sr	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Cs	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Use plant/soil ratio	NA	3	Check box	No	For purposes of this evaluation, the code should not be allowed to calculate the distribution coefficient from the plant root uptake factors
Contaminated zone field capacity	P	3	-	0.2	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Contaminated zone erosion rate	P,B	2	m/yr	Continuous logarithmic distribution	NUREG/CR-6697, Attachment C
Contaminated zone total porosity	P	2	-	Truncated normal distribution	NUREG/CR-6697, Attachment C
Contaminated zone hydraulic conductivity	P	2	m/yr	Lognormal	NUREG/CR-6697, Attachment C, Table 3.4-1 for silt
Contaminated zone b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Carbon-Model Parameters					
Thickness of evasion layer of C-14 in soil	P	2	m	Triangular distribution	NUREG/CR-6697, Attachment C
C-14 evasion flux rate from soil	P	3	1/s	7E-07	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
C-12 concentration in local water	P	3	g/cm ³	2E-05	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
C-12 concentration in contaminated soil	P	3	g/g	0.03	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Fraction of vegetation carbon absorbed from soil	P	3	-	0.02	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Fraction of vegetation carbon absorbed from air	P	3	-	0.98	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
C-12 evasion flux rate from soil	P	3	1/s	1E-10	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Grain fraction in beef cattle feed	B	3	-	0.8	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Grain fraction in milk cow feed	B	3	-	0.2	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
DCF correction factor for gaseous forms of C-14	P	3	-	88.94	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Soil					
Cover depth	P	2	m	0	The contamination is assumed to be on surface soil
Density of cover material	P	1	g/cm ³	Not Used	A cover is not used in this evaluation
Cover total porosity	P	3	-	Not Used	Radon is not used in this evaluation
Cover volumetric water content	P	3	-	Not Used	Radon is not used in this evaluation
Cover radon diffusion coefficient	P	3	m ² /s	Not Used	Radon is not used in this evaluation
Cover erosion rate	P,B	2	m/yr	Not Used	A cover is not used in this evaluation
Number of unsaturated zones	P	3	-	4	Simplified hydrogeological model assumption
Unsaturated zone 1 thickness	P	1	m	0.305	Thickness of silt layer above the sand layer
Unsaturated zone 1 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for silt
Unsaturated zone 1 distribution coefficient for C	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 1 distribution coefficient for Co	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Sr	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Cs	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 total porosity	P	2	-	Truncated normal distribution	NUREG/CR-6697, Attachment C, Table 3.2-1 distribution for silt
Unsaturated zone 1 effective porosity	P	2	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-7 distribution for silt
Unsaturated zone 1 field capacity	P	3	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-7 distribution for silt
Unsaturated zone 1 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n	NUREG/CR-6697, Attachment C, Table 3.4-1 for silt
Unsaturated zone 1 soil-specific b parameter	P	2	-	Bounded lognormal-n	NUREG/CR-6697, Attachment C, Table 3.5-1 for silt
Unsaturated zone 2 thickness	P	1	m	3.05	Thickness of fine sand layer above the siltstone layer
Unsaturated zone 2 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for sand
Unsaturated zone 2 distribution coefficient for C	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Co	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 2 distribution coefficient for Sr	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Cs	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 total porosity	P	2	-	Truncated normal distribution	NUREG/CR-6697, Attachment C, Table 3.2-1 distribution for sand
Unsaturated zone 2 effective porosity	P	2	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-1 distribution for sand
Unsaturated zone 2 field capacity	P	3	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-1 distribution for sand
Unsaturated zone 2 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.4-1 for sand
Unsaturated zone 2 soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.5-1 for sand
Unsaturated zone 3 thickness	P	1	m	25.60	Thickness of siltstone layer
Unsaturated zone 3 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for silt used as a placeholder until development of site-specific zone 3 density data
Unsaturated zone 3 distribution coefficient for C	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Co	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Sr	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 3 distribution coefficient for Cs	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 total porosity	P	2	-	0.35	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for medium siltstone used as a placeholder until development of site-specific zone 3 total porosity data
Unsaturated zone 3 effective porosity	P	2	-	0.12	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for medium siltstone used as a placeholder until development of site-specific zone 3 effective porosity data
Unsaturated zone 3 field capacity	P	3	-	0.23	Total porosity minus effective porosity per RESRAD Data Collection Handbook, Section 4.1, used as a placeholder until development of site-specific zone 4 field capacity data
Unsaturated zone 3 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n	NUREG/CR-6697, Attachment C, Table 3.4-1 for silt used as a placeholder until development of site-specific zone 3 hydraulic conductivity data
Unsaturated zone 3 soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.5-1 for silt used as a placeholder until development of site-specific zone 3 soil-specific b parameter data
Unsaturated zone 4 thickness	P	1	m	10.82	Thickness of unsaturated sandstone layer
Unsaturated zone 4 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for sand used as a placeholder until development of site-specific zone 4 density data
Unsaturated zone 4 distribution coefficient for C	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Co	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Sr	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Cs	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSN GS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 4 total porosity	P	2	-	0.35	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 total porosity data
Unsaturated zone 4 effective porosity	P	2	-	0.27	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 effective porosity data
Unsaturated zone 4 field capacity	P	3	-	0.07	Total porosity minus effective porosity per RESRAD Data Collection Handbook, Section 4.1, used as a placeholder until development of site-specific zone 4 field capacity data
Unsaturated zone 4 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.4-1 for sand used as a placeholder until development of site-specific zone 4 soil-specific hydraulic conductivity parameter data
Unsaturated zone 4 soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.5-1 for sand used as a placeholder until development of site-specific zone 4 soil-specific b parameter data
Water					
Density of saturated zone	P	1	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for sand used as a placeholder until development of site-specific zone 4 density data
Saturated zone distribution coefficient for C	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Co	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Sr	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Cs	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone total porosity	P	1	-	0.34	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 total porosity data

Selected RESRAD v6.22 Parameters for RSN GS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Saturated zone effective porosity	P	1	-	0.27	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 effective porosity data
Saturated zone field capacity	P	3	-	0.07	Total porosity minus effective porosity per RESRAD Data Collection Handbook, Section 4.1, used as a placeholder until development of site-specific zone 4 field capacity data
Saturated zone hydraulic conductivity	P	1	m/yr	10	Upper boundary value from RESRAD Data Collection Handbook, Table 5.1 for sandstone used as a placeholder until development of site-specific zone 4 hydraulic conductivity data
Saturated zone hydraulic gradient	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Length of contaminated zone parallel to the aquifer flow	P	2	m	113	Diameter of an 10,000 m ² contaminated zone
Water table drop rate	P	3	m/yr	0.783	Site specific value applicable to the RSN GS site as reported in the FSAR, Appendix 2C
Well-pump intake depth (below water table)	P	2	m	23	Site specific value applicable to the RSN GS site as reported in the FSAR, Appendix 2C
Well pumping rate	B, P	2	m ³ /yr	Not Used	Well pumping rate is not used with the Mass-Balance model for water transport selected – well pumping rate is used to calculate a dilution factor when the Nondisposal model is selected.
Model: non-dispersion or mass balance	NA	3	-	MB	The mass-balance model was chosen as the most conservative since it assumes that all of the radionuclides released from the contaminated zone are withdrawn through the well.
Evapotranspiration coefficient	P	2	-	Uniform distribution	NUREG/CR-6697, Attachment C
Humidity in air	P	3	g/m ³	Not Used	Not used when the Radon exposure pathway is suppressed
Average annual wind speed	P	2	m/s	3.13	7 mph average annual wind speed for the years of 1930 – 1996 reported by the National Climatic Data Center for Stockton, CA (http://www.ncdc.noaa.gov/oa/documentlibrary/wind/wind1996.pdf)
Precipitation rate	P	2	m/yr	0.38	Mean annual average rainfall measured at Sacramento and Stockton

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Irrigation mode	B	3	-	Overhead	Behavioral value – ditch irrigation is not the principal method of irrigation in the local region
Irrigation rate	B	3	m/yr	0.732	Table 8, Estimated Quantity of Water Applied Using Only Sprinkler Systems to Distribute Water: 1998 and 1994, average value for California, 1997 USDA Census of Agriculture, (http://www.nass.usda.gov/census/census97/fris/tbl08.pdf)
Runoff coefficient	P	2	-	Uniform distribution	NUREG/CR-6697, Attachment C
Watershed area for nearby stream or pond	P	3	m ²	1.00E+07	The entire RSNGS site drains into Clay Creek
Accuracy for water soil computation	NA	3	-	0.001	Default RESRAD v6.22 value acceptable for this evaluation
Ingestion					
Fruit, vegetable, and grain consumption rate	M, B	2	kg/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Leafy vegetable consumption	M, B	3	kg/yr	14	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Milk consumption	M, B	2	L/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Meat and poultry consumption	M, B	3	kg/yr	63	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Fish consumption rate	M, B	3	kg/yr	5.4	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Other seafood consumption rate	M, B	3	kg/yr	0.9	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Aquatic food contaminated fraction	B, P	2	-	Triangular distribution	NUREG/CR-6697, Attachment C
Soil ingestion rate	M, B	2	g/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Drinking water intake	M, B	2	L/yr	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Storage time for fruits, non-leafy vegetables, and grain	B	3	d	14	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSN GS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Storage time for leafy vegetables	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for milk	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for meat	B	3	d	20	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for fish	B	3	d	7	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for crustacea and mollusks	B	3	d	7	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for well water	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for surface water	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for livestock fodder	B	3	d	45	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Drinking water contaminated fraction	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Household water contaminated fraction	B, P	3	-	Not Used	Not used when the radon exposure pathway is suppressed
Livestock water contaminated fraction	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Irrigation water contaminated fraction	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Plant food contaminated fraction	B, P	3	-	-1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Meat contaminated fraction	B, P	3	-	-1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Milk contaminated fraction	B, P	3	-	-1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Livestock fodder intake rate for meat	M	3	kg/d	68	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock fodder intake rate for milk	M	3	kg/d	55	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock water intake rate for meat	M	3	L/d	50	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Livestock water intake rate for milk	M	3	L/d	160	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock intake of soil	M	3	kg/d	0.5	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Mass loading for foliar deposition	P	3	g/m ³	0.0001	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Depth of soil mixing layer	P	2	m	Triangular distribution	NUREG/CR-6697, Attachment C
Depth of roots	P	1	m	Uniform distribution	NUREG/CR-6697, Attachment C
Groundwater fractional usage for drinking water	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Groundwater fractional usage for household water	B, P	3	-	Not Used	Not used when the radon exposure pathway is suppressed
Groundwater fractional usage for livestock water	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Groundwater fractional usage for irrigation water	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Wet weight crop yield for non-leafy plants	P	2	kg/m ²	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Wet weight crop yield for leafy plants	P	3	kg/m ²	1.5	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Wet weight crop yield for fodder	P	3	kg/m ²	1.1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Length of growing season for non-leafy vegetables	P	3	yr	0.17	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Length of growing season for leafy vegetables	P	3	yr	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Length of growing season for fodder	P	3	yr	0.08	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Translocation factor for non-leafy vegetables	P	3	-	0.1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Translocation factor for leafy vegetables	P	3	-	1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Translocation factor for fodder	P	3	-	1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Weathering removal constant	P	2	1/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Dry foliar interception fraction for non-leafy vegetables	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Dry foliar interception fraction for leafy vegetables	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Dry foliar interception fraction for fodder	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Wet foliar interception fraction for non-leafy vegetables	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Wet foliar interception fraction for leafy vegetables	P	2	-	Triangular distribution	NUREG/CR-6697, Attachment C
Wet foliar interception fraction for fodder	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Slope factor – external	M	3	(risk/yr)/ (pCi/g)	Nuclide specific	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Slope factor – inhalation	M	3	risk/pCi	Nuclide specific	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Slope factor – ingestion	M	3	risk/pCi	Nuclide specific	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Plant transfer factor for C	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Plant transfer factor for Co	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Plant transfer factor for Ni	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Plant transfer factor for Sr	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Plant transfer factor for Cs	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Meat transfer factor for C	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Meat transfer factor for Co	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Meat transfer factor for Ni	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Meat transfer factor for Sr	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Meat transfer factor for Cs	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for C	P	2	(pCi/L)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Co	P	2	(pCi/L)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Ni	P	2	(pCi/L)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Milk transfer factor for Sr	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Cs	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
C bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C
Co bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C
Ni bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C
Sr bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C
Cs bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C
C bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/ (pCi/L)	9100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Co bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/ (pCi/L)	200	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Ni bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/ (pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Sr bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/ (pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Cs bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/ (pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Occupancy (Inhalation & External Parameters)					
Inhalation rate	M, B	3	m ³ /yr	Triangular distribution	NUREG/CR-6697, Attachment C
Inhalation dose conversion factors	M	3	mrem/pCi	Nuclide Specific	Metabolic RESRAD v6.22 default value

Selected RESRAD v6.22 Parameters for RSNCS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Ingestion dose conversion factors	M	3	mrem/pCi	Nuclide Specific	Metabolic RESRAD v6.22 default value
Mass loading for inhalation	P, B	2	g/m ³	Continuous linear distribution	NUREG/CR-6697, Attachment C
Indoor dust filtration factor	P, B	2	-	Uniform distribution	NUREG/CR-6697, Attachment C
External gamma shielding factor	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Building foundation thickness	P	3	m	Not Used	The Radon Exposure Pathway is not used
Building foundation bulk density	P	3	g/m ³	Not Used	The Radon Exposure Pathway is not used
Building foundation total porosity	P	3	-	Not Used	The Radon Exposure Pathway is not used
Building foundation volumetric water content	P	3	-	Not Used	The Radon Exposure Pathway is not used
Building foundation radon diffusion coefficient	P	3	m ² /s	Not Used	The Radon Exposure Pathway is not used
Contaminated soil zone radon diffusion coefficient	P	3	m ² /s	Not Used	The Radon Exposure Pathway is not used
Radon vertical dimension of mixing	P	3	m	Not Used	The Radon Exposure Pathway is not used
Building air exchange rate	P, B	3	1/hr	Not Used	The Radon Exposure Pathway is not used
Building (room) height	P	3	m	Not Used	The Radon Exposure Pathway is not used
Building indoor area factor	P	3	-	Not Used	The Radon Exposure Pathway is not used
Foundation depth below ground surface	P	3	m	Not Used	The Radon Exposure Pathway is not used
Radon-222 emanation coefficient	P	3	-	Not Used	The Radon Exposure Pathway is not used

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Detected Radionuclides – Resident Farmer Scenario

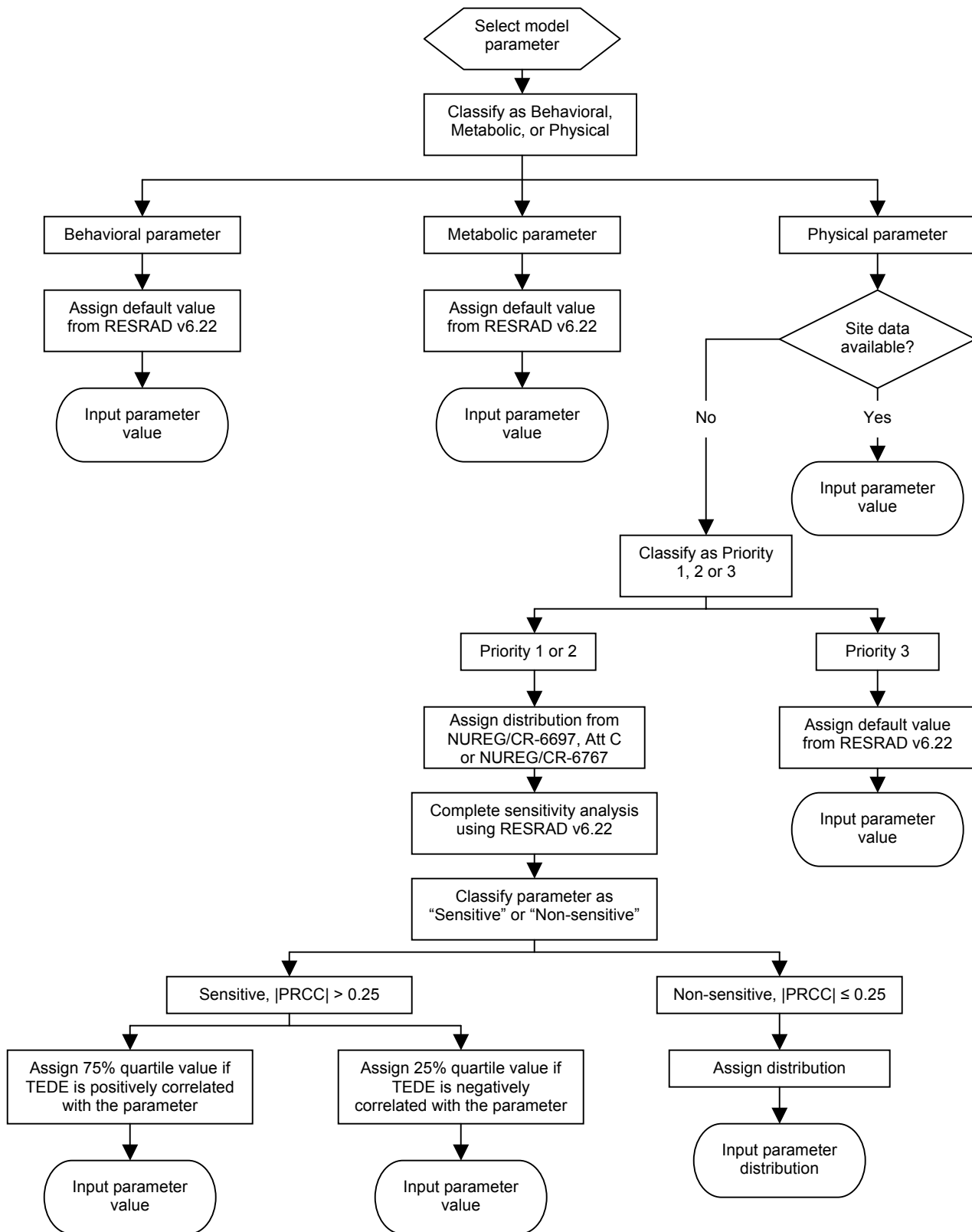
Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Radon-220 emanation coefficient	P	3	-	Not Used	The Radon Exposure Pathway is not used
Indoor time fraction	B	3	-	0.50	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Outdoor time fraction	B	3	-	0.25	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Exposure duration	B	3	yr	30	Behavioral RESRAD v6.22 default value

¹Parameter Classification: P = Physical; B = Behavioral; M = Metabolic

²1 = high priority parameter, 2 = medium priority parameter, 3 = low priority parameter

Attachment 8.2
RESRAD Parameter Selection Process

Parameter Selection Process



Attachment 8.3

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Density of contaminated zone	1	Normal	1.330	0.202	-	-	0.53	75%	1.47
Density of saturated zone	1	Normal	1.578	0.158	-	-	0.00	No	Distribution
Contaminated zone distribution coefficient for C-14	1	Truncated lognormal-n	2.40	3.22	0.001	0.999	0.13	No	Distribution
Contaminated zone distribution coefficient for Ni-63	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.03	No	Distribution
Contaminated zone distribution coefficient for Co-60	1	Truncated lognormal-n	5.46	2.53	0.001	0.999	0.07	No	Distribution
Contaminated zone distribution coefficient for Sr-90	1	Truncated lognormal-n	3.45	2.12	0.001	0.999	-0.08	No	Distribution
Contaminated zone distribution coefficient for Cs-134	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	-0.04	No	Distribution
Contaminated zone distribution coefficient for Cs-137	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	0.19	No	Distribution
Unsaturated zone 1 distribution coefficient for C-14	1	Truncated lognormal-n	2.40	3.22	0.001	0.999	0.07	No	Distribution
Unsaturated zone 1 distribution coefficient for Ni-63	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	0.12	No	Distribution
Unsaturated zone 1 distribution coefficient for Co-60	1	Truncated lognormal-n	5.46	2.53	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 1 distribution coefficient for Sr-90	1	Truncated lognormal-n	3.45	2.12	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 1 distribution coefficient for Cs-134	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 1 distribution coefficient for Cs-137	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	0.06	No	Distribution
Unsaturated zone 2 distribution coefficient for C-14	1	Truncated lognormal-n	2.40	3.22	0.001	0.999	0.01	No	Distribution
Unsaturated zone 2 distribution coefficient for Ni-63	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.03	No	Distribution
Unsaturated zone 2 distribution coefficient for Co-60	1	Truncated lognormal-n	5.46	2.53	0.001	0.999	0.03	No	Distribution
Unsaturated zone 2 distribution coefficient for Sr-90	1	Truncated lognormal-n	3.45	2.12	0.001	0.999	0.01	No	Distribution
Unsaturated zone 2 distribution coefficient for Cs-134	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	-0.05	No	Distribution
Unsaturated zone 2 distribution coefficient for Cs-137	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	0.03	No	Distribution
Unsaturated zone 3 distribution coefficient for C-14	1	Truncated lognormal-n	2.40	3.22	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 3 distribution coefficient for Ni-63	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	0.01	No	Distribution
Unsaturated zone 3 distribution coefficient for Co-60	1	Truncated lognormal-n	5.46	2.53	0.001	0.999	-0.06	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 3 distribution coefficient for Sr-90	1	Truncated lognormal-n	3.45	2.12	0.001	0.999	0.03	No	Distribution
Unsaturated zone 3 distribution coefficient for Cs-134	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 3 distribution coefficient for Cs-137	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	0.03	No	Distribution
Unsaturated zone 4 distribution coefficient for C-14	1	Truncated lognormal-n	2.40	3.22	0.001	0.999	-0.03	No	Distribution
Unsaturated zone 4 distribution coefficient for Ni-63	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	0.08	No	Distribution
Unsaturated zone 4 distribution coefficient for Co-60	1	Truncated lognormal-n	5.46	2.53	0.001	0.999	0.04	No	Distribution
Unsaturated zone 4 distribution coefficient for Sr-90	1	Truncated lognormal-n	3.45	2.12	0.001	0.999	0.04	No	Distribution
Unsaturated zone 4 distribution coefficient for Cs-134	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	0.11	No	Distribution
Unsaturated zone 4 distribution coefficient for Cs-137	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	-0.11	No	Distribution
Saturated zone distribution coefficient for C-14	1	Truncated lognormal-n	2.40	3.22	0.001	0.999	-0.02	No	Distribution
Saturated zone distribution coefficient for Ni-63	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.04	No	Distribution
Saturated zone distribution coefficient for Co-60	1	Truncated lognormal-n	5.46	2.53	0.001	0.999	0.06	No	Distribution
Saturated zone distribution coefficient for Sr-90	1	Truncated lognormal-n	3.45	2.12	0.001	0.999	0.04	No	Distribution
Saturated zone distribution coefficient for Cs-134	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	-0.02	No	Distribution
Saturated zone distribution coefficient for Cs-137	1	Truncated lognormal-n	6.10	2.33	0.001	0.999	0.01	No	Distribution
Depth of roots	1	Uniform	0.3	4.0	-	-	-0.53	25%	1.21
Plant transfer factor for C	1	Truncated lognormal-n	-0.36	0.9	0.001	0.999	0.01	No	Distribution
Plant transfer factor for Co	1	Truncated lognormal-n	-2.53	0.9	0.001	0.999	-0.04	No	Distribution
Plant transfer factor for Ni	1	Truncated lognormal-n	-3.00	0.9	0.001	0.999	-0.05	No	Distribution
Plant transfer factor for Sr	1	Truncated lognormal-n	-1.20	1.0	0.001	0.999	-0.09	No	Distribution
Plant transfer factor for Cs	1	Truncated lognormal-n	-3.22	1.0	0.001	0.999	0.63	75%	0.0781
Contaminated zone b parameter	2	Bounded lognormal-n	1.06	0.66	0.5	30	-0.09	No	Distribution
Contaminated zone erosion rate	2	Continuous logarithmic	Default ³	-	-	-	-0.19	No	Distribution
Contaminated zone total porosity	2	Truncated normal	0.425	0.0867	0.001	0.999	0.17	No	Distribution
Contaminated zone hydraulic conductivity	2	Lognormal	3.302	62.0	-	-	-0.16	No	Distribution
Depth of soil mixing layer	2	Triangular	0.0	0.6	0.15	-	-0.25	No	Distribution
Drinking water intake	2	Truncated lognormal-n	6.015	0.489	0.001	0.999	0.03	No	Distribution
Evapotranspiration coefficient	2	Uniform	0.5	0.75	-	-	-0.01	No	Distribution
External gamma shielding factor	2	Bounded lognormal-n	-1.3	0.59	0.044	1	0.93	75%	0.398

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Indoor dust filtration factor	2	Uniform	0.15	0.95	-	-	-0.01	No	Distribution
Mass loading for inhalation	2	Continuous linear	Default ³	-	-	-	-0.05	No	Distribution
Runoff coefficient	2	Uniform	0.1	0.8	-	-	0.07	No	Distribution
Fruit, vegetable and grain consumption rate	2	Triangular	135	318	178	-	0.02	No	Distribution
Milk consumption rate	2	Triangular	60	200	102	-	0.19	No	Distribution
Aquatic food contaminated fraction	2	Triangular	0	1	0.39	-	-0.02	No	Distribution
Wet weight crop yield for non-leafy plants	2	Truncated lognormal-n	0.56	0.48	0.001	0.999	-0.13	No	Distribution
Weathering removal constant	2	Triangular	5.1	84	18	-	-0.05	No	Distribution
Wet foliar interception fraction for leafy vegetables	2	Triangular	0.06	0.95	0.67	-	0.18	No	Distribution
Saturated zone b parameter	2	Bounded lognormal-n	1.06	0.66	0.5	30	-0.14	No	Distribution
Saturated zone hydraulic gradient	2	Bounded lognormal-n	-5.11	1.77	7E-05	0.5	-0.07	No	Distribution
Soil ingestion rate	2	Triangular	0	36.5	18.3	-	0.02	No	Distribution
Unsaturated zone 1 density	2	Normal	1.33	0.202	-	-	-0.13	No	Distribution
Unsaturated zone 1 effective porosity	2	Truncated normal	0.425	0.110	0.0839	0.766	0.02	No	Distribution
Unsaturated zone 1 hydraulic conductivity	2	Bounded lognormal-n	2.66	0.475	3.302	62.2	0.00	No	Distribution
Unsaturated zone 1 b parameter	2	Bounded lognormal-n	1.16	0.140	2.06	4.89	-0.02	No	Distribution
Unsaturated zone 1 total porosity	2	Truncated normal	0.46	0.11	0.1161	0.7959	0.04	No	Distribution
Unsaturated zone 2 density	2	Normal	1.578	0.158	-	-	0.05	No	Distribution
Unsaturated zone 2 effective porosity	2	Truncated normal	0.383	0.0610	0.195	0.572	0.02	No	Distribution
Unsaturated zone 2 hydraulic conductivity	2	Bounded lognormal-n	1.398	1.842	110	5870	0.02	No	Distribution
Unsaturated zone 2 b parameter	2	Bounded lognormal-n	-0.0253	0.216	0.501	1.90	-0.05	No	Distribution
Unsaturated zone 2 total porosity	2	Truncated normal	0.43	0.06	0.2446	0.6154	0.02	No	Distribution
Unsaturated zone 3 density	2	Normal	1.33	0.202	-	-	-0.02	No	Distribution
Unsaturated zone 3 hydraulic conductivity	2	Bounded lognormal-n	2.66	0.475	3.302	62.2	-0.04	No	Distribution
Unsaturated zone 3 b parameter	2	Bounded lognormal-n	1.16	0.140	2.06	4.89	-0.01	No	Distribution
Unsaturated zone 4 density	2	Normal	1.578	0.158	-	-	0.01	No	Distribution
Unsaturated zone 4 hydraulic conductivity	2	Bounded lognormal-n	1.398	1.842	110	5870	-0.07	No	Distribution
Unsaturated zone 4 b parameter	2	Bounded lognormal-n	-0.0253	0.216	0.501	1.90	-0.12	No	Distribution
Thickness of evasion layer of C-14 in soil	2	Triangular	0.5	1.0	0.75	-	-0.09	No	Distribution
Meat transfer factor for C	2	Truncated lognormal-n	-3.47	1.0	0.001	0.999	0.14	No	Distribution
Meat transfer factor for Co	2	Truncated lognormal-n	-3.51	1.0	0.001	0.999	-0.02	No	Distribution
Meat transfer factor for Ni	2	Truncated lognormal-n	-5.30	0.9	0.001	0.999	-0.16	No	Distribution
Meat transfer factor for Sr	2	Truncated lognormal-n	-4.61	0.4	0.001	0.999	-0.02	No	Distribution
Meat transfer factor for Cs	2	Truncated lognormal-n	-3.00	0.4	0.001	0.999	0.43	75%	0.0649
Milk transfer factor for C	2	Truncated lognormal-n	-4.4	0.9	0.001	0.999	-0.10	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Milk transfer factor for Co	2	Truncated lognormal-n	-6.21	0.7	0.001	0.999	0.04	No	Distribution
Milk transfer factor for Ni	2	Truncated lognormal-n	-3.91	0.7	0.001	0.999	-0.04	No	Distribution
Milk transfer factor for Sr	2	Truncated lognormal-n	-6.21	0.5	0.001	0.999	0.07	No	Distribution
Milk transfer factor for Cs	2	Truncated lognormal-n	-4.61	0.5	0.001	0.999	0.16	No	Distribution
C bioaccumulation factor for fish	2	Lognormal-n	10.8	1.1	-	-	-0.05	No	Distribution
Co bioaccumulation factor for fish	2	Lognormal-n	5.7	1.1	-	-	0.04	No	Distribution
Ni bioaccumulation factor for fish	2	Lognormal-n	4.6	1.1	-	-	0.07	No	Distribution
Sr bioaccumulation factor for fish	2	Lognormal-n	4.1	1.1	-	-	-0.03	No	Distribution
Cs bioaccumulation factor for fish	2	Lognormal-n	7.6	0.7	-	-	-0.04	No	Distribution
Unsaturated zone 1 field capacity	3	Truncated normal	0.236	0.0578	0.0575	0.415	0.06	No	Distribution
Unsaturated zone 2 field capacity	3	Truncated normal	0.0607	0.0150	0.0280	0.124	-0.07	No	Distribution
Inhalation rate	3	Triangular	4,380	13,100	8,400	-	-0.01	No	Distribution

Notes:

¹1 = high priority parameter, 2 = medium priority parameter

²Distribution's Statistical Parameter

Bounded lognormal-n: 1 = underlying mean value, 2 = underlying standard deviation, 3 = lower limit, 4 = upper limit

Lognormal: 1 = mean, 2 = error factor

Lognormal-n: 1 = mean, 2 = standard deviation

Normal: 1 = mean, 2 = standard deviation

Triangular: 1 = minimum, 2 = maximum, 3 = most likely

Truncated lognormal-n: 1 = underlying mean value, 2 = underlying standard deviation, 3 = lower quantile, 4 = upper quantile

Truncated normal: 1 = mean, 2 = standard deviation, 3 = lower quantile, 4 = upper quantile

Uniform: 1 = minimum, 2 = maximum

³Default RESRAD v6.22 distribution parameters were used

Attachment 8.4

Input Parameter Selections from the Sensitivity Analysis Deterministic Summary Report for Detected Radionuclides

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Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	C-14	2.090E-06	2.090E-06	DCF2(1)
B-1	Co-60	2.190E-04	2.190E-04	DCF2(2)
B-1	Cs-134	4.630E-05	4.630E-05	DCF2(3)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(4)
B-1	Ni-63	6.290E-06	6.290E-06	DCF2(5)
B-1	Sr-90+D	1.310E-03	1.310E-03	DCF2(6)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	C-14	2.090E-06	2.090E-06	DCF3(1)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(2)
D-1	Cs-134	7.330E-05	7.330E-05	DCF3(3)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(4)
D-1	Ni-63	5.770E-07	5.770E-07	DCF3(5)
D-1	Sr-90+D	1.530E-04	1.530E-04	DCF3(6)
D-34	Food transfer factors:			
D-34	C-14 , plant/soil concentration ratio, dimensionless	5.500E+00	5.500E+00	RTF(1,1)
D-34	C-14 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.100E-02	3.100E-02	RTF(1,2)
D-34	C-14 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.200E-02	1.200E-02	RTF(1,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(2,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(2,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(3,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(3,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(3,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(4,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(4,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(4,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(5,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(5,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(5,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(6,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(6,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(6,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	C-14 , fish	5.000E+04	5.000E+04	BIOFAC(1,1)
D-5	C-14 , crustacea and mollusks	9.100E+03	9.100E+03	BIOFAC(1,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(2,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(2,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(3,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(3,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(4,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(4,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(5,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(5,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(6,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(6,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): C-14	2.560E-01	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Co-60	3.600E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.240E-02	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Cs-137	5.120E+01	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Ni-63	9.190E+00	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Sr-90	6.920E-02	0.000E+00	---	S1(6)
R012	Concentration in groundwater (pCi/L): C-14	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Cs-134	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(6)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.300E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)
R016	Distribution coefficients for C-14				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.120E-03	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Cs-134				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.120E-03	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.120E-03	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.120E-03	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Sr-90				
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.708E-02	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	5.000E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	2.500E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.600E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	9.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.500E+00	FPLANT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Contamination fraction of meat	-1	-1	0.500E+00	FMEAT
R018	Contamination fraction of milk	-1	-1	0.500E+00	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LF15
R019	Livestock fodder intake for milk (kg/day)	5.500E+01	5.500E+01	---	LF16
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.600E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	9.000E-01	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	2.000E-05	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3.000E-02	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	2.000E-02	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	9.800E-01	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	3.000E-01	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	7.000E-07	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	1.000E-10	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	8.000E-01	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	2.000E-01	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	8.894E+01	8.894E+01	---	C02F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

Attachment 8.5

Input Parameter Selections from the Sensitivity Analysis Probabilistic Summary Report for Detected Radionuclides

Part VI: Uncertainty Analysis
 =====

RESRAD Uncertainty Analysis Results	
Probabilistic Input	2
Total Dose	5
Total Risk	6
Dose vs Pathway: Ground External	7
Dose vs Pathway: Inhalation (w/o Radon)	8
Dose vs Pathway: Radon (Water Ind.)	9
Dose vs Pathway: Plant (Water Ind.)	10
Dose vs Pathway: Meat (Water Ind.)	11
Dose vs Pathway: Milk (Water Ind.)	12
Dose vs Pathway: Soil Ingestion	13
Dose vs Pathway: Water Ingestion	14
Dose vs Pathway: Fish Ingestion	15
Dose vs Pathway: Radon (Water Dep.)	16
Dose vs Pathway: Plant (Water Dep.)	17
Dose vs Pathway: Meat (Water Dep.)	18
Dose vs Pathway: Milk (Water Dep.)	19
Cumulative Probability Summary.....	20
Summary of dose at graphical times, repetition 1.....	21
Peak of the mean dose at graphical times.....	22
Correlation and Regression coefficients (if any).....	23

Number of Sample Runs: 300

Number	Name	Distribution	Parameters						
1	DENSCZ	NORMAL	1.33	.202					
2	DCACTC(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
3	DCACTC(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
4	DCACTC(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
5	DCACTC(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
6	DCACTC(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
7	DCACTC(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
8	VCZ	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2
9	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999			1
10	HCCZ	LOGNORMAL	3.302	62					
11	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30			
12	DMC	TRIANGULAR	.5	.75	1				
13	DENSUZ(1)	NORMAL	1.33	.202					
14	DCACTU1(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
15	DCACTU1(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
16	DCACTU1(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
17	DCACTU1(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
18	DCACTU1(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
19	DCACTU1(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
20	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959			
21	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766			
22	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415			
23	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
24	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
25	DENSUZ(2)	NORMAL	.383	.061					
26	DCACTU2(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
27	DCACTU2(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
28	DCACTU2(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
29	DCACTU2(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
30	DCACTU2(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
31	DCACTU2(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
32	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154			
33	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572			
34	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124			
35	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870			
36	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9			
37	DENSUZ(3)	NORMAL	1.33	.202					
38	DCACTU3(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
39	DCACTU3(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
40	DCACTU3(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
41	DCACTU3(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
42	DCACTU3(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
43	DCACTU3(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
44	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
45	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
46	DENSUZ(4)	NORMAL	1.578	.158					
47	DCACTU4(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
48	DCACTU4(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters							
49	DCACTU4(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999				
50	DCACTU4(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999				
51	DCACTU4(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
52	DCACTU4(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
53	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870				
54	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9				
55	DENSAQ	NORMAL	1.578	.158						
56	DCACTS(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999				
57	DCACTS(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999				
58	DCACTS(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999				
59	DCACTS(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999				
60	DCACTS(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
61	DCACTS(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
62	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5				
63	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
64	EVAPTR	UNIFORM	.5	.75						
65	RUNOFF	UNIFORM	.1	.8						
66	SOIL	TRIANGULAR	0	18.3	36.5					
67	DWI	TRUNCATED LOGNORMAL-N	6.015	.489	.001	.999				
68	DM	TRIANGULAR	0	.15	.6					
69	INHALR	TRIANGULAR	4380	8400	13100					
70	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003 .8119
	.00004 .9495 .00006	.9937 .000076 .9983	.0001	1						
71	SHF3	UNIFORM	.15	.95						
72	SHF1	BOUNDED LOGNORMAL-N	-1.3	.59	.044	1				
73	DIET(1)	TRIANGULAR	135	178	318					
74	DIET(3)	TRIANGULAR	60	102	200					
75	FR9	TRIANGULAR	0	.39	1					
76	DROOT	UNIFORM	.3	4						
77	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999				
78	WLAM	TRIANGULAR	5.1	18	84					
79	RWET(2)	TRIANGULAR	.06	.67	.95					
80	BRTF(6,1)	TRUNCATED LOGNORMAL-N	-.36	.9	.001	.999				
81	BRTF(27,1)	TRUNCATED LOGNORMAL-N	-2.53	.9	.001	.999				
82	BRTF(55,1)	TRUNCATED LOGNORMAL-N	-3.22	1	.001	.999				
83	BRTF(28,1)	TRUNCATED LOGNORMAL-N	-3	.9	.001	.999				
84	BRTF(38,1)	TRUNCATED LOGNORMAL-N	-1.2	1	.001	.999				
85	BRTF(6,2)	TRUNCATED LOGNORMAL-N	-3.47	1	.001	.999				
86	BRTF(27,2)	TRUNCATED LOGNORMAL-N	-3.51	1	.001	.999				
87	BRTF(55,2)	TRUNCATED LOGNORMAL-N	-3	.4	.001	.999				
88	BRTF(28,2)	TRUNCATED LOGNORMAL-N	-5.3	.9	.001	.999				
89	BRTF(38,2)	TRUNCATED LOGNORMAL-N	-4.61	.4	.001	.999				
90	BRTF(6,3)	TRUNCATED LOGNORMAL-N	-4.4	.9	.001	.999				
91	BRTF(27,3)	TRUNCATED LOGNORMAL-N	-6.21	.7	.001	.999				
92	BRTF(55,3)	TRUNCATED LOGNORMAL-N	-4.61	.5	.001	.999				
93	BRTF(28,3)	TRUNCATED LOGNORMAL-N	-3.91	.7	.001	.999				
94	BRTF(38,3)	TRUNCATED LOGNORMAL-N	-6.21	.5	.001	.999				

95	BBIO(6,1)	LOGNORMAL-N	10.8	1.1
96	BBIO(27,1)	LOGNORMAL-N	5.7	1.1
97	BBIO(28,1)	LOGNORMAL-N	4.6	1.1
98	BBIO(38,1)	LOGNORMAL-N	4.1	1.1

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters
99	BBIO(55,1)	LOGNORMAL-N	7.6 .7
=====	=====	=====	=====

Attachment 8.6

RESRAD v6.22 Probabilistic Parameter Sensitivity Analysis Results for Detected Radionuclides

RESRAD Regression and Correlation output 06/13/05 13:29 Page: Coef 1
 Title : Parameter Sensitivity for Detected Radionuclides Using a RF Alternative Scenario
 Input File : Uncorrelated ParSens1RF.RAD

Coefficients for peak of mean dose time Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Density of contaminated zone	4	0.53	
Kd of C-14 in Contaminated Zone	19	0.13	
Kd of Ni-63 in Contaminated Zone	71	-0.03	
Kd of Co-60 in Contaminated Zone	37	0.07	
Kd of Sr-90 in Contaminated Zone	29	-0.08	
Kd of Cs-137 in Contaminated Zone	8	0.19	
Kd of Cs-134 in Contaminated Zone	56	-0.04	
Contaminated zone erosion rate	7	-0.19	
Contaminated zone total porosity	11	0.17	
Contaminated zone hydraulic conductivity	12	-0.16	
Contaminated zone b parameter	25	-0.09	
Thickness of evasion layer of C-14 in soil	27	-0.09	
Density of Unsaturated zone 1	17	-0.13	
Kd of C-14 in Unsaturated Zone 1	35	0.07	
Kd of Ni-63 in Unsaturated Zone 1	20	0.12	
Kd of Co-60 in Unsaturated Zone 1	58	-0.04	
Kd of Sr-90 in Unsaturated Zone 1	61	-0.04	
Kd of Cs-134 in Unsaturated Zone 1	62	-0.04	
Kd of Cs-137 in Unsaturated Zone 1	39	0.06	
Total Porosity of Unsaturated zone 1	59	0.04	
Effective Porosity of Unsaturated zone 1	77	0.02	
Field Capacity of Unsaturated zone 1	40	0.06	
Hydraulic Conductivity of Unsaturated zone 1	98	0.00	
b Parameter of Unsaturated zone 1	80	-0.02	
Density of Unsaturated zone 2	43	0.05	
Kd of C-14 in Unsaturated Zone 2	93	0.01	
Kd of Ni-63 in Unsaturated Zone 2	67	-0.03	
Kd of Co-60 in Unsaturated Zone 2	72	0.03	
Kd of Sr-90 in Unsaturated Zone 2	96	0.01	
Kd of Cs-134 in Unsaturated Zone 2	42	-0.05	
Kd of Cs-137 in Unsaturated Zone 2	65	0.03	
Total Porosity of Unsaturated zone 2	83	0.02	
Effective Porosity of Unsaturated zone 2	85	0.02	

Field Capacity of Unsaturated zone 2	33	-0.07
Hydraulic Conductivity of Unsaturated zone 2	84	0.02
b Parameter of Unsaturated zone 2	46	-0.05
Density of Unsaturated zone 3	81	-0.02
Kd of C-14 in Unsaturated Zone 3	74	-0.02
Kd of Ni-63 in Unsaturated Zone 3	88	0.01
Kd of Co-60 in Unsaturated Zone 3	41	-0.06
Kd of Sr-90 in Unsaturated Zone 3	66	0.03
Kd of Cs-134 in Unsaturated Zone 3	64	-0.04
Kd of Cs-137 in Unsaturated Zone 3	68	0.03
Hydraulic Conductivity of Unsaturated zone 3	57	-0.04
b Parameter of Unsaturated zone 3	91	-0.01
Density of Unsaturated zone 4	95	0.01
Kd of C-14 in Unsaturated Zone 4	70	-0.03
Kd of Ni-63 in Unsaturated Zone 4	28	0.08
Kd of Co-60 in Unsaturated Zone 4	52	0.04
Kd of Sr-90 in Unsaturated Zone 4	49	0.04
Kd of Cs-134 in Unsaturated Zone 4	22	0.11
Kd of Cs-137 in Unsaturated Zone 4	23	-0.11
Hydraulic Conductivity of Unsaturated zone 4	31	-0.07
b Parameter of Unsaturated zone 4	21	-0.12
Density of saturated zone	99	0.00
Kd of C-14 in Saturated Zone	78	-0.02
Kd of Ni-63 in Saturated Zone	53	-0.04
Kd of Co-60 in Saturated Zone	38	0.06
Kd of Sr-90 in Saturated Zone	60	0.04
Kd of Cs-134 in Saturated Zone	82	-0.02
Kd of Cs-137 in Saturated Zone	90	0.01
Saturated zone hydraulic gradient	30	-0.07
Saturated zone b parameter	15	-0.14
Evapotranspiration coefficient	89	-0.01
Runoff coefficient	36	0.07
Soil ingestion	87	0.02
Drinking water intake	73	0.03
Depth of soil mixing layer	6	-0.25
Inhalation rate	94	-0.01
Mass loading for inhalation	47	-0.05
Indoor dust filtration factor	92	-0.01
External gamma shielding factor	1	0.93
Fruit, vegetable, and grain consumption	79	0.02
Milk consumption	9	0.19
Aquatic food	86	-0.02
Depth of roots	3	-0.53
Wet weight crop yield of fruit, grain and non-leafy vegetables	18	-0.13

Weathering removal constant of all vegetation	48	-0.05
Wet foliar interception fraction of leafy vegetables	10	0.18
Plant transfer factor for C	97	0.01
Plant transfer factor for Co	54	-0.04
Plant transfer factor for Cs	2	0.63
Plant transfer factor for Ni	45	-0.05
Plant transfer factor for Sr	26	-0.09
Meat transfer factor for C	16	0.14
Meat transfer factor for Co	75	-0.02
Meat transfer factor for Cs	5	0.43
Meat transfer factor for Ni	14	-0.16
Meat transfer factor for Sr	76	-0.02
Milk transfer factor for C	24	-0.10
Milk transfer factor for Co	50	0.04
Milk transfer factor for Cs	13	0.16
Milk transfer factor for Ni	63	-0.04
Milk transfer factor for Sr	32	0.07
Fish transfer factor for C	44	-0.05
Fish transfer factor for Co	51	0.04
Fish transfer factor for Ni	34	0.07
Fish transfer factor for Sr	69	-0.03
Fish transfer factor for Cs	55	-0.04

R-SQUARE	0.90
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-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Attachment 8.7

Input Parameter Selections from the Resident Farmer Scenario Maximum Allowable Soil Contamination Value Dose Calculation Deterministic Summary Report

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Dose Conversion Factor (and Related) Parameter Summary
File: RSNRS RF DCGL Dose

Menu	Parameter	Current Value	Default	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	C-14	2.090E-06	2.090E-06	DCF2(1)
B-1	Co-60	2.190E-04	2.190E-04	DCF2(2)
B-1	Cs-134	4.630E-05	4.630E-05	DCF2(3)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(4)
B-1	Ni-63	6.290E-06	6.290E-06	DCF2(5)
B-1	Sr-90+D	1.310E-03	1.310E-03	DCF2(6)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	C-14	2.090E-06	2.090E-06	DCF3(1)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(2)
D-1	Cs-134	7.330E-05	7.330E-05	DCF3(3)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(4)
D-1	Ni-63	5.770E-07	5.770E-07	DCF3(5)
D-1	Sr-90+D	1.530E-04	1.530E-04	DCF3(6)
D-34	Food transfer factors:			
D-34	C-14 , plant/soil concentration ratio, dimensionless	5.500E+00	5.500E+00	RTF(1,1)
D-34	C-14 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.100E-02	3.100E-02	RTF(1,2)
D-34	C-14 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.200E-02	1.200E-02	RTF(1,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(2,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(2,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	7.810E-02	4.000E-02	RTF(3,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.490E-02	3.000E-02	RTF(3,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(3,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	7.810E-02	4.000E-02	RTF(4,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.490E-02	3.000E-02	RTF(4,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(4,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(5,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(5,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(5,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(6,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(6,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(6,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	C-14 , fish	5.000E+04	5.000E+04	BIOFAC(1,1)
D-5	C-14 , crustacea and mollusks	9.100E+03	9.100E+03	BIOFAC(1,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(2,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(2,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(3,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(3,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: RSNRS RF DCGL Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(4,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(4,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(5,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(5,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(6,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(6,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	2.500E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	7.500E+01	1.000E+02	---	T(6)
R011	Times for calculations (yr)	1.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	3.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	5.000E+02	0.000E+00	---	T(9)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): C-14	2.560E-01	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Co-60	3.600E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.240E-02	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Cs-137	5.120E+01	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Ni-63	9.190E+00	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Sr-90	6.920E-02	0.000E+00	---	S1(6)
R012	Concentration in groundwater (pCi/L): C-14	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Cs-134	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(6)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.470E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.300E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)
R016	Distribution coefficients for C-14				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.143E-03	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Cs-134				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.143E-03	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.143E-03	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.143E-03	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Sr-90				
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.783E-02	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	3.980E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	5.000E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	2.500E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.600E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	9.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.500E+00	FPLANT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Contamination fraction of meat	-1	-1	0.500E+00	FMEAT
R018	Contamination fraction of milk	-1	-1	0.500E+00	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LF15
R019	Livestock fodder intake for milk (kg/day)	5.500E+01	5.500E+01	---	LF16
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.600E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	1.210E+00	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	2.000E-05	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3.000E-02	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	2.000E-02	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	9.800E-01	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	3.000E-01	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	7.000E-07	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	1.000E-10	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	8.000E-01	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	2.000E-01	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	8.894E+01	8.894E+01	---	C02F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

Attachment 8.8

Resident Farmer Scenario Maximum Allowable Soil Contamination Value Dose Calculation Probabilistic Summary Report

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Part VI: Uncertainty Analysis

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters						
1	DCACTC(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
2	DCACTC(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
3	DCACTC(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
4	DCACTC(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
5	DCACTC(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
6	DCACTC(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
7	VCZ	CONTINUOUS LOGARITHMIC	4	5.E-8	0	.0007	.22	.005	.95
8	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999	.2		1
9	HCCZ	LOGNORMAL	3.302	62					
10	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30			
11	DENSUZ(1)	NORMAL	1.33	.202					
12	DCACTU1(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
13	DCACTU1(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
14	DCACTU1(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
15	DCACTU1(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
16	DCACTU1(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
17	DCACTU1(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
18	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959			
19	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766			
20	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415			
21	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
22	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
23	DENSUZ(2)	NORMAL	.383	.061					
24	DCACTU2(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
25	DCACTU2(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
26	DCACTU2(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
27	DCACTU2(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
28	DCACTU2(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
29	DCACTU2(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
30	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154			
31	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572			
32	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124			
33	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870			
34	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9			
35	DENSUZ(3)	NORMAL	1.33	.202					
36	DCACTU3(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
37	DCACTU3(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
38	DCACTU3(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
39	DCACTU3(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
40	DCACTU3(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
41	DCACTU3(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
42	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
43	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
44	DENSUZ(4)	NORMAL	1.578	.158					
45	DCACTU4(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
46	DCACTU4(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
47	DCACTU4(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
48	DCACTU4(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			

Number	Name	Distribution	Parameters							
49	DCACTU4(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
50	DCACTU4(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
51	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870				
52	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9				
53	DENSAQ	NORMAL	1.578	.158						
54	DCACTS(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999				
55	DCACTS(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999				
56	DCACTS(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999				
57	DCACTS(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999				
58	DCACTS(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
59	DCACTS(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999				
60	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5				
61	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
62	EVAPTR	UNIFORM	.5	.75						
63	RUNOFF	UNIFORM	.1	.8						
64	SOIL	TRIANGULAR	0	18.3	36.5					
65	DWI	TRUNCATED LOGNORMAL-N	6.015	.489	.001	.999				
66	INHALR	TRIANGULAR	4380	8400	13100					
67	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003
	.00004	.9495	.00006	.9937	.000076	.9983	.0001	1		.8119
68	SHF3	UNIFORM	.15	.95						
69	FR9	TRIANGULAR	0	.39	1					
70	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999				
71	WLAM	TRIANGULAR	5.1	18	84					
72	RWET(2)	TRIANGULAR	.06	.67	.95					
73	BRTF(6,1)	TRUNCATED LOGNORMAL-N	-.36	.9	.001	.999				
74	BRTF(27,1)	TRUNCATED LOGNORMAL-N	-2.53	.9	.001	.999				
75	BRTF(38,1)	TRUNCATED LOGNORMAL-N	-1.2	1	.001	.999				
76	BRTF(6,2)	TRUNCATED LOGNORMAL-N	-3.47	1	.001	.999				
77	BRTF(27,2)	TRUNCATED LOGNORMAL-N	-3.51	1	.001	.999				
78	BRTF(28,2)	TRUNCATED LOGNORMAL-N	-5.3	.9	.001	.999				
79	BRTF(38,2)	TRUNCATED LOGNORMAL-N	-4.61	.4	.001	.999				
80	BRTF(6,3)	TRUNCATED LOGNORMAL-N	-4.4	.9	.001	.999				
81	BRTF(27,3)	TRUNCATED LOGNORMAL-N	-6.21	.7	.001	.999				
82	BRTF(55,3)	TRUNCATED LOGNORMAL-N	-4.61	.5	.001	.999				
83	BRTF(38,3)	TRUNCATED LOGNORMAL-N	-6.21	.5	.001	.999				
84	BBIO(6,1)	LOGNORMAL-N	10.8	1.1						
85	BBIO(27,1)	LOGNORMAL-N	5.7	1.1						
86	BBIO(28,1)	LOGNORMAL-N	4.6	1.1						
87	BBIO(38,1)	LOGNORMAL-N	4.1	1.1						
88	BBIO(55,1)	LOGNORMAL-N	7.6	.7						
89	BRTF(28,1)	TRUNCATED LOGNORMAL-N	-3	.9	.001	.999				
90	DM	TRIANGULAR	0	.15	.6					
91	DIET(1)	TRIANGULAR	135	178	318					
92	DIET(3)	TRIANGULAR	60	102	200					
93	DMC	TRIANGULAR	.5	.75	1					
94	BRTF(28,3)	TRUNCATED LOGNORMAL-N	-3.91	.7	.001	.999				

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	DOSE(j,t), 5.00E+01	mrem/yr 7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14													
Min	0.00E+00	8.12E-03		8.12E-03	3.33E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.35E-02		2.35E-02	4.06E-11	2.41E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.47E-02		1.47E-02	2.29E-11	9.20E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	2.63E-03		2.63E-03	8.98E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60													
Min	0.00E+00	9.95E-01		9.95E-01	1.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.27E+00		2.27E+00	1.97E+00	1.50E+00	7.79E-02	2.89E-03	1.07E-04	3.99E-06	1.47E-17	5.47E-29	0.00E+00
Avg	0.00E+00	1.99E+00		1.99E+00	1.67E+00	1.22E+00	4.70E-02	1.15E-03	3.07E-05	8.60E-07	1.21E-18	3.44E-30	0.00E+00
Std	0.00E+00	1.27E-01		1.27E-01	2.76E-01	2.99E-01	2.43E-02	1.02E-03	3.60E-05	1.24E-06	3.40E-18	0.00E+00	0.00E+00
Cs-134													
Min	0.00E+00	2.60E-02		2.60E-02	1.45E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	4.28E-02		4.28E-02	3.04E-02	1.53E-02	9.30E-06	2.08E-09	4.66E-13	1.04E-16	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	4.08E-02		4.08E-02	2.84E-02	1.39E-02	6.35E-06	9.47E-10	1.54E-13	2.61E-17	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	1.71E-03		1.71E-03	3.65E-03	2.62E-03	2.70E-06	7.60E-10	1.65E-13	3.49E-17	0.00E+00	0.00E+00	0.00E+00
Cs-137													
Min	0.00E+00	4.63E+01		4.63E+01	5.62E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	8.16E+01		8.16E+01	7.97E+01	7.61E+01	4.56E+01	2.55E+01	1.42E+01	7.96E+00	7.57E-02	7.33E-04	6.79E-09
Avg	0.00E+00	7.54E+01		7.54E+01	7.16E+01	6.56E+01	2.89E+01	1.07E+01	4.45E+00	1.96E+00	8.90E-03	7.26E-05	5.08E-10
Std	0.00E+00	3.01E+00		3.01E+00	8.89E+00	1.25E+01	1.27E+01	8.99E+00	4.95E+00	2.65E+00	2.13E-02	1.89E-04	1.51E-09
Ni-63													
Min	0.00E+00	1.39E-03		1.39E-03	6.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.56E-01		1.56E-01	1.52E-01	1.45E-01	7.79E-02	4.68E-02	3.62E-02	2.80E-02	4.43E-03	8.65E-04	1.94E-05
Avg	0.00E+00	1.34E-02		1.34E-02	1.30E-02	1.23E-02	7.10E-03	3.79E-03	2.23E-03	1.44E-03	1.67E-04	3.02E-05	5.12E-07
Std	0.00E+00	1.39E-02		1.39E-02	1.36E-02	1.31E-02	8.29E-03	5.54E-03	4.12E-03	3.19E-03	5.50E-04	1.06E-04	2.13E-06
Sr-90													
Min	0.00E+00	5.61E-03		5.61E-03	1.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.38E-01		6.38E-01	6.20E-01	5.88E-01	3.23E-01	1.64E-01	8.31E-02	4.22E-02	1.84E-04	8.40E-07	4.89E-12
Avg	0.00E+00	8.67E-02		8.67E-02	7.64E-02	6.36E-02	1.85E-02	5.82E-03	2.13E-03	8.48E-04	2.86E-06	1.69E-08	6.24E-14
Std	0.00E+00	9.47E-02		9.47E-02	8.55E-02	7.47E-02	3.24E-02	1.45E-02	6.80E-03	3.31E-03	1.63E-05	9.60E-08	4.04E-13
\$ALL													
Min	0.00E+00	4.76E+01		4.76E+01	5.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	8.32E+01		8.32E+01	8.08E+01	7.65E+01	4.56E+01	2.55E+01	1.43E+01	7.97E+00	7.76E-02	1.21E-03	1.94E-05
Avg	0.00E+00	7.76E+01		7.76E+01	7.34E+01	6.69E+01	2.90E+01	1.07E+01	4.45E+00	1.96E+00	9.07E-03	1.03E-04	5.13E-07
Std	0.00E+00	3.07E+00		3.07E+00	9.07E+00	1.26E+01	1.27E+01	9.00E+00	4.96E+00	2.65E+00	2.15E-02	2.44E-04	2.13E-06
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\$ALL is total dose summed for all nuclides.

Probabilistic Risk Summary

Nuclide (j)	t=	RISK(j,t)									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		3.86E-06	2.52E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.15E-05	2.54E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		7.05E-06	1.44E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.39E-06	5.52E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		4.92E-05	1.59E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.79E-05	4.88E-05	3.73E-05	1.92E-06	7.11E-08	2.64E-09	9.81E-11	3.61E-22	0.00E+00	0.00E+00
Avg		5.00E-05	4.18E-05	3.02E-05	1.16E-06	2.84E-08	7.57E-10	2.12E-11	2.98E-23	0.00E+00	0.00E+00
Std		9.94E-07	5.30E-06	7.05E-06	5.96E-07	2.50E-08	8.85E-10	3.05E-11	8.35E-23	0.00E+00	0.00E+00
Cs-134											
Min		1.07E-06	1.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.13E-06	8.02E-07	4.05E-07	2.45E-10	5.49E-14	1.23E-17	2.75E-21	0.00E+00	0.00E+00	0.00E+00
Avg		1.09E-06	7.57E-07	3.70E-07	1.69E-10	2.52E-14	4.08E-18	6.93E-22	0.00E+00	0.00E+00	0.00E+00
Std		1.02E-08	7.33E-08	6.63E-08	7.07E-11	2.00E-14	4.37E-18	9.22E-22	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		1.68E-03	5.46E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.85E-03	1.81E-03	1.73E-03	1.03E-03	5.78E-04	3.23E-04	1.81E-04	1.72E-06	1.66E-08	1.54E-13
Avg		1.73E-03	1.65E-03	1.50E-03	6.62E-04	2.44E-04	1.02E-04	4.47E-05	2.02E-07	1.65E-09	1.15E-14
Std		3.05E-05	1.48E-04	2.70E-04	2.85E-04	2.04E-04	1.13E-04	6.02E-05	4.84E-07	4.30E-09	3.42E-14
Ni-63											
Min		6.90E-08	1.47E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.78E-06	7.62E-06	7.28E-06	3.92E-06	2.32E-06	1.80E-06	1.39E-06	2.20E-07	4.30E-08	9.63E-10
Avg		6.73E-07	6.52E-07	6.17E-07	3.56E-07	1.90E-07	1.12E-07	7.18E-08	8.29E-09	1.50E-09	2.54E-11
Std		6.93E-07	6.81E-07	6.53E-07	4.13E-07	2.76E-07	2.05E-07	1.59E-07	2.73E-08	5.27E-09	1.06E-10
Sr-90											
Min		1.19E-07	1.04E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.38E-05	1.18E-05	1.12E-05	6.14E-06	3.11E-06	1.58E-06	8.01E-07	3.50E-09	1.59E-11	9.28E-17
Avg		1.75E-06	1.52E-06	1.24E-06	3.55E-07	1.12E-07	4.08E-08	1.62E-08	5.44E-11	3.22E-13	1.19E-18
Std		1.97E-06	1.67E-06	1.44E-06	6.18E-07	2.76E-07	1.29E-07	6.29E-08	3.09E-10	1.82E-12	7.67E-18
\$ALL											
Min		1.73E-03	5.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.91E-03	1.84E-03	1.74E-03	1.04E-03	5.79E-04	3.24E-04	1.81E-04	1.81E-06	4.74E-08	9.63E-10
Avg		1.79E-03	1.69E-03	1.53E-03	6.64E-04	2.44E-04	1.02E-04	4.48E-05	2.11E-07	3.15E-09	2.54E-11
Std		3.13E-05	1.51E-04	2.74E-04	2.86E-04	2.04E-04	1.13E-04	6.03E-05	4.95E-07	7.78E-09	1.06E-10
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\$ALL is total risk summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i, j, t), mrem/yr											
C-14											
Min		5.73E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.94E-08	1.72E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		6.83E-08	1.32E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.90E-09	5.14E-18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		9.88E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.00E+00	1.76E+00	1.35E+00	7.47E-02	2.79E-03	1.04E-04	3.88E-06	1.45E-17	5.45E-29	0.00E+00
Avg		1.96E+00	1.65E+00	1.20E+00	4.64E-02	1.14E-03	3.03E-05	8.49E-07	1.20E-18	3.41E-30	0.00E+00
Std		1.21E-01	2.70E-01	2.94E-01	2.40E-02	1.00E-03	3.55E-05	1.22E-06	3.35E-18	0.00E+00	0.00E+00
Cs-134											
Min		2.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.85E-02	2.75E-02	1.40E-02	8.62E-06	1.93E-09	4.32E-13	9.68E-17	0.00E+00	0.00E+00	0.00E+00
Avg		3.80E-02	2.64E-02	1.30E-02	5.97E-06	8.93E-10	1.45E-13	2.46E-17	0.00E+00	0.00E+00	0.00E+00
Std		1.52E-03	3.38E-03	2.44E-03	2.51E-06	7.13E-10	1.55E-13	3.28E-17	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		4.09E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.70E+01	6.55E+01	6.25E+01	3.76E+01	2.11E+01	1.18E+01	6.62E+00	6.47E-02	6.32E-04	5.95E-09
Avg		6.62E+01	6.29E+01	5.77E+01	2.59E+01	9.57E+00	3.99E+00	1.76E+00	7.87E-03	6.42E-05	4.50E-10
Std		2.41E+00	7.70E+00	1.09E+01	1.11E+01	7.97E+00	4.40E+00	2.35E+00	1.88E-02	1.67E-04	1.33E-09
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		2.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.90E-04	6.74E-04	6.43E-04	3.80E-04	2.09E-04	1.15E-04	6.34E-05	5.35E-07	4.52E-09	2.95E-14
Avg		6.56E-04	5.88E-04	5.00E-04	1.64E-04	5.03E-05	1.84E-05	7.31E-06	2.29E-08	1.52E-10	6.86E-16
Std		6.70E-05	1.40E-04	1.81E-04	1.30E-04	6.53E-05	3.15E-05	1.54E-05	9.08E-08	6.72E-10	3.69E-15
\$ALL											
Min		4.21E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.90E+01	6.72E+01	6.39E+01	3.76E+01	2.11E+01	1.18E+01	6.62E+00	6.47E-02	6.32E-04	5.95E-09
Avg		6.82E+01	6.45E+01	5.89E+01	2.59E+01	9.57E+00	3.99E+00	1.76E+00	7.87E-03	6.42E-05	4.50E-10
Std		2.46E+00	7.86E+00	1.11E+01	1.11E+01	7.97E+00	4.40E+00	2.35E+00	1.88E-02	1.67E-04	1.33E-09

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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Inhalation (w/o Radon)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i, j, t), mrem/yr											
C-14											
Min		1.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.22E-06	7.85E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		2.17E-06	4.12E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		4.55E-07	1.86E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		5.00E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.59E-06	4.02E-06	3.09E-06	1.68E-07	6.14E-09	2.25E-10	8.22E-12	2.63E-23	0.00E+00	0.00E+00
Avg		7.63E-07	6.39E-07	4.62E-07	1.66E-08	4.11E-10	1.07E-11	3.05E-13	5.07E-25	0.00E+00	0.00E+00
Std		5.30E-07	4.64E-07	3.51E-07	1.75E-08	6.08E-10	2.05E-11	7.13E-13	2.16E-24	0.00E+00	0.00E+00
Cs-134											
Min		3.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.03E-08	2.16E-08	1.10E-08	6.67E-12	1.47E-15	3.23E-19	7.12E-23	0.00E+00	0.00E+00	0.00E+00
Avg		5.08E-09	3.52E-09	1.72E-09	7.20E-13	1.06E-16	1.65E-20	2.83E-24	0.00E+00	0.00E+00	0.00E+00
Std		3.53E-09	2.54E-09	1.29E-09	7.25E-13	1.48E-16	2.97E-20	6.11E-24	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		1.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.00E-04	9.80E-05	9.34E-05	5.52E-05	3.03E-05	1.67E-05	9.16E-06	7.64E-08	6.37E-10	4.04E-15
Avg		1.68E-05	1.59E-05	1.45E-05	5.88E-06	2.24E-06	9.22E-07	4.11E-07	2.02E-09	1.65E-11	1.13E-16
Std		1.17E-05	1.14E-05	1.08E-05	6.00E-06	3.24E-06	1.66E-06	8.79E-07	7.04E-09	6.14E-11	4.57E-16
Ni-63											
Min		3.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.58E-06	3.55E-06	3.50E-06	2.94E-06	2.42E-06	1.99E-06	1.64E-06	3.43E-07	7.18E-08	1.44E-09
Avg		6.02E-07	5.84E-07	5.56E-07	3.39E-07	1.91E-07	1.12E-07	7.20E-08	7.91E-09	1.49E-09	2.67E-11
Std		4.17E-07	4.17E-07	4.07E-07	3.15E-07	2.46E-07	1.84E-07	1.43E-07	2.73E-08	5.65E-09	1.17E-10
Sr-90											
Min		6.02E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.00E-06	3.91E-06	3.28E-06	1.67E-06	7.95E-07	4.20E-07	2.22E-07	1.34E-09	8.10E-12	3.61E-17
Avg		8.92E-07	7.92E-07	6.66E-07	1.92E-07	5.90E-08	2.11E-08	8.45E-09	2.95E-11	1.90E-13	7.60E-19
Std		6.19E-07	5.87E-07	5.35E-07	2.48E-07	1.11E-07	5.23E-08	2.57E-08	1.45E-10	9.68E-13	4.20E-18
SALL											
Min		3.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.16E-04	1.09E-04	1.02E-04	5.83E-05	3.28E-05	1.87E-05	1.08E-05	4.20E-07	7.25E-08	1.44E-09
Avg		2.12E-05	1.79E-05	1.61E-05	6.43E-06	2.49E-06	1.05E-06	4.91E-07	9.96E-09	1.50E-09	2.67E-11
Std		1.34E-05	1.28E-05	1.19E-05	6.43E-06	3.52E-06	1.85E-06	1.02E-06	3.27E-08	5.69E-09	1.17E-10

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SALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Radon (Water Ind.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Ind.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i, j, t), mrem/yr											
C-14											
Min		4.52E-03	3.15E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.61E-02	1.00E-11	5.96E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		9.17E-03	4.49E-12	1.57E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		2.09E-03	2.01E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		8.48E-04	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.06E-01	9.13E-02	6.78E-02	2.29E-03	4.86E-05	1.61E-06	5.37E-08	1.83E-19	6.80E-31	0.00E+00
Avg		1.44E-02	1.19E-02	8.49E-03	2.78E-04	6.30E-06	1.55E-07	4.22E-09	6.81E-21	4.24E-33	0.00E+00
Std		1.48E-02	1.25E-02	9.18E-03	3.45E-04	9.10E-06	2.66E-07	8.56E-09	2.29E-20	0.00E+00	0.00E+00
Cs-134											
Min		4.65E-04	1.55E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.20E-03	8.46E-04	4.27E-04	2.40E-07	5.37E-11	1.20E-14	2.69E-18	0.00E+00	0.00E+00	0.00E+00
Avg		8.22E-04	5.65E-04	2.73E-04	1.08E-07	1.55E-11	2.47E-15	4.24E-19	0.00E+00	0.00E+00	0.00E+00
Std		1.48E-04	1.27E-04	7.36E-05	5.94E-08	1.43E-11	3.03E-15	6.46E-19	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		1.47E+00	5.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.94E+00	3.76E+00	3.59E+00	2.12E+00	1.16E+00	6.37E-01	3.49E-01	3.16E-03	3.07E-05	2.84E-10
Avg		2.69E+00	2.53E+00	2.28E+00	8.76E-01	3.14E-01	1.29E-01	5.73E-02	2.93E-04	2.35E-06	1.60E-11
Std		4.81E-01	5.58E-01	6.09E-01	4.93E-01	3.03E-01	1.63E-01	8.73E-02	7.13E-04	6.22E-06	4.89E-11
Ni-63											
Min		2.46E-04	2.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.54E-02	6.39E-02	6.09E-02	3.26E-02	2.18E-02	1.68E-02	1.30E-02	2.13E-03	4.85E-04	1.19E-05
Avg		5.41E-03	5.24E-03	4.95E-03	2.79E-03	1.46E-03	8.65E-04	5.67E-04	6.87E-05	1.22E-05	2.02E-07
Std		6.36E-03	6.21E-03	5.90E-03	3.57E-03	2.35E-03	1.77E-03	1.38E-03	2.34E-04	4.44E-05	9.11E-07
Sr-90											
Min		2.18E-03	7.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.38E-01	5.24E-01	4.96E-01	2.73E-01	1.38E-01	7.02E-02	3.56E-02	1.56E-04	6.80E-07	3.04E-12
Avg		6.60E-02	5.81E-02	4.84E-02	1.41E-02	4.47E-03	1.64E-03	6.49E-04	2.15E-06	1.25E-08	4.42E-14
Std		7.49E-02	6.77E-02	5.94E-02	2.60E-02	1.16E-02	5.45E-03	2.65E-03	1.26E-05	7.08E-08	2.75E-13
\$ALL											
Min		1.50E+00	5.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.07E+00	3.81E+00	3.60E+00	2.12E+00	1.16E+00	6.37E-01	3.50E-01	3.16E-03	4.88E-04	1.19E-05
Avg		2.79E+00	2.61E+00	2.34E+00	8.93E-01	3.20E-01	1.32E-01	5.85E-02	3.64E-04	1.46E-05	2.02E-07
Std		5.03E-01	5.78E-01	6.24E-01	4.98E-01	3.07E-01	1.65E-01	8.87E-02	8.27E-04	4.66E-05	9.11E-07

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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Meat (Water Ind.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		2.88E-03	2.65E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.68E-03	2.59E-11	1.54E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		4.27E-03	1.57E-11	7.39E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		5.77E-04	6.04E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		3.38E-04	1.30E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.61E-01	2.16E-01	1.47E-01	5.41E-03	1.77E-04	5.26E-06	1.65E-07	5.30E-19	1.89E-30	0.00E+00
Avg		1.76E-02	1.46E-02	1.05E-02	3.53E-04	8.39E-06	2.18E-07	6.14E-09	1.04E-20	1.83E-32	0.00E+00
Std		2.71E-02	2.30E-02	1.68E-02	6.54E-04	2.02E-05	6.30E-07	2.03E-08	4.93E-20	0.00E+00	0.00E+00
Cs-134											
Min		8.50E-04	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.83E-03	1.31E-03	6.67E-04	4.09E-07	9.16E-11	2.05E-14	4.59E-18	0.00E+00	0.00E+00	0.00E+00
Avg		1.55E-03	1.07E-03	5.17E-04	2.08E-07	3.00E-11	4.78E-15	8.20E-19	0.00E+00	0.00E+00	0.00E+00
Std		2.09E-04	2.01E-04	1.23E-04	1.11E-07	2.73E-11	5.81E-15	1.23E-18	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		3.03E+00	5.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.99E+00	5.86E+00	5.59E+00	3.36E+00	1.88E+00	1.05E+00	5.90E-01	5.72E-03	5.55E-05	5.14E-10
Avg		5.08E+00	4.78E+00	4.32E+00	1.69E+00	6.15E-01	2.53E-01	1.12E-01	5.61E-04	4.54E-06	3.12E-11
Std		6.82E-01	8.91E-01	1.03E+00	9.34E-01	5.88E-01	3.16E-01	1.69E-01	1.37E-03	1.21E-05	9.61E-11
Ni-63											
Min		4.50E-05	4.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.30E-02	1.28E-02	1.24E-02	8.18E-03	4.67E-03	3.75E-03	3.01E-03	6.24E-04	1.42E-04	3.48E-06
Avg		1.14E-03	1.11E-03	1.06E-03	6.30E-04	3.45E-04	2.06E-04	1.33E-04	1.65E-05	3.05E-06	5.29E-08
Std		1.45E-03	1.43E-03	1.38E-03	9.43E-04	6.57E-04	4.77E-04	3.67E-04	6.68E-05	1.33E-05	2.77E-07
Sr-90											
Min		1.00E-03	1.18E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		9.47E-02	8.06E-02	7.50E-02	4.13E-02	2.09E-02	1.06E-02	5.38E-03	3.13E-05	2.58E-07	1.58E-12
Avg		1.49E-02	1.31E-02	1.09E-02	3.13E-03	9.76E-04	3.59E-04	1.46E-04	5.35E-07	3.38E-09	1.41E-14
Std		1.64E-02	1.48E-02	1.28E-02	5.25E-03	2.31E-03	1.10E-03	5.45E-04	3.10E-06	2.12E-08	1.08E-13
\$ALL											
Min		3.05E+00	5.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.15E+00	5.95E+00	5.65E+00	3.38E+00	1.88E+00	1.05E+00	5.90E-01	5.72E-03	1.47E-04	3.48E-06
Avg		5.11E+00	4.81E+00	4.35E+00	1.70E+00	6.17E-01	2.54E-01	1.13E-01	5.78E-04	7.59E-06	5.29E-08
Std		6.86E-01	8.95E-01	1.04E+00	9.35E-01	5.89E-01	3.16E-01	1.69E-01	1.40E-03	2.03E-05	2.77E-07
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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Milk (Water Ind.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		5.87E-04	1.49E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.39E-03	5.90E-12	3.52E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		1.30E-03	2.68E-12	2.42E-32	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		3.62E-04	1.26E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		9.04E-05	5.40E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.48E-02	1.28E-02	9.47E-03	4.52E-04	1.66E-05	6.10E-07	2.24E-08	7.44E-20	0.00E+00	0.00E+00
Avg		1.55E-03	1.29E-03	9.24E-04	3.17E-05	7.39E-07	1.83E-08	5.15E-10	9.26E-22	0.00E+00	0.00E+00
Std		1.85E-03	1.58E-03	1.18E-03	5.00E-05	1.50E-06	4.93E-08	1.70E-09	5.14E-21	0.00E+00	0.00E+00
Cs-134											
Min		7.33E-05	4.84E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.99E-03	1.41E-03	7.13E-04	3.84E-07	7.42E-11	1.43E-14	2.77E-18	0.00E+00	0.00E+00	0.00E+00
Avg		4.49E-04	3.09E-04	1.50E-04	6.05E-08	8.80E-12	1.42E-15	2.47E-19	0.00E+00	0.00E+00	0.00E+00
Std		2.77E-04	1.95E-04	9.64E-05	5.14E-08	1.06E-11	2.14E-15	4.33E-19	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		2.49E-01	1.87E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.54E+00	6.39E+00	6.10E+00	3.65E+00	2.04E+00	1.14E+00	6.38E-01	6.07E-03	5.77E-05	5.10E-10
Avg		1.47E+00	1.38E+00	1.24E+00	4.82E-01	1.77E-01	7.50E-02	3.42E-02	1.79E-04	1.47E-06	1.03E-11
Std		9.01E-01	8.60E-01	7.93E-01	4.27E-01	2.35E-01	1.26E-01	6.80E-02	5.56E-04	5.00E-06	4.12E-11
Ni-63											
Min		6.04E-04	2.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		8.52E-02	8.34E-02	7.97E-02	4.27E-02	2.56E-02	2.09E-02	1.71E-02	3.34E-03	6.53E-04	1.35E-05
Avg		6.80E-03	6.60E-03	6.25E-03	3.66E-03	1.97E-03	1.15E-03	7.35E-04	8.12E-05	1.48E-05	2.56E-07
Std		8.20E-03	8.05E-03	7.74E-03	4.98E-03	3.29E-03	2.37E-03	1.80E-03	3.13E-04	6.24E-05	1.27E-06
Sr-90											
Min		2.84E-04	4.67E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.62E-02	4.65E-02	4.03E-02	1.86E-02	7.97E-03	3.15E-03	1.65E-03	9.96E-06	6.02E-08	2.39E-13
Avg		5.14E-03	4.52E-03	3.75E-03	1.07E-03	3.25E-04	1.15E-04	4.52E-05	1.46E-07	8.81E-10	3.31E-15
Std		7.40E-03	6.49E-03	5.44E-03	2.06E-03	8.37E-04	3.69E-04	1.69E-04	8.60E-07	5.47E-09	2.28E-14
\$ALL											
Min		2.54E-01	1.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.56E+00	6.40E+00	6.11E+00	3.66E+00	2.05E+00	1.15E+00	6.43E-01	6.99E-03	6.53E-04	1.35E-05
Avg		1.48E+00	1.39E+00	1.25E+00	4.87E-01	1.80E-01	7.62E-02	3.50E-02	2.61E-04	1.62E-05	2.56E-07
Std		9.02E-01	8.61E-01	7.95E-01	4.28E-01	2.36E-01	1.27E-01	6.87E-02	7.25E-04	6.41E-05	1.27E-06

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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Soil Ingestion

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i, j, t), mrem/yr											
C-14											
Min		4.91E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.19E-07	1.53E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		2.24E-07	4.27E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.32E-07	3.22E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		1.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.28E-04	2.00E-04	1.54E-04	8.42E-06	2.65E-07	9.66E-09	3.36E-10	1.04E-21	0.00E+00	0.00E+00
Avg		8.20E-05	6.87E-05	4.98E-05	1.79E-06	4.33E-08	1.10E-09	3.07E-11	4.37E-23	0.00E+00	0.00E+00
Std		4.90E-05	4.35E-05	3.33E-05	1.67E-06	5.54E-08	1.73E-09	5.70E-11	1.42E-22	0.00E+00	0.00E+00
Cs-134											
Min		1.57E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.89E-05	1.33E-05	6.57E-06	3.99E-09	8.88E-13	1.60E-16	3.57E-20	0.00E+00	0.00E+00	0.00E+00
Avg		7.03E-06	4.85E-06	2.36E-06	9.77E-10	1.43E-13	2.22E-17	3.76E-21	0.00E+00	0.00E+00	0.00E+00
Std		4.15E-06	2.97E-06	1.49E-06	8.20E-10	1.69E-13	3.19E-17	6.39E-21	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		5.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.37E-02	6.22E-02	5.94E-02	3.54E-02	1.84E-02	9.61E-03	5.11E-03	3.90E-05	3.55E-07	2.87E-12
Avg		2.30E-02	2.17E-02	1.97E-02	8.07E-03	3.01E-03	1.21E-03	5.37E-04	2.38E-06	1.89E-08	1.27E-13
Std		1.36E-02	1.34E-02	1.26E-02	7.18E-03	3.74E-03	1.81E-03	9.26E-04	6.54E-06	5.68E-08	4.27E-13
Ni-63											
Min		1.08E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.33E-04	1.32E-04	1.29E-04	1.07E-04	8.31E-05	6.15E-05	5.12E-05	1.18E-05	2.70E-06	6.83E-08
Avg		4.83E-05	4.67E-05	4.45E-05	2.71E-05	1.51E-05	8.87E-06	5.71E-06	5.90E-07	1.10E-07	1.92E-09
Std		2.86E-05	2.86E-05	2.79E-05	2.22E-05	1.74E-05	1.25E-05	9.42E-06	1.67E-06	3.42E-07	7.11E-09
Sr-90											
Min		2.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.58E-04	2.52E-04	2.40E-04	1.40E-04	6.62E-05	3.48E-05	1.77E-05	9.16E-08	6.35E-10	3.81E-15
Avg		9.14E-05	8.14E-05	6.88E-05	1.97E-05	5.92E-06	2.12E-06	8.43E-07	2.75E-09	1.82E-11	7.70E-17
Std		5.51E-05	5.39E-05	5.01E-05	2.36E-05	1.05E-05	4.88E-06	2.38E-06	1.28E-08	8.89E-11	4.22E-16
\$ALL											
Min		5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.43E-02	6.28E-02	5.99E-02	3.55E-02	1.85E-02	9.69E-03	5.16E-03	4.81E-05	2.71E-06	6.83E-08
Avg		2.32E-02	2.19E-02	1.99E-02	8.12E-03	3.03E-03	1.22E-03	5.44E-04	2.97E-06	1.29E-07	1.92E-09
Std		1.37E-02	1.35E-02	1.27E-02	7.21E-03	3.76E-03	1.82E-03	9.35E-04	7.79E-06	3.80E-07	7.11E-09

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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Water Ingestion

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i, j, t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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SALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Fish Ingestion

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i, j, t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

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SALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Radon (Water Dep.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Dep.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Meat (Water Dep.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

SALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Milk (Water Dep.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr									
	t= 0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
0.025	7.10E+01	5.13E+01	1.57E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	7.40E+01	6.39E+01	4.19E+01	6.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	7.56E+01	6.89E+01	5.48E+01	2.15E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.100	7.59E+01	7.04E+01	5.89E+01	7.92E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.125	7.62E+01	7.16E+01	6.26E+01	1.12E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.150	7.64E+01	7.28E+01	6.47E+01	1.39E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.175	7.65E+01	7.33E+01	6.65E+01	1.59E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.200	7.66E+01	7.35E+01	6.73E+01	1.74E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.225	7.68E+01	7.36E+01	6.81E+01	2.05E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.250	7.69E+01	7.40E+01	6.85E+01	2.20E+01	6.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.275	7.70E+01	7.42E+01	6.87E+01	2.49E+01	9.55E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.300	7.71E+01	7.43E+01	6.89E+01	2.54E+01	8.85E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.325	7.72E+01	7.44E+01	6.91E+01	2.67E+01	1.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.350	7.73E+01	7.46E+01	6.95E+01	2.75E+01	3.23E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.375	7.74E+01	7.47E+01	6.97E+01	2.86E+01	4.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.400	7.75E+01	7.48E+01	6.98E+01	2.93E+01	5.90E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.425	7.76E+01	7.50E+01	7.00E+01	3.07E+01	8.05E+00	4.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.450	7.77E+01	7.50E+01	7.02E+01	3.16E+01	8.45E+00	2.72E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.475	7.78E+01	7.51E+01	7.03E+01	3.27E+01	9.61E+00	9.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.500	7.79E+01	7.52E+01	7.05E+01	3.30E+01	1.19E+01	1.90E+00	3.67E-04	0.00E+00	0.00E+00	0.00E+00
0.525	7.80E+01	7.53E+01	7.06E+01	3.38E+01	1.30E+01	2.81E+00	5.61E-03	0.00E+00	0.00E+00	0.00E+00
0.550	7.81E+01	7.54E+01	7.08E+01	3.47E+01	1.38E+01	4.04E+00	1.17E-01	0.00E+00	0.00E+00	0.00E+00
0.575	7.82E+01	7.56E+01	7.09E+01	3.52E+01	1.45E+01	5.06E+00	5.08E-01	0.00E+00	0.00E+00	0.00E+00
0.600	7.83E+01	7.57E+01	7.10E+01	3.60E+01	1.54E+01	5.36E+00	1.31E+00	0.00E+00	0.00E+00	0.00E+00
0.625	7.84E+01	7.58E+01	7.12E+01	3.65E+01	1.62E+01	6.02E+00	1.89E+00	0.00E+00	0.00E+00	0.00E+00
0.650	7.85E+01	7.59E+01	7.13E+01	3.71E+01	1.67E+01	6.93E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00
0.675	7.86E+01	7.60E+01	7.14E+01	3.75E+01	1.71E+01	7.39E+00	2.61E+00	0.00E+00	0.00E+00	0.00E+00
0.700	7.88E+01	7.61E+01	7.15E+01	3.78E+01	1.75E+01	7.71E+00	3.12E+00	0.00E+00	0.00E+00	0.00E+00
0.725	7.89E+01	7.62E+01	7.17E+01	3.82E+01	1.85E+01	8.39E+00	3.28E+00	0.00E+00	0.00E+00	0.00E+00
0.750	7.89E+01	7.63E+01	7.18E+01	3.86E+01	1.89E+01	9.09E+00	3.94E+00	0.00E+00	0.00E+00	0.00E+00
0.775	7.91E+01	7.66E+01	7.19E+01	3.91E+01	1.97E+01	9.54E+00	4.51E+00	0.00E+00	0.00E+00	0.00E+00
0.800	7.92E+01	7.67E+01	7.21E+01	3.97E+01	2.03E+01	1.00E+01	4.78E+00	2.75E-04	0.00E+00	0.00E+00
0.825	7.94E+01	7.69E+01	7.23E+01	4.05E+01	2.10E+01	1.06E+01	5.13E+00	5.39E-03	7.57E-05	1.21E-09
0.850	7.96E+01	7.70E+01	7.26E+01	4.11E+01	2.14E+01	1.10E+01	5.56E+00	1.71E-02	2.64E-04	1.24E-08
0.875	7.98E+01	7.73E+01	7.28E+01	4.15E+01	2.26E+01	1.20E+01	6.38E+00	4.08E-02	4.64E-04	4.35E-07
0.900	7.99E+01	7.75E+01	7.30E+01	4.18E+01	2.30E+01	1.27E+01	6.99E+00	5.94E-02	5.86E-04	9.38E-07
0.925	8.01E+01	7.76E+01	7.34E+01	4.20E+01	2.32E+01	1.28E+01	7.10E+00	6.23E-02	6.56E-04	1.85E-06
0.950	8.04E+01	7.78E+01	7.36E+01	4.26E+01	2.35E+01	1.31E+01	7.26E+00	6.66E-02	7.24E-04	2.99E-06
0.975	8.10E+01	7.85E+01	7.40E+01	4.31E+01	2.39E+01	1.33E+01	7.47E+00	7.17E-02	7.85E-04	5.56E-06
1.000	8.32E+01	8.08E+01	7.65E+01	4.56E+01	2.55E+01	1.43E+01	7.97E+00	7.76E-02	1.21E-03	1.94E-05
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Summary of dose at graphical times, reptition 1								
Dose statistics at graphical times, mrem/yr								
Time Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	4.76E+01	8.32E+01	7.76E+01	7.79E+01	7.99E+01	8.04E+01	8.11E+01	8.25E+01
1.00E+00	5.65E-03	8.08E+01	7.34E+01	7.52E+01	7.75E+01	7.78E+01	7.85E+01	7.97E+01
1.33E+00	0.00E+00	8.00E+01	7.21E+01	7.44E+01	7.66E+01	7.70E+01	7.77E+01	7.89E+01
1.78E+00	0.00E+00	7.90E+01	7.06E+01	7.33E+01	7.56E+01	7.61E+01	7.67E+01	7.77E+01
2.37E+00	0.00E+00	7.78E+01	6.87E+01	7.20E+01	7.43E+01	7.49E+01	7.54E+01	7.64E+01
3.00E+00	0.00E+00	7.65E+01	6.69E+01	7.05E+01	7.30E+01	7.36E+01	7.40E+01	7.51E+01
3.16E+00	0.00E+00	7.61E+01	6.64E+01	7.01E+01	7.27E+01	7.33E+01	7.37E+01	7.48E+01
4.22E+00	0.00E+00	7.41E+01	6.35E+01	6.78E+01	7.08E+01	7.12E+01	7.15E+01	7.29E+01
5.62E+00	0.00E+00	7.16E+01	6.00E+01	6.46E+01	6.81E+01	6.85E+01	6.88E+01	7.03E+01
7.50E+00	0.00E+00	6.85E+01	5.58E+01	6.07E+01	6.48E+01	6.53E+01	6.56E+01	6.72E+01
1.00E+01	0.00E+00	6.47E+01	5.07E+01	5.58E+01	6.06E+01	6.13E+01	6.17E+01	6.32E+01
1.33E+01	0.00E+00	5.98E+01	4.48E+01	5.00E+01	5.57E+01	5.64E+01	5.68E+01	5.83E+01
1.78E+01	0.00E+00	5.39E+01	3.81E+01	4.28E+01	4.98E+01	5.07E+01	5.11E+01	5.20E+01
2.37E+01	0.00E+00	4.70E+01	3.05E+01	3.46E+01	4.31E+01	4.40E+01	4.44E+01	4.49E+01
2.50E+01	0.00E+00	4.56E+01	2.90E+01	3.30E+01	4.18E+01	4.26E+01	4.31E+01	4.35E+01
3.16E+01	0.00E+00	3.91E+01	2.20E+01	2.58E+01	3.57E+01	3.64E+01	3.68E+01	3.73E+01
4.22E+01	0.00E+00	3.06E+01	1.44E+01	1.72E+01	2.77E+01	2.83E+01	2.87E+01	2.91E+01
5.00E+01	0.00E+00	2.55E+01	1.07E+01	1.19E+01	2.30E+01	2.35E+01	2.39E+01	2.42E+01
5.62E+01	0.00E+00	2.20E+01	8.52E+00	8.81E+00	1.98E+01	2.03E+01	2.07E+01	2.10E+01
7.50E+01	0.00E+00	1.43E+01	4.46E+00	1.83E+00	1.27E+01	1.31E+01	1.34E+01	1.35E+01
7.50E+01	0.00E+00	1.43E+01	4.45E+00	1.83E+00	1.27E+01	1.31E+01	1.33E+01	1.35E+01
1.00E+02	0.00E+00	7.97E+00	1.96E+00	1.86E-04	6.99E+00	7.26E+00	7.48E+00	7.58E+00
1.00E+02	0.00E+00	7.97E+00	1.96E+00	1.86E-04	6.99E+00	7.26E+00	7.48E+00	7.58E+00
1.33E+02	0.00E+00	3.67E+00	6.93E-01	0.00E+00	3.14E+00	3.31E+00	3.46E+00	3.51E+00
1.78E+02	0.00E+00	1.31E+00	1.90E-01	0.00E+00	1.08E+00	1.17E+00	1.23E+00	1.25E+00
2.37E+02	0.00E+00	3.30E-01	4.16E-02	0.00E+00	2.62E-01	2.90E-01	3.09E-01	3.19E-01
3.00E+02	0.00E+00	7.76E-02	9.07E-03	0.00E+00	5.92E-02	6.66E-02	7.20E-02	7.52E-02
3.16E+02	0.00E+00	5.35E-02	6.15E-03	0.00E+00	4.02E-02	4.56E-02	4.95E-02	5.19E-02
4.22E+02	0.00E+00	5.11E-03	5.31E-04	0.00E+00	3.35E-03	4.13E-03	4.40E-03	4.52E-03
5.00E+02	0.00E+00	1.21E-03	1.03E-04	0.00E+00	5.85E-04	7.24E-04	7.87E-04	1.03E-03
5.62E+02	0.00E+00	5.76E-04	3.44E-05	0.00E+00	1.67E-04	2.11E-04	3.04E-04	4.37E-04
7.50E+02	0.00E+00	1.21E-04	4.02E-06	0.00E+00	1.03E-05	2.73E-05	4.11E-05	1.05E-04
1.00E+03	0.00E+00	1.94E-05	5.13E-07	0.00E+00	9.37E-07	2.98E-06	5.69E-06	1.48E-05
=====	=====	=====	=====	=====	=====	=====	=====	=====

RESRAD, Version 6.22 T½ Limit = 0.5 year 06/13/2005 15:11 Page 21
 Probabilistic results summary : Dose for Detected Radionuclide DCGL Concentrati-
 ons Using a RF Scenario File: RF DCGL Dose.RAD
 Peak of the mean dose (averaged over observations) at graphical times
 Repetition Time of peak mean dose Peak mean dose
 Years mrem/yr
 1 0.000E+00 7.757E+01

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 1
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak of mean dose time Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	37	-0.07
Kd of Ni-63 in Contaminated Zone	20	-0.10
Kd of Co-60 in Contaminated Zone	19	0.11
Kd of Sr-90 in Contaminated Zone	7	-0.19
Kd of Cs-137 in Contaminated Zone	3	0.53
Kd of Cs-134 in Contaminated Zone	43	0.06
Contaminated zone erosion rate	5	-0.39
Contaminated zone total porosity	10	-0.14
Contaminated zone hydraulic conductivity	17	-0.11
Contaminated zone b parameter	42	-0.06
Density of Unsaturated zone 1	65	0.03
Kd of C-14 in Unsaturated Zone 1	56	0.04
Kd of Ni-63 in Unsaturated Zone 1	82	-0.01
Kd of Co-60 in Unsaturated Zone 1	59	-0.04
Kd of Sr-90 in Unsaturated Zone 1	91	0.00
Kd of Cs-134 in Unsaturated Zone 1	53	0.05
Kd of Cs-137 in Unsaturated Zone 1	30	-0.08
Total Porosity of Unsaturated zone 1	75	0.02
Effective Porosity of Unsaturated zone 1	80	-0.01
Field Capacity of Unsaturated zone 1	62	-0.03
Hydraulic Conductivity of Unsaturated zone 1	58	-0.04
b Parameter of Unsaturated zone 1	84	0.01
Density of Unsaturated zone 2	77	-0.02
Kd of C-14 in Unsaturated Zone 2	88	-0.01
Kd of Ni-63 in Unsaturated Zone 2	25	-0.10
Kd of Co-60 in Unsaturated Zone 2	83	0.01
Kd of Sr-90 in Unsaturated Zone 2	66	0.03
Kd of Cs-134 in Unsaturated Zone 2	46	-0.05
Kd of Cs-137 in Unsaturated Zone 2	33	-0.07
Total Porosity of Unsaturated zone 2	94	0.00
Effective Porosity of Unsaturated zone 2	39	-0.06
Field Capacity of Unsaturated zone 2	64	0.03
Hydraulic Conductivity of Unsaturated zone 2	21	0.10
b Parameter of Unsaturated zone 2	27	-0.09
Density of Unsaturated zone 3	41	-0.06
Kd of C-14 in Unsaturated Zone 3	34	0.07
Kd of Ni-63 in Unsaturated Zone 3	70	-0.03
Kd of Co-60 in Unsaturated Zone 3	86	0.01
Kd of Sr-90 in Unsaturated Zone 3	79	0.01
Kd of Cs-134 in Unsaturated Zone 3	69	-0.03
Kd of Cs-137 in Unsaturated Zone 3	31	-0.08
Hydraulic Conductivity of Unsaturated zone 3	54	-0.05
b Parameter of Unsaturated zone 3	8	0.15
Density of Unsaturated zone 4	89	0.00
Kd of C-14 in Unsaturated Zone 4	81	-0.01

Kd of Ni-63 in Unsaturated Zone 4	51 -0.05
Kd of Co-60 in Unsaturated Zone 4	93 0.00
Kd of Sr-90 in Unsaturated Zone 4	44 -0.06
Kd of Cs-134 in Unsaturated Zone 4	40 -0.06
Kd of Cs-137 in Unsaturated Zone 4	61 0.03
Hydraulic Conductivity of Unsaturated zone 4	90 0.00
b Parameter of Unsaturated zone 4	28 -0.09
Density of saturated zone	76 0.02
Kd of C-14 in Saturated Zone	73 -0.02
Kd of Ni-63 in Saturated Zone	85 0.01
Kd of Co-60 in Saturated Zone	74 -0.02
Kd of Sr-90 in Saturated Zone	13 -0.13
Kd of Cs-134 in Saturated Zone	87 -0.01
Kd of Cs-137 in Saturated Zone	32 -0.08
Saturated zone hydraulic gradient	57 -0.04
Saturated zone b parameter	72 -0.02
Evapotranspiration coefficient	55 0.04
Runoff coefficient	12 0.14
Soil ingestion	24 -0.10
Drinking water intake	45 0.05
Inhalation rate	47 0.05
Mass loading for inhalation	16 -0.12
Indoor dust filtration factor	22 0.10
Aquatic food	50 0.05
Wet weight crop yield of fruit, grain and non-leafy vegetables	92 0.00
Weathering removal constant of all vegetation	60 -0.04
Wet foliar interception fraction of leafy vegetables	26 -0.09
Plant transfer factor for C	14 -0.12
Plant transfer factor for Co	63 0.03
Plant transfer factor for Sr	36 0.07
Meat transfer factor for C	48 -0.05
Meat transfer factor for Co	68 -0.03
Meat transfer factor for Ni	15 -0.12
Meat transfer factor for Sr	35 0.07
Milk transfer factor for C	11 0.14
Milk transfer factor for Co	29 0.08
Milk transfer factor for Cs	2 0.64
Milk transfer factor for Sr	67 0.03
Fish transfer factor for C	78 -0.02
Fish transfer factor for Co	18 0.11
Fish transfer factor for Ni	49 -0.05
Fish transfer factor for Sr	71 -0.02
Fish transfer factor for Cs	38 -0.07
Plant transfer factor for Ni	9 0.15
Depth of soil mixing layer	1 -0.79
Fruit, vegetable, and grain consumption	4 0.51
Milk consumption	6 0.20
Thickness of evasion layer of C-14 in soil	23 0.10
Milk transfer factor for Ni	52 0.05
R-SQUARE	0.79

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak All Pathways Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	37	-0.07
Kd of Ni-63 in Contaminated Zone	20	-0.10
Kd of Co-60 in Contaminated Zone	19	0.11
Kd of Sr-90 in Contaminated Zone	7	-0.19
Kd of Cs-137 in Contaminated Zone	3	0.53
Kd of Cs-134 in Contaminated Zone	43	0.06
Contaminated zone erosion rate	5	-0.39
Contaminated zone total porosity	10	-0.14
Contaminated zone hydraulic conductivity	17	-0.11
Contaminated zone b parameter	42	-0.06
Density of Unsaturated zone 1	65	0.03
Kd of C-14 in Unsaturated Zone 1	56	0.04
Kd of Ni-63 in Unsaturated Zone 1	81	-0.01
Kd of Co-60 in Unsaturated Zone 1	58	-0.04
Kd of Sr-90 in Unsaturated Zone 1	91	0.00
Kd of Cs-134 in Unsaturated Zone 1	53	0.05
Kd of Cs-137 in Unsaturated Zone 1	30	-0.08
Total Porosity of Unsaturated zone 1	75	0.02
Effective Porosity of Unsaturated zone 1	80	-0.01
Field Capacity of Unsaturated zone 1	62	-0.03
Hydraulic Conductivity of Unsaturated zone 1	59	-0.04
b Parameter of Unsaturated zone 1	84	0.01
Density of Unsaturated zone 2	78	-0.02
Kd of C-14 in Unsaturated Zone 2	88	-0.01
Kd of Ni-63 in Unsaturated Zone 2	25	-0.10
Kd of Co-60 in Unsaturated Zone 2	83	0.01
Kd of Sr-90 in Unsaturated Zone 2	66	0.03
Kd of Cs-134 in Unsaturated Zone 2	46	-0.05
Kd of Cs-137 in Unsaturated Zone 2	33	-0.07
Total Porosity of Unsaturated zone 2	94	0.00
Effective Porosity of Unsaturated zone 2	39	-0.06
Field Capacity of Unsaturated zone 2	64	0.03
Hydraulic Conductivity of Unsaturated zone 2	21	0.10
b Parameter of Unsaturated zone 2	27	-0.09
Density of Unsaturated zone 3	41	-0.06
Kd of C-14 in Unsaturated Zone 3	34	0.07
Kd of Ni-63 in Unsaturated Zone 3	69	-0.03
Kd of Co-60 in Unsaturated Zone 3	86	0.01
Kd of Sr-90 in Unsaturated Zone 3	79	0.01
Kd of Cs-134 in Unsaturated Zone 3	70	-0.03
Kd of Cs-137 in Unsaturated Zone 3	31	-0.08
Hydraulic Conductivity of Unsaturated zone 3	54	-0.05
b Parameter of Unsaturated zone 3	8	0.15
Density of Unsaturated zone 4	89	0.00
Kd of C-14 in Unsaturated Zone 4	82	-0.01

Kd of Ni-63 in Unsaturated Zone 4	51 -0.05
Kd of Co-60 in Unsaturated Zone 4	93 0.00
Kd of Sr-90 in Unsaturated Zone 4	44 -0.05
Kd of Cs-134 in Unsaturated Zone 4	40 -0.06
Kd of Cs-137 in Unsaturated Zone 4	61 0.03
Hydraulic Conductivity of Unsaturated zone 4	90 0.00
b Parameter of Unsaturated zone 4	28 -0.09
Density of saturated zone	76 0.02
Kd of C-14 in Saturated Zone	73 -0.02
Kd of Ni-63 in Saturated Zone	85 0.01
Kd of Co-60 in Saturated Zone	74 -0.02
Kd of Sr-90 in Saturated Zone	13 -0.13
Kd of Cs-134 in Saturated Zone	87 -0.01
Kd of Cs-137 in Saturated Zone	32 -0.08
Saturated zone hydraulic gradient	57 -0.04
Saturated zone b parameter	72 -0.02
Evapotranspiration coefficient	55 0.04
Runoff coefficient	12 0.14
Soil ingestion	23 -0.10
Drinking water intake	47 0.05
Inhalation rate	45 0.05
Mass loading for inhalation	16 -0.12
Indoor dust filtration factor	22 0.10
Aquatic food	50 0.05
Wet weight crop yield of fruit, grain and non-leafy vegetables	92 0.00
Weathering removal constant of all vegetation	60 -0.04
Wet foliar interception fraction of leafy vegetables	26 -0.10
Plant transfer factor for C	14 -0.12
Plant transfer factor for Co	63 0.03
Plant transfer factor for Sr	36 0.07
Meat transfer factor for C	48 -0.05
Meat transfer factor for Co	67 -0.03
Meat transfer factor for Ni	15 -0.12
Meat transfer factor for Sr	35 0.07
Milk transfer factor for C	11 0.14
Milk transfer factor for Co	29 0.08
Milk transfer factor for Cs	2 0.64
Milk transfer factor for Sr	68 0.03
Fish transfer factor for C	77 -0.02
Fish transfer factor for Co	18 0.11
Fish transfer factor for Ni	49 -0.05
Fish transfer factor for Sr	71 -0.02
Fish transfer factor for Cs	38 -0.07
Plant transfer factor for Ni	9 0.15
Depth of soil mixing layer	1 -0.79
Fruit, vegetable, and grain consumption	4 0.51
Milk consumption	6 0.20
Thickness of evasion layer of C-14 in soil	24 0.10
Milk transfer factor for Ni	52 0.05
R-SQUARE	0.79

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 3
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak External Ground Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	35	-0.07
Kd of Ni-63 in Contaminated Zone	24	-0.09
Kd of Co-60 in Contaminated Zone	3	0.45
Kd of Sr-90 in Contaminated Zone	10	-0.14
Kd of Cs-137 in Contaminated Zone	1	0.87
Kd of Cs-134 in Contaminated Zone	30	0.08
Contaminated zone erosion rate	2	-0.79
Contaminated zone total porosity	71	-0.03
Contaminated zone hydraulic conductivity	75	-0.02
Contaminated zone b parameter	26	-0.09
Density of Unsaturated zone 1	85	-0.01
Kd of C-14 in Unsaturated Zone 1	78	0.02
Kd of Ni-63 in Unsaturated Zone 1	63	-0.03
Kd of Co-60 in Unsaturated Zone 1	34	-0.07
Kd of Sr-90 in Unsaturated Zone 1	42	0.06
Kd of Cs-134 in Unsaturated Zone 1	21	-0.10
Kd of Cs-137 in Unsaturated Zone 1	47	0.06
Total Porosity of Unsaturated zone 1	50	-0.05
Effective Porosity of Unsaturated zone 1	9	0.16
Field Capacity of Unsaturated zone 1	81	-0.02
Hydraulic Conductivity of Unsaturated zone 1	33	0.08
b Parameter of Unsaturated zone 1	80	-0.02
Density of Unsaturated zone 2	92	0.00
Kd of C-14 in Unsaturated Zone 2	90	-0.01
Kd of Ni-63 in Unsaturated Zone 2	49	-0.05
Kd of Co-60 in Unsaturated Zone 2	29	-0.08
Kd of Sr-90 in Unsaturated Zone 2	58	0.04
Kd of Cs-134 in Unsaturated Zone 2	23	0.09
Kd of Cs-137 in Unsaturated Zone 2	79	0.02
Total Porosity of Unsaturated zone 2	31	-0.08
Effective Porosity of Unsaturated zone 2	37	-0.07
Field Capacity of Unsaturated zone 2	61	-0.04
Hydraulic Conductivity of Unsaturated zone 2	18	0.10
b Parameter of Unsaturated zone 2	64	-0.03
Density of Unsaturated zone 3	77	-0.02
Kd of C-14 in Unsaturated Zone 3	57	0.04
Kd of Ni-63 in Unsaturated Zone 3	44	-0.06
Kd of Co-60 in Unsaturated Zone 3	67	-0.03
Kd of Sr-90 in Unsaturated Zone 3	22	0.09
Kd of Cs-134 in Unsaturated Zone 3	11	-0.14
Kd of Cs-137 in Unsaturated Zone 3	60	-0.04
Hydraulic Conductivity of Unsaturated zone 3	19	0.10
b Parameter of Unsaturated zone 3	4	0.25
Density of Unsaturated zone 4	38	0.06
Kd of C-14 in Unsaturated Zone 4	14	0.12

Kd of Ni-63 in Unsaturated Zone 4	74	0.02
Kd of Co-60 in Unsaturated Zone 4	45	0.06
Kd of Sr-90 in Unsaturated Zone 4	15	-0.12
Kd of Cs-134 in Unsaturated Zone 4	13	-0.12
Kd of Cs-137 in Unsaturated Zone 4	54	-0.05
Hydraulic Conductivity of Unsaturated zone 4	20	0.10
b Parameter of Unsaturated zone 4	17	-0.11
Density of saturated zone	55	-0.04
Kd of C-14 in Saturated Zone	59	0.04
Kd of Ni-63 in Saturated Zone	65	0.03
Kd of Co-60 in Saturated Zone	84	0.01
Kd of Sr-90 in Saturated Zone	48	-0.06
Kd of Cs-134 in Saturated Zone	70	-0.03
Kd of Cs-137 in Saturated Zone	62	0.03
Saturated zone hydraulic gradient	39	-0.06
Saturated zone b parameter	56	0.04
Evapotranspiration coefficient	6	0.21
Runoff coefficient	5	0.22
Soil ingestion	32	-0.08
Drinking water intake	28	0.08
Inhalation rate	73	0.02
Mass loading for inhalation	41	-0.06
Indoor dust filtration factor	88	0.01
Aquatic food	94	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	93	0.00
Weathering removal constant of all vegetation	89	-0.01
Wet foliar interception fraction of leafy vegetables	66	0.03
Plant transfer factor for C	16	-0.11
Plant transfer factor for Co	53	0.05
Plant transfer factor for Sr	69	0.03
Meat transfer factor for C	83	-0.01
Meat transfer factor for Co	51	-0.05
Meat transfer factor for Ni	25	-0.09
Meat transfer factor for Sr	86	-0.01
Milk transfer factor for C	7	0.18
Milk transfer factor for Co	27	0.09
Milk transfer factor for Cs	46	-0.06
Milk transfer factor for Sr	82	0.01
Fish transfer factor for C	72	0.02
Fish transfer factor for Co	12	0.13
Fish transfer factor for Ni	91	0.00
Fish transfer factor for Sr	68	-0.03
Fish transfer factor for Cs	76	0.02
Plant transfer factor for Ni	52	-0.05
Depth of soil mixing layer	87	0.01
Fruit, vegetable, and grain consumption	40	0.06
Milk consumption	8	-0.18
Thickness of evasion layer of C-14 in soil	43	-0.06
Milk transfer factor for Ni	36	-0.07
R-SQUARE		0.85

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Inhalation particles Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	31	0.08
Kd of Ni-63 in Contaminated Zone	9	-0.14
Kd of Co-60 in Contaminated Zone	73	-0.03
Kd of Sr-90 in Contaminated Zone	62	-0.04
Kd of Cs-137 in Contaminated Zone	60	0.04
Kd of Cs-134 in Contaminated Zone	92	0.00
Contaminated zone erosion rate	5	-0.17
Contaminated zone total porosity	47	0.06
Contaminated zone hydraulic conductivity	71	-0.03
Contaminated zone b parameter	56	0.05
Density of Unsaturated zone 1	90	0.00
Kd of C-14 in Unsaturated Zone 1	77	-0.02
Kd of Ni-63 in Unsaturated Zone 1	70	0.03
Kd of Co-60 in Unsaturated Zone 1	72	0.03
Kd of Sr-90 in Unsaturated Zone 1	49	0.06
Kd of Cs-134 in Unsaturated Zone 1	37	-0.07
Kd of Cs-137 in Unsaturated Zone 1	41	-0.06
Total Porosity of Unsaturated zone 1	34	-0.07
Effective Porosity of Unsaturated zone 1	17	0.12
Field Capacity of Unsaturated zone 1	7	0.15
Hydraulic Conductivity of Unsaturated zone 1	66	-0.03
b Parameter of Unsaturated zone 1	29	0.08
Density of Unsaturated zone 2	18	0.11
Kd of C-14 in Unsaturated Zone 2	38	-0.07
Kd of Ni-63 in Unsaturated Zone 2	33	0.07
Kd of Co-60 in Unsaturated Zone 2	21	0.11
Kd of Sr-90 in Unsaturated Zone 2	87	0.01
Kd of Cs-134 in Unsaturated Zone 2	81	-0.02
Kd of Cs-137 in Unsaturated Zone 2	6	0.16
Total Porosity of Unsaturated zone 2	78	-0.02
Effective Porosity of Unsaturated zone 2	16	-0.12
Field Capacity of Unsaturated zone 2	65	0.03
Hydraulic Conductivity of Unsaturated zone 2	79	-0.02
b Parameter of Unsaturated zone 2	50	-0.05
Density of Unsaturated zone 3	52	0.05
Kd of C-14 in Unsaturated Zone 3	91	0.00
Kd of Ni-63 in Unsaturated Zone 3	86	-0.01
Kd of Co-60 in Unsaturated Zone 3	53	-0.05
Kd of Sr-90 in Unsaturated Zone 3	94	0.00
Kd of Cs-134 in Unsaturated Zone 3	12	-0.13
Kd of Cs-137 in Unsaturated Zone 3	80	-0.02
Hydraulic Conductivity of Unsaturated zone 3	57	-0.04
b Parameter of Unsaturated zone 3	11	-0.14
Density of Unsaturated zone 4	85	-0.01
Kd of C-14 in Unsaturated Zone 4	42	-0.06

Kd of Ni-63 in Unsaturated Zone 4	63	0.04
Kd of Co-60 in Unsaturated Zone 4	24	-0.11
Kd of Sr-90 in Unsaturated Zone 4	55	0.05
Kd of Cs-134 in Unsaturated Zone 4	23	-0.11
Kd of Cs-137 in Unsaturated Zone 4	13	-0.13
Hydraulic Conductivity of Unsaturated zone 4	10	0.14
b Parameter of Unsaturated zone 4	30	-0.08
Density of saturated zone	89	0.00
Kd of C-14 in Saturated Zone	40	0.07
Kd of Ni-63 in Saturated Zone	51	-0.05
Kd of Co-60 in Saturated Zone	75	-0.02
Kd of Sr-90 in Saturated Zone	46	-0.06
Kd of Cs-134 in Saturated Zone	61	0.04
Kd of Cs-137 in Saturated Zone	20	-0.11
Saturated zone hydraulic gradient	8	-0.15
Saturated zone b parameter	82	-0.01
Evapotranspiration coefficient	22	-0.11
Runoff coefficient	28	-0.09
Soil ingestion	84	0.01
Drinking water intake	68	-0.03
Inhalation rate	3	0.83
Mass loading for inhalation	2	0.91
Indoor dust filtration factor	4	0.81
Aquatic food	44	0.06
Wet weight crop yield of fruit, grain and non-leafy vegetables	43	-0.06
Weathering removal constant of all vegetation	88	0.00
Wet foliar interception fraction of leafy vegetables	69	-0.03
Plant transfer factor for C	36	-0.07
Plant transfer factor for Co	54	-0.05
Plant transfer factor for Sr	32	0.08
Meat transfer factor for C	64	0.04
Meat transfer factor for Co	14	0.12
Meat transfer factor for Ni	76	-0.02
Meat transfer factor for Sr	26	0.10
Milk transfer factor for C	67	-0.03
Milk transfer factor for Co	93	0.00
Milk transfer factor for Cs	83	-0.01
Milk transfer factor for Sr	25	-0.10
Fish transfer factor for C	58	-0.04
Fish transfer factor for Co	45	0.06
Fish transfer factor for Ni	35	0.07
Fish transfer factor for Sr	74	0.03
Fish transfer factor for Cs	59	0.04
Plant transfer factor for Ni	27	0.09
Depth of soil mixing layer	1	-0.93
Fruit, vegetable, and grain consumption	48	-0.06
Milk consumption	15	-0.12
Thickness of evasion layer of C-14 in soil	39	0.07
Milk transfer factor for Ni	19	0.11
R-SQUARE		0.94

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Radon (WaterInd.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 6
 Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
 Input File : RF DCGL Dose.RAD

Coefficients for peak Plant (WaterInd.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	43	-0.06
Kd of Ni-63 in Contaminated Zone	10	-0.15
Kd of Co-60 in Contaminated Zone	34	0.08
Kd of Sr-90 in Contaminated Zone	6	-0.18
Kd of Cs-137 in Contaminated Zone	8	0.16
Kd of Cs-134 in Contaminated Zone	66	0.03
Contaminated zone erosion rate	3	-0.41
Contaminated zone total porosity	47	-0.05
Contaminated zone hydraulic conductivity	77	-0.02
Contaminated zone b parameter	64	0.03
Density of Unsaturated zone 1	26	0.09
Kd of C-14 in Unsaturated Zone 1	57	0.04
Kd of Ni-63 in Unsaturated Zone 1	45	0.06
Kd of Co-60 in Unsaturated Zone 1	44	-0.06
Kd of Sr-90 in Unsaturated Zone 1	20	0.11
Kd of Cs-134 in Unsaturated Zone 1	48	0.05
Kd of Cs-137 in Unsaturated Zone 1	9	-0.16
Total Porosity of Unsaturated zone 1	78	0.02
Effective Porosity of Unsaturated zone 1	39	0.07
Field Capacity of Unsaturated zone 1	40	0.06
Hydraulic Conductivity of Unsaturated zone 1	35	0.07
b Parameter of Unsaturated zone 1	94	0.00
Density of Unsaturated zone 2	53	-0.05
Kd of C-14 in Unsaturated Zone 2	29	-0.09
Kd of Ni-63 in Unsaturated Zone 2	76	0.02
Kd of Co-60 in Unsaturated Zone 2	85	-0.01
Kd of Sr-90 in Unsaturated Zone 2	41	0.06
Kd of Cs-134 in Unsaturated Zone 2	71	-0.02
Kd of Cs-137 in Unsaturated Zone 2	81	0.02
Total Porosity of Unsaturated zone 2	58	0.04
Effective Porosity of Unsaturated zone 2	50	-0.05
Field Capacity of Unsaturated zone 2	82	0.02
Hydraulic Conductivity of Unsaturated zone 2	93	0.00
b Parameter of Unsaturated zone 2	90	0.00
Density of Unsaturated zone 3	62	-0.03
Kd of C-14 in Unsaturated Zone 3	18	0.12
Kd of Ni-63 in Unsaturated Zone 3	7	-0.17
Kd of Co-60 in Unsaturated Zone 3	84	0.01
Kd of Sr-90 in Unsaturated Zone 3	38	-0.07
Kd of Cs-134 in Unsaturated Zone 3	24	-0.10
Kd of Cs-137 in Unsaturated Zone 3	70	-0.03
Hydraulic Conductivity of Unsaturated zone 3	63	-0.03
b Parameter of Unsaturated zone 3	30	0.09
Density of Unsaturated zone 4	54	-0.04
Kd of C-14 in Unsaturated Zone 4	23	-0.10

Kd of Ni-63 in Unsaturated Zone 4	73 -0.02
Kd of Co-60 in Unsaturated Zone 4	59 0.04
Kd of Sr-90 in Unsaturated Zone 4	21 -0.11
Kd of Cs-134 in Unsaturated Zone 4	46 -0.05
Kd of Cs-137 in Unsaturated Zone 4	14 -0.13
Hydraulic Conductivity of Unsaturated zone 4	55 0.04
b Parameter of Unsaturated zone 4	27 -0.09
Density of saturated zone	69 0.03
Kd of C-14 in Saturated Zone	67 -0.03
Kd of Ni-63 in Saturated Zone	83 -0.02
Kd of Co-60 in Saturated Zone	86 -0.01
Kd of Sr-90 in Saturated Zone	19 -0.12
Kd of Cs-134 in Saturated Zone	16 -0.12
Kd of Cs-137 in Saturated Zone	17 -0.12
Saturated zone hydraulic gradient	75 0.02
Saturated zone b parameter	49 -0.05
Evapotranspiration coefficient	80 0.02
Runoff coefficient	12 0.14
Soil ingestion	74 -0.02
Drinking water intake	28 -0.09
Inhalation rate	36 0.07
Mass loading for inhalation	15 -0.13
Indoor dust filtration factor	5 0.20
Aquatic food	91 0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	61 -0.04
Weathering removal constant of all vegetation	68 -0.03
Wet foliar interception fraction of leafy vegetables	33 -0.08
Plant transfer factor for C	52 -0.05
Plant transfer factor for Co	51 0.05
Plant transfer factor for Sr	2 0.46
Meat transfer factor for C	25 -0.09
Meat transfer factor for Co	89 -0.01
Meat transfer factor for Ni	31 -0.08
Meat transfer factor for Sr	92 0.00
Milk transfer factor for C	22 0.10
Milk transfer factor for Co	13 0.14
Milk transfer factor for Cs	79 -0.02
Milk transfer factor for Sr	37 0.07
Fish transfer factor for C	60 -0.04
Fish transfer factor for Co	87 0.01
Fish transfer factor for Ni	32 0.08
Fish transfer factor for Sr	42 -0.06
Fish transfer factor for Cs	56 -0.04
Plant transfer factor for Ni	4 0.21
Depth of soil mixing layer	88 -0.01
Fruit, vegetable, and grain consumption	1 0.97
Milk consumption	11 -0.14
Thickness of evasion layer of C-14 in soil	65 0.03
Milk transfer factor for Ni	72 -0.02
R-SQUARE	0.95

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 7
 Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
 Input File : RF DCGL Dose.RAD

Coefficients for peak Meat (WaterInd.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	20	-0.12
Kd of Ni-63 in Contaminated Zone	5	-0.20
Kd of Co-60 in Contaminated Zone	24	0.11
Kd of Sr-90 in Contaminated Zone	11	-0.15
Kd of Cs-137 in Contaminated Zone	3	0.28
Kd of Cs-134 in Contaminated Zone	71	0.02
Contaminated zone erosion rate	2	-0.41
Contaminated zone total porosity	83	-0.01
Contaminated zone hydraulic conductivity	17	-0.12
Contaminated zone b parameter	85	-0.01
Density of Unsaturated zone 1	54	0.05
Kd of C-14 in Unsaturated Zone 1	82	0.01
Kd of Ni-63 in Unsaturated Zone 1	67	-0.03
Kd of Co-60 in Unsaturated Zone 1	28	-0.09
Kd of Sr-90 in Unsaturated Zone 1	57	0.05
Kd of Cs-134 in Unsaturated Zone 1	84	0.01
Kd of Cs-137 in Unsaturated Zone 1	9	-0.16
Total Porosity of Unsaturated zone 1	78	-0.02
Effective Porosity of Unsaturated zone 1	14	0.13
Field Capacity of Unsaturated zone 1	92	0.00
Hydraulic Conductivity of Unsaturated zone 1	30	0.09
b Parameter of Unsaturated zone 1	91	0.00
Density of Unsaturated zone 2	61	-0.03
Kd of C-14 in Unsaturated Zone 2	80	-0.01
Kd of Ni-63 in Unsaturated Zone 2	70	0.02
Kd of Co-60 in Unsaturated Zone 2	86	0.01
Kd of Sr-90 in Unsaturated Zone 2	66	0.03
Kd of Cs-134 in Unsaturated Zone 2	51	0.06
Kd of Cs-137 in Unsaturated Zone 2	60	0.04
Total Porosity of Unsaturated zone 2	55	-0.05
Effective Porosity of Unsaturated zone 2	19	-0.12
Field Capacity of Unsaturated zone 2	90	0.01
Hydraulic Conductivity of Unsaturated zone 2	46	0.07
b Parameter of Unsaturated zone 2	41	-0.07
Density of Unsaturated zone 3	88	0.01
Kd of C-14 in Unsaturated Zone 3	18	0.12
Kd of Ni-63 in Unsaturated Zone 3	34	-0.08
Kd of Co-60 in Unsaturated Zone 3	50	-0.06
Kd of Sr-90 in Unsaturated Zone 3	56	-0.05
Kd of Cs-134 in Unsaturated Zone 3	29	-0.09
Kd of Cs-137 in Unsaturated Zone 3	81	-0.01
Hydraulic Conductivity of Unsaturated zone 3	73	0.02
b Parameter of Unsaturated zone 3	47	0.06
Density of Unsaturated zone 4	45	-0.07
Kd of C-14 in Unsaturated Zone 4	69	-0.02

Kd of Ni-63 in Unsaturated Zone 4	38	-0.07
Kd of Co-60 in Unsaturated Zone 4	72	0.02
Kd of Sr-90 in Unsaturated Zone 4	43	-0.07
Kd of Cs-134 in Unsaturated Zone 4	22	-0.11
Kd of Cs-137 in Unsaturated Zone 4	15	-0.13
Hydraulic Conductivity of Unsaturated zone 4	65	-0.03
b Parameter of Unsaturated zone 4	6	-0.18
Density of saturated zone	58	-0.04
Kd of C-14 in Saturated Zone	37	-0.08
Kd of Ni-63 in Saturated Zone	63	0.03
Kd of Co-60 in Saturated Zone	87	-0.01
Kd of Sr-90 in Saturated Zone	48	-0.06
Kd of Cs-134 in Saturated Zone	49	-0.06
Kd of Cs-137 in Saturated Zone	23	-0.11
Saturated zone hydraulic gradient	79	0.02
Saturated zone b parameter	77	0.02
Evapotranspiration coefficient	64	-0.03
Runoff coefficient	44	0.07
Soil ingestion	33	-0.08
Drinking water intake	76	-0.02
Inhalation rate	75	0.02
Mass loading for inhalation	68	-0.03
Indoor dust filtration factor	16	0.13
Aquatic food	21	0.11
Wet weight crop yield of fruit, grain and non-leafy vegetables	93	0.00
Weathering removal constant of all vegetation	89	0.01
Wet foliar interception fraction of leafy vegetables	40	-0.07
Plant transfer factor for C	13	-0.14
Plant transfer factor for Co	32	0.09
Plant transfer factor for Sr	7	0.18
Meat transfer factor for C	26	-0.10
Meat transfer factor for Co	8	0.18
Meat transfer factor for Ni	39	-0.07
Meat transfer factor for Sr	31	0.09
Milk transfer factor for C	25	0.10
Milk transfer factor for Co	10	0.16
Milk transfer factor for Cs	94	0.00
Milk transfer factor for Sr	74	0.02
Fish transfer factor for C	27	-0.10
Fish transfer factor for Co	42	0.07
Fish transfer factor for Ni	59	0.04
Fish transfer factor for Sr	53	-0.05
Fish transfer factor for Cs	36	0.08
Plant transfer factor for Ni	12	0.15
Depth of soil mixing layer	1	-0.97
Fruit, vegetable, and grain consumption	35	-0.08
Milk consumption	4	-0.21
Thickness of evasion layer of C-14 in soil	52	0.05
Milk transfer factor for Ni	62	0.03
R-SQUARE		0.95

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Milk (WaterInd.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	30	-0.08
Kd of Ni-63 in Contaminated Zone	81	0.01
Kd of Co-60 in Contaminated Zone	55	-0.05
Kd of Sr-90 in Contaminated Zone	7	-0.18
Kd of Cs-137 in Contaminated Zone	52	0.05
Kd of Cs-134 in Contaminated Zone	94	0.00
Contaminated zone erosion rate	5	-0.20
Contaminated zone total porosity	53	-0.05
Contaminated zone hydraulic conductivity	19	-0.11
Contaminated zone b parameter	93	0.00
Density of Unsaturated zone 1	27	0.10
Kd of C-14 in Unsaturated Zone 1	16	0.12
Kd of Ni-63 in Unsaturated Zone 1	31	-0.08
Kd of Co-60 in Unsaturated Zone 1	41	-0.07
Kd of Sr-90 in Unsaturated Zone 1	60	0.04
Kd of Cs-134 in Unsaturated Zone 1	54	0.05
Kd of Cs-137 in Unsaturated Zone 1	49	-0.06
Total Porosity of Unsaturated zone 1	48	0.06
Effective Porosity of Unsaturated zone 1	51	0.05
Field Capacity of Unsaturated zone 1	61	-0.04
Hydraulic Conductivity of Unsaturated zone 1	35	0.08
b Parameter of Unsaturated zone 1	73	-0.02
Density of Unsaturated zone 2	43	-0.06
Kd of C-14 in Unsaturated Zone 2	33	-0.08
Kd of Ni-63 in Unsaturated Zone 2	59	0.04
Kd of Co-60 in Unsaturated Zone 2	90	0.00
Kd of Sr-90 in Unsaturated Zone 2	11	0.13
Kd of Cs-134 in Unsaturated Zone 2	89	-0.01
Kd of Cs-137 in Unsaturated Zone 2	23	0.11
Total Porosity of Unsaturated zone 2	21	-0.11
Effective Porosity of Unsaturated zone 2	29	-0.09
Field Capacity of Unsaturated zone 2	69	0.03
Hydraulic Conductivity of Unsaturated zone 2	76	-0.02
b Parameter of Unsaturated zone 2	68	-0.03
Density of Unsaturated zone 3	66	0.03
Kd of C-14 in Unsaturated Zone 3	47	0.06
Kd of Ni-63 in Unsaturated Zone 3	26	-0.10
Kd of Co-60 in Unsaturated Zone 3	45	0.06
Kd of Sr-90 in Unsaturated Zone 3	88	0.01
Kd of Cs-134 in Unsaturated Zone 3	87	-0.01
Kd of Cs-137 in Unsaturated Zone 3	62	-0.04
Hydraulic Conductivity of Unsaturated zone 3	86	-0.01
b Parameter of Unsaturated zone 3	71	0.02
Density of Unsaturated zone 4	12	0.13
Kd of C-14 in Unsaturated Zone 4	38	0.07

Kd of Ni-63 in Unsaturated Zone 4	85	0.01
Kd of Co-60 in Unsaturated Zone 4	80	0.01
Kd of Sr-90 in Unsaturated Zone 4	77	-0.02
Kd of Cs-134 in Unsaturated Zone 4	84	-0.01
Kd of Cs-137 in Unsaturated Zone 4	56	-0.05
Hydraulic Conductivity of Unsaturated zone 4	91	0.00
b Parameter of Unsaturated zone 4	57	-0.05
Density of saturated zone	40	0.07
Kd of C-14 in Saturated Zone	17	-0.12
Kd of Ni-63 in Saturated Zone	22	-0.11
Kd of Co-60 in Saturated Zone	78	-0.02
Kd of Sr-90 in Saturated Zone	37	-0.08
Kd of Cs-134 in Saturated Zone	74	0.02
Kd of Cs-137 in Saturated Zone	20	-0.11
Saturated zone hydraulic gradient	24	-0.10
Saturated zone b parameter	58	0.04
Evapotranspiration coefficient	42	-0.07
Runoff coefficient	32	0.08
Soil ingestion	18	-0.12
Drinking water intake	83	-0.01
Inhalation rate	39	0.07
Mass loading for inhalation	75	-0.02
Indoor dust filtration factor	4	0.22
Aquatic food	10	0.14
Wet weight crop yield of fruit, grain and non-leafy vegetables	25	-0.10
Weathering removal constant of all vegetation	82	0.01
Wet foliar interception fraction of leafy vegetables	9	-0.16
Plant transfer factor for C	92	0.00
Plant transfer factor for Co	63	-0.04
Plant transfer factor for Sr	65	0.03
Meat transfer factor for C	67	-0.03
Meat transfer factor for Co	46	0.06
Meat transfer factor for Ni	34	-0.08
Meat transfer factor for Sr	15	-0.12
Milk transfer factor for C	64	0.04
Milk transfer factor for Co	79	-0.02
Milk transfer factor for Cs	1	0.98
Milk transfer factor for Sr	50	0.05
Fish transfer factor for C	28	-0.10
Fish transfer factor for Co	70	0.03
Fish transfer factor for Ni	44	0.06
Fish transfer factor for Sr	36	-0.08
Fish transfer factor for Cs	13	0.13
Plant transfer factor for Ni	8	0.18
Depth of soil mixing layer	3	-0.84
Fruit, vegetable, and grain consumption	6	-0.18
Milk consumption	2	0.93
Thickness of evasion layer of C-14 in soil	72	-0.02
Milk transfer factor for Ni	14	0.12
R-SQUARE		0.97

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Soil Ingestion Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	47	-0.04
Kd of Ni-63 in Contaminated Zone	4	-0.15
Kd of Co-60 in Contaminated Zone	37	0.06
Kd of Sr-90 in Contaminated Zone	83	-0.01
Kd of Cs-137 in Contaminated Zone	40	0.05
Kd of Cs-134 in Contaminated Zone	70	0.02
Contaminated zone erosion rate	3	-0.16
Contaminated zone total porosity	9	-0.11
Contaminated zone hydraulic conductivity	18	-0.09
Contaminated zone b parameter	31	-0.06
Density of Unsaturated zone 1	6	0.13
Kd of C-14 in Unsaturated Zone 1	45	0.05
Kd of Ni-63 in Unsaturated Zone 1	80	-0.01
Kd of Co-60 in Unsaturated Zone 1	57	-0.04
Kd of Sr-90 in Unsaturated Zone 1	94	0.00
Kd of Cs-134 in Unsaturated Zone 1	90	-0.01
Kd of Cs-137 in Unsaturated Zone 1	63	-0.03
Total Porosity of Unsaturated zone 1	41	-0.05
Effective Porosity of Unsaturated zone 1	64	0.03
Field Capacity of Unsaturated zone 1	65	0.03
Hydraulic Conductivity of Unsaturated zone 1	58	0.03
b Parameter of Unsaturated zone 1	26	0.06
Density of Unsaturated zone 2	44	-0.05
Kd of C-14 in Unsaturated Zone 2	81	-0.01
Kd of Ni-63 in Unsaturated Zone 2	29	0.06
Kd of Co-60 in Unsaturated Zone 2	38	-0.06
Kd of Sr-90 in Unsaturated Zone 2	71	0.02
Kd of Cs-134 in Unsaturated Zone 2	89	0.01
Kd of Cs-137 in Unsaturated Zone 2	75	-0.01
Total Porosity of Unsaturated zone 2	56	0.04
Effective Porosity of Unsaturated zone 2	84	-0.01
Field Capacity of Unsaturated zone 2	73	-0.02
Hydraulic Conductivity of Unsaturated zone 2	77	-0.01
b Parameter of Unsaturated zone 2	87	-0.01
Density of Unsaturated zone 3	82	0.01
Kd of C-14 in Unsaturated Zone 3	54	0.04
Kd of Ni-63 in Unsaturated Zone 3	86	0.01
Kd of Co-60 in Unsaturated Zone 3	5	0.13
Kd of Sr-90 in Unsaturated Zone 3	52	-0.04
Kd of Cs-134 in Unsaturated Zone 3	78	0.01
Kd of Cs-137 in Unsaturated Zone 3	34	-0.06
Hydraulic Conductivity of Unsaturated zone 3	49	0.04
b Parameter of Unsaturated zone 3	60	0.03
Density of Unsaturated zone 4	59	-0.03
Kd of C-14 in Unsaturated Zone 4	91	0.01

Kd of Ni-63 in Unsaturated Zone 4	92	0.00
Kd of Co-60 in Unsaturated Zone 4	36	-0.06
Kd of Sr-90 in Unsaturated Zone 4	28	0.06
Kd of Cs-134 in Unsaturated Zone 4	14	-0.09
Kd of Cs-137 in Unsaturated Zone 4	67	-0.03
Hydraulic Conductivity of Unsaturated zone 4	53	0.04
b Parameter of Unsaturated zone 4	55	-0.04
Density of saturated zone	39	-0.05
Kd of C-14 in Saturated Zone	22	-0.07
Kd of Ni-63 in Saturated Zone	88	-0.01
Kd of Co-60 in Saturated Zone	24	-0.07
Kd of Sr-90 in Saturated Zone	72	0.02
Kd of Cs-134 in Saturated Zone	51	-0.04
Kd of Cs-137 in Saturated Zone	66	-0.03
Saturated zone hydraulic gradient	13	-0.10
Saturated zone b parameter	16	0.09
Evapotranspiration coefficient	74	0.02
Runoff coefficient	79	-0.01
Soil ingestion	1	0.95
Drinking water intake	93	0.00
Inhalation rate	23	0.07
Mass loading for inhalation	8	-0.12
Indoor dust filtration factor	33	0.06
Aquatic food	85	0.01
Wet weight crop yield of fruit, grain and non-leafy vegetables	30	-0.06
Weathering removal constant of all vegetation	19	-0.08
Wet foliar interception fraction of leafy vegetables	62	-0.03
Plant transfer factor for C	48	0.04
Plant transfer factor for Co	46	0.04
Plant transfer factor for Sr	42	-0.05
Meat transfer factor for C	27	-0.06
Meat transfer factor for Co	68	-0.03
Meat transfer factor for Ni	35	-0.06
Meat transfer factor for Sr	43	0.05
Milk transfer factor for C	20	-0.08
Milk transfer factor for Co	25	-0.07
Milk transfer factor for Cs	10	0.11
Milk transfer factor for Sr	17	-0.09
Fish transfer factor for C	61	0.03
Fish transfer factor for Co	11	0.11
Fish transfer factor for Ni	32	-0.06
Fish transfer factor for Sr	50	0.04
Fish transfer factor for Cs	76	-0.01
Plant transfer factor for Ni	69	-0.02
Depth of soil mixing layer	2	-0.94
Fruit, vegetable, and grain consumption	7	-0.13
Milk consumption	12	-0.10
Thickness of evasion layer of C-14 in soil	15	0.09
Milk transfer factor for Ni	21	-0.07
R-SQUARE		0.94

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 10
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak Water Ingestion Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable

Sig Coeff

Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 11
 Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
 Input File : RF DCGL Dose.RAD

Coefficients for peak Fish Ingestion Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable

Sig Coeff

Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 12
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak Radon (WaterDep.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 13
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak Plant (WaterDep.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 14
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak Meat (WaterDep.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Milk (WaterDep.) Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 16
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak C-14 Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable

Sig Coeff

Kd of C-14 in Contaminated Zone	3	0.57
Kd of Ni-63 in Contaminated Zone	52	-0.05
Kd of Co-60 in Contaminated Zone	7	-0.16
Kd of Sr-90 in Contaminated Zone	94	0.00
Kd of Cs-137 in Contaminated Zone	58	0.05
Kd of Cs-134 in Contaminated Zone	51	-0.05
Contaminated zone erosion rate	35	-0.07
Contaminated zone total porosity	13	-0.13
Contaminated zone hydraulic conductivity	18	-0.10
Contaminated zone b parameter	15	-0.12
Density of Unsaturated zone 1	6	-0.17
Kd of C-14 in Unsaturated Zone 1	22	-0.08
Kd of Ni-63 in Unsaturated Zone 1	39	-0.06
Kd of Co-60 in Unsaturated Zone 1	93	0.00
Kd of Sr-90 in Unsaturated Zone 1	28	0.08
Kd of Cs-134 in Unsaturated Zone 1	59	0.04
Kd of Cs-137 in Unsaturated Zone 1	38	-0.06
Total Porosity of Unsaturated zone 1	90	0.00
Effective Porosity of Unsaturated zone 1	78	0.02
Field Capacity of Unsaturated zone 1	27	0.08
Hydraulic Conductivity of Unsaturated zone 1	40	-0.06
b Parameter of Unsaturated zone 1	85	-0.01
Density of Unsaturated zone 2	26	-0.08
Kd of C-14 in Unsaturated Zone 2	37	-0.07
Kd of Ni-63 in Unsaturated Zone 2	53	0.05
Kd of Co-60 in Unsaturated Zone 2	21	-0.08
Kd of Sr-90 in Unsaturated Zone 2	76	0.03
Kd of Cs-134 in Unsaturated Zone 2	70	-0.03
Kd of Cs-137 in Unsaturated Zone 2	11	0.14
Total Porosity of Unsaturated zone 2	74	0.03
Effective Porosity of Unsaturated zone 2	64	0.04
Field Capacity of Unsaturated zone 2	61	-0.04
Hydraulic Conductivity of Unsaturated zone 2	68	-0.03
b Parameter of Unsaturated zone 2	33	0.07
Density of Unsaturated zone 3	9	0.14
Kd of C-14 in Unsaturated Zone 3	20	0.09
Kd of Ni-63 in Unsaturated Zone 3	30	-0.08
Kd of Co-60 in Unsaturated Zone 3	82	-0.02
Kd of Sr-90 in Unsaturated Zone 3	46	-0.06
Kd of Cs-134 in Unsaturated Zone 3	92	0.00
Kd of Cs-137 in Unsaturated Zone 3	86	0.01
Hydraulic Conductivity of Unsaturated zone 3	55	0.05
b Parameter of Unsaturated zone 3	50	0.05
Density of Unsaturated zone 4	80	0.02
Kd of C-14 in Unsaturated Zone 4	29	-0.08

Kd of Ni-63 in Unsaturated Zone 4	57	0.05
Kd of Co-60 in Unsaturated Zone 4	31	-0.07
Kd of Sr-90 in Unsaturated Zone 4	79	-0.02
Kd of Cs-134 in Unsaturated Zone 4	12	-0.13
Kd of Cs-137 in Unsaturated Zone 4	16	0.11
Hydraulic Conductivity of Unsaturated zone 4	84	0.01
b Parameter of Unsaturated zone 4	87	0.01
Density of saturated zone	43	-0.06
Kd of C-14 in Saturated Zone	49	0.05
Kd of Ni-63 in Saturated Zone	23	-0.08
Kd of Co-60 in Saturated Zone	89	0.01
Kd of Sr-90 in Saturated Zone	24	0.08
Kd of Cs-134 in Saturated Zone	14	-0.12
Kd of Cs-137 in Saturated Zone	75	-0.03
Saturated zone hydraulic gradient	41	0.06
Saturated zone b parameter	25	0.08
Evapotranspiration coefficient	10	0.14
Runoff coefficient	60	-0.04
Soil ingestion	56	0.05
Drinking water intake	72	0.03
Inhalation rate	81	0.02
Mass loading for inhalation	88	0.01
Indoor dust filtration factor	17	0.10
Aquatic food	73	-0.03
Wet weight crop yield of fruit, grain and non-leafy vegetables	32	-0.07
Weathering removal constant of all vegetation	19	-0.10
Wet foliar interception fraction of leafy vegetables	77	-0.02
Plant transfer factor for C	65	-0.04
Plant transfer factor for Co	67	0.04
Plant transfer factor for Sr	62	-0.04
Meat transfer factor for C	91	0.00
Meat transfer factor for Co	8	-0.15
Meat transfer factor for Ni	71	-0.03
Meat transfer factor for Sr	69	-0.03
Milk transfer factor for C	54	0.05
Milk transfer factor for Co	34	0.07
Milk transfer factor for Cs	5	-0.20
Milk transfer factor for Sr	47	0.06
Fish transfer factor for C	83	0.01
Fish transfer factor for Co	36	0.07
Fish transfer factor for Ni	44	0.06
Fish transfer factor for Sr	48	0.06
Fish transfer factor for Cs	45	-0.06
Plant transfer factor for Ni	63	0.04
Depth of soil mixing layer	66	-0.04
Fruit, vegetable, and grain consumption	2	0.96
Milk consumption	4	0.56
Thickness of evasion layer of C-14 in soil	1	0.97
Milk transfer factor for Ni	42	0.06
R-SQUARE		0.97

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 17
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak Co-60 Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	1	1.00
Kd of Ni-63 in Contaminated Zone	72	0.03
Kd of Co-60 in Contaminated Zone	69	-0.03
Kd of Sr-90 in Contaminated Zone	77	-0.02
Kd of Cs-137 in Contaminated Zone	56	0.04
Kd of Cs-134 in Contaminated Zone	12	-0.12
Contaminated zone erosion rate	21	-0.09
Contaminated zone total porosity	4	0.18
Contaminated zone hydraulic conductivity	5	-0.17
Contaminated zone b parameter	16	0.11
Density of Unsaturated zone 1	48	-0.05
Kd of C-14 in Unsaturated Zone 1	37	0.06
Kd of Ni-63 in Unsaturated Zone 1	31	0.07
Kd of Co-60 in Unsaturated Zone 1	19	-0.10
Kd of Sr-90 in Unsaturated Zone 1	53	-0.05
Kd of Cs-134 in Unsaturated Zone 1	26	-0.07
Kd of Cs-137 in Unsaturated Zone 1	22	0.08
Total Porosity of Unsaturated zone 1	15	-0.11
Effective Porosity of Unsaturated zone 1	92	0.00
Field Capacity of Unsaturated zone 1	52	-0.05
Hydraulic Conductivity of Unsaturated zone 1	43	0.06
b Parameter of Unsaturated zone 1	9	-0.14
Density of Unsaturated zone 2	8	-0.14
Kd of C-14 in Unsaturated Zone 2	18	-0.11
Kd of Ni-63 in Unsaturated Zone 2	93	0.00
Kd of Co-60 in Unsaturated Zone 2	49	-0.05
Kd of Sr-90 in Unsaturated Zone 2	61	0.04
Kd of Cs-134 in Unsaturated Zone 2	51	-0.05
Kd of Cs-137 in Unsaturated Zone 2	29	0.07
Total Porosity of Unsaturated zone 2	36	0.06
Effective Porosity of Unsaturated zone 2	68	-0.03
Field Capacity of Unsaturated zone 2	57	-0.04
Hydraulic Conductivity of Unsaturated zone 2	46	0.06
b Parameter of Unsaturated zone 2	45	0.06
Density of Unsaturated zone 3	7	0.16
Kd of C-14 in Unsaturated Zone 3	76	0.02
Kd of Ni-63 in Unsaturated Zone 3	35	-0.07
Kd of Co-60 in Unsaturated Zone 3	17	0.11
Kd of Sr-90 in Unsaturated Zone 3	80	0.02
Kd of Cs-134 in Unsaturated Zone 3	30	-0.07
Kd of Cs-137 in Unsaturated Zone 3	13	0.12
Hydraulic Conductivity of Unsaturated zone 3	71	-0.03
b Parameter of Unsaturated zone 3	39	-0.06
Density of Unsaturated zone 4	38	-0.06
Kd of C-14 in Unsaturated Zone 4	65	-0.03

Kd of Ni-63 in Unsaturated Zone 4	59 -0.04
Kd of Co-60 in Unsaturated Zone 4	34 -0.07
Kd of Sr-90 in Unsaturated Zone 4	10 -0.14
Kd of Cs-134 in Unsaturated Zone 4	67 -0.03
Kd of Cs-137 in Unsaturated Zone 4	82 0.02
Hydraulic Conductivity of Unsaturated zone 4	6 0.16
b Parameter of Unsaturated zone 4	27 -0.07
Density of saturated zone	14 -0.12
Kd of C-14 in Saturated Zone	90 0.00
Kd of Ni-63 in Saturated Zone	24 0.08
Kd of Co-60 in Saturated Zone	84 0.01
Kd of Sr-90 in Saturated Zone	23 -0.08
Kd of Cs-134 in Saturated Zone	87 0.01
Kd of Cs-137 in Saturated Zone	20 0.09
Saturated zone hydraulic gradient	78 0.02
Saturated zone b parameter	28 -0.07
Evapotranspiration coefficient	2 0.64
Runoff coefficient	3 0.64
Soil ingestion	47 0.06
Drinking water intake	79 -0.02
Inhalation rate	94 0.00
Mass loading for inhalation	44 0.06
Indoor dust filtration factor	89 0.00
Aquatic food	58 -0.04
Wet weight crop yield of fruit, grain and non-leafy vegetables	33 -0.07
Weathering removal constant of all vegetation	50 0.05
Wet foliar interception fraction of leafy vegetables	42 -0.06
Plant transfer factor for C	63 0.04
Plant transfer factor for Co	64 -0.04
Plant transfer factor for Sr	73 -0.03
Meat transfer factor for C	55 0.05
Meat transfer factor for Co	54 -0.05
Meat transfer factor for Ni	75 -0.02
Meat transfer factor for Sr	85 0.01
Milk transfer factor for C	74 -0.03
Milk transfer factor for Co	66 0.03
Milk transfer factor for Cs	83 0.02
Milk transfer factor for Sr	81 -0.02
Fish transfer factor for C	86 0.01
Fish transfer factor for Co	62 0.04
Fish transfer factor for Ni	41 0.06
Fish transfer factor for Sr	60 -0.04
Fish transfer factor for Cs	88 0.01
Plant transfer factor for Ni	25 0.08
Depth of soil mixing layer	91 0.00
Fruit, vegetable, and grain consumption	40 0.06
Milk consumption	70 -0.03
Thickness of evasion layer of C-14 in soil	32 0.07
Milk transfer factor for Ni	11 -0.13
R-SQUARE	0.99

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 18
 Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
 Input File : RF DCGL Dose.RAD

Coefficients for peak Cs-134 Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	2	0.72
Kd of Ni-63 in Contaminated Zone	3	-0.20
Kd of Co-60 in Contaminated Zone	88	-0.01
Kd of Sr-90 in Contaminated Zone	26	-0.08
Kd of Cs-137 in Contaminated Zone	33	0.07
Kd of Cs-134 in Contaminated Zone	53	-0.04
Contaminated zone erosion rate	31	-0.08
Contaminated zone total porosity	38	-0.07
Contaminated zone hydraulic conductivity	6	-0.14
Contaminated zone b parameter	17	-0.11
Density of Unsaturated zone 1	11	-0.12
Kd of C-14 in Unsaturated Zone 1	86	-0.01
Kd of Ni-63 in Unsaturated Zone 1	83	-0.01
Kd of Co-60 in Unsaturated Zone 1	59	-0.04
Kd of Sr-90 in Unsaturated Zone 1	19	0.10
Kd of Cs-134 in Unsaturated Zone 1	32	-0.08
Kd of Cs-137 in Unsaturated Zone 1	68	-0.03
Total Porosity of Unsaturated zone 1	48	-0.05
Effective Porosity of Unsaturated zone 1	76	0.02
Field Capacity of Unsaturated zone 1	73	0.02
Hydraulic Conductivity of Unsaturated zone 1	79	0.01
b Parameter of Unsaturated zone 1	62	0.04
Density of Unsaturated zone 2	14	-0.11
Kd of C-14 in Unsaturated Zone 2	52	-0.04
Kd of Ni-63 in Unsaturated Zone 2	80	0.01
Kd of Co-60 in Unsaturated Zone 2	64	-0.03
Kd of Sr-90 in Unsaturated Zone 2	66	-0.03
Kd of Cs-134 in Unsaturated Zone 2	18	-0.10
Kd of Cs-137 in Unsaturated Zone 2	90	0.00
Total Porosity of Unsaturated zone 2	41	-0.06
Effective Porosity of Unsaturated zone 2	9	0.12
Field Capacity of Unsaturated zone 2	37	-0.07
Hydraulic Conductivity of Unsaturated zone 2	87	0.01
b Parameter of Unsaturated zone 2	75	-0.02
Density of Unsaturated zone 3	4	0.19
Kd of C-14 in Unsaturated Zone 3	27	0.08
Kd of Ni-63 in Unsaturated Zone 3	70	-0.03
Kd of Co-60 in Unsaturated Zone 3	54	0.04
Kd of Sr-90 in Unsaturated Zone 3	91	0.00
Kd of Cs-134 in Unsaturated Zone 3	22	-0.10
Kd of Cs-137 in Unsaturated Zone 3	92	0.00
Hydraulic Conductivity of Unsaturated zone 3	20	0.10
b Parameter of Unsaturated zone 3	35	0.07
Density of Unsaturated zone 4	7	-0.13
Kd of C-14 in Unsaturated Zone 4	43	0.06

Kd of Ni-63 in Unsaturated Zone 4	94	0.00
Kd of Co-60 in Unsaturated Zone 4	29	-0.08
Kd of Sr-90 in Unsaturated Zone 4	46	-0.05
Kd of Cs-134 in Unsaturated Zone 4	10	-0.12
Kd of Cs-137 in Unsaturated Zone 4	51	0.04
Hydraulic Conductivity of Unsaturated zone 4	89	0.00
b Parameter of Unsaturated zone 4	44	0.05
Density of saturated zone	78	0.01
Kd of C-14 in Saturated Zone	69	-0.03
Kd of Ni-63 in Saturated Zone	25	-0.08
Kd of Co-60 in Saturated Zone	23	0.09
Kd of Sr-90 in Saturated Zone	42	0.06
Kd of Cs-134 in Saturated Zone	5	-0.15
Kd of Cs-137 in Saturated Zone	49	0.05
Saturated zone hydraulic gradient	81	-0.01
Saturated zone b parameter	85	-0.01
Evapotranspiration coefficient	13	0.12
Runoff coefficient	50	0.04
Soil ingestion	55	0.04
Drinking water intake	56	0.04
Inhalation rate	1	1.00
Mass loading for inhalation	63	0.03
Indoor dust filtration factor	72	0.02
Aquatic food	57	-0.04
Wet weight crop yield of fruit, grain and non-leafy vegetables	93	0.00
Weathering removal constant of all vegetation	16	-0.11
Wet foliar interception fraction of leafy vegetables	39	-0.07
Plant transfer factor for C	84	-0.01
Plant transfer factor for Co	67	0.03
Plant transfer factor for Sr	34	0.07
Meat transfer factor for C	40	0.06
Meat transfer factor for Co	12	-0.12
Meat transfer factor for Ni	61	-0.04
Meat transfer factor for Sr	71	0.02
Milk transfer factor for C	74	-0.02
Milk transfer factor for Co	65	0.03
Milk transfer factor for Cs	24	-0.09
Milk transfer factor for Sr	47	-0.05
Fish transfer factor for C	82	0.01
Fish transfer factor for Co	21	0.10
Fish transfer factor for Ni	58	0.04
Fish transfer factor for Sr	60	-0.04
Fish transfer factor for Cs	77	0.01
Plant transfer factor for Ni	8	0.13
Depth of soil mixing layer	45	-0.05
Fruit, vegetable, and grain consumption	36	0.07
Milk consumption	15	-0.11
Thickness of evasion layer of C-14 in soil	30	-0.08
Milk transfer factor for Ni	28	0.08
R-SQUARE		0.99

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 19
 Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
 Input File : RF DCGL Dose.RAD

Coefficients for peak Cs-137 Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00

Kd of Ni-63 in Unsaturated Zone 4	0	0.00
Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Soil ingestion	0	0.00
Drinking water intake	0	0.00
Inhalation rate	0	0.00
Mass loading for inhalation	0	0.00
Indoor dust filtration factor	0	0.00
Aquatic food	0	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	0	0.00
Weathering removal constant of all vegetation	0	0.00
Wet foliar interception fraction of leafy vegetables	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Milk transfer factor for C	0	0.00
Milk transfer factor for Co	0	0.00
Milk transfer factor for Cs	0	0.00
Milk transfer factor for Sr	0	0.00
Fish transfer factor for C	0	0.00
Fish transfer factor for Co	0	0.00
Fish transfer factor for Ni	0	0.00
Fish transfer factor for Sr	0	0.00
Fish transfer factor for Cs	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Fruit, vegetable, and grain consumption	0	0.00
Milk consumption	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
Milk transfer factor for Ni	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 20
Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
Input File : RF DCGL Dose.RAD

Coefficients for peak Ni-63 Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	3	0.55
Kd of Ni-63 in Contaminated Zone	54	-0.05
Kd of Co-60 in Contaminated Zone	5	-0.16
Kd of Sr-90 in Contaminated Zone	49	0.05
Kd of Cs-137 in Contaminated Zone	60	0.04
Kd of Cs-134 in Contaminated Zone	58	-0.04
Contaminated zone erosion rate	61	-0.03
Contaminated zone total porosity	9	-0.14
Contaminated zone hydraulic conductivity	16	-0.12
Contaminated zone b parameter	13	-0.13
Density of Unsaturated zone 1	6	-0.16
Kd of C-14 in Unsaturated Zone 1	34	-0.08
Kd of Ni-63 in Unsaturated Zone 1	74	-0.03
Kd of Co-60 in Unsaturated Zone 1	48	-0.06
Kd of Sr-90 in Unsaturated Zone 1	39	0.07
Kd of Cs-134 in Unsaturated Zone 1	77	0.02
Kd of Cs-137 in Unsaturated Zone 1	26	-0.09
Total Porosity of Unsaturated zone 1	31	0.08
Effective Porosity of Unsaturated zone 1	70	0.03
Field Capacity of Unsaturated zone 1	42	0.07
Hydraulic Conductivity of Unsaturated zone 1	75	-0.02
b Parameter of Unsaturated zone 1	92	0.00
Density of Unsaturated zone 2	22	-0.10
Kd of C-14 in Unsaturated Zone 2	45	-0.06
Kd of Ni-63 in Unsaturated Zone 2	59	0.04
Kd of Co-60 in Unsaturated Zone 2	15	-0.13
Kd of Sr-90 in Unsaturated Zone 2	65	-0.03
Kd of Cs-134 in Unsaturated Zone 2	69	-0.03
Kd of Cs-137 in Unsaturated Zone 2	25	0.09
Total Porosity of Unsaturated zone 2	93	0.00
Effective Porosity of Unsaturated zone 2	79	-0.02
Field Capacity of Unsaturated zone 2	37	-0.07
Hydraulic Conductivity of Unsaturated zone 2	82	-0.01
b Parameter of Unsaturated zone 2	18	0.12
Density of Unsaturated zone 3	11	0.14
Kd of C-14 in Unsaturated Zone 3	14	0.13
Kd of Ni-63 in Unsaturated Zone 3	23	-0.10
Kd of Co-60 in Unsaturated Zone 3	51	-0.05
Kd of Sr-90 in Unsaturated Zone 3	67	-0.03
Kd of Cs-134 in Unsaturated Zone 3	94	0.00
Kd of Cs-137 in Unsaturated Zone 3	66	0.03
Hydraulic Conductivity of Unsaturated zone 3	53	0.05
b Parameter of Unsaturated zone 3	33	0.08
Density of Unsaturated zone 4	80	0.02
Kd of C-14 in Unsaturated Zone 4	56	-0.05

Kd of Ni-63 in Unsaturated Zone 4	76	0.02
Kd of Co-60 in Unsaturated Zone 4	21	-0.10
Kd of Sr-90 in Unsaturated Zone 4	86	-0.01
Kd of Cs-134 in Unsaturated Zone 4	17	-0.12
Kd of Cs-137 in Unsaturated Zone 4	12	0.13
Hydraulic Conductivity of Unsaturated zone 4	78	0.02
b Parameter of Unsaturated zone 4	84	-0.01
Density of saturated zone	55	-0.05
Kd of C-14 in Saturated Zone	41	0.07
Kd of Ni-63 in Saturated Zone	29	-0.08
Kd of Co-60 in Saturated Zone	47	0.06
Kd of Sr-90 in Saturated Zone	27	0.09
Kd of Cs-134 in Saturated Zone	19	-0.11
Kd of Cs-137 in Saturated Zone	90	0.00
Saturated zone hydraulic gradient	83	0.01
Saturated zone b parameter	30	0.08
Evapotranspiration coefficient	8	0.14
Runoff coefficient	57	-0.04
Soil ingestion	43	0.06
Drinking water intake	50	0.05
Inhalation rate	85	0.01
Mass loading for inhalation	87	0.01
Indoor dust filtration factor	20	0.11
Aquatic food	72	-0.03
Wet weight crop yield of fruit, grain and non-leafy vegetables	28	-0.08
Weathering removal constant of all vegetation	10	-0.14
Wet foliar interception fraction of leafy vegetables	89	0.00
Plant transfer factor for C	64	-0.03
Plant transfer factor for Co	68	0.03
Plant transfer factor for Sr	38	-0.07
Meat transfer factor for C	88	0.01
Meat transfer factor for Co	7	-0.15
Meat transfer factor for Ni	71	-0.03
Meat transfer factor for Sr	52	-0.05
Milk transfer factor for C	35	0.07
Milk transfer factor for Co	46	0.06
Milk transfer factor for Cs	4	-0.17
Milk transfer factor for Sr	63	0.03
Fish transfer factor for C	91	0.00
Fish transfer factor for Co	24	0.10
Fish transfer factor for Ni	73	0.03
Fish transfer factor for Sr	62	0.03
Fish transfer factor for Cs	40	-0.07
Plant transfer factor for Ni	44	0.06
Depth of soil mixing layer	81	-0.02
Fruit, vegetable, and grain consumption	1	0.98
Milk consumption	32	0.08
Thickness of evasion layer of C-14 in soil	2	0.96
Milk transfer factor for Ni	36	0.07
R-SQUARE		0.98

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

RESRAD Regression and Correlation output 06/13/05 15:11 Page: Coef 21
 Title : Dose for Detected Radionuclide DCGL Concentrations Using a RF Scenario
 Input File : RF DCGL Dose.RAD

Coefficients for peak Sr-90 Dose

Coefficient =

Repetition =

PRCC

1

Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	2	0.72
Kd of Ni-63 in Contaminated Zone	4	-0.17
Kd of Co-60 in Contaminated Zone	15	-0.11
Kd of Sr-90 in Contaminated Zone	76	-0.02
Kd of Cs-137 in Contaminated Zone	71	0.03
Kd of Cs-134 in Contaminated Zone	64	-0.04
Contaminated zone erosion rate	19	-0.11
Contaminated zone total porosity	35	-0.08
Contaminated zone hydraulic conductivity	6	-0.15
Contaminated zone b parameter	26	-0.09
Density of Unsaturated zone 1	42	-0.07
Kd of C-14 in Unsaturated Zone 1	85	-0.01
Kd of Ni-63 in Unsaturated Zone 1	49	-0.06
Kd of Co-60 in Unsaturated Zone 1	55	-0.05
Kd of Sr-90 in Unsaturated Zone 1	9	0.13
Kd of Cs-134 in Unsaturated Zone 1	37	-0.08
Kd of Cs-137 in Unsaturated Zone 1	17	-0.11
Total Porosity of Unsaturated zone 1	28	-0.09
Effective Porosity of Unsaturated zone 1	46	0.07
Field Capacity of Unsaturated zone 1	78	0.02
Hydraulic Conductivity of Unsaturated zone 1	77	-0.02
b Parameter of Unsaturated zone 1	30	0.09
Density of Unsaturated zone 2	20	-0.10
Kd of C-14 in Unsaturated Zone 2	73	-0.02
Kd of Ni-63 in Unsaturated Zone 2	67	0.03
Kd of Co-60 in Unsaturated Zone 2	11	-0.11
Kd of Sr-90 in Unsaturated Zone 2	79	0.02
Kd of Cs-134 in Unsaturated Zone 2	33	-0.08
Kd of Cs-137 in Unsaturated Zone 2	86	-0.01
Total Porosity of Unsaturated zone 2	41	-0.07
Effective Porosity of Unsaturated zone 2	18	0.11
Field Capacity of Unsaturated zone 2	60	-0.04
Hydraulic Conductivity of Unsaturated zone 2	50	-0.06
b Parameter of Unsaturated zone 2	31	-0.09
Density of Unsaturated zone 3	3	0.21
Kd of C-14 in Unsaturated Zone 3	25	0.10
Kd of Ni-63 in Unsaturated Zone 3	81	-0.01
Kd of Co-60 in Unsaturated Zone 3	43	0.07
Kd of Sr-90 in Unsaturated Zone 3	54	0.05
Kd of Cs-134 in Unsaturated Zone 3	44	-0.07
Kd of Cs-137 in Unsaturated Zone 3	53	-0.05
Hydraulic Conductivity of Unsaturated zone 3	32	0.09
b Parameter of Unsaturated zone 3	45	0.07
Density of Unsaturated zone 4	27	-0.09
Kd of C-14 in Unsaturated Zone 4	61	-0.04

Kd of Ni-63 in Unsaturated Zone 4	84	0.01
Kd of Co-60 in Unsaturated Zone 4	63	-0.04
Kd of Sr-90 in Unsaturated Zone 4	36	-0.08
Kd of Cs-134 in Unsaturated Zone 4	12	-0.11
Kd of Cs-137 in Unsaturated Zone 4	34	-0.08
Hydraulic Conductivity of Unsaturated zone 4	83	0.01
b Parameter of Unsaturated zone 4	94	0.00
Density of saturated zone	68	-0.03
Kd of C-14 in Saturated Zone	82	-0.01
Kd of Ni-63 in Saturated Zone	23	-0.10
Kd of Co-60 in Saturated Zone	38	0.08
Kd of Sr-90 in Saturated Zone	74	0.02
Kd of Cs-134 in Saturated Zone	7	-0.14
Kd of Cs-137 in Saturated Zone	51	-0.06
Saturated zone hydraulic gradient	29	0.09
Saturated zone b parameter	72	-0.02
Evapotranspiration coefficient	8	0.13
Runoff coefficient	40	0.07
Soil ingestion	80	0.02
Drinking water intake	70	-0.03
Inhalation rate	24	0.10
Mass loading for inhalation	62	0.04
Indoor dust filtration factor	90	0.00
Aquatic food	87	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	57	-0.05
Weathering removal constant of all vegetation	52	-0.06
Wet foliar interception fraction of leafy vegetables	56	-0.05
Plant transfer factor for C	88	0.00
Plant transfer factor for Co	69	0.03
Plant transfer factor for Sr	5	0.15
Meat transfer factor for C	91	0.00
Meat transfer factor for Co	13	-0.11
Meat transfer factor for Ni	21	-0.10
Meat transfer factor for Sr	93	0.00
Milk transfer factor for C	39	0.08
Milk transfer factor for Co	89	0.00
Milk transfer factor for Cs	47	-0.06
Milk transfer factor for Sr	65	-0.03
Fish transfer factor for C	14	-0.11
Fish transfer factor for Co	16	0.11
Fish transfer factor for Ni	92	0.00
Fish transfer factor for Sr	58	-0.04
Fish transfer factor for Cs	59	-0.04
Plant transfer factor for Ni	66	0.03
Depth of soil mixing layer	75	-0.02
Fruit, vegetable, and grain consumption	10	0.12
Milk consumption	22	-0.10
Thickness of evasion layer of C-14 in soil	1	1.00
Milk transfer factor for Ni	48	0.06
R-SQUARE		0.99

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Attachment 8.9

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Contamination					
Thickness of contaminated zone	P	2	m	0.15	Assigned value
Area of contaminated zone	P	2	m ²	10,000	Default RESRAD v6.22 Physical value acceptable for this preliminary evaluation
Shape of the contaminated zone	P	3	-	Circular	Default RESRAD v6.22 Physical value acceptable for this evaluation
Initial concentration of H-3 in soil	P	2	pCi/g	5.44	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Na-22 in soil	P	2	pCi/g	0.00946	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Fe-55 in soil	P	2	pCi/g	1.27	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Ni-59 in soil	P	2	pCi/g	3.58	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Nb-94 in soil	P	2	pCi/g	0.0395	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Tc-99 in soil	P	2	pCi/g	2.35	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Ag-108 in soil	P	2	pCi/g	0.0550	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Sb-125 in soil	P	2	pCi/g	0.125	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Pm-147 in soil	P	2	pCi/g	0.955	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Eu-152 in soil	P	2	pCi/g	0.176	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Eu-154 in soil	P	2	pCi/g	0.0626	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Eu-155 in soil	P	2	pCi/g	0.156	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Np-237 in soil	P	2	pCi/g	0.441	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Pu-238 in soil	P	2	pCi/g	0.824	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Pu-239 in soil	P	2	pCi/g	0.207	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value

Selected RESRAD v6.22 Parameters for RSN GS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Initial concentration of Pu-240 in soil	P	2	pCi/g	0.207	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Pu-241 in soil	P	2	pCi/g	48.7	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Am-241 in soil	P	2	pCi/g	0.757	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Pu-242 in soil	P	2	pCi/g	0.594	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of Cm-244 in soil	P	2	pCi/g	0.480	Table 6-4 discounted radionuclide decayed laboratory analysis MDA value
Initial concentration of radionuclides present in ground water	P	3	pCi/L	0	Not Used for this evaluation
Leach rate	P	3	1/yr	0	Default Physical value to invoke the calculation of this parameter via a first-order leaching model that uses the value of the soil/water distribution coefficient in the contaminated zone
Solubility limit	P	3	mol/L	0	Default Physical value – not used by RESRAD v6.22 with leach rate flag set to 0
Time since placement of material	P	3	yr	0	Default RESRAD v6.22 Physical value acceptable for this evaluation
Times for calculation	P	3	yr	1, 3, 25, 50, 75 100, 300, 500, and 1000	Specified calculations times for this evaluation
Contaminated zone density	P	1	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for silt
Contaminated zone distribution coefficient for H	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Na	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Fe	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Contaminated zone distribution coefficient for Nb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Tc	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Ag	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Sb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Sm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Eu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Gd	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Np	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for U	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Th	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Pu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNCS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 1 distribution coefficient for Pb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ra	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ac	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Pa	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Am	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Contaminated zone distribution coefficient for Cm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Use plant/soil ratio	NA	3	Check box	No	For purposes of this evaluation, the code should not be allowed to calculate the distribution coefficient from the plant root uptake factors
Contaminated zone field capacity	P	3	-	0.2	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Contaminated zone erosion rate	P,B	2	m/yr	Continuous logarithmic distribution	NUREG/CR-6697, Attachment C
Contaminated zone total porosity	P	2	-	Truncated normal distribution	NUREG/CR-6697, Attachment C
Contaminated zone hydraulic conductivity	P	2	m/yr	Lognormal	NUREG/CR-6697, Attachment C, Table 3.4-1 for silt
Contaminated zone b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Carbon-Model Parameters					
Thickness of evasion layer of C-14 in soil	P	2	m	Not Used	C-14 is not a discounted radionuclide

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
C-14 evasion flux rate from soil	P	3	1/s	Not Used	C-14 is not a discounted radionuclide
C-12 concentration in local water	P	3	g/cm ³	Not Used	C-14 is not a discounted radionuclide
C-12 concentration in contaminated soil	P	3	g/g	Not Used	C-14 is not a discounted radionuclide
Fraction of vegetation carbon absorbed from soil	P	3	-	Not Used	C-14 is not a discounted radionuclide
Fraction of vegetation carbon absorbed from air	P	3	-	Not Used	C-14 is not a discounted radionuclide
C-12 evasion flux rate from soil	P	3	1/s	Not Used	C-14 is not a discounted radionuclide
Grain fraction in beef cattle feed	B	3	-	Not Used	C-14 is not a discounted radionuclide
Grain fraction in milk cow feed	B	3	-	Not Used	C-14 is not a discounted radionuclide
DCF correction factor for gaseous forms of C-14	P	3	-	Not Used	C-14 is not a discounted radionuclide
Soil					
Cover depth	P	2	m	0	The contamination is assumed to be on surface soil
Density of cover material	P	1	g/cm ³	Not Used	A cover is not used in this evaluation
Cover total porosity	P	3	-	Not Used	Radon is not used in this evaluation
Cover volumetric water content	P	3	-	Not Used	Radon is not used in this evaluation
Cover radon diffusion coefficient	P	3	m ² /s	Not Used	Radon is not used in this evaluation
Cover erosion rate	P,B	2	m/yr	Not Used	A cover is not used in this evaluation
Number of unsaturated zones	P	3	-	4	Simplified hydrogeological model assumption
Unsaturated zone 1 thickness	P	1	m	0.305	Thickness of silt layer above the sand layer
Unsaturated zone 1 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for silt

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 1 distribution coefficient for H	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Na	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Fe	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Nb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Tc	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ag	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Sb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Sm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Eu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Gd	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 1 distribution coefficient for Np	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Th	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for U	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Pu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Pb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ra	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Ac	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Pa	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Am	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 distribution coefficient for Cm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 1 total porosity	P	2	-	Truncated normal distribution	NUREG/CR-6697, Attachment C, Table 3.2-1 distribution for silt
Unsaturated zone 1 effective porosity	P	2	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-7 distribution for silt

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 1 field capacity	P	3	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-7 distribution for silt
Unsaturated zone 1 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n	NUREG/CR-6697, Attachment C, Table 3.4-1 for silt
Unsaturated zone 1 soil-specific b parameter	P	2	-	Bounded lognormal-n	NUREG/CR-6697, Attachment C, Table 3.5-1 for silt
Unsaturated zone 2 thickness	P	1	m	3.05	Thickness of fine sand layer above the siltstone layer
Unsaturated zone 2 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for sand
Unsaturated zone 2 distribution coefficient for H	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Na	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Fe	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Nb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Tc	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Ag	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Sb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 2 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Sm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Eu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Gd	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Np	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Th	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for U	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Pu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Pb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Ra	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Ac	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 2 distribution coefficient for Pa	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Am	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 distribution coefficient for Cm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 2 total porosity	P	2	-	Truncated normal distribution	NUREG/CR-6697, Attachment C, Table 3.2-1 distribution for sand
Unsaturated zone 2 effective porosity	P	2	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-1 distribution for sand
Unsaturated zone 2 field capacity	P	3	-	Truncated normal distribution	NUREG/CR-6767, Attachment A, Table A-1 distribution for sand
Unsaturated zone 2 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.4-1 for sand
Unsaturated zone 2 soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.5-1 for sand
Unsaturated zone 3 thickness	P	1	m	25.60	Thickness of siltstone layer
Unsaturated zone 3 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for silt used as a placeholder until development of site-specific zone 3 density data
Unsaturated zone 3 distribution coefficient for H	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Na	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Fe	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 3 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Nb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Tc	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Ag	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Sb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Sm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Eu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Gd	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Np	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Th	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 3 distribution coefficient for U	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Pu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Pb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Ra	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Ac	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Pa	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Am	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 distribution coefficient for Cm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 3 total porosity	P	2	-	0.35	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for medium siltstone used as a placeholder until development of site-specific zone 3 total porosity data
Unsaturated zone 3 effective porosity	P	2	-	0.12	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for medium siltstone used as a placeholder until development of site-specific zone 3 effective porosity data
Unsaturated zone 3 field capacity	P	3	-	0.23	Total porosity minus effective porosity per RESRAD Data Collection Handbook, Section 4.1, used as a placeholder until development of site-specific zone 4 field capacity data
Unsaturated zone 3 hydraulic conductivity	P	2	m/yr	Bounded lognormal-n	NUREG/CR-6697, Attachment C, Table 3.4-1 for silt used as a placeholder until development of site-specific zone 3 hydraulic conductivity data

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 3 soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.5-1 for silt used as a placeholder until development of site-specific zone 3 soil-specific b parameter data
Unsaturated zone 4 thickness	P	1	m	10.82	Thickness of unsaturated sandstone layer
Unsaturated zone 4 density	P	2	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for sand used as a placeholder until development of site-specific zone 4 density data
Unsaturated zone 4 distribution coefficient for H	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Na	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Fe	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Nb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Tc	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Ag	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Sb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Sm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 4 distribution coefficient for Eu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Gd	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Np	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Th	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for U	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Pu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Pb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Ra	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Ac	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Pa	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 distribution coefficient for Am	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Unsaturated zone 4 distribution coefficient for Cm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Unsaturated zone 4 total porosity	P	2	-	0.35	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 total porosity data
Unsaturated zone 4 effective porosity	P	2	-	0.27	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 effective porosity data
Unsaturated zone 4 field capacity	P	3	-	0.07	Total porosity minus effective porosity per RESRAD Data Collection Handbook, Section 4.1, used as a placeholder until development of site-specific zone 4 field capacity data
Unsaturated zone 4 hydraulic conductivity	P	2	m/yr	10	Upper boundary value from RESRAD Data Collection Handbook, Table 5.1 for sandstone used as a placeholder until development of site-specific zone 4 hydraulic conductivity data
Unsaturated zone 4 soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 3.5-1 for sand used as a placeholder until development of site-specific zone 4 soil-specific b parameter data
Water					
Density of saturated zone	P	1	g/cm ³	Normal distribution	NUREG/CR-6767, Attachment C, Table C-1 distribution for sand used as a placeholder until development of site-specific zone 4 density data
Saturated zone distribution coefficient for H	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Na	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Fe	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Ni	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Nb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Saturated zone distribution coefficient for Tc	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Ag	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Sb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Sm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Eu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Gd	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Np	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Th	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Pm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for U	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Pu	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Saturated zone distribution coefficient for Pb	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Ra	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Ac	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Pa	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Am	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone distribution coefficient for Cm	P	1	cm ³ /g	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone total porosity	P	1	-	0.34	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 total porosity data
Saturated zone effective porosity	P	1	-	0.27	RESRAD Data Collection Handbook Table 3.2 arithmetic mean for sandstone used as a placeholder until development of site-specific zone 4 effective porosity data
Saturated zone field capacity	P	3	-	0.07	Total porosity minus effective porosity per RESRAD Data Collection Handbook, Section 4.1, used as a placeholder until development of site-specific zone 4 field capacity data
Saturated zone hydraulic conductivity	P	1	m/yr	10	Upper boundary value from RESRAD Data Collection Handbook, Table 5.1 for sandstone used as a placeholder until development of site-specific zone 4 hydraulic conductivity data
Saturated zone hydraulic gradient	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Saturated zone soil-specific b parameter	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSN GS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Length of contaminated zone parallel to the aquifer flow	P	2	m	113	Diameter of an 10,000 m ² contaminated zone
Water table drop rate	P	3	m/yr	0.783	Site specific value applicable to the RSN GS site as reported in the FSAR, Appendix 2C
Well-pump intake depth (below water table)	P	2	m	23	Site specific value applicable to the RSN GS site as reported in the FSAR, Appendix 2C
Well pumping rate	B, P	2	m ³ /yr	Not Used	Well pumping rate is not used with the Mass-Balance model for water transport selected – well pumping rate is used to calculate a dilution factor when the Nondisposal model is selected.
Model: non-dispersion or mass balance	NA	3	-	MB	The mass-balance model was chosen as the most conservative since it assumes that all of the radionuclides released from the contaminated zone are withdrawn through the well.
Evapotranspiration coefficient	P	2	-	Uniform distribution	NUREG/CR-6697, Attachment C
Humidity in air	P	3	g/m ³	Not Used	Not used when the Radon exposure pathway is suppressed
Average annual wind speed	P	2	m/s	3.13	7 mph average annual wind speed for the years of 1930 – 1996 reported by the National Climatic Data Center for Stockton, CA (http://www.ncdc.noaa.gov/oa/documentlibrary/wind/wind1996.pdf)
Precipitation rate	P	2	m/yr	0.38	Mean annual average rainfall measured at Sacramento and Stockton
Irrigation mode	B	3	-	Overhead	Behavioral value – ditch irrigation is not the principal method of irrigation in the local region
Irrigation rate	B	3	m/yr	0.732	Table 8, Estimated Quantity of Water Applied Using Only Sprinkler Systems to Distribute Water: 1998 and 1994, average value for California, 1997 USDA Census of Agriculture, (http://www.nass.usda.gov/census/census97/fris/tbl08.pdf)
Runoff coefficient	P	2	-	Uniform distribution	NUREG/CR-6697, Attachment C
Watershed area for nearby stream or pond	P	3	m ²	1.00E+07	The entire RSN GS site drains into Clay Creek
Accuracy for water soil computation	NA	3	-	0.001	Default RESRAD v6.22 value acceptable for this evaluation

Ingestion

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Fruit, vegetable, and grain consumption rate	M, B	2	kg/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Leafy vegetable consumption	M, B	3	kg/yr	14	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Milk consumption	M, B	2	L/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Meat and poultry consumption	M, B	3	kg/yr	63	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Fish consumption rate	M, B	3	kg/yr	5.4	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Other seafood consumption rate	M, B	3	kg/yr	0.9	Default RESRAD v6.22 Priority 3 Metabolic/ Behavioral value acceptable for this evaluation
Aquatic food contaminated fraction	B, P	2	-	Triangular distribution	NUREG/CR-6697, Attachment C
Soil ingestion rate	M, B	2	g/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Drinking water intake	M, B	2	L/yr	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Storage time for fruits, non-leafy vegetables, and grain	B	3	d	14	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for leafy vegetables	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for milk	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for meat	B	3	d	20	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for fish	B	3	d	7	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for crustacea and mollusks	B	3	d	7	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for well water	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Storage time for surface water	B	3	d	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Storage time for livestock fodder	B	3	d	45	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Drinking water contaminated fraction	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Household water contaminated fraction	B, P	3	-	Not Used	Not used when the radon exposure pathway is suppressed
Livestock water contaminated fraction	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Irrigation water contaminated fraction	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Plant food contaminated fraction	B, P	3	-	-1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Meat contaminated fraction	B, P	3	-	-1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Milk contaminated fraction	B, P	3	-	-1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Livestock fodder intake rate for meat	M	3	kg/d	68	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock fodder intake rate for milk	M	3	kg/d	55	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock water intake rate for meat	M	3	L/d	50	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock water intake rate for milk	M	3	L/d	160	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Livestock intake of soil	M	3	kg/d	0.5	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Mass loading for foliar deposition	P	3	g/m ³	0.0001	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Depth of soil mixing layer	P	2	m	Triangular distribution	NUREG/CR-6697, Attachment C
Depth of roots	P	1	m	Uniform distribution	NUREG/CR-6697, Attachment C
Groundwater fractional usage for drinking water	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Groundwater fractional usage for household water	B, P	3	-	Not Used	Not used when the radon exposure pathway is suppressed

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Groundwater fractional usage for livestock water	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Groundwater fractional usage for irrigation water	B, P	3	-	1	Default RESRAD v6.22 Priority 3 Behavioral/Physical value acceptable for this evaluation
Wet weight crop yield for non-leafy plants	P	2	kg/m ²	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Wet weight crop yield for leafy plants	P	3	kg/m ²	1.5	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Wet weight crop yield for fodder	P	3	kg/m ²	1.1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Length of growing season for non-leafy vegetables	P	3	yr	0.17	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Length of growing season for leafy vegetables	P	3	yr	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Length of growing season for fodder	P	3	yr	0.08	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Translocation factor for non-leafy vegetables	P	3	-	0.1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Translocation factor for leafy vegetables	P	3	-	1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Translocation factor for fodder	P	3	-	1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Weathering removal constant	P	2	1/yr	Triangular distribution	NUREG/CR-6697, Attachment C
Dry foliar interception fraction for non-leafy vegetables	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Dry foliar interception fraction for leafy vegetables	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Dry foliar interception fraction for fodder	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Wet foliar interception fraction for non-leafy vegetables	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Wet foliar interception fraction for leafy vegetables	P	2	-	Triangular distribution	NUREG/CR-6697, Attachment C
Wet foliar interception fraction for fodder	P	3	-	0.25	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Slope factor – external	M	3	(risk/yr)/ (pCi/g)	Nuclide specific	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Slope factor – inhalation	M	3	risk/pCi	Nuclide specific	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Slope factor – ingestion	M	3	risk/pCi	Nuclide specific	Default RESRAD v6.22 Priority 3 Metabolic value acceptable for this evaluation
Plant transfer factor for H	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Na	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Fe	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Ni	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Nb	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Tc	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1

Selected RESRAD v6.22 Parameters for RSN GS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Plant transfer factor for Ag	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Sb	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Pm	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Sm	P	1	- pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Eu	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Gd	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Np	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Th	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for U	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1

Selected RESRAD v6.22 Parameters for RSNCS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Plant transfer factor for Pu	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Pb	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Ra	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Ac	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Pa	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Am	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Plant transfer factor for Cm	P	1	pCi/g plant(wet) per pCi/g soil (dry)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.2-1
Meat transfer factor for H	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Na	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Fe	P	2	(pCi/kg)/(pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Meat transfer factor for Ni	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Nb	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Tc	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Ag	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Sb	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Pm	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Sm	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Eu	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Gd	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Np	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Th	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for U	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Meat transfer factor for Pu	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Pb	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Ra	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Ac	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Pa	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Am	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Meat transfer factor for Cm	P	2	(pCi/kg)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Milk transfer factor for H	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.3-1
Milk transfer factor for Na	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Fe	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Ni	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Nb	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Milk transfer factor for Tc	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Ag	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Sb	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Pm	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Sm	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Eu	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Gd	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Np	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Th	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Pu	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for H	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Pb	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Milk transfer factor for Ra	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Ac	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Pa	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Am	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
Milk transfer factor for Cm	P	2	(pCi/L)/ (pCi/d)	Truncated lognormal-n distribution	NUREG/CR-6697, Attachment C
H bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Na bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Fe bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Ni bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Nb bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Tc bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Ag bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Sb bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Pm bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Sm bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Eu bioaccumulation factor for fish	P	2	(pCi/kg)/ (pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Gd bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Np bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Th bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
U bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Pu bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Pb bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Ra bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Ac bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Pa bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Am bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
Cm bioaccumulation factor for fish	P	2	(pCi/kg)/(pCi/L)	Lognormal-n distribution	NUREG/CR-6697, Attachment C, Table 6.8-1
H bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Na bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	200	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Fe bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	3200	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Ni bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Nb bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Tc bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	5	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Ag bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	770	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Sb bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	10	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Pm bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Sm bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Eu bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Gd bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Np bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	400	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Th bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	500	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Pm bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
U bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	60	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Pu bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation

Selected RESRAD v6.22 Parameters for RSNBS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Pb bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	100	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Ra bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	250	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Ac bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Pa bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	110	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Am bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Cm bioaccumulation factor for crustacea and mollusks	P	3	(pCi/kg)/(pCi/L)	1000	Default RESRAD v6.22 Priority 3 Physical value acceptable for this evaluation
Occupancy (Inhalation & External Parameters)					
Inhalation rate	M, B	3	m ³ /yr	Triangular distribution	NUREG/CR-6697, Attachment C
Inhalation dose conversion factors	M	3	mrem/pCi	Nuclide Specific	Metabolic RESRAD v6.22 default value
Ingestion dose conversion factors	M	3	mrem/pCi	Nuclide Specific	Metabolic RESRAD v6.22 default value
Mass loading for inhalation	P, B	2	g/m ³	Continuous linear distribution	NUREG/CR-6697, Attachment C
Indoor dust filtration factor	P, B	2	-	Uniform distribution	NUREG/CR-6697, Attachment C
External gamma shielding factor	P	2	-	Bounded lognormal-n distribution	NUREG/CR-6697, Attachment C
Building foundation thickness	P	3	m	Not Used	The Radon Exposure Pathway is not used
Building foundation bulk density	P	3	g/m ³	Not Used	The Radon Exposure Pathway is not used

Selected RESRAD v6.22 Parameters for RSNGS Dose Modeling Probabilistic Sensitivity Analysis of Discounted Radionuclides – Resident Farmer Scenario

Parameter	Class ¹	Priority ²	Units	Parameter Value	Basis for Parameter Selection
Building foundation total porosity	P	3	-	Not Used	The Radon Exposure Pathway is not used
Building foundation volumetric water content	P	3	-	Not Used	The Radon Exposure Pathway is not used
Building foundation radon diffusion coefficient	P	3	m ² /s	Not Used	The Radon Exposure Pathway is not used
Contaminated soil zone radon diffusion coefficient	P	3	m ² /s	Not Used	The Radon Exposure Pathway is not used
Radon vertical dimension of mixing	P	3	m	Not Used	The Radon Exposure Pathway is not used
Building air exchange rate	P, B	3	1/hr	Not Used	The Radon Exposure Pathway is not used
Building (room) height	P	3	m	Not Used	The Radon Exposure Pathway is not used
Building indoor area factor	P	3	-	Not Used	The Radon Exposure Pathway is not used
Foundation depth below ground surface	P	3	m	Not Used	The Radon Exposure Pathway is not used
Radon-222 emanation coefficient	P	3	-	Not Used	The Radon Exposure Pathway is not used
Radon-220 emanation coefficient	P	3	-	Not Used	The Radon Exposure Pathway is not used
Indoor time fraction	B	3	-	0.50	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Outdoor time fraction	B	3	-	0.25	Default RESRAD v6.22 Priority 3 Behavioral value acceptable for this evaluation
Exposure duration	B	3	yr	30	Behavioral RESRAD v6.22 default value

Attachment 8.10

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Discounted Radionuclides - Resident Farmer Scenario

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Density of contaminated zone	1	Normal	1.330	0.202	-	-	0.58	75%	1.46
Density of saturated zone	1	Normal	1.578	0.158	-	-	0.10	No	Distribution
Contaminated zone distribution coefficient for H-3	1	Truncated lognormal-n	-2.81	0.5	0.001	0.999	-0.08	No	Distribution
Contaminated zone distribution coefficient for Na-22	1	Truncated lognormal-n	5.04	3.22	0.001	0.999	0.04	No	Distribution
Contaminated zone distribution coefficient for Fe-55	1	Truncated lognormal-n	5.34	2.67	0.001	0.999	-0.11	No	Distribution
Contaminated zone distribution coefficient for Ni-59	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.06	No	Distribution
Contaminated zone distribution coefficient for Nb-94	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.09	No	Distribution
Contaminated zone distribution coefficient for Tc-99	1	Truncated lognormal-n	-0.67	3.16	0.001	0.999	0.69	75%	4.21
Contaminated zone distribution coefficient for Ag-108m	1	Truncated lognormal-n	5.38	2.10	0.001	0.999	-0.02	No	Distribution
Contaminated zone distribution coefficient for Sb-125	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.17	No	Distribution
Contaminated zone distribution coefficient for Pm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.09	No	Distribution
Contaminated zone distribution coefficient for Sm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.17	No	Distribution
Contaminated zone distribution coefficient for Eu-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.17	No	Distribution
Contaminated zone distribution coefficient for Eu-154	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.13	No	Distribution
Contaminated zone distribution coefficient for Eu-155	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.10	No	Distribution
Contaminated zone distribution coefficient for Gd-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.06	No	Distribution
Contaminated zone distribution coefficient for Np-237	1	Truncated lognormal-n	2.84	2.25	0.001	0.999	0.47	75%	77.8
Contaminated zone distribution coefficient for Th-228	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.27	25%	507
Contaminated zone distribution coefficient for Th-229	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.09	No	Distribution
Contaminated zone distribution coefficient for Th-230	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.06	No	Distribution
Contaminated zone distribution coefficient for Th-232	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.12	No	Distribution
Contaminated zone distribution coefficient for U-233	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.21	No	Distribution
Contaminated zone distribution coefficient for U-234	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.14	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Contaminated zone distribution coefficient for U-235	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.14	No	Distribution
Contaminated zone distribution coefficient for U-236	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.02	No	Distribution
Contaminated zone distribution coefficient for U-238	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.06	No	Distribution
Contaminated zone distribution coefficient for Pu-238	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.21	No	Distribution
Contaminated zone distribution coefficient for Pu-239	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.00	No	Distribution
Contaminated zone distribution coefficient for Pu-240	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.13	No	Distribution
Contaminated zone distribution coefficient for Pu-241	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.04	No	Distribution
Contaminated zone distribution coefficient for Pu-242	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.03	No	Distribution
Contaminated zone distribution coefficient for Pb-210	1	Truncated lognormal-n	7.78	2.76	0.001	0.999	-0.01	No	Distribution
Contaminated zone distribution coefficient for Ra-226	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	0.07	No	Distribution
Contaminated zone distribution coefficient for Ra-228	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.02	No	Distribution
Contaminated zone distribution coefficient for Ac-227	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.02	No	Distribution
Contaminated zone distribution coefficient for Pa-231	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.15	No	Distribution
Contaminated zone distribution coefficient for Am-241	1	Truncated lognormal-n	7.28	3.15	0.001	0.999	-0.02	No	Distribution
Contaminated zone distribution coefficient for Cm-244	1	Truncated lognormal-n	8.82	1.82	0.001	0.999	0.08	No	Distribution
Unsaturated zone 1 distribution coefficient for H-3	1	Truncated lognormal-n	-2.81	0.5	0.001	0.999	0.26	75%	0.0840
Unsaturated zone 1 distribution coefficient for Na-22	1	Truncated lognormal-n	5.04	3.22	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 1 distribution coefficient for Fe-55	1	Truncated lognormal-n	5.34	2.67	0.001	0.999	0.07	No	Distribution
Unsaturated zone 1 distribution coefficient for Ni-59	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.23	No	Distribution
Unsaturated zone 1 distribution coefficient for Nb-94	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 1 distribution coefficient for Tc-99	1	Truncated lognormal-n	-0.67	3.16	0.001	0.999	0.08	No	Distribution
Unsaturated zone 1 distribution coefficient for Ag-108m	1	Truncated lognormal-n	5.38	2.10	0.001	0.999	-0.21	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 1 distribution coefficient for Sb-125	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 1 distribution coefficient for Pm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 1 distribution coefficient for Sm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.08	No	Distribution
Unsaturated zone 1 distribution coefficient for Eu-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.02	No	Distribution
Unsaturated zone 1 distribution coefficient for Eu-154	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.00	No	Distribution
Unsaturated zone 1 distribution coefficient for Eu-155	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.06	No	Distribution
Unsaturated zone 1 distribution coefficient for Gd-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.01	No	Distribution
Unsaturated zone 1 distribution coefficient for Np-237	1	Truncated lognormal-n	2.84	2.25	0.001	0.999	0.06	No	Distribution
Unsaturated zone 1 distribution coefficient for Th-228	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.03	No	Distribution
Unsaturated zone 1 distribution coefficient for Th-229	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.29	25%	504
Unsaturated zone 1 distribution coefficient for Th-230	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.18	No	Distribution
Unsaturated zone 1 distribution coefficient for Th-232	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 1 distribution coefficient for U-233	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.00	No	Distribution
Unsaturated zone 1 distribution coefficient for U-234	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.05	No	Distribution
Unsaturated zone 1 distribution coefficient for U-235	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.05	No	Distribution
Unsaturated zone 1 distribution coefficient for U-236	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.13	No	Distribution
Unsaturated zone 1 distribution coefficient for U-238	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.02	No	Distribution
Unsaturated zone 1 distribution coefficient for Pu-238	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.21	No	Distribution
Unsaturated zone 1 distribution coefficient for Pu-239	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.12	No	Distribution
Unsaturated zone 1 distribution coefficient for Pu-240	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.08	No	Distribution
Unsaturated zone 1 distribution coefficient for Pu-241	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.25	No	Distribution
Unsaturated zone 1 distribution coefficient for Pu-242	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.09	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 1 distribution coefficient for Pb-210	1	Truncated lognormal-n	7.78	2.76	0.001	0.999	-0.08	No	Distribution
Unsaturated zone 1 distribution coefficient for Ra-226	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.11	No	Distribution
Unsaturated zone 1 distribution coefficient for Ra-228	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.12	No	Distribution
Unsaturated zone 1 distribution coefficient for Ac-227	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.08	No	Distribution
Unsaturated zone 1 distribution coefficient for Pa-231	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.10	No	Distribution
Unsaturated zone 1 distribution coefficient for Am-241	1	Truncated lognormal-n	7.28	3.15	0.001	0.999	0.05	No	Distribution
Unsaturated zone 1 distribution coefficient for Cm-244	1	Truncated lognormal-n	8.82	1.82	0.001	0.999	0.10	No	Distribution
Unsaturated zone 2 distribution coefficient for H-3	1	Truncated lognormal-n	-2.81	0.5	0.001	0.999	0.07	No	Distribution
Unsaturated zone 2 distribution coefficient for Na-22	1	Truncated lognormal-n	5.04	3.22	0.001	0.999	0.00	No	Distribution
Unsaturated zone 2 distribution coefficient for Fe-55	1	Truncated lognormal-n	5.34	2.67	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 2 distribution coefficient for Ni-59	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	0.10	No	Distribution
Unsaturated zone 2 distribution coefficient for Nb-94	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 2 distribution coefficient for Tc-99	1	Truncated lognormal-n	-0.67	3.16	0.001	0.999	0.05	No	Distribution
Unsaturated zone 2 distribution coefficient for Ag-108m	1	Truncated lognormal-n	5.38	2.10	0.001	0.999	-0.09	No	Distribution
Unsaturated zone 2 distribution coefficient for Sb-125	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.05	No	Distribution
Unsaturated zone 2 distribution coefficient for Pm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.07	No	Distribution
Unsaturated zone 2 distribution coefficient for Sm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.06	No	Distribution
Unsaturated zone 2 distribution coefficient for Eu-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.12	No	Distribution
Unsaturated zone 2 distribution coefficient for Eu-154	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.08	No	Distribution
Unsaturated zone 2 distribution coefficient for Eu-155	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.07	No	Distribution
Unsaturated zone 2 distribution coefficient for Gd-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 2 distribution coefficient for Np-237	1	Truncated lognormal-n	2.84	2.25	0.001	0.999	0.04	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 2 distribution coefficient for Th-228	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.00	No	Distribution
Unsaturated zone 2 distribution coefficient for Th-229	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 2 distribution coefficient for Th-230	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 2 distribution coefficient for Th-232	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 2 distribution coefficient for U-233	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.04	No	Distribution
Unsaturated zone 2 distribution coefficient for U-234	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.02	No	Distribution
Unsaturated zone 2 distribution coefficient for U-235	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.00	No	Distribution
Unsaturated zone 2 distribution coefficient for U-236	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.24	No	Distribution
Unsaturated zone 2 distribution coefficient for U-238	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.01	No	Distribution
Unsaturated zone 2 distribution coefficient for Pu-238	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.10	No	Distribution
Unsaturated zone 2 distribution coefficient for Pu-239	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.24	No	Distribution
Unsaturated zone 2 distribution coefficient for Pu-240	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.07	No	Distribution
Unsaturated zone 2 distribution coefficient for Pu-241	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.07	No	Distribution
Unsaturated zone 2 distribution coefficient for Pu-242	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.01	No	Distribution
Unsaturated zone 2 distribution coefficient for Pb-210	1	Truncated lognormal-n	7.78	2.76	0.001	0.999	0.02	No	Distribution
Unsaturated zone 2 distribution coefficient for Ra-226	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	0.03	No	Distribution
Unsaturated zone 2 distribution coefficient for Ra-228	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	0.10	No	Distribution
Unsaturated zone 2 distribution coefficient for Ac-227	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.10	No	Distribution
Unsaturated zone 2 distribution coefficient for Pa-231	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.08	No	Distribution
Unsaturated zone 2 distribution coefficient for Am-241	1	Truncated lognormal-n	7.28	3.15	0.001	0.999	0.13	No	Distribution
Unsaturated zone 2 distribution coefficient for Cm-244	1	Truncated lognormal-n	8.82	1.82	0.001	0.999	-0.15	No	Distribution
Unsaturated zone 3 distribution coefficient for H-3	1	Truncated lognormal-n	-2.81	0.5	0.001	0.999	-0.01	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 3 distribution coefficient for Na-22	1	Truncated lognormal-n	5.04	3.22	0.001	0.999	-0.08	No	Distribution
Unsaturated zone 3 distribution coefficient for Fe-55	1	Truncated lognormal-n	5.34	2.67	0.001	0.999	0.25	No	Distribution
Unsaturated zone 3 distribution coefficient for Ni-59	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	0.01	No	Distribution
Unsaturated zone 3 distribution coefficient for Nb-94	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.17	No	Distribution
Unsaturated zone 3 distribution coefficient for Tc-99	1	Truncated lognormal-n	-0.67	3.16	0.001	0.999	-0.18	No	Distribution
Unsaturated zone 3 distribution coefficient for Ag-108m	1	Truncated lognormal-n	5.38	2.10	0.001	0.999	0.12	No	Distribution
Unsaturated zone 3 distribution coefficient for Sb-125	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.11	No	Distribution
Unsaturated zone 3 distribution coefficient for Pm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.00	No	Distribution
Unsaturated zone 3 distribution coefficient for Sm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.10	No	Distribution
Unsaturated zone 3 distribution coefficient for Eu-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.01	No	Distribution
Unsaturated zone 3 distribution coefficient for Eu-154	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.12	No	Distribution
Unsaturated zone 3 distribution coefficient for Eu-155	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.14	No	Distribution
Unsaturated zone 3 distribution coefficient for Gd-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.05	No	Distribution
Unsaturated zone 3 distribution coefficient for Np-237	1	Truncated lognormal-n	2.84	2.25	0.001	0.999	-0.14	No	Distribution
Unsaturated zone 3 distribution coefficient for Th-228	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.03	No	Distribution
Unsaturated zone 3 distribution coefficient for Th-229	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.07	No	Distribution
Unsaturated zone 3 distribution coefficient for Th-230	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.01	No	Distribution
Unsaturated zone 3 distribution coefficient for Th-232	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.17	No	Distribution
Unsaturated zone 3 distribution coefficient for U-233	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.05	No	Distribution
Unsaturated zone 3 distribution coefficient for U-234	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 3 distribution coefficient for U-235	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.06	No	Distribution
Unsaturated zone 3 distribution coefficient for U-236	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.16	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 3 distribution coefficient for U-238	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.05	No	Distribution
Unsaturated zone 3 distribution coefficient for Pu-238	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.07	No	Distribution
Unsaturated zone 3 distribution coefficient for Pu-239	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.22	No	Distribution
Unsaturated zone 3 distribution coefficient for Pu-240	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.03	No	Distribution
Unsaturated zone 3 distribution coefficient for Pu-241	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.12	No	Distribution
Unsaturated zone 3 distribution coefficient for Pu-242	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.16	No	Distribution
Unsaturated zone 3 distribution coefficient for Pb-210	1	Truncated lognormal-n	7.78	2.76	0.001	0.999	0.01	No	Distribution
Unsaturated zone 3 distribution coefficient for Ra-226	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.15	No	Distribution
Unsaturated zone 3 distribution coefficient for Ra-228	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 3 distribution coefficient for Ac-227	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.18	No	Distribution
Unsaturated zone 3 distribution coefficient for Pa-231	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.31	75%	3300
Unsaturated zone 3 distribution coefficient for Am-241	1	Truncated lognormal-n	7.28	3.15	0.001	0.999	-0.08	No	Distribution
Unsaturated zone 3 distribution coefficient for Cm-244	1	Truncated lognormal-n	8.82	1.82	0.001	0.999	-0.13	No	Distribution
Unsaturated zone 4 distribution coefficient for H-3	1	Truncated lognormal-n	-2.81	0.5	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 4 distribution coefficient for Na-22	1	Truncated lognormal-n	5.04	3.22	0.001	0.999	0.02	No	Distribution
Unsaturated zone 4 distribution coefficient for Fe-55	1	Truncated lognormal-n	5.34	2.67	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 4 distribution coefficient for Ni-59	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.04	No	Distribution
Unsaturated zone 4 distribution coefficient for Nb-94	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 4 distribution coefficient for Tc-99	1	Truncated lognormal-n	-0.67	3.16	0.001	0.999	0.06	No	Distribution
Unsaturated zone 4 distribution coefficient for Ag-108m	1	Truncated lognormal-n	5.38	2.10	0.001	0.999	0.12	No	Distribution
Unsaturated zone 4 distribution coefficient for Sb-125	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.01	No	Distribution
Unsaturated zone 4 distribution coefficient for Pm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.09	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 4 distribution coefficient for Sm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.11	No	Distribution
Unsaturated zone 4 distribution coefficient for Eu-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.25	No	Distribution
Unsaturated zone 4 distribution coefficient for Eu-154	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.01	No	Distribution
Unsaturated zone 4 distribution coefficient for Eu-155	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.03	No	Distribution
Unsaturated zone 4 distribution coefficient for Gd-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.00	No	Distribution
Unsaturated zone 4 distribution coefficient for Np-237	1	Truncated lognormal-n	2.84	2.25	0.001	0.999	-0.23	No	Distribution
Unsaturated zone 4 distribution coefficient for Th-228	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.16	No	Distribution
Unsaturated zone 4 distribution coefficient for Th-229	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.15	No	Distribution
Unsaturated zone 4 distribution coefficient for Th-230	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.07	No	Distribution
Unsaturated zone 4 distribution coefficient for Th-232	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.08	No	Distribution
Unsaturated zone 4 distribution coefficient for U-233	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.02	No	Distribution
Unsaturated zone 4 distribution coefficient for U-234	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.01	No	Distribution
Unsaturated zone 4 distribution coefficient for U-235	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.07	No	Distribution
Unsaturated zone 4 distribution coefficient for U-236	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.02	No	Distribution
Unsaturated zone 4 distribution coefficient for U-238	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.01	No	Distribution
Unsaturated zone 4 distribution coefficient for Pu-238	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.06	No	Distribution
Unsaturated zone 4 distribution coefficient for Pu-239	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.07	No	Distribution
Unsaturated zone 4 distribution coefficient for Pu-240	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.06	No	Distribution
Unsaturated zone 4 distribution coefficient for Pu-241	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.03	No	Distribution
Unsaturated zone 4 distribution coefficient for Pu-242	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.12	No	Distribution
Unsaturated zone 4 distribution coefficient for Pb-210	1	Truncated lognormal-n	7.78	2.76	0.001	0.999	-0.15	No	Distribution
Unsaturated zone 4 distribution coefficient for Ra-226	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.09	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 4 distribution coefficient for Ra-228	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.03	No	Distribution
Unsaturated zone 4 distribution coefficient for Ac-227	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.18	No	Distribution
Unsaturated zone 4 distribution coefficient for Pa-231	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	-0.18	No	Distribution
Unsaturated zone 4 distribution coefficient for Am-241	1	Truncated lognormal-n	7.28	3.15	0.001	0.999	-0.15	No	Distribution
Unsaturated zone 4 distribution coefficient for Cm-244	1	Truncated lognormal-n	8.82	1.82	0.001	0.999	-0.05	No	Distribution
Saturated zone distribution coefficient for H-3	1	Truncated lognormal-n	-2.81	0.5	0.001	0.999	-0.02	No	Distribution
Saturated zone distribution coefficient for Na-22	1	Truncated lognormal-n	5.04	3.22	0.001	0.999	0.01	No	Distribution
Saturated zone distribution coefficient for Fe-55	1	Truncated lognormal-n	5.34	2.67	0.001	0.999	0.06	No	Distribution
Saturated zone distribution coefficient for Ni-59	1	Truncated lognormal-n	6.05	1.46	0.001	0.999	-0.10	No	Distribution
Saturated zone distribution coefficient for Nb-94	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.02	No	Distribution
Saturated zone distribution coefficient for Tc-99	1	Truncated lognormal-n	-0.67	3.16	0.001	0.999	-0.12	No	Distribution
Saturated zone distribution coefficient for Ag-108m	1	Truncated lognormal-n	5.38	2.10	0.001	0.999	0.01	No	Distribution
Saturated zone distribution coefficient for Sb-125	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.04	No	Distribution
Saturated zone distribution coefficient for Pm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.07	No	Distribution
Saturated zone distribution coefficient for Sm-147	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.07	No	Distribution
Saturated zone distribution coefficient for Eu-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.11	No	Distribution
Saturated zone distribution coefficient for Eu-154	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.01	No	Distribution
Saturated zone distribution coefficient for Eu-155	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.04	No	Distribution
Saturated zone distribution coefficient for Gd-152	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	-0.13	No	Distribution
Saturated zone distribution coefficient for Np-237	1	Truncated lognormal-n	2.84	2.25	0.001	0.999	0.16	No	Distribution
Saturated zone distribution coefficient for Th-228	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.06	No	Distribution
Saturated zone distribution coefficient for Th-229	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.04	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Saturated zone distribution coefficient for Th-230	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	-0.01	No	Distribution
Saturated zone distribution coefficient for Th-232	1	Truncated lognormal-n	8.68	3.62	0.001	0.999	0.26	75%	6520
Saturated zone distribution coefficient for U-233	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.05	No	Distribution
Saturated zone distribution coefficient for U-234	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.03	No	Distribution
Saturated zone distribution coefficient for U-235	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	-0.08	No	Distribution
Saturated zone distribution coefficient for U-236	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.08	No	Distribution
Saturated zone distribution coefficient for U-238	1	Truncated lognormal-n	4.84	3.13	0.001	0.999	0.08	No	Distribution
Saturated zone distribution coefficient for Pu-238	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.05	No	Distribution
Saturated zone distribution coefficient for Pu-239	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.01	No	Distribution
Saturated zone distribution coefficient for Pu-240	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.10	No	Distribution
Saturated zone distribution coefficient for Pu-241	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	0.09	No	Distribution
Saturated zone distribution coefficient for Pu-242	1	Truncated lognormal-n	6.86	1.89	0.001	0.999	-0.04	No	Distribution
Saturated zone distribution coefficient for Pb-210	1	Truncated lognormal-n	7.78	2.76	0.001	0.999	0.06	No	Distribution
Saturated zone distribution coefficient for Ra-226	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.05	No	Distribution
Saturated zone distribution coefficient for Ra-228	1	Truncated lognormal-n	8.17	1.70	0.001	0.999	-0.02	No	Distribution
Saturated zone distribution coefficient for Ac-227	1	Truncated lognormal-n	6.72	3.22	0.001	0.999	0.13	No	Distribution
Saturated zone distribution coefficient for Pa-231	1	Truncated lognormal-n	5.94	3.22	0.001	0.999	0.16	No	Distribution
Saturated zone distribution coefficient for Am-241	1	Truncated lognormal-n	7.28	3.15	0.001	0.999	0.18	No	Distribution
Saturated zone distribution coefficient for Cm-244	1	Truncated lognormal-n	8.82	1.82	0.001	0.999	-0.12	No	Distribution
Depth of roots	1	Uniform	0.3	4.0	-	-	-0.95	25%	1.22
Plant transfer factor for H	1	Truncated lognormal-n	1.57	1.1	0.001	0.999	-0.02	No	Distribution
Plant transfer factor for Na	1	Truncated lognormal-n	-3.00	1.0	0.001	0.999	0.01	No	Distribution
Plant transfer factor for Fe	1	Truncated lognormal-n	-6.91	0.9	0.001	0.999	-0.20	No	Distribution
Plant transfer factor for Ni	1	Truncated lognormal-n	-3.00	0.9	0.001	0.999	0.01	No	Distribution
Plant transfer factor for Nb	1	Truncated lognormal-n	-4.61	1.1	0.001	0.999	-0.01	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Plant transfer factor for Tc	1	Truncated lognormal-n	1.61	0.9	0.001	0.999	0.93	75%	9.17
Plant transfer factor for Ag	1	Truncated lognormal-n	-5.51	0.9	0.001	0.999	-0.10	No	Distribution
Plant transfer factor for Sb	1	Truncated lognormal-n	-4.61	1.0	0.001	0.999	0.06	No	Distribution
Plant transfer factor for Pm	1	Truncated lognormal-n	-6.21	1.1	0.001	0.999	0.02	No	Distribution
Plant transfer factor for Sm	1	Truncated lognormal-n	-6.21	1.1	0.001	0.999	0.03	No	Distribution
Plant transfer factor for Eu	1	Truncated lognormal-n	-6.21	1.1	0.001	0.999	0.00	No	Distribution
Plant transfer factor for Gd	1	Truncated lognormal-n	-6.21	1.1	0.001	0.999	-0.10	No	Distribution
Plant transfer factor for Np	1	Truncated lognormal-n	-3.91	0.9	0.001	0.999	0.94	75%	0.0365
Plant transfer factor for Th	1	Truncated lognormal-n	-6.91	0.9	0.001	0.999	-0.03	No	Distribution
Plant transfer factor for U	1	Truncated lognormal-n	-6.21	0.9	0.001	0.999	0.00	No	Distribution
Plant transfer factor for Pu	1	Truncated lognormal-n	-6.91	0.9	0.001	0.999	0.77	75%	0.00183
Plant transfer factor for Pb	1	Truncated lognormal-n	-5.52	0.9	0.001	0.999	-0.03	No	Distribution
Plant transfer factor for Ra	1	Truncated lognormal-n	-3.22	0.9	0.001	0.999	-0.10	No	Distribution
Plant transfer factor for Ac	1	Truncated lognormal-n	-6.91	1.1	0.001	0.999	-0.02	No	Distribution
Plant transfer factor for Pa	1	Truncated lognormal-n	-4.61	1.1	0.001	0.999	-0.08	No	Distribution
Plant transfer factor for Am	1	Truncated lognormal-n	-6.91	0.9	0.001	0.999	0.27	75%	0.00182
Plant transfer factor for Cm	1	Truncated lognormal-n	-6.91	0.9	0.001	0.999	0.03	No	Distribution
Contaminated zone b parameter	2	Bounded lognormal-n	1.06	0.66	0.5	30	-0.11	No	Distribution
Contaminated zone erosion rate	2	Continuous logarithmic	Default ³	-	-	-	-0.34	25%	0.000759
Contaminated zone total porosity	2	Truncated normal	0.425	0.0867	0.001	0.999	0.16	No	Distribution
Contaminated zone hydraulic conductivity	2	Lognormal	3.302	62.0	-	-	-0.24	No	Distribution
Depth of soil mixing layer	2	Triangular	0.0	0.6	0.15	-	-0.33	25%	0.149
Drinking water intake	2	Truncated lognormal-n	6.015	0.489	0.001	0.999	0.16	No	Distribution
Evapotranspiration coefficient	2	Uniform	0.5	0.75	-	-	0.25	No	Distribution
External gamma shielding factor	2	Bounded lognormal-n	-1.3	0.59	0.044	1	0.74	75%	0.397
Indoor dust filtration factor	2	Uniform	0.15	0.95	-	-	-0.12	No	Distribution
Mass loading for inhalation	2	Continuous linear	Default ³	-	-	-	0.10	No	Distribution
Runoff coefficient	2	Uniform	0.1	0.8	-	-	0.18	No	Distribution
Fruit, vegetable and grain consumption rate	2	Triangular	135	318	178	-	0.66	75%	237
Milk consumption rate	2	Triangular	60	200	102	-	-0.05	No	Distribution
Aquatic food contaminated fraction	2	Triangular	0	1	0.39	-	0.05	No	Distribution
Wet weight crop yield for non-leafy plants	2	Truncated lognormal-n	0.56	0.48	0.001	0.999	-0.04	No	Distribution
Weathering removal constant	2	Triangular	5.1	84	18	-	0.14	No	Distribution
Wet foliar interception fraction for leafy vegetables	2	Triangular	0.06	0.95	0.67	-	-0.02	No	Distribution
Saturated zone b parameter	2	Bounded lognormal-n	1.06	0.66	0.5	30	-0.13	No	Distribution
Saturated zone hydraulic gradient	2	Bounded lognormal-n	-5.11	1.77	7E-05	0.5	-0.21	No	Distribution
Soil ingestion rate	2	Triangular	0	36.5	18.3	-	0.09	No	Distribution
Unsaturated zone 1 density	2	Normal	1.33	0.202	-	-	-0.32	25%	1.19
Unsaturated zone 1 effective porosity	2	Truncated normal	0.425	0.110	0.0839	0.766	0.03	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 1 hydraulic conductivity	2	Bounded lognormal-n	2.66	0.475	3.302	62.2	0.06	No	Distribution
Unsaturated zone 1 b parameter	2	Bounded lognormal-n	1.16	0.140	2.06	4.89	-0.07	No	Distribution
Unsaturated zone 1 total porosity	2	Truncated normal	0.46	0.11	0.1161	0.7959	0.00	No	Distribution
Unsaturated zone 2 density	2	Normal	1.578	0.158	-	-	-0.02	No	Distribution
Unsaturated zone 2 effective porosity	2	Truncated normal	0.383	0.0610	0.195	0.572	-0.15	No	Distribution
Unsaturated zone 2 hydraulic conductivity	2	Bounded lognormal-n	1.398	1.842	110	5870	-0.04	No	Distribution
Unsaturated zone 2 b parameter	2	Bounded lognormal-n	-0.0253	0.216	0.501	1.90	-0.22	No	Distribution
Unsaturated zone 2 total porosity	2	Truncated normal	0.43	0.06	0.2446	0.6154	0.09	No	Distribution
Unsaturated zone 3 density	2	Normal	1.33	0.202	-	-	0.13	No	Distribution
Unsaturated zone 3 hydraulic conductivity	2	Bounded lognormal-n	2.66	0.475	3.302	62.2	-0.13	No	Distribution
Unsaturated zone 3 b parameter	2	Bounded lognormal-n	1.16	0.140	2.06	4.89	0.16	No	Distribution
Unsaturated zone 4 density	2	Normal	1.578	0.158	-	-	0.15	No	Distribution
Unsaturated zone 4 hydraulic conductivity	2	Bounded lognormal-n	1.398	1.842	110	5870	0.17	No	Distribution
Unsaturated zone 4 b parameter	2	Bounded lognormal-n	-0.0253	0.216	0.501	1.90	-0.17	No	Distribution
Thickness of evasion layer of C-14 in soil	2	Triangular	0.5	1.0	0.75	-		No	Distribution
Meat transfer factor for H	2	Truncated lognormal-n	-4.42	1.0	0.001	0.999	-0.1	No	Distribution
Meat transfer factor for Na	2	Truncated lognormal-n	-2.53	0.2	0.001	0.999	0.01	No	Distribution
Meat transfer factor for Fe	2	Truncated lognormal-n	-3.51	0.4	0.001	0.999	0.17	No	Distribution
Meat transfer factor for Ni	2	Truncated lognormal-n	-5.30	0.9	0.001	0.999	0.14	No	Distribution
Meat transfer factor for Nb	2	Truncated lognormal-n	-13.82	0.9	0.001	0.999	0.10	No	Distribution
Meat transfer factor for Tc	2	Truncated lognormal-n	-9.21	0.7	0.001	0.999	-0.05	No	Distribution
Meat transfer factor for Ag	2	Truncated lognormal-n	-6.21	0.7	0.001	0.999	-0.21	No	Distribution
Meat transfer factor for Sb	2	Truncated lognormal-n	-6.91	0.9	0.001	0.999	-0.03	No	Distribution
Meat transfer factor for Pm	2	Truncated lognormal-n	-6.21	1.0	0.001	0.999	-0.07	No	Distribution
Meat transfer factor for Sm	2	Truncated lognormal-n	-6.21	1.0	0.001	0.999	-0.22	No	Distribution
Meat transfer factor for Eu	2	Truncated lognormal-n	-6.21	1.0	0.001	0.999	-0.21	No	Distribution
Meat transfer factor for Gd	2	Truncated lognormal-n	-6.21	1.0	0.001	0.999	0.08	No	Distribution
Meat transfer factor for Np	2	Truncated lognormal-n	-6.91	0.7	0.001	0.999	0.01	No	Distribution
Meat transfer factor for Th	2	Truncated lognormal-n	-9.21	1.0	0.001	0.999	0.06	No	Distribution
Meat transfer factor for U	2	Truncated lognormal-n	-7.13	0.7	0.001	0.999	0.01	No	Distribution
Meat transfer factor for Pu	2	Truncated lognormal-n	-9.21	0.2	0.001	0.999	0.06	No	Distribution
Meat transfer factor for Pb	2	Truncated lognormal-n	-7.13	0.7	0.001	0.999	0.01	No	Distribution
Meat transfer factor for Ra	2	Truncated lognormal-n	-6.91	0.7	0.001	0.999	0.00	No	Distribution
Meat transfer factor for Ac	2	Truncated lognormal-n	-10.82	1.0	0.001	0.999	-0.12	No	Distribution
Meat transfer factor for Pa	2	Truncated lognormal-n	-12.21	1.0	0.001	0.999	-0.10	No	Distribution
Meat transfer factor for Am	2	Truncated lognormal-n	-9.90	0.2	0.001	0.999	-0.06	No	Distribution
Meat transfer factor for Cm	2	Truncated lognormal-n	-10.82	1.0	0.001	0.999	-0.08	No	Distribution
Milk transfer factor for H	2	Truncated lognormal-n	-4.6	0.9	0.001	0.999	-0.04	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Milk transfer factor for Na	2	Truncated lognormal-n	-3.22	0.5	0.001	0.999	-0.07	No	Distribution
Milk transfer factor for Fe	2	Truncated lognormal-n	-8.11	0.7	0.001	0.999	0.07	No	Distribution
Milk transfer factor for Ni	2	Truncated lognormal-n	-3.91	0.7	0.001	0.999	0.04	No	Distribution
Milk transfer factor for Nb	2	Truncated lognormal-n	-13.12	0.7	0.001	0.999	0.01	No	Distribution
Milk transfer factor for Tc	2	Truncated lognormal-n	-6.91	0.7	0.001	0.999	0.03	No	Distribution
Milk transfer factor for Ag	2	Truncated lognormal-n	-5.12	0.7	0.001	0.999	0.15	No	Distribution
Milk transfer factor for Sb	2	Truncated lognormal-n	-9.72	0.9	0.001	0.999	0.12	No	Distribution
Milk transfer factor for Pm	2	Truncated lognormal-n	-9.72	0.9	0.001	0.999	0.18	No	Distribution
Milk transfer factor for Sm	2	Truncated lognormal-n	-9.72	0.9	0.001	0.999	-0.04	No	Distribution
Milk transfer factor for Eu	2	Truncated lognormal-n	-9.72	0.9	0.001	0.999	0.06	No	Distribution
Milk transfer factor for Gd	2	Truncated lognormal-n	-9.72	0.9	0.001	0.999	0.02	No	Distribution
Milk transfer factor for Np	2	Truncated lognormal-n	-11.51	0.7	0.001	0.999	-0.04	No	Distribution
Milk transfer factor for Th	2	Truncated lognormal-n	-12.21	0.9	0.001	0.999	-0.03	No	Distribution
Milk transfer factor for U	2	Truncated lognormal-n	-7.82	0.6	0.001	0.999	-0.04	No	Distribution
Milk transfer factor for Pu	2	Truncated lognormal-n	-13.82	0.5	0.001	0.999	0.14	No	Distribution
Milk transfer factor for Pb	2	Truncated lognormal-n	-8.11	0.9	0.001	0.999	0.19	No	Distribution
Milk transfer factor for Ra	2	Truncated lognormal-n	-6.91	0.5	0.001	0.999	-0.23	No	Distribution
Milk transfer factor for Ac	2	Truncated lognormal-n	-13.12	0.9	0.001	0.999	0.15	No	Distribution
Milk transfer factor for Pa	2	Truncated lognormal-n	-12.21	0.9	0.001	0.999	-0.02	No	Distribution
Milk transfer factor for Am	2	Truncated lognormal-n	-13.12	0.7	0.001	0.999	0.15	No	Distribution
Milk transfer factor for Cm	2	Truncated lognormal-n	-13.12	0.9	0.001	0.999	-0.16	No	Distribution
H bioaccumulation factor for fish	2	Lognormal-n	0	0.1	-	-	-0.01	No	Distribution
Na bioaccumulation factor for fish	2	Lognormal-n	3	1.1	-	-	-0.10	No	Distribution
Fe bioaccumulation factor for fish	2	Lognormal-n	5.3	1.1	-	-	0.25	No	Distribution
Ni bioaccumulation factor for fish	2	Lognormal-n	4.6	1.1	-	-	-0.21	No	Distribution
Nb bioaccumulation factor for fish	2	Lognormal-n	5.7	1.1	-	-	-0.10	No	Distribution
Tc bioaccumulation factor for fish	2	Lognormal-n	3.0	1.1	-	-	0.05	No	Distribution
Ag bioaccumulation factor for fish	2	Lognormal-n	1.6	1.1	-	-	0.01	No	Distribution
Sb bioaccumulation factor for fish	2	Lognormal-n	4.6	1.1	-	-	-0.05	No	Distribution
Pm bioaccumulation factor for fish	2	Lognormal-n	3.4	1.1	-	-	0.09	No	Distribution
Sm bioaccumulation factor for fish	2	Lognormal-n	3.2	1.1	-	-	0.22	No	Distribution
Eu bioaccumulation factor for fish	2	Lognormal-n	3.9	1.1	-	-	-0.04	No	Distribution
Gd bioaccumulation factor for fish	2	Lognormal-n	3.2	1.1	-	-	0.02	No	Distribution
Np bioaccumulation factor for fish	2	Lognormal-n	3.4	1.1	-	-	0.06	No	Distribution
Th bioaccumulation factor for fish	2	Lognormal-n	4.6	1.1	-	-	0.08	No	Distribution
U bioaccumulation factor for fish	2	Lognormal-n	2.3	1.1	-	-	0.07	No	Distribution
Pu bioaccumulation factor for fish	2	Lognormal-n	3.4	1.1	-	-	-0.02	No	Distribution
Pb bioaccumulation factor for fish	2	Lognormal-n	5.7	1.1	-	-	0.11	No	Distribution
Ra bioaccumulation factor for fish	2	Lognormal-n	3.9	1.1	-	-	-0.20	No	Distribution
Ac bioaccumulation factor for fish	2	Lognormal-n	2.7	1.1	-	-	-0.07	No	Distribution
Pa bioaccumulation factor for fish	2	Lognormal-n	2.3	1.1	-	-	0.04	No	Distribution
Am bioaccumulation factor for fish	2	Lognormal-n	3.4	1.1	-	-	-0.16	No	Distribution
Cm bioaccumulation factor for fish	2	Lognormal-n	3.4	1.1	-	-	0.07	No	Distribution

RESRAD v6.22 Sensitivity Analysis Distribution Parameters and Sensitive Parameter Results for Detected Radionuclides - Resident Farmer Scenario

Parameter	Priority ¹	Distribution	Distribution's Statistical Parameters ²				PRCC ³	25% or 75% Quartile	Assigned Parameter Value
			1	2	3	4			
Unsaturated zone 1 field capacity	3	Truncated normal	0.236	0.0578	0.0575	0.415	-0.07	No	Distribution
Unsaturated zone 2 field capacity	3	Truncated normal	0.0607	0.0150	0.0280	0.124	0.05	No	Distribution
Inhalation rate	3	Triangular	4,380	13,100	8,400	-	-0.06	No	Distribution

Attachment 8.11

Input Parameter Selections from the Sensitivity Analysis Deterministic Summary Report for Discounted Radionuclides - Resident Farmer Scenario

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Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
B-1 Dose conversion factors for inhalation, mrem/pCi:				
B-1	Ac-227+D	6.720E+00	6.720E+00	DCF2(1)
B-1	Am-241	4.440E-01	4.440E-01	DCF2(2)
B-1	Cm-244	2.480E-01	2.480E-01	DCF2(3)
B-1	Np-237+D	5.400E-01	5.400E-01	DCF2(4)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(5)
B-1	Pb-210+D	2.320E-02	2.320E-02	DCF2(6)
B-1	Pu-238	3.920E-01	3.920E-01	DCF2(7)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(8)
B-1	Pu-240	4.290E-01	4.290E-01	DCF2(9)
B-1	Pu-241+D	8.250E-03	8.250E-03	DCF2(10)
B-1	Pu-242	4.110E-01	4.110E-01	DCF2(12)
B-1	Ra-226+D	8.600E-03	8.600E-03	DCF2(13)
B-1	Ra-228+D	5.080E-03	5.080E-03	DCF2(14)
B-1	Th-228+D	3.450E-01	3.450E-01	DCF2(15)
B-1	Th-229+D	2.160E+00	2.160E+00	DCF2(16)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(17)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(18)
B-1	U-233	1.350E-01	1.350E-01	DCF2(19)
B-1	U-234	1.320E-01	1.320E-01	DCF2(20)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(21)
B-1	U-236	1.250E-01	1.250E-01	DCF2(22)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(23)
D-1 Dose conversion factors for ingestion, mrem/pCi:				
D-1	Ac-227+D	1.480E-02	1.480E-02	DCF3(1)
D-1	Am-241	3.640E-03	3.640E-03	DCF3(2)
D-1	Cm-244	2.020E-03	2.020E-03	DCF3(3)
D-1	Np-237+D	4.440E-03	4.440E-03	DCF3(4)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(5)
D-1	Pb-210+D	7.270E-03	7.270E-03	DCF3(6)
D-1	Pu-238	3.200E-03	3.200E-03	DCF3(7)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(8)
D-1	Pu-240	3.540E-03	3.540E-03	DCF3(9)
D-1	Pu-241+D	6.850E-05	6.850E-05	DCF3(10)
D-1	Pu-242	3.360E-03	3.360E-03	DCF3(12)
D-1	Ra-226+D	1.330E-03	1.330E-03	DCF3(13)
D-1	Ra-228+D	1.440E-03	1.440E-03	DCF3(14)
D-1	Th-228+D	8.080E-04	8.080E-04	DCF3(15)
D-1	Th-229+D	4.030E-03	4.030E-03	DCF3(16)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(17)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(18)
D-1	U-233	2.890E-04	2.890E-04	DCF3(19)
D-1	U-234	2.830E-04	2.830E-04	DCF3(20)
D-1	U-235+D	2.670E-04	2.670E-04	DCF3(21)
D-1	U-236	2.690E-04	2.690E-04	DCF3(22)
D-1	U-238+D	2.690E-04	2.690E-04	DCF3(23)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(2,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(2,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(2,3)
D-34	Cm-244 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(3,1)
D-34	Cm-244 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Cm-244 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(3,3)
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(4,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(4,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(4,3)
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(5,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(5,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(5,3)
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(6,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(6,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(6,3)
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(7,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(7,3)
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(8,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(8,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(8,3)
D-34	Pu-240 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(9,1)
D-34	Pu-240 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(9,2)
D-34	Pu-240 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(9,3)
D-34	Pu-241+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(10,1)
D-34	Pu-241+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(10,2)
D-34	Pu-241+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(10,3)
D-34	Pu-242 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(12,1)
D-34	Pu-242 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(12,2)
D-34	Pu-242 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(12,3)
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(13,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(13,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(13,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(14,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(14,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(14,3)
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(15,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(15,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(15,3)
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(16,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(16,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(16,3)
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(17,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(17,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(17,3)
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(18,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(18,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(18,3)
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(19,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(19,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(19,3)
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(20,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(20,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(20,3)
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(21,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(21,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(21,3)
D-34	U-236 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(22,1)
D-34	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(22,2)
D-34	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(22,3)
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(23,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(23,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(23,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(2,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)
D-5	Cm-244 , fish	3.000E+01	3.000E+01	BIOFAC(3,1)
D-5	Cm-244 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(4,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(4,2)
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(5,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(5,2)
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(6,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(6,2)
D-5	Pu-238 , fish	3.000E+01	3.000E+01	BIOFAC(7,1)
D-5	Pu-238 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(7,2)
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(8,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(8,2)
D-5	Pu-240 , fish	3.000E+01	3.000E+01	BIOFAC(9,1)
D-5	Pu-240 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5	Pu-241+D , fish	3.000E+01	3.000E+01	BIOFAC(10,1)
D-5	Pu-241+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Pu-242 , fish	3.000E+01	3.000E+01	BIOFAC(12,1)
D-5	Pu-242 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(12,2)
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(13,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(13,2)
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(14,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(14,2)
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(15,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(15,2)
D-5	Th-229+D , fish	1.000E+02	1.000E+02	BIOFAC(16,1)
D-5	Th-229+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(16,2)
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(17,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(17,2)
D-5	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC(18,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(18,2)
D-5	U-233 , fish	1.000E+01	1.000E+01	BIOFAC(19,1)
D-5	U-233 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(19,2)
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(20,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(20,2)
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(21,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(21,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: FGR 13 Morbidity

Menu	Parameter	Current Value	Default	Parameter Name
D-5	U-236 , fish	1.000E+01	1.000E+01	BIOFAC(22,1)
D-5	U-236 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(22,2)
D-5	U-238+D , fish	1.000E+01	1.000E+01	BIOFAC(23,1)
D-5	U-238+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(23,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	2.500E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	7.500E+01	1.000E+02	---	T(6)
R011	Times for calculations (yr)	1.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	3.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	5.000E+02	0.000E+00	---	T(9)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Am-241	7.570E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Cm-244	4.800E-01	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Np-237	4.410E-01	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Pu-238	8.240E-01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Pu-239	2.070E-01	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Pu-240	2.070E-01	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Pu-241	4.870E+01	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Pu-242	5.940E-01	0.000E+00	---	S1(12)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Cm-244	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Pu-240	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): Pu-241	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): Pu-242	not used	0.000E+00	---	W1(12)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.470E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.300E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Am-241					
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.656E-02	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
Distribution coefficients for Cm-244					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
Distribution coefficients for Np-237					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
Distribution coefficients for Pu-238					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.714E-04	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
Distribution coefficients for Pu-239					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.714E-04	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Pu-240					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.714E-04	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)
Distribution coefficients for Pu-241					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.714E-04	ALEACH(10)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
Distribution coefficients for Pu-242					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.714E-04	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)
Distribution coefficients for daughter Ac-227					
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.656E-02	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
Distribution coefficients for daughter Pa-231					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.276E-02	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for daughter Pb-210					
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.140E-02	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
Distribution coefficients for daughter Ra-226					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(13)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,1)
R016	Unsaturated zone 2 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,2)
R016	Unsaturated zone 3 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,3)
R016	Unsaturated zone 4 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,4)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.628E-02	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
Distribution coefficients for daughter Ra-228					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,1)
R016	Unsaturated zone 2 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,2)
R016	Unsaturated zone 3 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,3)
R016	Unsaturated zone 4 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,4)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.628E-02	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
Distribution coefficients for daughter Th-228					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(15)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.905E-05	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
Distribution coefficients for daughter Th-229					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.905E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for daughter Th-230					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.905E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)
Distribution coefficients for daughter Th-232					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.905E-05	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
Distribution coefficients for daughter U-233					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(19)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(19)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.276E-02	ALEACH(19)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(19)
Distribution coefficients for daughter U-234					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(20)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(20)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.276E-02	ALEACH(20)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(20)
Distribution coefficients for daughter U-235					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(21)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.276E-02	ALEACH(21)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(21)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
AA					
R016	Distribution coefficients for daughter U-236				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(22)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(22)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.276E-02	ALEACH(22)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(22)
R016	Distribution coefficients for daughter U-238				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(23)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(23)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.276E-02	ALEACH(23)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(23)
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	3.970E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	1.140E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.140E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017 3 Fractions of annular areas within AREA:					
R017 3	Ring 1	3 not used	3 1.000E+00	3 ---	3 FRACA(1)
R017 3	Ring 2	3 not used	3 2.732E-01	3 ---	3 FRACA(2)
R017 3	Ring 3	3 not used	3 0.000E+00	3 ---	3 FRACA(3)
R017 3	Ring 4	3 not used	3 0.000E+00	3 ---	3 FRACA(4)
R017 3	Ring 5	3 not used	3 0.000E+00	3 ---	3 FRACA(5)
R017 3	Ring 6	3 not used	3 0.000E+00	3 ---	3 FRACA(6)
R017 3	Ring 7	3 not used	3 0.000E+00	3 ---	3 FRACA(7)
R017 3	Ring 8	3 not used	3 0.000E+00	3 ---	3 FRACA(8)
R017 3	Ring 9	3 not used	3 0.000E+00	3 ---	3 FRACA(9)
R017 3	Ring 10	3 not used	3 0.000E+00	3 ---	3 FRACA(10)
R017 3	Ring 11	3 not used	3 0.000E+00	3 ---	3 FRACA(11)
R017 3	Ring 12	3 not used	3 0.000E+00	3 ---	3 FRACA(12)
R018 3	Fruits, vegetables and grain consumption (kg/yr)	3 1.600E+02	3 1.600E+02	3 ---	3 DIET(1)
R018 3	Leafy vegetable consumption (kg/yr)	3 1.400E+01	3 1.400E+01	3 ---	3 DIET(2)
R018 3	Milk consumption (L/yr)	3 9.200E+01	3 9.200E+01	3 ---	3 DIET(3)
R018 3	Meat and poultry consumption (kg/yr)	3 6.300E+01	3 6.300E+01	3 ---	3 DIET(4)
R018 3	Fish consumption (kg/yr)	3 5.400E+00	3 5.400E+00	3 ---	3 DIET(5)
R018 3	Other seafood consumption (kg/yr)	3 9.000E-01	3 9.000E-01	3 ---	3 DIET(6)
R018 3	Soil ingestion rate (g/yr)	3 3.650E+01	3 3.650E+01	3 ---	3 SOIL
R018 3	Drinking water intake (L/yr)	3 5.100E+02	3 5.100E+02	3 ---	3 DWI
R018 3	Contamination fraction of drinking water	3 1.000E+00	3 1.000E+00	3 ---	3 FDW
R018 3	Contamination fraction of household water	3 not used	3 1.000E+00	3 ---	3 FHHW
R018 3	Contamination fraction of livestock water	3 1.000E+00	3 1.000E+00	3 ---	3 FLW
R018 3	Contamination fraction of irrigation water	3 1.000E+00	3 1.000E+00	3 ---	3 FIRW
R018 3	Contamination fraction of aquatic food	3 5.000E-01	3 5.000E-01	3 ---	3 FR9
R018 3	Contamination fraction of plant food	3 -1	3 -1	3 0.500E+00	3 PLANT
R018 3	Contamination fraction of meat	3 -1	3 -1	3 0.500E+00	3 FMEAT
R018 3	Contamination fraction of milk	3 -1	3 -1	3 0.500E+00	3 FMILK
R019 3	Livestock fodder intake for meat (kg/day)	3 6.800E+01	3 6.800E+01	3 ---	3 LFI5
R019 3	Livestock fodder intake for milk (kg/day)	3 5.500E+01	3 5.500E+01	3 ---	3 LFI6
R019 3	Livestock water intake for meat (L/day)	3 5.000E+01	3 5.000E+01	3 ---	3 LWI5
R019 3	Livestock water intake for milk (L/day)	3 1.600E+02	3 1.600E+02	3 ---	3 LWI6
R019 3	Livestock soil intake (kg/day)	3 5.000E-01	3 5.000E-01	3 ---	3 LSI
R019 3	Mass loading for foliar deposition (g/m**3)	3 1.000E-04	3 1.000E-04	3 ---	3 MLFD
R019 3	Depth of soil mixing layer (m)	3 1.500E-01	3 1.500E-01	3 ---	3 DM
R019 3	Depth of roots (m)	3 9.000E-01	3 9.000E-01	3 ---	3 DROOT
R019 3	Drinking water fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWDW
R019 3	Household water fraction from ground water	3 not used	3 1.000E+00	3 ---	3 FGWHH
R019 3	Livestock water fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWLW
R019 3	Irrigation fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWIR
R19B 3	Wet weight crop yield for Non-Leafy (kg/m**2)	3 7.000E-01	3 7.000E-01	3 ---	3 YV(1)
R19B 3	Wet weight crop yield for Leafy (kg/m**2)	3 1.500E+00	3 1.500E+00	3 ---	3 YV(2)
R19B 3	Wet weight crop yield for Fodder (kg/m**2)	3 1.100E+00	3 1.100E+00	3 ---	3 YV(3)
R19B 3	Growing Season for Non-Leafy (years)	3 1.700E-01	3 1.700E-01	3 ---	3 TE(1)
R19B 3	Growing Season for Leafy (years)	3 2.500E-01	3 2.500E-01	3 ---	3 TE(2)
R19B 3	Growing Season for Fodder (years)	3 8.000E-02	3 8.000E-02	3 ---	3 TE(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	not used	8.894E+01	---	C02F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

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Probabilistic Input
 Number of Sample Runs: 300

Number	Name	Distribution	Parameters								
AAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA
1	VCZ	CONTINUOUS LOGARITHMIC	4	5.E-8	0	.0007	.22	.005	.95	.2	1
2	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999					
3	HCCZ	LOGNORMAL	3.302	62							
4	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30					
5	DENSUZ(1)	NORMAL	1.33	.202							
6	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959					
7	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766					
8	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415					
9	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2					
10	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89					
11	DENSUZ(2)	NORMAL	1.578	.158							
12	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154					
13	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572					
14	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124					
15	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870					
16	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9					
17	DENSUZ(3)	NORMAL	1.33	.202							
18	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2					
19	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89					
20	DENSUZ(4)	NORMAL	1.578	.158							
21	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870					
22	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9					
23	DENSAQ	NORMAL	1.578	.158							
24	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5					
25	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30					
26	EVAPTR	UNIFORM	.5	.75							
27	RUNOFF	UNIFORM	.1	.8							
28	SOIL	TRIANGULAR	0	18.3	36.5						
29	DWI	TRUNCATED LOGNORMAL-N	6.015	.489	.001	.999					
30	DM	TRIANGULAR	0	.15	.6						
31	INHALR	TRIANGULAR	4380	8400	13100						
32	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003	.8119
	.00004	.9495	.00006	.9937	.000076	.9983	.0001	1			
33	SHF3	UNIFORM	.15	.95							
34	DCACTC(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999					
35	DCACTU1(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999					
36	DCACTU2(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999					
37	DCACTU3(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999					
38	DCACTU4(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999					
39	DCACTS(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999					
40	DCACTC(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999					
41	DCACTU1(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999					
42	DCACTU2(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999					
43	DCACTU3(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999					
44	DCACTU4(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999					
45	DCACTS(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999					
46	DCACTC(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999					
47	DCACTU1(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999					
48	DCACTU2(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999					

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA	AAAAAA
49	DCACTU3(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999
50	DCACTU4(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999
51	DCACTS(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999
52	DCACTC(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
53	DCACTU1(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
54	DCACTU2(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
55	DCACTU3(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
56	DCACTU4(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
57	DCACTS(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
58	DCACTC(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
59	DCACTU1(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
60	DCACTU2(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
61	DCACTU3(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
62	DCACTU4(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
63	DCACTS(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
64	DCACTC(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
65	DCACTU1(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
66	DCACTU2(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
67	DCACTU3(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
68	DCACTU4(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
69	DCACTS(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
70	DCACTC(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
71	DCACTU1(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
72	DCACTU2(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
73	DCACTU3(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
74	DCACTU4(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
75	DCACTS(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
76	DCACTC(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
77	DCACTU1(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
78	DCACTU2(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
79	DCACTU3(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
80	DCACTU4(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
81	DCACTS(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
82	DCACTC(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
83	DCACTU1(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
84	DCACTU2(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
85	DCACTU3(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
86	DCACTU4(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
87	DCACTS(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
88	DCACTC(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
89	DCACTU1(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
90	DCACTU2(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
91	DCACTU3(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
92	DCACTU4(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
93	DCACTS(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
94	DCACTC(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
95	DCACTU1(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
96	DCACTU2(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
97	DCACTU3(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
98	DCACTU4(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
99	DCACTS(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
100	DCACTC(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
101	DCACTU1(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
102	DCACTU2(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
103	DCACTU3(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
104	DCACTU4(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
105	DCACTS(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
106	DCACTC(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
107	DCACTU1(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
108	DCACTU2(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
109	DCACTU3(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
110	DCACTU4(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
111	DCACTS(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
112	DCACTC(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
113	DCACTU1(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
114	DCACTU2(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
115	DCACTU3(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
116	DCACTU4(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
117	DCACTS(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
118	DCACTC(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
119	DCACTU1(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
120	DCACTU2(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
121	DCACTU3(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
122	DCACTU4(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
123	DCACTS(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
124	DCACTC(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
125	DCACTU1(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
126	DCACTU2(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
127	DCACTU3(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
128	DCACTU4(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
129	DCACTS(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
130	DCACTC(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
131	DCACTU1(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
132	DCACTU2(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
133	DCACTU3(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
134	DCACTU4(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
135	DCACTS(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
136	DCACTC(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
137	DCACTU1(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
138	DCACTU2(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
139	DCACTU3(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
140	DCACTU4(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
141	DCACTS(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
142	DCACTC(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
143	DCACTU1(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
144	DCACTU2(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
145	DCACTU3(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
146	DCACTU4(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
147	DCACTS(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
148	DCACTC(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
149	DCACTU1(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
150	DCACTU2(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
151	DCACTU3(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
152	DCACTU4(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
153	DCACTS(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
154	DCACTC(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
155	DCACTU1(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
156	DCACTU2(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
157	DCACTU3(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
158	DCACTU4(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
159	DCACTS(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
160	DCACTC(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
161	DCACTU1(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
162	DCACTU2(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
163	DCACTU3(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
164	DCACTU4(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
165	DCACTS(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
166	DENSCZ	NORMAL	1.33	.202		
167	DIET(1)	TRIANGULAR	135	178	318	
168	DIET(3)	TRIANGULAR	60	102	200	
169	FR9	TRIANGULAR	0	.39	1	
170	DR00T	UNIFORM	.3	4		
171	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999
172	WLAM	TRIANGULAR	5.1	18	84	
173	RWET(2)	TRIANGULAR	.06	.67	.95	
174	BRTF(95,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
175	BRTF(96,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
176	BRTF(93,1)	TRUNCATED LOGNORMAL-N	-3.91	.9	.001	.999
177	BRTF(89,1)	TRUNCATED LOGNORMAL-N	-6.91	1.1	.001	.999
178	BRTF(91,1)	TRUNCATED LOGNORMAL-N	-4.61	1.1	.001	.999
179	BRTF(94,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
180	BRTF(88,1)	TRUNCATED LOGNORMAL-N	-3.22	.9	.001	.999
181	BRTF(90,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
182	BRTF(92,1)	TRUNCATED LOGNORMAL-N	-6.21	.9	.001	.999
183	BRTF(89,2)	TRUNCATED LOGNORMAL-N	-10.82	1	.001	.999
184	BRTF(95,2)	TRUNCATED LOGNORMAL-N	-9.9	.2	.001	.999
185	BRTF(96,2)	TRUNCATED LOGNORMAL-N	-10.82	1	.001	.999
186	BRTF(91,2)	TRUNCATED LOGNORMAL-N	-12.21	1	.001	.999
187	BRTF(93,2)	TRUNCATED LOGNORMAL-N	-6.91	.07	.001	.999
188	BRTF(82,2)	TRUNCATED LOGNORMAL-N	-7.13	.7	.001	.999
189	BRTF(94,2)	TRUNCATED LOGNORMAL-N	-9.21	.2	.001	.999
190	BRTF(88,2)	TRUNCATED LOGNORMAL-N	-6.91	.7	.001	.999
191	BRTF(90,2)	TRUNCATED LOGNORMAL-N	-9.21	1	.001	.999
192	BRTF(92,2)	TRUNCATED LOGNORMAL-N	-7.13	.7	.001	.999
193	BRTF(89,3)	TRUNCATED LOGNORMAL-N	-13.12	.9	.001	.999
194	BRTF(95,3)	TRUNCATED LOGNORMAL-N	-13.12	.7	.001	.999
195	BRTF(96,3)	TRUNCATED LOGNORMAL-N	-13.12	.9	.001	.999
196	BRTF(93,3)	TRUNCATED LOGNORMAL-N	-11.51	.7	.001	.999
197	BRTF(91,3)	TRUNCATED LOGNORMAL-N	-12.21	.9	.001	.999
198	BRTF(82,3)	TRUNCATED LOGNORMAL-N	-8.11	.9	.001	.999

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
199	BRTF(94,3)	TRUNCATED LOGNORMAL-N	-13.82	.5	.001	.999
200	BRTF(88,3)	TRUNCATED LOGNORMAL-N	-6.91	.5	.001	.999
201	BRTF(90,3)	TRUNCATED LOGNORMAL-N	-12.21	.9	.001	.999
202	BRTF(92,3)	TRUNCATED LOGNORMAL-N	-7.82	.6	.001	.999
203	BBIO(89,1)	LOGNORMAL-N	2.7	1.1		
204	BBIO(95,1)	LOGNORMAL-N	3.4	1.1		
205	BBIO(96,1)	LOGNORMAL-N	3.4	1.1		
206	BBIO(93,1)	LOGNORMAL-N	3.4	1.1		
207	BBIO(91,1)	LOGNORMAL-N	2.3	1.1		
208	BBIO(82,1)	LOGNORMAL-N	5.7	1.1		
209	BBIO(94,1)	LOGNORMAL-N	3.4	1.1		
210	BBIO(88,1)	LOGNORMAL-N	3.9	1.1		
211	BBIO(90,1)	LOGNORMAL-N	4.6	1.1		
212	BBIO(92,1)	LOGNORMAL-N	2.3	1.1		
213	SHF1	BOUNDED LOGNORMAL-N	-1.3	.59	.044	1
214	BRTF(82,1)	TRUNCATED LOGNORMAL-N	-5.52	.9	.001	.999

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Time = 3.000E+00	16
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Dose Conversion Factor (and Related) Parameter Summary
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Menu	Parameter	Current Value	Default	Parameter Name
Dose conversion factors for inhalation, mrem/pCi:				
B-1	Ag-108m+D	2.830E-04	2.830E-04	DCF2(1)
B-1	Eu-152	2.210E-04	2.210E-04	DCF2(2)
B-1	Eu-154	2.860E-04	2.860E-04	DCF2(4)
B-1	Eu-155	4.140E-05	4.140E-05	DCF2(5)
B-1	Fe-55	2.690E-06	2.690E-06	DCF2(6)
B-1	Gd-152	2.430E-01	2.430E-01	DCF2(7)
B-1	H-3	6.400E-08	6.400E-08	DCF2(8)
B-1	Na-22	7.660E-06	7.660E-06	DCF2(9)
B-1	Nb-94	4.140E-04	4.140E-04	DCF2(10)
B-1	Ni-59	2.700E-06	2.700E-06	DCF2(11)
B-1	Pm-147	3.920E-05	3.920E-05	DCF2(12)
B-1	Sb-125+D	1.386E-05	1.386E-05	DCF2(13)
B-1	Sm-147	7.470E-02	7.470E-02	DCF2(14)
B-1	Tc-99	8.330E-06	8.330E-06	DCF2(15)
Dose conversion factors for ingestion, mrem/pCi:				
D-1	Ag-108m+D	7.620E-06	7.620E-06	DCF3(1)
D-1	Eu-152	6.480E-06	6.480E-06	DCF3(2)
D-1	Eu-154	9.550E-06	9.550E-06	DCF3(4)
D-1	Eu-155	1.530E-06	1.530E-06	DCF3(5)
D-1	Fe-55	6.070E-07	6.070E-07	DCF3(6)
D-1	Gd-152	1.610E-04	1.610E-04	DCF3(7)
D-1	H-3	6.400E-08	6.400E-08	DCF3(8)
D-1	Na-22	1.150E-05	1.150E-05	DCF3(9)
D-1	Nb-94	7.140E-06	7.140E-06	DCF3(10)
D-1	Ni-59	2.100E-07	2.100E-07	DCF3(11)
D-1	Pm-147	1.050E-06	1.050E-06	DCF3(12)
D-1	Sb-125+D	3.647E-06	3.647E-06	DCF3(13)
D-1	Sm-147	1.850E-04	1.850E-04	DCF3(14)
D-1	Tc-99	1.460E-06	1.460E-06	DCF3(15)
Food transfer factors:				
D-34	Ag-108m+D, plant/soil concentration ratio, dimensionless	1.500E-01	1.500E-01	RTF(1,1)
D-34	Ag-108m+D, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-03	3.000E-03	RTF(1,2)
D-34	Ag-108m+D, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.500E-02	2.500E-02	RTF(1,3)
D-34	Eu-152, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(2,1)
D-34	Eu-152, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,2)
D-34	Eu-152, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,3)
D-34	Eu-154, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(4,1)
D-34	Eu-154, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(4,2)
D-34	Eu-154, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,3)
D-34	Eu-155, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(5,1)
D-34	Eu-155, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(5,2)
D-34	Eu-155, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
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Menu	Parameter	Current Value	Default	Parameter Name
D-34	Fe-55 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(6,1)
D-34	Fe-55 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(6,2)
D-34	Fe-55 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(6,3)
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(7,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(7,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(7,3)
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(8,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(8,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(8,3)
D-34	Na-22 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(9,1)
D-34	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-02	8.000E-02	RTF(9,2)
D-34	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-02	4.000E-02	RTF(9,3)
D-34	Nb-94 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(10,1)
D-34	Nb-94 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-07	3.000E-07	RTF(10,2)
D-34	Nb-94 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(10,3)
D-34	Ni-59 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(11,1)
D-34	Ni-59 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(11,2)
D-34	Ni-59 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(11,3)
D-34	Pm-147 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(12,1)
D-34	Pm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(12,2)
D-34	Pm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(12,3)
D-34	Sb-125+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(13,1)
D-34	Sb-125+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(13,2)
D-34	Sb-125+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-04	1.000E-04	RTF(13,3)
D-34	Sm-147 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(14,1)
D-34	Sm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(14,2)
D-34	Sm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(14,3)
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	5.000E+00	5.000E+00	RTF(15,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(15,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(15,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ag-108m+D, fish	5.000E+00	5.000E+00	BIOFAC(1,1)
D-5	Ag-108m+D, crustacea and mollusks	7.700E+02	7.700E+02	BIOFAC(1,2)
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC(2,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC(4,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
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Menu	Parameter	Current Value	Default	Parameter Name
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(5,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)
D-5	Fe-55 , fish	2.000E+02	2.000E+02	BIOFAC(6,1)
D-5	Fe-55 , crustacea and mollusks	3.200E+03	3.200E+03	BIOFAC(6,2)
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(7,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(7,2)
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(8,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(8,2)
D-5	Na-22 , fish	2.000E+01	2.000E+01	BIOFAC(9,1)
D-5	Na-22 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(9,2)
D-5	Nb-94 , fish	3.000E+02	3.000E+02	BIOFAC(10,1)
D-5	Nb-94 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Ni-59 , fish	1.000E+02	1.000E+02	BIOFAC(11,1)
D-5	Ni-59 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(11,2)
D-5	Pm-147 , fish	3.000E+01	3.000E+01	BIOFAC(12,1)
D-5	Pm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(12,2)
D-5	Sb-125+D , fish	1.000E+02	1.000E+02	BIOFAC(13,1)
D-5	Sb-125+D , crustacea and mollusks	1.000E+01	1.000E+01	BIOFAC(13,2)
D-5	Sm-147 , fish	2.500E+01	2.500E+01	BIOFAC(14,1)
D-5	Sm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(14,2)
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(15,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(15,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Ag-108m	5.500E-02	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.760E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Eu-154	6.260E-02	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.560E-01	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Fe-55	1.270E+00	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): H-3	5.440E+00	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Na-22	9.460E-03	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Nb-94	3.950E-02	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Ni-59	3.580E+00	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Pm-147	9.550E-01	0.000E+00	---	S1(12)
R012	Initial principal radionuclide (pCi/g): Sb-125	1.250E-01	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Tc-99	2.350E+00	0.000E+00	---	S1(15)
R012	Concentration in groundwater (pCi/L): Ag-108m	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Eu-152	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Eu-154	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Eu-155	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Fe-55	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): Nb-94	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): Ni-59	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): Pm-147	not used	0.000E+00	---	W1(12)
R012	Concentration in groundwater (pCi/L): Sb-125	not used	0.000E+00	---	W1(13)
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(15)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.470E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R013	Humidity in air (g/m**3)	8.000E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.300E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)
R016	Distribution coefficients for Ag-108m				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for Eu-152				
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Eu-154				
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Eu-155				
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Fe-55					
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.143E-03	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
Distribution coefficients for H-3					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
Distribution coefficients for Na-22					
R016	Contaminated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,4)
R016	Saturated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.120E-01	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)
Distribution coefficients for Nb-94					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(10)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
Distribution coefficients for Ni-59					
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(11)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.143E-03	ALEACH(11)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Pm-147					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)
Distribution coefficients for Sb-125					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(13)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
Distribution coefficients for Tc-99					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(15)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
Distribution coefficients for daughter Gd-152					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
Distribution coefficients for daughter Sm-147					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.464E-01	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	3.970E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	1.140E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.140E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.600E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	9.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.500E+00	FPLANT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Contamination fraction of meat	3 -1	3 -1	3 0.500E+00	3 FMEAT
R018	Contamination fraction of milk	3 -1	3 -1	3 0.500E+00	3 FMILK
R019	Livestock fodder intake for meat (kg/day)	3 6.800E+01	3 6.800E+01	3 ---	3 LFI5
R019	Livestock fodder intake for milk (kg/day)	3 5.500E+01	3 5.500E+01	3 ---	3 LFI6
R019	Livestock water intake for meat (L/day)	3 5.000E+01	3 5.000E+01	3 ---	3 LWI5
R019	Livestock water intake for milk (L/day)	3 1.600E+02	3 1.600E+02	3 ---	3 LWI6
R019	Livestock soil intake (kg/day)	3 5.000E-01	3 5.000E-01	3 ---	3 LSI
R019	Mass loading for foliar deposition (g/m**3)	3 1.000E-04	3 1.000E-04	3 ---	3 MLFD
R019	Depth of soil mixing layer (m)	3 1.500E-01	3 1.500E-01	3 ---	3 DM
R019	Depth of roots (m)	3 9.000E-01	3 9.000E-01	3 ---	3 DROOT
R019	Drinking water fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWDW
R019	Household water fraction from ground water	3 not used	3 1.000E+00	3 ---	3 FGWHH
R019	Livestock water fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWLW
R019	Irrigation fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	3 7.000E-01	3 7.000E-01	3 ---	3 YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	3 1.500E+00	3 1.500E+00	3 ---	3 YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	3 1.100E+00	3 1.100E+00	3 ---	3 YV(3)
R19B	Growing Season for Non-Leafy (years)	3 1.700E-01	3 1.700E-01	3 ---	3 TE(1)
R19B	Growing Season for Leafy (years)	3 2.500E-01	3 2.500E-01	3 ---	3 TE(2)
R19B	Growing Season for Fodder (years)	3 8.000E-02	3 8.000E-02	3 ---	3 TE(3)
R19B	Translocation Factor for Non-Leafy	3 1.000E-01	3 1.000E-01	3 ---	3 TIV(1)
R19B	Translocation Factor for Leafy	3 1.000E+00	3 1.000E+00	3 ---	3 TIV(2)
R19B	Translocation Factor for Fodder	3 1.000E+00	3 1.000E+00	3 ---	3 TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	3 2.500E-01	3 2.500E-01	3 ---	3 RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	3 2.500E-01	3 2.500E-01	3 ---	3 RWET(3)
R19B	Weathering Removal Constant for Vegetation	3 2.000E+01	3 2.000E+01	3 ---	3 WLAM
C14	C-12 concentration in water (g/cm**3)	3 not used	3 2.000E-05	3 ---	3 C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3 not used	3 3.000E-02	3 ---	3 C12CZ
C14	Fraction of vegetation carbon from soil	3 not used	3 2.000E-02	3 ---	3 CSOIL
C14	Fraction of vegetation carbon from air	3 not used	3 9.800E-01	3 ---	3 CAIR
C14	C-14 evasion layer thickness in soil (m)	3 not used	3 3.000E-01	3 ---	3 DMC
C14	C-14 evasion flux rate from soil (1/sec)	3 not used	3 7.000E-07	3 ---	3 EVSN
C14	C-12 evasion flux rate from soil (1/sec)	3 not used	3 1.000E-10	3 ---	3 REVSN
C14	Fraction of grain in beef cattle feed	3 not used	3 8.000E-01	3 ---	3 AVFG4
C14	Fraction of grain in milk cow feed	3 not used	3 2.000E-01	3 ---	3 AVFG5
C14	DCF correction factor for gaseous forms of C14	3 not used	3 8.894E+01	3 ---	3 CO2F
STOR	Storage times of contaminated foodstuffs (days):	3	3	3	3
STOR	Fruits, non-leafy vegetables, and grain	3 1.400E+01	3 1.400E+01	3 ---	3 STOR_T(1)
STOR	Leafy vegetables	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(2)
STOR	Milk	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(3)
STOR	Meat and poultry	3 2.000E+01	3 2.000E+01	3 ---	3 STOR_T(4)
STOR	Fish	3 7.000E+00	3 7.000E+00	3 ---	3 STOR_T(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

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 Probabilistic results summary : Uncorrelated Parameter Sensitivity for Discount-
 ed Non-Transuranics - RF File: Uncorrelated ParSens3RF.RAD
 Probabilistic Input
 Number of Sample Runs: 300

Number	Name	Distribution	Parameters							
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA
1	VCZ	CONTINUOUS LOGARITHMIC	4	5.E-8	0	.0007	.22	.005	.95	.2
2	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999				1
3	HCCZ	LOGNORMAL	3.302	62						
4	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
5	DENSUZ(1)	NORMAL	1.33	.202						
6	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959				
7	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766				
8	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415				
9	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2				
10	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89				
11	DENSUZ(2)	NORMAL	1.578	.158						
12	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154				
13	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572				
14	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124				
15	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870				
16	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9				
17	DENSUZ(3)	NORMAL	1.33	.202						
18	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2				
19	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89				
20	DENSUZ(4)	NORMAL	1.578	.158						
21	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870				
22	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9				
23	DENSAQ	NORMAL	1.578	.158						
24	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5				
25	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
26	EVAPTR	UNIFORM	.5	.75						
27	RUNOFF	UNIFORM	.1	.8						
28	SOIL	TRIANGULAR	0	18.3	36.5					
29	DWI	TRUNCATED LOGNORMAL-N	6.015	.489	.001	.999				
30	DM	TRIANGULAR	0	.15	.6					
31	INHALR	TRIANGULAR	4380	8400	13100					
32	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003
	.00004	.9495	.00006	.9937	.000076	.9983	.0001	1		.8119
33	SHF3	UNIFORM	.15	.95						
34	DCACTC(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
35	DCACTU1(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
36	DCACTU2(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
37	DCACTU3(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
38	DCACTU4(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
39	DCACTS(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
40	DCACTC(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
41	DCACTU1(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
42	DCACTU2(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
43	DCACTU3(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
44	DCACTU4(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
45	DCACTS(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
46	DCACTC(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
47	DCACTU1(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
48	DCACTU2(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
49	DCACTU3(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
50	DCACTU4(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
51	DCACTS(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
52	DCACTC(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
53	DCACTU1(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
54	DCACTU2(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
55	DCACTU3(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
56	DCACTU4(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
57	DCACTS(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
58	DCACTC(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
59	DCACTU1(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
60	DCACTU2(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
61	DCACTU3(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
62	DCACTU4(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
63	DCACTS(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
64	DCACTC(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
65	DCACTU1(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
66	DCACTU2(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
67	DCACTU3(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
68	DCACTU4(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
69	DCACTS(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
70	DCACTC(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
71	DCACTU1(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
72	DCACTU2(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
73	DCACTU3(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
74	DCACTU4(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
75	DCACTS(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
76	DCACTC(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
77	DCACTU1(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
78	DCACTU2(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
79	DCACTU3(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
80	DCACTU4(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
81	DCACTS(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
82	DCACTC(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
83	DCACTU1(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
84	DCACTU2(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
85	DCACTU3(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
86	DCACTU4(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
87	DCACTS(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
88	DCACTC(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
89	DCACTU1(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
90	DCACTU2(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
91	DCACTU3(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
92	DCACTU4(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
93	DCACTS(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
94	DCACTC(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
95	DCACTU1(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
96	DCACTU2(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
97	DCACTU3(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
98	DCACTU4(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
99	DCACTS(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
100	DCACTC(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
101	DCACTU1(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
102	DCACTU2(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
103	DCACTU3(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
104	DCACTU4(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
105	DCACTS(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
106	DCACTC(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
107	DCACTU1(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
108	DCACTU2(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
109	DCACTU3(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
110	DCACTU4(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
111	DCACTS(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
112	DCACTC(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
113	DCACTU1(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
114	DCACTU2(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
115	DCACTU3(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
116	DCACTU4(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
117	DCACTS(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
118	DENSCZ	NORMAL	1.33	.202		
119	DROOT	UNIFORM	.3	4		
120	DIET(1)	TRIANGULAR	135	178	318	
121	DIET(3)	TRIANGULAR	60	102	200	
122	FR9	TRIANGULAR	0	.39	1	
123	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999
124	WLAM	TRIANGULAR	5.1	18	84	
125	RWET(2)	TRIANGULAR	.06	.67	.95	
126	BRTF(47,1)	TRUNCATED LOGNORMAL-N	-5.51	.9	.001	.999
127	BRTF(63,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
128	BRTF(26,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
129	BRTF(64,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
130	BRTF(1,1)	TRUNCATED LOGNORMAL-N	1.57	1.1	.001	.999
131	BRTF(11,1)	TRUNCATED LOGNORMAL-N	-3	1	.001	.999
132	BRTF(41,1)	TRUNCATED LOGNORMAL-N	-4.61	1.1	.001	.999
133	BRTF(28,1)	TRUNCATED LOGNORMAL-N	-3	.9	.001	.999
134	BRTF(61,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
135	BRTF(51,1)	TRUNCATED LOGNORMAL-N	-4.61	1	.001	.999
136	BRTF(62,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
137	BRTF(43,1)	TRUNCATED LOGNORMAL-N	1.61	.9	.001	.999
138	BRTF(47,2)	TRUNCATED LOGNORMAL-N	-6.21	.7	.001	.999
139	BRTF(63,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
140	BRTF(26,2)	TRUNCATED LOGNORMAL-N	-3.51	.4	.001	.999
141	BRTF(64,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
142	BRTF(1,2)	TRUNCATED LOGNORMAL-N	-4.42	1	.001	.999
143	BRTF(11,2)	TRUNCATED LOGNORMAL-N	-2.53	.2	.001	.999
144	BRTF(41,2)	TRUNCATED LOGNORMAL-N	-13.82	.9	.001	.999
145	BRTF(28,2)	TRUNCATED LOGNORMAL-N	-5.3	.9	.001	.999
146	BRTF(61,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
147	BRTF(51,2)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
148	BRTF(62,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA			
149	BRTF(43,2)	TRUNCATED LOGNORMAL-N	-9.21	.7	.001	.999
150	BRTF(47,3)	TRUNCATED LOGNORMAL-N	-5.12	.7	.001	.999
151	BRTF(63,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
152	BRTF(26,3)	TRUNCATED LOGNORMAL-N	-8.11	.7	.001	.999
153	BRTF(64,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
154	BRTF(1,3)	TRUNCATED LOGNORMAL-N	-4.6	.9	.001	.999
155	BRTF(11,3)	TRUNCATED LOGNORMAL-N	-3.22	.5	.001	.999
156	BRTF(41,3)	TRUNCATED LOGNORMAL-N	-13.12	.7	.001	.999
157	BRTF(28,3)	TRUNCATED LOGNORMAL-N	-3.91	.7	.001	.999
158	BRTF(61,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
159	BRTF(51,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
160	BRTF(62,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
161	BRTF(43,3)	TRUNCATED LOGNORMAL-N	-6.91	.7	.001	.999
162	BBIO(47,1)	LOGNORMAL-N	1.6	1.1		
163	BBIO(63,1)	LOGNORMAL-N	3.9	1.1		
164	BBIO(26,1)	LOGNORMAL-N	5.3	1.1		
165	BBIO(64,1)	LOGNORMAL-N	3.2	1.1		
166	BBIO(1,1)	LOGNORMAL-N	0	.1		
167	BBIO(11,1)	LOGNORMAL-N	3	1.1		
168	BBIO(41,1)	LOGNORMAL-N	5.7	1.1		
169	BBIO(28,1)	LOGNORMAL-N	4.6	1.1		
170	BBIO(61,1)	LOGNORMAL-N	3.4	1.1		
171	BBIO(51,1)	LOGNORMAL-N	4.6	1.1		
172	BBIO(62,1)	LOGNORMAL-N	3.2	1.1		
173	BBIO(43,1)	LOGNORMAL-N	3	1.1		
174	SHF1	BOUNDED LOGNORMAL-N	-1.3	.59	.044	1
iiiiii	iiiiii	iiiiii	iiiiii			

Attachment 8.12

RESRAD v6.22 Probabilistic Parameter Sensitivity Analysis Results for Discounted Radionuclides - Resident Farmer Scenario

RESRAD Regression and Correlation output 03/08/05 08:56 Page: Coef 1
 Title : Uncorrelated Parameter Sensitivity for Discounted Transuranics - RF
 Input File : Uncorrelated ParSens2RF.RAD

Coefficients for peak of mean dose time Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Contaminated zone erosion rate	33	-0.17
Contaminated zone total porosity	37	0.16
Contaminated zone hydraulic conductivity	141	-0.05
Contaminated zone b parameter	73	-0.11
Density of Unsaturated zone 1	7	-0.32
Total Porosity of Unsaturated zone 1	207	0.00
Effective Porosity of Unsaturated zone 1	161	0.03
Field Capacity of Unsaturated zone 1	112	-0.07
Hydraulic Conductivity of Unsaturated zone 1	213	0.00
b Parameter of Unsaturated zone 1	103	-0.07
Density of Unsaturated zone 2	211	0.00
Total Porosity of Unsaturated zone 2	115	-0.07
Effective Porosity of Unsaturated zone 2	50	-0.15
Field Capacity of Unsaturated zone 2	180	0.02
Hydraulic Conductivity of Unsaturated zone 2	162	-0.03
b Parameter of Unsaturated zone 2	20	-0.22
Density of Unsaturated zone 3	166	-0.03
Hydraulic Conductivity of Unsaturated zone 3	30	-0.18
b Parameter of Unsaturated zone 3	47	-0.15
Density of Unsaturated zone 4	53	0.15
Hydraulic Conductivity of Unsaturated zone 4	35	0.17
b Parameter of Unsaturated zone 4	210	0.00
Density of saturated zone	203	-0.01
Saturated zone hydraulic gradient	21	-0.21
Saturated zone b parameter	59	-0.13
Evapotranspiration coefficient	212	0.00
Runoff coefficient	164	0.03
Soil ingestion	85	0.09
Drinking water intake	88	-0.09
Depth of soil mixing layer	6	-0.33
Inhalation rate	169	-0.03
Mass loading for inhalation	140	0.05
Indoor dust filtration factor	154	-0.04

Kd of Ac-227 in Contaminated Zone	178	-0.02
Kd of Ac-227 in Unsaturated Zone 1	100	0.08
Kd of Ac-227 in Unsaturated Zone 2	80	0.10
Kd of Ac-227 in Unsaturated Zone 3	31	-0.18
Kd of Ac-227 in Unsaturated Zone 4	28	0.18
Kd of Ac-227 in Saturated Zone	63	0.13
Kd of Am-241 in Contaminated Zone	187	-0.02
Kd of Am-241 in Unsaturated Zone 1	139	0.05
Kd of Am-241 in Unsaturated Zone 2	60	0.13
Kd of Am-241 in Unsaturated Zone 3	93	-0.08
Kd of Am-241 in Unsaturated Zone 4	52	-0.15
Kd of Am-241 in Saturated Zone	29	0.18
Kd of Cm-244 in Contaminated Zone	96	0.08
Kd of Cm-244 in Unsaturated Zone 1	81	0.10
Kd of Cm-244 in Unsaturated Zone 2	46	-0.15
Kd of Cm-244 in Unsaturated Zone 3	61	-0.13
Kd of Cm-244 in Unsaturated Zone 4	138	-0.05
Kd of Cm-244 in Saturated Zone	65	-0.12
Kd of Np-237 in Contaminated Zone	5	0.47
Kd of Np-237 in Unsaturated Zone 1	124	0.06
Kd of Np-237 in Unsaturated Zone 2	143	0.04
Kd of Np-237 in Unsaturated Zone 3	56	-0.14
Kd of Np-237 in Unsaturated Zone 4	17	-0.23
Kd of Np-237 in Saturated Zone	42	0.16
Kd of Pa-231 in Contaminated Zone	51	-0.15
Kd of Pa-231 in Unsaturated Zone 1	82	-0.10
Kd of Pa-231 in Unsaturated Zone 2	94	0.08
Kd of Pa-231 in Unsaturated Zone 3	8	0.31
Kd of Pa-231 in Unsaturated Zone 4	32	-0.18
Kd of Pa-231 in Saturated Zone	43	0.16
Kd of Pb-210 in Contaminated Zone	197	-0.01
Kd of Pb-210 in Unsaturated Zone 1	99	-0.08
Kd of Pb-210 in Unsaturated Zone 2	172	0.02
Kd of Pb-210 in Unsaturated Zone 3	200	0.01
Kd of Pb-210 in Unsaturated Zone 4	44	-0.15
Kd of Pb-210 in Saturated Zone	118	0.06
Kd of Pu-238 in Contaminated Zone	23	0.21
Kd of Pu-238 in Unsaturated Zone 1	24	0.21
Kd of Pu-238 in Unsaturated Zone 2	79	-0.10
Kd of Pu-238 in Unsaturated Zone 3	114	0.07
Kd of Pu-238 in Unsaturated Zone 4	119	0.06
Kd of Pu-238 in Saturated Zone	137	-0.05
Kd of Pu-239 in Contaminated Zone	209	0.00
Kd of Pu-239 in Unsaturated Zone 1	70	0.12

Kd of Pu-239 in Unsaturated Zone 2	14 -0.24
Kd of Pu-239 in Unsaturated Zone 3	19 0.22
Kd of Pu-239 in Unsaturated Zone 4	102 -0.07
Kd of Pu-239 in Saturated Zone	199 -0.01
Kd of Pu-240 in Contaminated Zone	62 -0.13
Kd of Pu-240 in Unsaturated Zone 1	89 -0.08
Kd of Pu-240 in Unsaturated Zone 2	107 0.07
Kd of Pu-240 in Unsaturated Zone 3	168 -0.03
Kd of Pu-240 in Unsaturated Zone 4	125 -0.06
Kd of Pu-240 in Saturated Zone	78 -0.10
Kd of Pu-241 in Contaminated Zone	150 -0.04
Kd of Pu-241 in Unsaturated Zone 1	13 -0.25
Kd of Pu-241 in Unsaturated Zone 2	113 -0.07
Kd of Pu-241 in Unsaturated Zone 3	71 -0.12
Kd of Pu-241 in Unsaturated Zone 4	156 0.03
Kd of Pu-241 in Saturated Zone	83 0.09
Kd of Pu-242 in Contaminated Zone	160 -0.03
Kd of Pu-242 in Unsaturated Zone 1	84 0.09
Kd of Pu-242 in Unsaturated Zone 2	194 0.01
Kd of Pu-242 in Unsaturated Zone 3	41 0.16
Kd of Pu-242 in Unsaturated Zone 4	69 -0.12
Kd of Pu-242 in Saturated Zone	144 -0.04
Kd of Ra-226 in Contaminated Zone	108 0.07
Kd of Ra-226 in Unsaturated Zone 1	72 -0.11
Kd of Ra-226 in Unsaturated Zone 2	158 0.03
Kd of Ra-226 in Unsaturated Zone 3	48 -0.15
Kd of Ra-226 in Unsaturated Zone 4	87 -0.09
Kd of Ra-226 in Saturated Zone	134 -0.05
Kd of Ra-228 in Contaminated Zone	186 -0.02
Kd of Ra-228 in Unsaturated Zone 1	66 -0.12
Kd of Ra-228 in Unsaturated Zone 2	75 0.10
Kd of Ra-228 in Unsaturated Zone 3	130 -0.06
Kd of Ra-228 in Unsaturated Zone 4	170 -0.03
Kd of Ra-228 in Saturated Zone	181 -0.02
Kd of Th-228 in Contaminated Zone	10 -0.27
Kd of Th-228 in Unsaturated Zone 1	165 0.03
Kd of Th-228 in Unsaturated Zone 2	206 0.00
Kd of Th-228 in Unsaturated Zone 3	167 -0.03
Kd of Th-228 in Unsaturated Zone 4	40 0.16
Kd of Th-228 in Saturated Zone	120 0.06
Kd of Th-229 in Contaminated Zone	86 -0.09
Kd of Th-229 in Unsaturated Zone 1	9 -0.29
Kd of Th-229 in Unsaturated Zone 2	145 -0.04
Kd of Th-229 in Unsaturated Zone 3	104 -0.07

Kd of Th-229 in Unsaturated Zone 4	45	0.15
Kd of Th-229 in Saturated Zone	152	-0.04
Kd of Th-230 in Contaminated Zone	117	-0.06
Kd of Th-230 in Unsaturated Zone 1	27	0.18
Kd of Th-230 in Unsaturated Zone 2	129	-0.06
Kd of Th-230 in Unsaturated Zone 3	198	0.01
Kd of Th-230 in Unsaturated Zone 4	101	0.07
Kd of Th-230 in Saturated Zone	193	-0.01
Kd of Th-232 in Contaminated Zone	67	0.12
Kd of Th-232 in Unsaturated Zone 1	122	-0.06
Kd of Th-232 in Unsaturated Zone 2	183	-0.02
Kd of Th-232 in Unsaturated Zone 3	34	-0.17
Kd of Th-232 in Unsaturated Zone 4	97	-0.08
Kd of Th-232 in Saturated Zone	12	0.26
Kd of U-233 in Contaminated Zone	22	0.21
Kd of U-233 in Unsaturated Zone 1	214	0.00
Kd of U-233 in Unsaturated Zone 2	153	0.04
Kd of U-233 in Unsaturated Zone 3	132	0.05
Kd of U-233 in Unsaturated Zone 4	175	-0.02
Kd of U-233 in Saturated Zone	142	0.05
Kd of U-234 in Contaminated Zone	57	0.14
Kd of U-234 in Unsaturated Zone 1	135	-0.05
Kd of U-234 in Unsaturated Zone 2	174	0.02
Kd of U-234 in Unsaturated Zone 3	176	-0.02
Kd of U-234 in Unsaturated Zone 4	195	0.01
Kd of U-234 in Saturated Zone	155	0.03
Kd of U-235 in Contaminated Zone	58	-0.14
Kd of U-235 in Unsaturated Zone 1	136	-0.05
Kd of U-235 in Unsaturated Zone 2	208	0.00
Kd of U-235 in Unsaturated Zone 3	127	0.06
Kd of U-235 in Unsaturated Zone 4	106	0.07
Kd of U-235 in Saturated Zone	95	-0.08
Kd of U-236 in Contaminated Zone	179	0.02
Kd of U-236 in Unsaturated Zone 1	64	-0.13
Kd of U-236 in Unsaturated Zone 2	15	0.24
Kd of U-236 in Unsaturated Zone 3	38	0.16
Kd of U-236 in Unsaturated Zone 4	177	0.02
Kd of U-236 in Saturated Zone	98	0.08
Kd of U-238 in Contaminated Zone	128	0.06
Kd of U-238 in Unsaturated Zone 1	182	0.02
Kd of U-238 in Unsaturated Zone 2	191	-0.01
Kd of U-238 in Unsaturated Zone 3	133	-0.05
Kd of U-238 in Unsaturated Zone 4	196	0.01
Kd of U-238 in Saturated Zone	111	0.07

Density of contaminated zone	192	-0.01
Fruit, vegetable, and grain consumption	4	0.66
Milk consumption	131	-0.05
Aquatic food	202	0.01
Depth of roots	1	-0.95
Wet weight crop yield of fruit, grain and non-leafy vegetables	148	-0.04
Weathering removal constant of all vegetation	149	-0.04
Wet foliar interception fraction of leafy vegetables	185	-0.02
Plant transfer factor for Am	11	0.27
Plant transfer factor for Cm	163	0.03
Plant transfer factor for Np	2	0.94
Plant transfer factor for Ac	184	-0.02
Plant transfer factor for Pa	91	-0.08
Plant transfer factor for Pu	3	0.77
Plant transfer factor for Ra	77	-0.10
Plant transfer factor for Th	159	-0.03
Plant transfer factor for U	205	0.00
Meat transfer factor for Ac	68	-0.12
Meat transfer factor for Am	123	-0.06
Meat transfer factor for Cm	92	-0.08
Meat transfer factor for Pa	76	-0.10
Meat transfer factor for Np	190	0.01
Meat transfer factor for Pb	189	0.01
Meat transfer factor for Pu	121	0.06
Meat transfer factor for Ra	204	0.00
Meat transfer factor for Th	116	0.06
Meat transfer factor for U	201	0.01
Milk transfer factor for Ac	54	0.15
Milk transfer factor for Am	49	0.15
Milk transfer factor for Cm	39	-0.16
Milk transfer factor for Np	146	-0.04
Milk transfer factor for Pa	188	-0.02
Milk transfer factor for Pb	26	0.19
Milk transfer factor for Pu	55	0.14
Milk transfer factor for Ra	16	-0.23
Milk transfer factor for Th	157	-0.03
Milk transfer factor for U	147	-0.04
Fish transfer factor for Ac	105	-0.07
Fish transfer factor for Am	36	-0.16
Fish transfer factor for Cm	109	0.07
Fish transfer factor for Np	126	0.06
Fish transfer factor for Pa	151	0.04
Fish transfer factor for Pb	74	0.11
Fish transfer factor for Pu	173	-0.02

Fish transfer factor for Ra	25	-0.20
Fish transfer factor for Th	90	0.08
Fish transfer factor for U	110	0.07
External gamma shielding factor	18	0.22
Plant transfer factor for Pb	171	-0.03

R-SQUARE		0.96
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-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak of mean dose time Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Contaminated zone erosion rate	7	-0.34
Contaminated zone total porosity	34	0.16
Contaminated zone hydraulic conductivity	13	-0.24
Contaminated zone b parameter	123	0.04
Density of Unsaturated zone 1	92	-0.06
Total Porosity of Unsaturated zone 1	169	0.00
Effective Porosity of Unsaturated zone 1	173	0.00
Field Capacity of Unsaturated zone 1	90	0.06
Hydraulic Conductivity of Unsaturated zone 1	100	0.06
b Parameter of Unsaturated zone 1	171	0.00
Density of Unsaturated zone 2	146	-0.02
Total Porosity of Unsaturated zone 2	68	0.09
Effective Porosity of Unsaturated zone 2	105	-0.06
Field Capacity of Unsaturated zone 2	108	0.05
Hydraulic Conductivity of Unsaturated zone 2	124	-0.04
b Parameter of Unsaturated zone 2	41	-0.13
Density of Unsaturated zone 3	49	0.12
Hydraulic Conductivity of Unsaturated zone 3	159	-0.01
b Parameter of Unsaturated zone 3	32	0.16
Density of Unsaturated zone 4	126	-0.04
Hydraulic Conductivity of Unsaturated zone 4	36	0.15
b Parameter of Unsaturated zone 4	25	-0.17
Density of saturated zone	58	0.10
Saturated zone hydraulic gradient	31	0.16
Saturated zone b parameter	42	-0.13
Evapotranspiration coefficient	11	0.25
Runoff coefficient	23	0.18
Soil ingestion	78	-0.08
Drinking water intake	33	0.16
Depth of soil mixing layer	165	0.01
Inhalation rate	91	-0.06
Mass loading for inhalation	66	0.10
Indoor dust filtration factor	51	-0.12
Kd of Ag-108m in Contaminated Zone	134	-0.02
Kd of Ag-108m in Unsaturated Zone 1	19	-0.21
Kd of Ag-108m in Unsaturated Zone 2	71	-0.09
Kd of Ag-108m in Unsaturated Zone 3	50	0.12
Kd of Ag-108m in Unsaturated Zone 4	45	0.12
Kd of Ag-108m in Saturated Zone	160	0.01
Kd of Eu-152 in Contaminated Zone	26	0.17
Kd of Eu-152 in Unsaturated Zone 1	137	0.02
Kd of Eu-152 in Unsaturated Zone 2	46	0.12
Kd of Eu-152 in Unsaturated Zone 3	163	0.01
Kd of Eu-152 in Unsaturated Zone 4	12	-0.25

Kd of Eu-152 in Saturated Zone	52	-0.11
Kd of Eu-154 in Contaminated Zone	43	0.13
Kd of Eu-154 in Unsaturated Zone 1	167	0.00
Kd of Eu-154 in Unsaturated Zone 2	73	0.08
Kd of Eu-154 in Unsaturated Zone 3	47	0.12
Kd of Eu-154 in Unsaturated Zone 4	162	-0.01
Kd of Eu-154 in Saturated Zone	158	0.01
Kd of Eu-155 in Contaminated Zone	56	-0.10
Kd of Eu-155 in Unsaturated Zone 1	101	0.06
Kd of Eu-155 in Unsaturated Zone 2	83	-0.07
Kd of Eu-155 in Unsaturated Zone 3	37	0.14
Kd of Eu-155 in Unsaturated Zone 4	129	0.03
Kd of Eu-155 in Saturated Zone	115	0.04
Kd of Fe-55 in Contaminated Zone	54	-0.11
Kd of Fe-55 in Unsaturated Zone 1	85	0.07
Kd of Fe-55 in Unsaturated Zone 2	93	-0.06
Kd of Fe-55 in Unsaturated Zone 3	10	0.25
Kd of Fe-55 in Unsaturated Zone 4	103	-0.06
Kd of Fe-55 in Saturated Zone	95	0.06
Kd of Gd-152 in Contaminated Zone	89	-0.06
Kd of Gd-152 in Unsaturated Zone 1	164	0.01
Kd of Gd-152 in Unsaturated Zone 2	145	-0.02
Kd of Gd-152 in Unsaturated Zone 3	110	0.05
Kd of Gd-152 in Unsaturated Zone 4	174	0.00
Kd of Gd-152 in Saturated Zone	40	-0.13
Kd of H-3 in Contaminated Zone	75	-0.08
Kd of H-3 in Unsaturated Zone 1	8	0.26
Kd of H-3 in Unsaturated Zone 2	86	0.07
Kd of H-3 in Unsaturated Zone 3	149	-0.01
Kd of H-3 in Unsaturated Zone 4	94	-0.06
Kd of H-3 in Saturated Zone	142	-0.02
Kd of Na-22 in Contaminated Zone	117	0.04
Kd of Na-22 in Unsaturated Zone 1	127	-0.04
Kd of Na-22 in Unsaturated Zone 2	172	0.00
Kd of Na-22 in Unsaturated Zone 3	79	-0.08
Kd of Na-22 in Unsaturated Zone 4	140	0.02
Kd of Na-22 in Saturated Zone	155	0.01
Kd of Nb-94 in Contaminated Zone	72	-0.09
Kd of Nb-94 in Unsaturated Zone 1	139	-0.02
Kd of Nb-94 in Unsaturated Zone 2	116	-0.04
Kd of Nb-94 in Unsaturated Zone 3	29	-0.17
Kd of Nb-94 in Unsaturated Zone 4	104	-0.06
Kd of Nb-94 in Saturated Zone	136	0.02
Kd of Ni-59 in Contaminated Zone	98	-0.06
Kd of Ni-59 in Unsaturated Zone 1	14	-0.23
Kd of Ni-59 in Unsaturated Zone 2	65	0.10
Kd of Ni-59 in Unsaturated Zone 3	161	0.01
Kd of Ni-59 in Unsaturated Zone 4	118	-0.04
Kd of Ni-59 in Saturated Zone	62	-0.10
Kd of Pm-147 in Contaminated Zone	67	0.09
Kd of Pm-147 in Unsaturated Zone 1	141	-0.02
Kd of Pm-147 in Unsaturated Zone 2	80	-0.07
Kd of Pm-147 in Unsaturated Zone 3	170	0.00
Kd of Pm-147 in Unsaturated Zone 4	70	0.09
Kd of Pm-147 in Saturated Zone	82	-0.07

Kd of Sb-125 in Contaminated Zone	30	0.17
Kd of Sb-125 in Unsaturated Zone 1	119	-0.04
Kd of Sb-125 in Unsaturated Zone 2	109	-0.05
Kd of Sb-125 in Unsaturated Zone 3	53	0.11
Kd of Sb-125 in Unsaturated Zone 4	151	-0.01
Kd of Sb-125 in Saturated Zone	122	0.04
Kd of Sm-147 in Contaminated Zone	28	0.17
Kd of Sm-147 in Unsaturated Zone 1	76	-0.08
Kd of Sm-147 in Unsaturated Zone 2	102	0.06
Kd of Sm-147 in Unsaturated Zone 3	61	-0.10
Kd of Sm-147 in Unsaturated Zone 4	55	0.11
Kd of Sm-147 in Saturated Zone	84	-0.07
Kd of Tc-99 in Contaminated Zone	4	0.69
Kd of Tc-99 in Unsaturated Zone 1	77	0.08
Kd of Tc-99 in Unsaturated Zone 2	112	0.05
Kd of Tc-99 in Unsaturated Zone 3	24	-0.18
Kd of Tc-99 in Unsaturated Zone 4	96	0.06
Kd of Tc-99 in Saturated Zone	44	-0.12
Density of contaminated zone	5	0.58
Depth of roots	2	-0.87
Fruit, vegetable, and grain consumption	6	0.48
Milk consumption	114	-0.05
Aquatic food	106	0.05
Wet weight crop yield of fruit, grain and non-leafy vegetables	154	-0.01
Weathering removal constant of all vegetation	39	0.14
Wet foliar interception fraction of leafy vegetables	143	0.02
Plant transfer factor for Ag	59	-0.10
Plant transfer factor for Eu	168	0.00
Plant transfer factor for Fe	21	-0.20
Plant transfer factor for Gd	57	-0.10
Plant transfer factor for H	138	-0.02
Plant transfer factor for Na	166	0.01
Plant transfer factor for Nb	157	-0.01
Plant transfer factor for Ni	153	0.01
Plant transfer factor for Pm	144	0.02
Plant transfer factor for Sb	99	0.06
Plant transfer factor for Sm	130	0.03
Plant transfer factor for Tc	1	0.93
Meat transfer factor for Ag	17	-0.21
Meat transfer factor for Eu	20	-0.21
Meat transfer factor for Fe	27	0.17
Meat transfer factor for Gd	74	0.08
Meat transfer factor for H	152	-0.01
Meat transfer factor for Na	148	0.01
Meat transfer factor for Nb	63	0.10
Meat transfer factor for Ni	38	0.14
Meat transfer factor for Pm	87	-0.07
Meat transfer factor for Sb	131	-0.03
Meat transfer factor for Sm	16	-0.22
Meat transfer factor for Tc	113	-0.05
Milk transfer factor for Ag	35	0.15
Milk transfer factor for Eu	97	0.06
Milk transfer factor for Fe	88	0.07
Milk transfer factor for Gd	135	0.02
Milk transfer factor for H	128	-0.04

Milk transfer factor for Na	81	-0.07
Milk transfer factor for Nb	156	0.01
Milk transfer factor for Ni	120	0.04
Milk transfer factor for Pm	22	0.18
Milk transfer factor for Sb	48	0.12
Milk transfer factor for Sm	121	-0.04
Milk transfer factor for Tc	132	0.03
Fish transfer factor for Ag	147	0.01
Fish transfer factor for Eu	125	-0.04
Fish transfer factor for Fe	9	0.25
Fish transfer factor for Gd	133	0.02
Fish transfer factor for H	150	-0.01
Fish transfer factor for Na	64	-0.10
Fish transfer factor for Nb	60	-0.10
Fish transfer factor for Ni	18	-0.21
Fish transfer factor for Pm	69	0.09
Fish transfer factor for Sb	107	-0.05
Fish transfer factor for Sm	15	0.22
Fish transfer factor for Tc	111	0.05
External gamma shielding factor	3	0.74

R-SQUARE		0.94
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-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Attachment 8.13

Input Parameter Selections from the Dose Calculation Deterministic and Probabilistic Summary Reports for Discounted Radionuclides - Resident Farmer Scenario

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Time = 1.000E+00	19
Time = 3.000E+00	20
Time = 2.500E+01	21
Time = 5.000E+01	22
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Dose Conversion Factor (and Related) Parameter Summary
 File: RSNCS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
Dose conversion factors for inhalation, mrem/pCi:				
B-1	Ac-227+D	6.720E+00	6.720E+00	DCF2(1)
B-1	Am-241	4.440E-01	4.440E-01	DCF2(2)
B-1	Cm-244	2.480E-01	2.480E-01	DCF2(3)
B-1	Np-237+D	5.400E-01	5.400E-01	DCF2(4)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(5)
B-1	Pb-210+D	2.320E-02	2.320E-02	DCF2(6)
B-1	Pu-238	3.920E-01	3.920E-01	DCF2(7)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(8)
B-1	Pu-240	4.290E-01	4.290E-01	DCF2(9)
B-1	Pu-241+D	8.250E-03	8.250E-03	DCF2(10)
B-1	Pu-242	4.110E-01	4.110E-01	DCF2(12)
B-1	Ra-226+D	8.600E-03	8.600E-03	DCF2(13)
B-1	Ra-228+D	5.080E-03	5.080E-03	DCF2(14)
B-1	Th-228+D	3.450E-01	3.450E-01	DCF2(15)
B-1	Th-229+D	2.160E+00	2.160E+00	DCF2(16)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(17)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(18)
B-1	U-233	1.350E-01	1.350E-01	DCF2(19)
B-1	U-234	1.320E-01	1.320E-01	DCF2(20)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(21)
B-1	U-236	1.250E-01	1.250E-01	DCF2(22)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(23)
Dose conversion factors for ingestion, mrem/pCi:				
D-1	Ac-227+D	1.480E-02	1.480E-02	DCF3(1)
D-1	Am-241	3.640E-03	3.640E-03	DCF3(2)
D-1	Cm-244	2.020E-03	2.020E-03	DCF3(3)
D-1	Np-237+D	4.440E-03	4.440E-03	DCF3(4)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(5)
D-1	Pb-210+D	7.270E-03	7.270E-03	DCF3(6)
D-1	Pu-238	3.200E-03	3.200E-03	DCF3(7)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(8)
D-1	Pu-240	3.540E-03	3.540E-03	DCF3(9)
D-1	Pu-241+D	6.850E-05	6.850E-05	DCF3(10)
D-1	Pu-242	3.360E-03	3.360E-03	DCF3(12)
D-1	Ra-226+D	1.330E-03	1.330E-03	DCF3(13)
D-1	Ra-228+D	1.440E-03	1.440E-03	DCF3(14)
D-1	Th-228+D	8.080E-04	8.080E-04	DCF3(15)
D-1	Th-229+D	4.030E-03	4.030E-03	DCF3(16)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(17)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(18)
D-1	U-233	2.890E-04	2.890E-04	DCF3(19)
D-1	U-234	2.830E-04	2.830E-04	DCF3(20)
D-1	U-235+D	2.670E-04	2.670E-04	DCF3(21)
D-1	U-236	2.690E-04	2.690E-04	DCF3(22)
D-1	U-238+D	2.690E-04	2.690E-04	DCF3(23)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 File: RSNCS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.820E-03	1.000E-03	RTF(2,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(2,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(2,3)
D-34	Cm-244 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(3,1)
D-34	Cm-244 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Cm-244 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(3,3)
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	3.650E-02	2.000E-02	RTF(4,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(4,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(4,3)
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(5,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(5,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(5,3)
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(6,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(6,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(6,3)
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(7,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(7,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(7,3)
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(8,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(8,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(8,3)
D-34	Pu-240 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(9,1)
D-34	Pu-240 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(9,2)
D-34	Pu-240 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(9,3)
D-34	Pu-241+D , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(10,1)
D-34	Pu-241+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(10,2)
D-34	Pu-241+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(10,3)
D-34	Pu-242 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(12,1)
D-34	Pu-242 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(12,2)
D-34	Pu-242 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(12,3)
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(13,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(13,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(13,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 File: RNSGS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(14,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(14,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(14,3)
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(15,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(15,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(15,3)
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(16,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(16,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(16,3)
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(17,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(17,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(17,3)
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(18,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(18,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(18,3)
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(19,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(19,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(19,3)
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(20,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(20,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(20,3)
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(21,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(21,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(21,3)
D-34	U-236 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(22,1)
D-34	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(22,2)
D-34	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(22,3)
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(23,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(23,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(23,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(2,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)
D-5	Cm-244 , fish	3.000E+01	3.000E+01	BIOFAC(3,1)
D-5	Cm-244 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: RSNCS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(4,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(4,2)
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(5,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(5,2)
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(6,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(6,2)
D-5	Pu-238 , fish	3.000E+01	3.000E+01	BIOFAC(7,1)
D-5	Pu-238 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(7,2)
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(8,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(8,2)
D-5	Pu-240 , fish	3.000E+01	3.000E+01	BIOFAC(9,1)
D-5	Pu-240 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5	Pu-241+D , fish	3.000E+01	3.000E+01	BIOFAC(10,1)
D-5	Pu-241+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Pu-242 , fish	3.000E+01	3.000E+01	BIOFAC(12,1)
D-5	Pu-242 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(12,2)
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(13,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(13,2)
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(14,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(14,2)
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(15,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(15,2)
D-5	Th-229+D , fish	1.000E+02	1.000E+02	BIOFAC(16,1)
D-5	Th-229+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(16,2)
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(17,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(17,2)
D-5	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC(18,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(18,2)
D-5	U-233 , fish	1.000E+01	1.000E+01	BIOFAC(19,1)
D-5	U-233 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(19,2)
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(20,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(20,2)
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(21,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(21,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 File: RSNCS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-5	U-236, fish	1.000E+01	1.000E+01	BIOFAC(22,1)
D-5	U-236, crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(22,2)
D-5	U-238+D, fish	1.000E+01	1.000E+01	BIOFAC(23,1)
D-5	U-238+D, crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(23,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	2.500E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	7.500E+01	1.000E+02	---	T(6)
R011	Times for calculations (yr)	1.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	3.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	5.000E+02	0.000E+00	---	T(9)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Am-241	7.570E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Cm-244	4.800E-01	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Np-237	4.410E-01	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Pu-238	8.240E-01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Pu-239	2.070E-01	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Pu-240	2.070E-01	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Pu-241	4.870E+01	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Pu-242	5.940E-01	0.000E+00	---	S1(12)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Cm-244	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Pu-240	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): Pu-241	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): Pu-242	not used	0.000E+00	---	W1(12)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.460E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	7.590E-04	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.300E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.190E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Am-241					
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.694E-02	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
Distribution coefficients for Cm-244					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(3,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
Distribution coefficients for Np-237					
R016	Contaminated zone (cm**3/g)	7.780E+01	-1.000E+00	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.475E-02	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
Distribution coefficients for Pu-238					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(7,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.753E-04	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
Distribution coefficients for Pu-239					
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(8,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.753E-04	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
AA					
R016	Distribution coefficients for Pu-240				
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(9,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.753E-04	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)
R016	Distribution coefficients for Pu-241				
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(10,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.753E-04	ALEACH(10)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
R016	Distribution coefficients for Pu-242				
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(12,4)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.753E-04	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)
R016	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.694E-02	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for daughter Pa-231				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	3.300E+03	5.000E+01	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.292E-02	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for daughter Pb-210					
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.148E-02	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
Distribution coefficients for daughter Ra-226					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(13)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,1)
R016	Unsaturated zone 2 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,2)
R016	Unsaturated zone 3 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,3)
R016	Unsaturated zone 4 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(13,4)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.639E-02	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
Distribution coefficients for daughter Ra-228					
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,1)
R016	Unsaturated zone 2 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,2)
R016	Unsaturated zone 3 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,3)
R016	Unsaturated zone 4 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(14,4)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.639E-02	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
Distribution coefficients for daughter Th-228					
R016	Contaminated zone (cm**3/g)	5.070E+02	6.000E+04	---	DCNUCC(15)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(15,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.269E-03	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
Distribution coefficients for daughter Th-229					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	5.040E+02	6.000E+04	---	DCNUCU(16,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(16,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.918E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for daughter Th-230					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(17,4)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.918E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)
Distribution coefficients for daughter Th-232					
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,1)
R016	Unsaturated zone 2 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,2)
R016	Unsaturated zone 3 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,3)
R016	Unsaturated zone 4 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(18,4)
R016	Saturated zone (cm**3/g)	6.520E+03	6.000E+04	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.918E-05	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
Distribution coefficients for daughter U-233					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(19)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(19,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(19)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.292E-02	ALEACH(19)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(19)
Distribution coefficients for daughter U-234					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(20)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(20,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(20)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.292E-02	ALEACH(20)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(20)
Distribution coefficients for daughter U-235					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(21)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(21,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(21)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.292E-02	ALEACH(21)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(21)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for daughter U-236					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(22)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(22,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(22)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.292E-02	ALEACH(22)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(22)
Distribution coefficients for daughter U-238					
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(23)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,1)
R016	Unsaturated zone 2 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,2)
R016	Unsaturated zone 3 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,3)
R016	Unsaturated zone 4 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(23,4)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(23)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.292E-02	ALEACH(23)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(23)
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	3.970E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	1.140E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.140E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
Radii of shape factor array (used if FS = -1):					
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
AA					
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	2.370E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	9.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.500E+00	FPLANT
R018	Contamination fraction of meat	-1	-1	0.500E+00	FMEAT
R018	Contamination fraction of milk	-1	-1	0.500E+00	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	5.500E+01	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.600E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.490E-01	1.500E-01	---	DM
R019	Depth of roots (m)	1.220E+00	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVS
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	not used	8.894E+01	---	C02F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

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Probabilistic Input
 Number of Sample Runs: 300

Number	Name	Distribution	Parameters						
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA
1	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999			
2	HCCZ	LOGNORMAL	3.302	62					
3	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30			
4	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959			
5	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766			
6	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415			
7	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
8	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
9	DENSUZ(2)	NORMAL	1.578	.158					
10	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154			
11	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572			
12	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124			
13	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870			
14	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9			
15	DENSUZ(3)	NORMAL	1.33	.202					
16	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
17	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
18	DENSUZ(4)	NORMAL	1.578	.158					
19	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870			
20	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9			
21	DENSAQ	NORMAL	1.578	.158					
22	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5			
23	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30			
24	EVAPTR	UNIFORM	.5	.75					
25	RUNOFF	UNIFORM	.1	.8					
26	SOIL	TRIANGULAR	0	18.3	36.5				
27	DWI	TRUNCATED LOGNORMAL-N	6.015	.489	.001	.999			
28	INHALR	TRIANGULAR	4380	8400	13100				
29	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365
	.00004	.9495	.00006	.9937	.000076	.9983	.0001	1	.00003
30	SHF3	UNIFORM	.15	.95					.8119
31	DCACTC(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999			
32	DCACTU1(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999			
33	DCACTU2(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999			
34	DCACTU3(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999			
35	DCACTU4(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999			
36	DCACTS(1)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999			
37	DCACTC(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999			
38	DCACTU1(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999			
39	DCACTU2(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999			
40	DCACTU3(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999			
41	DCACTU4(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999			
42	DCACTS(2)	TRUNCATED LOGNORMAL-N	7.28	3.15	.001	.999			
43	DCACTC(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999			
44	DCACTU1(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999			
45	DCACTU2(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999			
46	DCACTU3(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999			
47	DCACTU4(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999			
48	DCACTS(3)	TRUNCATED LOGNORMAL-N	8.82	1.82	.001	.999			

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
49	DCACTU1(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
50	DCACTU2(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
51	DCACTU3(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
52	DCACTU4(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
53	DCACTS(4)	TRUNCATED LOGNORMAL-N	2.84	2.25	.001	.999
54	DCACTC(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
55	DCACTU1(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
56	DCACTU2(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
57	DCACTU4(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
58	DCACTS(5)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
59	DCACTC(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
60	DCACTU1(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
61	DCACTU2(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
62	DCACTU3(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
63	DCACTU4(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
64	DCACTS(6)	TRUNCATED LOGNORMAL-N	7.78	2.76	.001	.999
65	DCACTC(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
66	DCACTU1(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
67	DCACTU2(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
68	DCACTU3(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
69	DCACTU4(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
70	DCACTS(7)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
71	DCACTC(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
72	DCACTU1(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
73	DCACTU2(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
74	DCACTU3(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
75	DCACTU4(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
76	DCACTS(8)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
77	DCACTC(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
78	DCACTU1(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
79	DCACTU2(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
80	DCACTU3(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
81	DCACTU4(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
82	DCACTS(9)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
83	DCACTC(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
84	DCACTU1(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
85	DCACTU2(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
86	DCACTU3(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
87	DCACTU4(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
88	DCACTS(11)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
89	DCACTC(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
90	DCACTU1(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
91	DCACTU2(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
92	DCACTU3(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
93	DCACTU4(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
94	DCACTS(12)	TRUNCATED LOGNORMAL-N	6.86	1.89	.001	.999
95	DCACTC(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
96	DCACTU1(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
97	DCACTU2(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
98	DCACTU3(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA	AAAAAA
99	DCACTU4(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
100	DCACTS(13)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
101	DCACTC(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
102	DCACTU1(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
103	DCACTU2(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
104	DCACTU3(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
105	DCACTU4(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
106	DCACTS(14)	TRUNCATED LOGNORMAL-N	8.17	1.7	.001	.999
107	DCACTU1(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
108	DCACTU2(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
109	DCACTU3(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
110	DCACTU4(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
111	DCACTS(15)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
112	DCACTC(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
113	DCACTU2(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
114	DCACTU3(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
115	DCACTU4(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
116	DCACTS(16)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
117	DCACTC(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
118	DCACTU1(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
119	DCACTU2(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
120	DCACTU3(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
121	DCACTU4(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
122	DCACTS(17)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
123	DCACTC(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
124	DCACTU1(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
125	DCACTU2(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
126	DCACTU3(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
127	DCACTU4(18)	TRUNCATED LOGNORMAL-N	8.68	3.62	.001	.999
128	DCACTC(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
129	DCACTU1(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
130	DCACTU2(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
131	DCACTU3(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
132	DCACTU4(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
133	DCACTS(19)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
134	DCACTC(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
135	DCACTU1(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
136	DCACTU2(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
137	DCACTU3(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
138	DCACTU4(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
139	DCACTS(20)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
140	DCACTC(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
141	DCACTU1(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
142	DCACTU2(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
143	DCACTU3(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
144	DCACTU4(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
145	DCACTS(21)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
146	DCACTC(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
147	DCACTU1(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
148	DCACTU2(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA	AAAAAA
149	DCACTU3(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
150	DCACTU4(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
151	DCACTS(22)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
152	DCACTC(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
153	DCACTU1(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
154	DCACTU2(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
155	DCACTU3(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
156	DCACTU4(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
157	DCACTS(23)	TRUNCATED LOGNORMAL-N	4.84	3.13	.001	.999
158	DIET(3)	TRIANGULAR	60	102	200	
159	FR9	TRIANGULAR	0	.39	1	
160	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999
161	WLAM	TRIANGULAR	5.1	18	84	
162	RWET(2)	TRIANGULAR	.06	.67	.95	
163	BRTF(96,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
164	BRTF(89,1)	TRUNCATED LOGNORMAL-N	-6.91	1.1	.001	.999
165	BRTF(91,1)	TRUNCATED LOGNORMAL-N	-4.61	1.1	.001	.999
166	BRTF(88,1)	TRUNCATED LOGNORMAL-N	-3.22	.9	.001	.999
167	BRTF(90,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
168	BRTF(92,1)	TRUNCATED LOGNORMAL-N	-6.21	.9	.001	.999
169	BRTF(89,2)	TRUNCATED LOGNORMAL-N	-10.82	1	.001	.999
170	BRTF(95,2)	TRUNCATED LOGNORMAL-N	-9.9	.2	.001	.999
171	BRTF(96,2)	TRUNCATED LOGNORMAL-N	-10.82	1	.001	.999
172	BRTF(91,2)	TRUNCATED LOGNORMAL-N	-12.21	1	.001	.999
173	BRTF(93,2)	TRUNCATED LOGNORMAL-N	-6.91	.07	.001	.999
174	BRTF(82,2)	TRUNCATED LOGNORMAL-N	-7.13	.7	.001	.999
175	BRTF(94,2)	TRUNCATED LOGNORMAL-N	-9.21	.2	.001	.999
176	BRTF(88,2)	TRUNCATED LOGNORMAL-N	-6.91	.7	.001	.999
177	BRTF(90,2)	TRUNCATED LOGNORMAL-N	-9.21	1	.001	.999
178	BRTF(92,2)	TRUNCATED LOGNORMAL-N	-7.13	.7	.001	.999
179	BRTF(89,3)	TRUNCATED LOGNORMAL-N	-13.12	.9	.001	.999
180	BRTF(95,3)	TRUNCATED LOGNORMAL-N	-13.12	.7	.001	.999
181	BRTF(96,3)	TRUNCATED LOGNORMAL-N	-13.12	.9	.001	.999
182	BRTF(93,3)	TRUNCATED LOGNORMAL-N	-11.51	.7	.001	.999
183	BRTF(91,3)	TRUNCATED LOGNORMAL-N	-12.21	.9	.001	.999
184	BRTF(82,3)	TRUNCATED LOGNORMAL-N	-8.11	.9	.001	.999
185	BRTF(94,3)	TRUNCATED LOGNORMAL-N	-13.82	.5	.001	.999
186	BRTF(88,3)	TRUNCATED LOGNORMAL-N	-6.91	.5	.001	.999
187	BRTF(90,3)	TRUNCATED LOGNORMAL-N	-12.21	.9	.001	.999
188	BRTF(92,3)	TRUNCATED LOGNORMAL-N	-7.82	.6	.001	.999
189	BBIO(89,1)	LOGNORMAL-N	2.7	1.1		
190	BBIO(95,1)	LOGNORMAL-N	3.4	1.1		
191	BBIO(96,1)	LOGNORMAL-N	3.4	1.1		
192	BBIO(93,1)	LOGNORMAL-N	3.4	1.1		
193	BBIO(91,1)	LOGNORMAL-N	2.3	1.1		
194	BBIO(82,1)	LOGNORMAL-N	5.7	1.1		
195	BBIO(94,1)	LOGNORMAL-N	3.4	1.1		
196	BBIO(88,1)	LOGNORMAL-N	3.9	1.1		
197	BBIO(90,1)	LOGNORMAL-N	4.6	1.1		
198	BBIO(92,1)	LOGNORMAL-N	2.3	1.1		

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters
199	BRTF(82,1)	TRUNCATED LOGNORMAL-N	-5.52 .9 .001 .999

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Dose Conversion Factor (and Related) Parameter Summary
 File: RNSGS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
Dose conversion factors for inhalation, mrem/pCi:				
B-1	Ag-108m+D	2.830E-04	2.830E-04	DCF2(1)
B-1	Eu-152	2.210E-04	2.210E-04	DCF2(2)
B-1	Eu-154	2.860E-04	2.860E-04	DCF2(4)
B-1	Eu-155	4.140E-05	4.140E-05	DCF2(5)
B-1	Fe-55	2.690E-06	2.690E-06	DCF2(6)
B-1	Gd-152	2.430E-01	2.430E-01	DCF2(7)
B-1	H-3	6.400E-08	6.400E-08	DCF2(8)
B-1	Na-22	7.660E-06	7.660E-06	DCF2(9)
B-1	Nb-94	4.140E-04	4.140E-04	DCF2(10)
B-1	Ni-59	2.700E-06	2.700E-06	DCF2(11)
B-1	Pm-147	3.920E-05	3.920E-05	DCF2(12)
B-1	Sb-125+D	1.386E-05	1.386E-05	DCF2(13)
B-1	Sm-147	7.470E-02	7.470E-02	DCF2(14)
B-1	Tc-99	8.330E-06	8.330E-06	DCF2(15)
Dose conversion factors for ingestion, mrem/pCi:				
D-1	Ag-108m+D	7.620E-06	7.620E-06	DCF3(1)
D-1	Eu-152	6.480E-06	6.480E-06	DCF3(2)
D-1	Eu-154	9.550E-06	9.550E-06	DCF3(4)
D-1	Eu-155	1.530E-06	1.530E-06	DCF3(5)
D-1	Fe-55	6.070E-07	6.070E-07	DCF3(6)
D-1	Gd-152	1.610E-04	1.610E-04	DCF3(7)
D-1	H-3	6.400E-08	6.400E-08	DCF3(8)
D-1	Na-22	1.150E-05	1.150E-05	DCF3(9)
D-1	Nb-94	7.140E-06	7.140E-06	DCF3(10)
D-1	Ni-59	2.100E-07	2.100E-07	DCF3(11)
D-1	Pm-147	1.050E-06	1.050E-06	DCF3(12)
D-1	Sb-125+D	3.647E-06	3.647E-06	DCF3(13)
D-1	Sm-147	1.850E-04	1.850E-04	DCF3(14)
D-1	Tc-99	1.460E-06	1.460E-06	DCF3(15)
Food transfer factors:				
D-34	Ag-108m+D, plant/soil concentration ratio, dimensionless	1.500E-01	1.500E-01	RTF(1,1)
D-34	Ag-108m+D, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-03	3.000E-03	RTF(1,2)
D-34	Ag-108m+D, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.500E-02	2.500E-02	RTF(1,3)
D-34	Eu-152, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(2,1)
D-34	Eu-152, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,2)
D-34	Eu-152, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,3)
D-34	Eu-154, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(4,1)
D-34	Eu-154, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(4,2)
D-34	Eu-154, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,3)
D-34	Eu-155, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(5,1)
D-34	Eu-155, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(5,2)
D-34	Eu-155, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: RNSGS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-34	Fe-55, plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(6,1)
D-34	Fe-55, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(6,2)
D-34	Fe-55, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(6,3)
D-34	Gd-152, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(7,1)
D-34	Gd-152, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(7,2)
D-34	Gd-152, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(7,3)
D-34	H-3, plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(8,1)
D-34	H-3, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(8,2)
D-34	H-3, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(8,3)
D-34	Na-22, plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(9,1)
D-34	Na-22, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-02	8.000E-02	RTF(9,2)
D-34	Na-22, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-02	4.000E-02	RTF(9,3)
D-34	Nb-94, plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(10,1)
D-34	Nb-94, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-07	3.000E-07	RTF(10,2)
D-34	Nb-94, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(10,3)
D-34	Ni-59, plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(11,1)
D-34	Ni-59, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(11,2)
D-34	Ni-59, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(11,3)
D-34	Pm-147, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(12,1)
D-34	Pm-147, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(12,2)
D-34	Pm-147, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(12,3)
D-34	Sb-125+D, plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(13,1)
D-34	Sb-125+D, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(13,2)
D-34	Sb-125+D, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-04	1.000E-04	RTF(13,3)
D-34	Sm-147, plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(14,1)
D-34	Sm-147, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(14,2)
D-34	Sm-147, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(14,3)
D-34	Tc-99, plant/soil concentration ratio, dimensionless	9.170E+00	5.000E+00	RTF(15,1)
D-34	Tc-99, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(15,2)
D-34	Tc-99, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(15,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ag-108m+D, fish	5.000E+00	5.000E+00	BIOFAC(1,1)
D-5	Ag-108m+D, crustacea and mollusks	7.700E+02	7.700E+02	BIOFAC(1,2)
D-5	Eu-152, fish	5.000E+01	5.000E+01	BIOFAC(2,1)
D-5	Eu-152, crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)
D-5	Eu-154, fish	5.000E+01	5.000E+01	BIOFAC(4,1)
D-5	Eu-154, crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
 File: RSNCS RF Dis Nuclide Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(5,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)
D-5	Fe-55 , fish	2.000E+02	2.000E+02	BIOFAC(6,1)
D-5	Fe-55 , crustacea and mollusks	3.200E+03	3.200E+03	BIOFAC(6,2)
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(7,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(7,2)
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(8,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(8,2)
D-5	Na-22 , fish	2.000E+01	2.000E+01	BIOFAC(9,1)
D-5	Na-22 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(9,2)
D-5	Nb-94 , fish	3.000E+02	3.000E+02	BIOFAC(10,1)
D-5	Nb-94 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(10,2)
D-5	Ni-59 , fish	1.000E+02	1.000E+02	BIOFAC(11,1)
D-5	Ni-59 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(11,2)
D-5	Pm-147 , fish	3.000E+01	3.000E+01	BIOFAC(12,1)
D-5	Pm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(12,2)
D-5	Sb-125+D , fish	1.000E+02	1.000E+02	BIOFAC(13,1)
D-5	Sb-125+D , crustacea and mollusks	1.000E+01	1.000E+01	BIOFAC(13,2)
D-5	Sm-147 , fish	2.500E+01	2.500E+01	BIOFAC(14,1)
D-5	Sm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(14,2)
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(15,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(15,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	2.500E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	7.500E+01	1.000E+02	---	T(6)
R011	Times for calculations (yr)	1.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	3.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	5.000E+02	0.000E+00	---	T(9)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Ag-108m	5.500E-02	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.760E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Eu-154	6.260E-02	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.560E-01	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Fe-55	1.270E+00	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): H-3	5.440E+00	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Na-22	9.460E-03	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Nb-94	3.950E-02	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Ni-59	3.580E+00	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Pm-147	9.550E-01	0.000E+00	---	S1(12)
R012	Initial principal radionuclide (pCi/g): Sb-125	1.250E-01	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Tc-99	2.350E+00	0.000E+00	---	S1(15)
R012	Concentration in groundwater (pCi/L): Ag-108m	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Eu-152	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Eu-154	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Eu-155	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Fe-55	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Na-22	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): Nb-94	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): Ni-59	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): Pm-147	not used	0.000E+00	---	W1(12)
R012	Concentration in groundwater (pCi/L): Sb-125	not used	0.000E+00	---	W1(13)
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(15)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.460E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R013	Humidity in air (g/m**3)	8.000E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.300E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.190E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)
R016	Distribution coefficients for Ag-108m				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for Eu-152				
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Eu-154				
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Eu-155				
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Fe-55					
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.150E-03	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
Distribution coefficients for H-3					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	8.400E-02	0.000E+00	---	DCNUCU(8,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(8,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
Distribution coefficients for Na-22					
R016	Contaminated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(9,4)
R016	Saturated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.127E-01	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)
Distribution coefficients for Nb-94					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(10,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(10)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
Distribution coefficients for Ni-59					
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(11)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(11,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.150E-03	ALEACH(11)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
Distribution coefficients for Pm-147					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(12,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)
Distribution coefficients for Sb-125					
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(13)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(13,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.505E+00	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
Distribution coefficients for Tc-99					
R016	Contaminated zone (cm**3/g)	4.210E+00	0.000E+00	---	DCNUCC(15)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(15,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.604E-01	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
Distribution coefficients for daughter Gd-152					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(7,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
Distribution coefficients for daughter Sm-147					
R016	Contaminated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCU(14,4)
R016	Saturated zone (cm**3/g)	1.000E+00	-1.000E+00	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.518E-01	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	3.970E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	1.140E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.140E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	2.370E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	9.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.500E+00	FPLANT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Contamination fraction of meat	3 -1	3 -1	3 0.500E+00	3 FMEAT
R018	Contamination fraction of milk	3 -1	3 -1	3 0.500E+00	3 FMILK
R019	Livestock fodder intake for meat (kg/day)	3 6.800E+01	3 6.800E+01	3 ---	3 LFI5
R019	Livestock fodder intake for milk (kg/day)	3 5.500E+01	3 5.500E+01	3 ---	3 LFI6
R019	Livestock water intake for meat (L/day)	3 5.000E+01	3 5.000E+01	3 ---	3 LWI5
R019	Livestock water intake for milk (L/day)	3 1.600E+02	3 1.600E+02	3 ---	3 LWI6
R019	Livestock soil intake (kg/day)	3 5.000E-01	3 5.000E-01	3 ---	3 LSI
R019	Mass loading for foliar deposition (g/m**3)	3 1.000E-04	3 1.000E-04	3 ---	3 MLFD
R019	Depth of soil mixing layer (m)	3 1.490E-01	3 1.500E-01	3 ---	3 DM
R019	Depth of roots (m)	3 1.220E+00	3 9.000E-01	3 ---	3 DROOT
R019	Drinking water fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWDW
R019	Household water fraction from ground water	3 not used	3 1.000E+00	3 ---	3 FGWHH
R019	Livestock water fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWLW
R019	Irrigation fraction from ground water	3 1.000E+00	3 1.000E+00	3 ---	3 FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	3 7.000E-01	3 7.000E-01	3 ---	3 YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	3 1.500E+00	3 1.500E+00	3 ---	3 YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	3 1.100E+00	3 1.100E+00	3 ---	3 YV(3)
R19B	Growing Season for Non-Leafy (years)	3 1.700E-01	3 1.700E-01	3 ---	3 TE(1)
R19B	Growing Season for Leafy (years)	3 2.500E-01	3 2.500E-01	3 ---	3 TE(2)
R19B	Growing Season for Fodder (years)	3 8.000E-02	3 8.000E-02	3 ---	3 TE(3)
R19B	Translocation Factor for Non-Leafy	3 1.000E-01	3 1.000E-01	3 ---	3 TIV(1)
R19B	Translocation Factor for Leafy	3 1.000E+00	3 1.000E+00	3 ---	3 TIV(2)
R19B	Translocation Factor for Fodder	3 1.000E+00	3 1.000E+00	3 ---	3 TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	3 2.500E-01	3 2.500E-01	3 ---	3 RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	3 2.500E-01	3 2.500E-01	3 ---	3 RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	3 2.500E-01	3 2.500E-01	3 ---	3 RWET(3)
R19B	Weathering Removal Constant for Vegetation	3 2.000E+01	3 2.000E+01	3 ---	3 WLAM
C14	C-12 concentration in water (g/cm**3)	3 not used	3 2.000E-05	3 ---	3 C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3 not used	3 3.000E-02	3 ---	3 C12CZ
C14	Fraction of vegetation carbon from soil	3 not used	3 2.000E-02	3 ---	3 CSOIL
C14	Fraction of vegetation carbon from air	3 not used	3 9.800E-01	3 ---	3 CAIR
C14	C-14 evasion layer thickness in soil (m)	3 not used	3 3.000E-01	3 ---	3 DMC
C14	C-14 evasion flux rate from soil (1/sec)	3 not used	3 7.000E-07	3 ---	3 EVSN
C14	C-12 evasion flux rate from soil (1/sec)	3 not used	3 1.000E-10	3 ---	3 REVSN
C14	Fraction of grain in beef cattle feed	3 not used	3 8.000E-01	3 ---	3 AVFG4
C14	Fraction of grain in milk cow feed	3 not used	3 2.000E-01	3 ---	3 AVFG5
C14	DCF correction factor for gaseous forms of C14	3 not used	3 8.894E+01	3 ---	3 CO2F
STOR	Storage times of contaminated foodstuffs (days):	3	3	3	3
STOR	Fruits, non-leafy vegetables, and grain	3 1.400E+01	3 1.400E+01	3 ---	3 STOR_T(1)
STOR	Leafy vegetables	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(2)
STOR	Milk	3 1.000E+00	3 1.000E+00	3 ---	3 STOR_T(3)
STOR	Meat and poultry	3 2.000E+01	3 2.000E+01	3 ---	3 STOR_T(4)
STOR	Fish	3 7.000E+00	3 7.000E+00	3 ---	3 STOR_T(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

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Probabilistic Input
 Number of Sample Runs: 300

Number	Name	Distribution	Parameters							
AAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA							
1	VCZ	CONTINUOUS LOGARITHMIC4	5.E-8	0	.0007	.22	.005	.95	.2	1
2	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999				
3	HCCZ	LOGNORMAL	3.302	62						
4	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
5	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959				
6	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766				
7	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415				
8	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2				
9	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89				
10	DENSUZ(2)	NORMAL	1.578	.158						
11	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154				
12	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572				
13	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124				
14	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870				
15	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9				
16	DENSUZ(3)	NORMAL	1.33	.202						
17	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2				
18	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89				
19	DENSUZ(4)	NORMAL	1.578	.158						
20	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870				
21	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9				
22	DENSAQ	NORMAL	1.578	.158						
23	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5				
24	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30				
25	EVAPTR	UNIFORM	.5	.75						
26	RUNOFF	UNIFORM	.1	.8						
27	SOIL	TRIANGULAR	0	18.3	36.5					
28	DWI	TRUNCATED LOGNORMAL-N	6.015	.489	.001	.999				
29	INHALR	TRIANGULAR	4380	8400	13100					
30	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003 .8119
	.00004 .9495 .00006 .9937 .000076 .9983 .0001 1									
31	SHF3	UNIFORM	.15	.95						
32	DCACTC(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
33	DCACTU1(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
34	DCACTU2(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
35	DCACTU3(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
36	DCACTU4(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
37	DCACTS(1)	TRUNCATED LOGNORMAL-N	5.38	2.1	.001	.999				
38	DCACTC(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
39	DCACTU1(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
40	DCACTU2(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
41	DCACTU3(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
42	DCACTU4(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
43	DCACTS(3)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
44	DCACTC(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
45	DCACTU1(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
46	DCACTU2(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
47	DCACTU3(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				
48	DCACTU4(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999				

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
49	DCACTS(4)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
50	DCACTC(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
51	DCACTU1(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
52	DCACTU2(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
53	DCACTU3(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
54	DCACTU4(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
55	DCACTS(5)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
56	DCACTC(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
57	DCACTU1(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
58	DCACTU2(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
59	DCACTU3(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
60	DCACTU4(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
61	DCACTS(6)	TRUNCATED LOGNORMAL-N	5.34	2.67	.001	.999
62	DCACTC(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
63	DCACTU1(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
64	DCACTU2(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
65	DCACTU3(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
66	DCACTU4(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
67	DCACTS(7)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
68	DCACTC(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
69	DCACTU2(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
70	DCACTU3(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
71	DCACTU4(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
72	DCACTS(8)	TRUNCATED LOGNORMAL-N	-2.81	.5	.001	.999
73	DCACTC(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
74	DCACTU1(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
75	DCACTU2(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
76	DCACTU3(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
77	DCACTU4(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
78	DCACTS(9)	TRUNCATED LOGNORMAL-N	5.04	3.22	.001	.999
79	DCACTC(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
80	DCACTU1(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
81	DCACTU2(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
82	DCACTU3(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
83	DCACTU4(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
84	DCACTS(10)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
85	DCACTC(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
86	DCACTU1(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
87	DCACTU2(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
88	DCACTU3(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
89	DCACTU4(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
90	DCACTS(11)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
91	DCACTC(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
92	DCACTU1(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
93	DCACTU2(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
94	DCACTU3(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
95	DCACTU4(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
96	DCACTS(12)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
97	DCACTC(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
98	DCACTU1(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
AAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA
99	DCACTU2(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
100	DCACTU3(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
101	DCACTU4(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
102	DCACTS(13)	TRUNCATED LOGNORMAL-N	5.94	3.22	.001	.999
103	DCACTC(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
104	DCACTU1(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
105	DCACTU2(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
106	DCACTU3(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
107	DCACTU4(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
108	DCACTS(14)	TRUNCATED LOGNORMAL-N	6.72	3.22	.001	.999
109	DCACTU1(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
110	DCACTU2(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
111	DCACTU3(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
112	DCACTU4(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
113	DCACTS(15)	TRUNCATED LOGNORMAL-N	-.67	3.16	.001	.999
114	DIET(3)	TRIANGULAR	60	102	200	
115	FR9	TRIANGULAR	0	.39	1	
116	YV(1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999
117	WLAM	TRIANGULAR	5.1	18	84	
118	RWET(2)	TRIANGULAR	.06	.67	.95	
119	BRTF(47,1)	TRUNCATED LOGNORMAL-N	-5.51	.9	.001	.999
120	BRTF(63,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
121	BRTF(26,1)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
122	BRTF(64,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
123	BRTF(1,1)	TRUNCATED LOGNORMAL-N	1.57	1.1	.001	.999
124	BRTF(11,1)	TRUNCATED LOGNORMAL-N	-3	1	.001	.999
125	BRTF(41,1)	TRUNCATED LOGNORMAL-N	-4.61	1.1	.001	.999
126	BRTF(28,1)	TRUNCATED LOGNORMAL-N	-3	.9	.001	.999
127	BRTF(61,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
128	BRTF(51,1)	TRUNCATED LOGNORMAL-N	-4.61	1	.001	.999
129	BRTF(62,1)	TRUNCATED LOGNORMAL-N	-6.21	1.1	.001	.999
130	BRTF(43,1)	TRUNCATED LOGNORMAL-N	1.61	.9	.001	.999
131	BRTF(47,2)	TRUNCATED LOGNORMAL-N	-6.21	.7	.001	.999
132	BRTF(63,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
133	BRTF(26,2)	TRUNCATED LOGNORMAL-N	-3.51	.4	.001	.999
134	BRTF(64,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
135	BRTF(1,2)	TRUNCATED LOGNORMAL-N	-4.42	1	.001	.999
136	BRTF(11,2)	TRUNCATED LOGNORMAL-N	-2.53	.2	.001	.999
137	BRTF(41,2)	TRUNCATED LOGNORMAL-N	-13.82	.9	.001	.999
138	BRTF(28,2)	TRUNCATED LOGNORMAL-N	-5.3	.9	.001	.999
139	BRTF(61,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
140	BRTF(51,2)	TRUNCATED LOGNORMAL-N	-6.91	.9	.001	.999
141	BRTF(62,2)	TRUNCATED LOGNORMAL-N	-6.21	1	.001	.999
142	BRTF(43,2)	TRUNCATED LOGNORMAL-N	-9.21	.7	.001	.999
143	BRTF(47,3)	TRUNCATED LOGNORMAL-N	-5.12	.7	.001	.999
144	BRTF(63,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
145	BRTF(26,3)	TRUNCATED LOGNORMAL-N	-8.11	.7	.001	.999
146	BRTF(64,3)	TRUNCATED LOGNORMAL-N	-9.72	.9	.001	.999
147	BRTF(1,3)	TRUNCATED LOGNORMAL-N	-4.6	.9	.001	.999
148	BRTF(11,3)	TRUNCATED LOGNORMAL-N	-3.22	.5	.001	.999

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters
149	BRTF(41,3)	TRUNCATED LOGNORMAL-N	-13.12 .7 .001 .999
150	BRTF(28,3)	TRUNCATED LOGNORMAL-N	-3.91 .7 .001 .999
151	BRTF(61,3)	TRUNCATED LOGNORMAL-N	-9.72 .9 .001 .999
152	BRTF(51,3)	TRUNCATED LOGNORMAL-N	-9.72 .9 .001 .999
153	BRTF(62,3)	TRUNCATED LOGNORMAL-N	-9.72 .9 .001 .999
154	BRTF(43,3)	TRUNCATED LOGNORMAL-N	-6.91 .7 .001 .999
155	BBIO(47,1)	LOGNORMAL-N	1.6 1.1
156	BBIO(63,1)	LOGNORMAL-N	3.9 1.1
157	BBIO(26,1)	LOGNORMAL-N	5.3 1.1
158	BBIO(64,1)	LOGNORMAL-N	3.2 1.1
159	BBIO(1,1)	LOGNORMAL-N	0 .1
160	BBIO(11,1)	LOGNORMAL-N	3 1.1
161	BBIO(41,1)	LOGNORMAL-N	5.7 1.1
162	BBIO(28,1)	LOGNORMAL-N	4.6 1.1
163	BBIO(61,1)	LOGNORMAL-N	3.4 1.1
164	BBIO(51,1)	LOGNORMAL-N	4.6 1.1
165	BBIO(62,1)	LOGNORMAL-N	3.2 1.1
166	BBIO(43,1)	LOGNORMAL-N	3 1.1

Attachment 8.14

**RESRAD v6.22 Probabilistic Dose Calculation Results for Discounted
Radionuclides - Resident Farmer Scenario**

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	DOSE(j,t), 5.00E+01	mrem/yr 7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
AAAAAAA	AAAAAAA	AAAAAAA	t=	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Am-241													
Min	0.00E+00	5.51E-02		5.51E-02	1.31E-02	7.30E-04	3.46E-07	2.46E-07	1.70E-07	1.13E-07	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.17E-01		1.17E-01	1.16E-01	1.15E-01	9.84E-02	8.13E-02	6.55E-02	5.07E-02	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	9.73E-02		9.73E-02	9.55E-02	9.24E-02	7.25E-02	5.70E-02	4.43E-02	3.34E-02	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	5.98E-03		5.98E-03	9.34E-03	1.31E-02	2.14E-02	2.04E-02	1.77E-02	1.45E-02	0.00E+00	0.00E+00	0.00E+00
Cm-244													
Min	0.00E+00	5.31E-03		5.31E-03	5.10E-03	4.69E-03	1.87E-03	5.86E-04	1.66E-04	6.97E-05	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.86E-01		1.86E-01	1.78E-01	1.63E-01	6.20E-02	2.03E-02	6.46E-03	2.00E-03	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	2.68E-02		2.68E-02	2.57E-02	2.36E-02	8.99E-03	2.99E-03	9.98E-04	3.43E-04	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	2.23E-02		2.23E-02	2.14E-02	1.96E-02	7.41E-03	2.41E-03	7.60E-04	2.31E-04	0.00E+00	0.00E+00	0.00E+00
Np-237													
Min	0.00E+00	1.21E+00		1.21E+00	1.19E+00	1.15E+00	7.41E-01	4.39E-01	2.53E-01	1.40E-01	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.24E+00		1.24E+00	1.23E+00	1.20E+00	9.72E-01	7.53E-01	5.68E-01	4.12E-01	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.23E+00		1.23E+00	1.21E+00	1.18E+00	8.63E-01	5.97E-01	4.04E-01	2.63E-01	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	5.08E-03		5.08E-03	6.35E-03	1.07E-02	5.20E-02	7.09E-02	7.13E-02	6.14E-02	0.00E+00	0.00E+00	0.00E+00
Pu-238													
Min	0.00E+00	8.02E-02		8.02E-02	7.51E-02	5.59E-02	2.16E-03	5.24E-05	1.23E-06	2.79E-08	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.08E-01		1.08E-01	1.07E-01	1.03E-01	7.26E-02	5.08E-02	3.45E-02	2.24E-02	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	9.11E-02		9.11E-02	8.96E-02	8.67E-02	6.09E-02	4.07E-02	2.66E-02	1.68E-02	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	4.71E-03		4.71E-03	4.89E-03	5.56E-03	9.91E-03	9.14E-03	7.17E-03	5.11E-03	0.00E+00	0.00E+00	0.00E+00
Pu-239													
Min	0.00E+00	2.24E-02		2.24E-02	2.22E-02	2.04E-02	4.12E-03	6.29E-04	9.34E-05	1.33E-05	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	3.02E-02		3.02E-02	3.01E-02	2.98E-02	2.63E-02	2.23E-02	1.84E-02	1.46E-02	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	2.54E-02		2.54E-02	2.52E-02	2.48E-02	2.07E-02	1.68E-02	1.34E-02	1.03E-02	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	1.30E-03		1.30E-03	1.31E-03	1.40E-03	3.04E-03	3.64E-03	3.56E-03	3.13E-03	0.00E+00	0.00E+00	0.00E+00
Pu-240													
Min	0.00E+00	2.24E-02		2.24E-02	1.93E-02	1.28E-02	1.31E-04	7.05E-07	4.12E-09	3.09E-10	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	3.02E-02		3.02E-02	3.01E-02	2.98E-02	2.61E-02	2.20E-02	1.80E-02	1.42E-02	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	2.54E-02		2.54E-02	2.52E-02	2.48E-02	2.06E-02	1.67E-02	1.33E-02	1.02E-02	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	1.31E-03		1.31E-03	1.37E-03	1.58E-03	3.18E-03	3.68E-03	3.57E-03	3.13E-03	0.00E+00	0.00E+00	0.00E+00
Pu-241													
Min	0.00E+00	1.11E-01		1.04E-01	1.01E-01	8.33E-02	2.25E-02	2.25E-03	1.96E-04	1.66E-05	0.00E+00	0.00E+00	0.00E+00
Max	2.70E+01	1.73E-01		1.40E-01	1.42E-01	1.47E-01	1.73E-01	1.58E-01	1.32E-01	1.03E-01	0.00E+00	0.00E+00	0.00E+00
Avg	2.04E+01	1.47E-01		1.18E-01	1.21E-01	1.26E-01	1.40E-01	1.20E-01	9.48E-02	7.17E-02	0.00E+00	0.00E+00	0.00E+00
Std	7.70E+00	1.40E-02		6.00E-03	6.36E-03	7.79E-03	2.94E-02	3.72E-02	3.54E-02	2.99E-02	0.00E+00	0.00E+00	0.00E+00
Pu-242													
Min	0.00E+00	6.08E-02		6.08E-02	5.83E-02	4.33E-02	1.62E-03	3.81E-05	8.69E-07	1.90E-08	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	8.22E-02		8.22E-02	8.13E-02	7.93E-02	6.74E-02	5.75E-02	4.77E-02	3.79E-02	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	6.92E-02		6.92E-02	6.86E-02	6.74E-02	5.63E-02	4.58E-02	3.65E-02	2.80E-02	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	3.53E-03		3.53E-03	3.61E-03	4.08E-03	8.90E-03	1.03E-02	9.92E-03	8.68E-03	0.00E+00	0.00E+00	0.00E+00
äALL													
Min	0.00E+00	1.60E+00		1.60E+00	1.58E+00	1.52E+00	9.51E-01	5.78E-01	3.55E-01	2.14E-01	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.86E+00		1.86E+00	1.83E+00	1.77E+00	1.41E+00	1.10E+00	8.43E-01	6.21E-01	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.68E+00		1.68E+00	1.66E+00	1.62E+00	1.24E+00	8.97E-01	6.34E-01	4.34E-01	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	3.51E-02		3.51E-02	3.54E-02	3.74E-02	7.80E-02	9.65E-02	9.36E-02	7.97E-02	0.00E+00	0.00E+00	0.00E+00
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äALL	is total dose summed for all nuclides.												

Probabilistic Total Dose Summary													
Nuclide (j)	Peak Time	Peak Dose	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA
Ag-108m													
Min	0.00E+00	4.34E-02	4.34E-02	2.14E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	7.36E-02	7.36E-02	7.32E-02	7.23E-02	6.38E-02	5.56E-02	4.84E-02	4.21E-02	1.39E-02	4.57E-03	2.85E-04	2.85E-04
Avg	0.00E+00	7.22E-02	7.22E-02	6.94E-02	6.54E-02	4.17E-02	2.40E-02	1.51E-02	9.87E-03	1.12E-03	2.53E-04	8.63E-06	8.63E-06
Std	0.00E+00	3.15E-03	3.15E-03	9.27E-03	1.38E-02	1.97E-02	2.02E-02	1.67E-02	1.34E-02	2.94E-03	7.96E-04	3.65E-05	3.65E-05
Eu-152													
Min	0.00E+00	5.86E-02	5.86E-02	4.30E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.61E-01	1.61E-01	1.53E-01	1.38E-01	4.38E-02	1.19E-02	3.25E-03	8.85E-04	2.69E-08	8.20E-13	5.80E-16	5.80E-16
Avg	0.00E+00	1.57E-01	1.57E-01	1.43E-01	1.23E-01	2.95E-02	5.49E-03	1.10E-03	2.34E-04	3.49E-09	9.09E-14	9.26E-18	9.26E-18
Std	0.00E+00	1.07E-02	1.07E-02	2.39E-02	3.01E-02	1.38E-02	4.52E-03	1.22E-03	3.19E-04	8.14E-09	2.28E-13	4.61E-17	4.61E-17
Eu-154													
Min	0.00E+00	2.95E-02	2.95E-02	2.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.15E-02	6.15E-02	5.68E-02	4.85E-02	8.56E-03	1.19E-03	1.67E-04	2.33E-05	3.35E-12	4.82E-19	0.00E+00	0.00E+00
Avg	0.00E+00	6.00E-02	6.00E-02	5.34E-02	4.35E-02	5.73E-03	5.40E-04	5.60E-05	6.13E-06	4.22E-13	5.10E-20	0.00E+00	0.00E+00
Std	0.00E+00	3.87E-03	3.87E-03	8.84E-03	1.07E-02	2.74E-03	4.59E-04	6.31E-05	8.38E-06	9.89E-13	1.31E-19	0.00E+00	0.00E+00
Eu-155													
Min	0.00E+00	1.48E-03	1.48E-03	8.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	4.22E-03	4.22E-03	3.67E-03	2.77E-03	1.28E-04	3.89E-06	1.18E-07	3.59E-09	2.60E-21	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	3.98E-03	3.98E-03	3.35E-03	2.43E-03	9.19E-05	1.94E-06	4.37E-08	1.02E-09	3.06E-22	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	2.70E-04	2.70E-04	5.52E-04	5.89E-04	3.98E-05	1.53E-06	4.61E-08	1.32E-09	7.55E-22	0.00E+00	0.00E+00	0.00E+00
Fe-55													
Min	0.00E+00	1.04E-04	1.04E-04	1.76E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.00E-03	1.00E-03	7.71E-04	4.52E-04	1.53E-06	2.48E-09	4.04E-12	6.58E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	3.71E-04	3.71E-04	2.72E-04	1.51E-04	3.16E-07	3.15E-10	3.70E-13	4.66E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	1.48E-04	1.48E-04	1.20E-04	7.38E-05	2.46E-07	3.89E-10	5.83E-13	8.89E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3													
Min	0.00E+00	3.24E-03	3.24E-03	3.46E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	7.02E-03	7.02E-03	8.15E-04	2.12E-05	5.84E-23	0.00E+00	2.25E-03	3.36E-04	4.04E-09	2.42E-15	0.00E+00	0.00E+00
Avg	0.00E+00	4.62E-03	4.62E-03	1.46E-04	6.39E-07	2.53E-25	0.00E+00	9.82E-06	1.46E-06	1.35E-11	8.08E-18	0.00E+00	0.00E+00
Std	0.00E+00	8.04E-04	8.04E-04	1.49E-04	2.11E-06	3.74E-24	0.00E+00	1.35E-04	2.02E-05	2.33E-10	1.40E-16	0.00E+00	0.00E+00
Na-22													
Min	0.00E+00	4.96E-03	4.96E-03	8.31E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.91E-02	1.91E-02	1.43E-02	8.08E-03	2.11E-05	2.70E-08	3.46E-11	4.44E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.52E-02	1.52E-02	1.09E-02	5.89E-03	1.12E-05	9.06E-09	8.06E-12	7.74E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	1.72E-03	1.72E-03	2.70E-03	2.06E-03	7.17E-06	9.38E-09	1.11E-11	1.30E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-94													
Min	0.00E+00	1.78E-02	1.78E-02	1.32E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.25E-02	5.25E-02	5.24E-02	5.22E-02	5.20E-02	5.19E-02	5.18E-02	5.18E-02	5.14E-02	5.11E-02	5.02E-02	5.02E-02
Avg	0.00E+00	5.04E-02	5.04E-02	4.81E-02	4.54E-02	3.28E-02	2.13E-02	1.54E-02	1.16E-02	4.49E-03	3.62E-03	2.71E-03	2.71E-03
Std	0.00E+00	4.40E-03	4.40E-03	9.47E-03	1.29E-02	1.73E-02	1.94E-02	1.84E-02	1.69E-02	1.26E-02	1.14E-02	9.68E-03	9.68E-03
Ni-59													
Min	0.00E+00	2.84E-04	2.84E-04	9.45E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.72E-02	1.72E-02	1.71E-02	1.67E-02	1.27E-02	9.07E-03	8.85E-03	8.63E-03	7.05E-03	5.76E-03	3.47E-03	3.47E-03
Avg	0.00E+00	2.18E-03	2.18E-03	2.11E-03	2.01E-03	1.35E-03	8.66E-04	6.29E-04	4.84E-04	2.52E-04	1.97E-04	1.24E-04	1.24E-04
Std	0.00E+00	1.95E-03	1.95E-03	1.91E-03	1.85E-03	1.41E-03	1.19E-03	1.04E-03	9.60E-04	7.66E-04	6.40E-04	4.40E-04	4.40E-04
Pm-147													
Min	0.00E+00	2.22E-05	2.22E-05	7.95E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	8.77E-04	8.77E-04	6.36E-04	3.34E-04	5.99E-07	8.00E-10	1.97E-12	1.38E-12	1.06E-12	9.27E-13	8.83E-13	8.83E-13
Avg	0.00E+00	1.07E-04	1.07E-04	7.93E-05	4.42E-05	8.58E-08	7.50E-11	2.03E-13	9.94E-14	4.97E-14	4.07E-14	2.99E-14	2.99E-14
Std	0.00E+00	9.43E-05	9.43E-05	7.10E-05	4.02E-05	8.82E-08	1.00E-10	3.06E-13	2.17E-13	1.65E-13	1.45E-13	1.23E-13	1.23E-13

Probabilistic Total Dose Summary(cont.)

Nuclide (j)	Peak Time	Peak Dose	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
AAAAAA	AAAAAA	AAAAAA		AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA	AAAAAA
Sb-125													
Min	0.00E+00	8.75E-03	8.75E-03	4.52E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	3.85E-02	3.85E-02	2.99E-02	1.81E-02	7.35E-05	1.41E-07	2.70E-10	5.18E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	3.69E-02	3.69E-02	2.74E-02	1.57E-02	4.61E-05	5.92E-08	8.42E-11	1.27E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	3.19E-03	3.19E-03	5.39E-03	4.46E-03	2.50E-05	5.41E-08	1.01E-10	1.82E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99													
Min	0.00E+00	2.34E-02	2.34E-02	1.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.07E+02	2.57E+00	2.57E+00	2.04E+00	1.66E+00	1.72E-01	1.24E-02	2.84E-01	8.08E-01	4.19E-05	2.17E-09	8.71E-02	
Avg	1.36E+00	3.75E-01	3.71E-01	3.10E-01	2.19E-01	8.47E-03	3.68E-04	9.71E-04	2.76E-03	2.63E-07	7.24E-12	3.64E-04	
Std	1.86E+01	3.77E-01	3.76E-01	3.13E-01	2.30E-01	1.57E-02	1.17E-03	1.64E-02	4.66E-02	3.14E-06	1.25E-10	5.14E-03	
äALL													
Min	0.00E+00	3.85E-01	3.85E-01	1.87E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	9.99E+01	2.96E+00	2.96E+00	2.41E+00	1.99E+00	3.29E-01	1.20E-01	2.92E-01	8.69E-01	6.13E-02	5.33E-02	8.71E-02	
Avg	3.33E-01	7.75E-01	7.74E-01	6.68E-01	5.23E-01	1.20E-01	5.25E-02	3.32E-02	2.49E-02	5.86E-03	4.07E-03	3.21E-03	
Std	5.76E+00	3.76E-01	3.76E-01	3.19E-01	2.44E-01	4.76E-02	4.05E-02	3.69E-02	5.66E-02	1.47E-02	1.19E-02	1.10E-02	
íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí	íííííííí
äALL is total dose summed for all nuclides.													

Attachment 8.15

Input Parameter Selections from the Deterministic Summary Report for Maximum Allowable Soil Contamination Value – Cattle Grazing Scenario

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Dose Conversion Factor (and Related) Parameter Summary
File: RSNRS RF DCGL Dose

Menu	Parameter	Current Value	Default	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	C-14	2.090E-06	2.090E-06	DCF2(1)
B-1	Co-60	2.190E-04	2.190E-04	DCF2(2)
B-1	Cs-134	4.630E-05	4.630E-05	DCF2(3)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(4)
B-1	Ni-63	6.290E-06	6.290E-06	DCF2(5)
B-1	Sr-90+D	1.310E-03	1.310E-03	DCF2(6)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	C-14	2.090E-06	2.090E-06	DCF3(1)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(2)
D-1	Cs-134	7.330E-05	7.330E-05	DCF3(3)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(4)
D-1	Ni-63	5.770E-07	5.770E-07	DCF3(5)
D-1	Sr-90+D	1.530E-04	1.530E-04	DCF3(6)
D-34	Food transfer factors:			
D-34	C-14 , plant/soil concentration ratio, dimensionless	5.500E+00	5.500E+00	RTF(1,1)
D-34	C-14 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.100E-02	3.100E-02	RTF(1,2)
D-34	C-14 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.200E-02	1.200E-02	RTF(1,3)
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(2,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(2,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,3)
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	7.810E-02	4.000E-02	RTF(3,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.490E-02	3.000E-02	RTF(3,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(3,3)
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	7.810E-02	4.000E-02	RTF(4,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.490E-02	3.000E-02	RTF(4,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(4,3)
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	5.000E-02	5.000E-02	RTF(5,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(5,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-02	2.000E-02	RTF(5,3)
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(6,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(6,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(6,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	C-14 , fish	5.000E+04	5.000E+04	BIOFAC(1,1)
D-5	C-14 , crustacea and mollusks	9.100E+03	9.100E+03	BIOFAC(1,2)
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(2,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(2,2)
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(3,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(3,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: RSNRS RF DCGL Dose

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(4,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(4,2)
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(5,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(5,2)
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(6,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(6,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.130E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	2.500E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	2.500E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	5.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	7.500E+01	1.000E+02	---	T(6)
R011	Times for calculations (yr)	1.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	3.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	5.000E+02	0.000E+00	---	T(9)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): C-14	2.560E-01	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Co-60	3.600E-01	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.240E-02	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Cs-137	5.120E+01	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Ni-63	9.190E+00	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Sr-90	6.920E-02	0.000E+00	---	S1(6)
R012	Concentration in groundwater (pCi/L): C-14	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Cs-134	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(6)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.470E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.130E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.800E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+07	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.400E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.700E-01	2.000E-01	---	EPSZ

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Saturated zone field capacity	7.000E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	7.830E-01	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.300E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	4	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.050E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	3.050E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.000E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	2.000E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	2.560E+01	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	3.500E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	1.200E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.300E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(3)
R015	Unsat. zone 4, thickness (m)	1.082E+01	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.500E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	2.700E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	7.000E-02	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(4)
R016	Distribution coefficients for C-14				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(1,4)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.447E+00	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(2,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.892E-04	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Cs-134				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(3,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.892E-04	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(4,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.892E-04	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(5,4)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.892E-04	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Sr-90				
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(6,4)
R016	Saturated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.283E-02	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Inhalation rate (m**3/yr)	not used	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	not used	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	not used	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	not used	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	not used	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	not used	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	not used	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	not used	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	not used	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	0.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	0.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Contamination fraction of meat	-1	-1	0.500E+00	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	0.000E+00	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	1.210E+00	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	0.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	0.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	2.000E-05	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3.000E-02	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	2.000E-02	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	9.800E-01	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	3.000E-01	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	7.000E-07	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	1.000E-10	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	8.000E-01	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	2.000E-01	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	8.894E+01	8.894E+01	---	CO2F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH20CV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH20FL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	suppressed
2 -- inhalation (w/o radon)	suppressed
3 -- plant ingestion	suppressed
4 -- meat ingestion	active
5 -- milk ingestion	suppressed
6 -- aquatic foods	suppressed
7 -- drinking water	suppressed
8 -- soil ingestion	suppressed
9 -- radon	suppressed
Find peak pathway doses	active

Attachment 8.16

**Cattle Grazing Scenario Maximum Allowable Soil Contamination Value Dose
Calculation Probabilistic Summary Report**

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Part VI: Uncertainty Analysis

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters						
1	DCACTC(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
2	DCACTC(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
3	DCACTC(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
4	DCACTC(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
5	DCACTC(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
6	DCACTC(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
7	VCZ	CONTINUOUS LOGARITHMIC4		5.E-8	0	.0007	.22	.005	.95
8	TPCZ	TRUNCATED NORMAL	.425	.0867	.001	.999		.2	1
9	HCCZ	LOGNORMAL	3.302	62					
10	BCZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30			
11	DENSUZ(1)	NORMAL	1.33	.202					
12	DCACTU1(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
13	DCACTU1(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
14	DCACTU1(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
15	DCACTU1(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
16	DCACTU1(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
17	DCACTU1(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
18	TPUZ(1)	TRUNCATED NORMAL	.46	.11	.1161	.7959			
19	EPUZ(1)	TRUNCATED NORMAL	.425	.11	.0839	.766			
20	FCUZ(1)	TRUNCATED NORMAL	.236	.0578	.0575	.415			
21	HCUZ(1)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
22	BUZ(1)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
23	DENSUZ(2)	NORMAL	.383	.061					
24	DCACTU2(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
25	DCACTU2(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
26	DCACTU2(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
27	DCACTU2(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
28	DCACTU2(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
29	DCACTU2(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
30	TPUZ(2)	TRUNCATED NORMAL	.43	.06	.2446	.6154			
31	EPUZ(2)	TRUNCATED NORMAL	.383	.061	.195	.572			
32	FCUZ(2)	TRUNCATED NORMAL	.0607	.015	.028	.124			
33	HCUZ(2)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870			
34	BUZ(2)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9			
35	DENSUZ(3)	NORMAL	1.33	.202					
36	DCACTU3(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
37	DCACTU3(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
38	DCACTU3(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
39	DCACTU3(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			
40	DCACTU3(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
41	DCACTU3(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999			
42	HCUZ(3)	BOUNDED LOGNORMAL-N	2.66	.475	3.302	62.2			
43	BUZ(3)	BOUNDED LOGNORMAL-N	1.16	.14	2.06	4.89			
44	DENSUZ(4)	NORMAL	1.578	.158					
45	DCACTU4(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999			
46	DCACTU4(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999			
47	DCACTU4(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999			
48	DCACTU4(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999			

Probabilistic Input (cont.)

Number	Name	Distribution	Parameters			
49	DCACTU4(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999
50	DCACTU4(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999
51	HCUZ(4)	BOUNDED LOGNORMAL-N	1.398	1.842	110	5870
52	BUZ(4)	BOUNDED LOGNORMAL-N	-.0253	.216	.501	1.9
53	DENSAQ	NORMAL	1.578	.158		
54	DCACTS(1)	TRUNCATED LOGNORMAL-N	2.4	3.22	.001	.999
55	DCACTS(5)	TRUNCATED LOGNORMAL-N	6.05	1.46	.001	.999
56	DCACTS(2)	TRUNCATED LOGNORMAL-N	5.46	2.53	.001	.999
57	DCACTS(6)	TRUNCATED LOGNORMAL-N	3.45	2.12	.001	.999
58	DCACTS(3)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999
59	DCACTS(4)	TRUNCATED LOGNORMAL-N	6.1	2.33	.001	.999
60	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5
61	BSZ	BOUNDED LOGNORMAL-N	1.06	.66	.5	30
62	EVAPTR	UNIFORM	.5	.75		
63	RUNOFF	UNIFORM	.1	.8		
64	WLAM	TRIANGULAR	5.1	18	84	
65	BRTF(6,1)	TRUNCATED LOGNORMAL-N	-.36	.9	.001	.999
66	BRTF(27,1)	TRUNCATED LOGNORMAL-N	-2.53	.9	.001	.999
67	BRTF(38,1)	TRUNCATED LOGNORMAL-N	-1.2	1	.001	.999
68	BRTF(6,2)	TRUNCATED LOGNORMAL-N	-3.47	1	.001	.999
69	BRTF(27,2)	TRUNCATED LOGNORMAL-N	-3.51	1	.001	.999
70	BRTF(28,2)	TRUNCATED LOGNORMAL-N	-5.3	.9	.001	.999
71	BRTF(38,2)	TRUNCATED LOGNORMAL-N	-4.61	.4	.001	.999
72	BRTF(28,1)	TRUNCATED LOGNORMAL-N	-3	.9	.001	.999
73	DM	TRIANGULAR	0	.15	.6	
74	DMC	TRIANGULAR	.5	.75	1	
=====	=====	=====	=====	=====	=====	=====

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	DOSE(j,t), 5.00E+01	mrem/yr 7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14													
Min	0.00E+00	2.98E-03	2.98E-03	6.07E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.59E-03	5.59E-03	2.57E-11	1.54E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	4.29E-03	4.29E-03	1.72E-11	8.44E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	5.79E-04	5.79E-04	4.88E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60													
Min	0.00E+00	4.37E-04	4.37E-04	5.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.94E-01	2.94E-01	2.54E-01	1.88E-01	7.38E-03	2.68E-04	9.70E-06	3.51E-07	1.00E-18	2.60E-30	0.00E+00	0.00E+00
Avg	0.00E+00	1.82E-02	1.82E-02	1.54E-02	1.12E-02	4.08E-04	9.73E-06	2.55E-07	7.51E-09	1.56E-20	2.90E-32	0.00E+00	0.00E+00
Std	0.00E+00	2.89E-02	2.89E-02	2.48E-02	1.85E-02	7.72E-04	2.28E-05	7.69E-07	2.73E-08	7.92E-20	0.00E+00	0.00E+00	0.00E+00
Cs-134													
Min	0.00E+00	8.12E-04	8.12E-04	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.83E-03	1.83E-03	1.31E-03	6.67E-04	4.09E-07	9.17E-11	2.05E-14	4.60E-18	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.55E-03	1.55E-03	1.08E-03	5.25E-04	2.18E-07	3.17E-11	5.14E-15	9.06E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	2.09E-04	2.09E-04	1.93E-04	1.18E-04	1.07E-07	2.84E-11	6.30E-15	1.38E-18	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137													
Min	0.00E+00	2.55E+00	2.55E+00	5.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.99E+00	5.99E+00	5.86E+00	5.59E+00	3.36E+00	1.89E+00	1.06E+00	5.95E-01	5.85E-03	5.75E-05	5.52E-10	5.52E-10
Avg	0.00E+00	5.09E+00	5.09E+00	4.82E+00	4.41E+00	1.79E+00	6.61E-01	2.67E-01	1.17E-01	6.07E-04	5.07E-06	3.68E-11	3.68E-11
Std	0.00E+00	6.89E-01	6.89E-01	8.66E-01	9.86E-01	8.82E-01	5.78E-01	3.18E-01	1.73E-01	1.48E-03	1.33E-05	1.09E-10	1.09E-10
Ni-63													
Min	0.00E+00	2.42E-05	2.42E-05	4.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.58E-02	1.58E-02	1.55E-02	1.49E-02	9.57E-03	5.08E-03	2.32E-03	1.90E-03	3.85E-04	7.81E-05	1.46E-06	1.46E-06
Avg	0.00E+00	1.13E-03	1.13E-03	1.09E-03	1.04E-03	6.12E-04	3.32E-04	1.95E-04	1.30E-04	1.50E-05	2.74E-06	4.75E-08	4.75E-08
Std	0.00E+00	1.47E-03	1.47E-03	1.43E-03	1.37E-03	8.37E-04	5.33E-04	3.43E-04	2.64E-04	4.61E-05	9.16E-06	1.83E-07	1.83E-07
Sr-90													
Min	0.00E+00	9.45E-04	9.45E-04	6.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.65E-01	1.65E-01	1.59E-01	1.47E-01	6.49E-02	2.56E-02	1.01E-02	5.42E-03	4.53E-05	3.79E-07	2.42E-12	2.42E-12
Avg	0.00E+00	1.54E-02	1.54E-02	1.40E-02	1.21E-02	3.66E-03	1.16E-03	4.39E-04	1.81E-04	5.82E-07	3.59E-09	1.59E-14	1.59E-14
Std	0.00E+00	1.91E-02	1.91E-02	1.78E-02	1.61E-02	5.95E-03	2.55E-03	1.17E-03	5.66E-04	3.49E-06	2.66E-08	1.51E-13	1.51E-13
\$ALL													
Min	0.00E+00	2.58E+00	2.58E+00	5.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.15E+00	6.15E+00	5.97E+00	5.68E+00	3.37E+00	1.89E+00	1.06E+00	5.96E-01	6.09E-03	1.08E-04	1.46E-06	1.46E-06
Avg	0.00E+00	5.13E+00	5.13E+00	4.86E+00	4.43E+00	1.80E+00	6.62E-01	2.68E-01	1.17E-01	6.23E-04	7.81E-06	4.75E-08	4.75E-08
Std	0.00E+00	6.92E-01	6.92E-01	8.70E-01	9.90E-01	8.83E-01	5.79E-01	3.18E-01	1.74E-01	1.50E-03	1.91E-05	1.83E-07	1.83E-07

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\$ALL is total dose summed for all nuclides.

Probabilistic Risk Summary

Nuclide (j)	t=	RISK(j, t)									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		6.74E-07	8.14E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.28E-06	1.61E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		9.77E-07	1.08E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		1.31E-07	2.98E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		1.17E-08	6.19E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.85E-06	6.79E-06	5.04E-06	1.96E-07	7.11E-09	2.58E-10	9.33E-12	2.67E-23	0.00E+00	0.00E+00
Avg		4.88E-07	4.15E-07	3.01E-07	1.09E-08	2.60E-10	6.80E-12	2.00E-13	4.15E-25	0.00E+00	0.00E+00
Std		7.73E-07	6.66E-07	4.94E-07	2.06E-08	6.08E-10	2.04E-11	7.24E-13	2.16E-24	0.00E+00	0.00E+00
Cs-134											
Min		3.08E-08	1.27E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		4.53E-08	3.24E-08	1.65E-08	1.01E-11	2.27E-15	5.09E-19	1.14E-22	0.00E+00	0.00E+00	0.00E+00
Avg		3.89E-08	2.70E-08	1.31E-08	5.44E-12	7.91E-16	1.28E-19	2.25E-23	0.00E+00	0.00E+00	0.00E+00
Std		4.96E-09	4.30E-09	2.87E-09	2.62E-12	7.03E-16	1.56E-19	3.42E-23	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		9.26E-05	5.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.36E-04	1.33E-04	1.27E-04	7.64E-05	4.29E-05	2.40E-05	1.35E-05	1.33E-07	1.31E-09	1.25E-14
Avg		1.17E-04	1.11E-04	1.01E-04	4.11E-05	1.51E-05	6.11E-06	2.66E-06	1.38E-08	1.15E-10	8.35E-16
Std		1.49E-05	1.77E-05	2.19E-05	1.99E-05	1.31E-05	7.21E-06	3.93E-06	3.36E-08	3.02E-10	2.47E-15
Ni-63											
Min		1.20E-09	1.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		7.86E-07	7.73E-07	7.45E-07	4.78E-07	2.55E-07	1.15E-07	9.43E-08	1.91E-08	3.87E-09	7.24E-11
Avg		5.68E-08	5.50E-08	5.18E-08	3.06E-08	1.66E-08	9.72E-09	6.47E-09	7.45E-10	1.36E-10	2.36E-12
Std		7.35E-08	7.17E-08	6.86E-08	4.18E-08	2.66E-08	1.70E-08	1.31E-08	2.29E-09	4.55E-10	9.10E-12
Sr-90											
Min		1.82E-08	1.71E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		3.14E-06	3.03E-06	2.81E-06	1.24E-06	4.88E-07	1.92E-07	1.03E-07	8.59E-10	7.18E-12	4.59E-17
Avg		3.00E-07	2.74E-07	2.34E-07	7.03E-08	2.22E-08	8.38E-09	3.44E-09	1.10E-11	6.81E-14	3.02E-19
Std		3.70E-07	3.45E-07	3.09E-07	1.13E-07	4.84E-08	2.23E-08	1.07E-08	6.61E-11	5.03E-13	2.85E-18
\$ALL											
Min		9.39E-05	5.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.41E-04	1.36E-04	1.29E-04	7.66E-05	4.30E-05	2.41E-05	1.36E-05	1.44E-07	3.87E-09	7.24E-11
Avg		1.19E-04	1.12E-04	1.02E-04	4.12E-05	1.51E-05	6.12E-06	2.67E-06	1.45E-08	2.51E-10	2.36E-12
Std		1.50E-05	1.78E-05	2.20E-05	1.99E-05	1.32E-05	7.23E-06	3.94E-06	3.48E-08	6.44E-10	9.10E-12
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\$ALL is total risk summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Inhalation (w/o Radon)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Radon (Water Ind.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Ind.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Meat (Water Ind.)

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		2.98E-03	6.07E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.59E-03	2.57E-11	1.54E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		4.29E-03	1.72E-11	8.44E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		5.79E-04	4.88E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		4.37E-04	5.76E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		2.94E-01	2.54E-01	1.88E-01	7.38E-03	2.68E-04	9.70E-06	3.51E-07	1.00E-18	2.60E-30	0.00E+00
Avg		1.82E-02	1.54E-02	1.12E-02	4.08E-04	9.73E-06	2.55E-07	7.51E-09	1.56E-20	2.90E-32	0.00E+00
Std		2.89E-02	2.48E-02	1.85E-02	7.72E-04	2.28E-05	7.69E-07	2.73E-08	7.92E-20	0.00E+00	0.00E+00
Cs-134											
Min		8.12E-04	1.39E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.83E-03	1.31E-03	6.67E-04	4.09E-07	9.17E-11	2.05E-14	4.60E-18	0.00E+00	0.00E+00	0.00E+00
Avg		1.55E-03	1.08E-03	5.25E-04	2.18E-07	3.17E-11	5.14E-15	9.06E-19	0.00E+00	0.00E+00	0.00E+00
Std		2.09E-04	1.93E-04	1.18E-04	1.07E-07	2.84E-11	6.30E-15	1.38E-18	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		2.55E+00	5.38E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.99E+00	5.86E+00	5.59E+00	3.36E+00	1.89E+00	1.06E+00	5.95E-01	5.85E-03	5.75E-05	5.52E-10
Avg		5.09E+00	4.82E+00	4.41E+00	1.79E+00	6.61E-01	2.67E-01	1.17E-01	6.07E-04	5.07E-06	3.68E-11
Std		6.89E-01	8.66E-01	9.86E-01	8.82E-01	5.78E-01	3.18E-01	1.73E-01	1.48E-03	1.33E-05	1.09E-10
Ni-63											
Min		2.42E-05	4.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.58E-02	1.55E-02	1.49E-02	9.57E-03	5.08E-03	2.32E-03	1.90E-03	3.85E-04	7.81E-05	1.46E-06
Avg		1.13E-03	1.09E-03	1.04E-03	6.12E-04	3.32E-04	1.95E-04	1.30E-04	1.50E-05	2.74E-06	4.75E-08
Std		1.47E-03	1.43E-03	1.37E-03	8.37E-04	5.33E-04	3.43E-04	2.64E-04	4.61E-05	9.16E-06	1.83E-07
Sr-90											
Min		9.45E-04	6.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		1.65E-01	1.59E-01	1.47E-01	6.49E-02	2.56E-02	1.01E-02	5.42E-03	4.53E-05	3.79E-07	2.42E-12
Avg		1.54E-02	1.40E-02	1.21E-02	3.66E-03	1.16E-03	4.39E-04	1.81E-04	5.82E-07	3.59E-09	1.59E-14
Std		1.91E-02	1.78E-02	1.61E-02	5.95E-03	2.55E-03	1.17E-03	5.66E-04	3.49E-06	2.66E-08	1.51E-13
\$ALL											
Min		2.58E+00	5.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		6.15E+00	5.97E+00	5.68E+00	3.37E+00	1.89E+00	1.06E+00	5.96E-01	6.09E-03	1.08E-04	1.46E-06
Avg		5.13E+00	4.86E+00	4.43E+00	1.80E+00	6.62E-01	2.68E-01	1.17E-01	6.23E-04	7.81E-06	4.75E-08
Std		6.92E-01	8.70E-01	9.90E-01	8.83E-01	5.79E-01	3.18E-01	1.74E-01	1.50E-03	1.91E-05	1.83E-07
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\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Milk (Water Ind.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Soil Ingestion

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Water Ingestion

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Fish Ingestion

Nuclide (j)	t=	0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
DOSE(i,j,t), mrem/yr											
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Radon (Water Dep.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Dep.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Meat (Water Dep.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
=====		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

\$ALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Milk (Water Dep.)

Nuclide (j)	t=	DOSE(i, j, t), mrem/yr									
		0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
C-14											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
\$ALL											
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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\$ALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr									
	t= 0.00E+00	1.00E+00	3.00E+00	2.50E+01	5.00E+01	7.50E+01	1.00E+02	3.00E+02	5.00E+02	1.00E+03
0.025	4.10E+00	3.38E+00	1.57E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	4.18E+00	3.94E+00	3.01E+00	1.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	4.24E+00	4.02E+00	3.55E+00	2.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.100	4.26E+00	4.07E+00	3.65E+00	4.73E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.125	4.31E+00	4.12E+00	3.74E+00	6.27E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.150	4.36E+00	4.17E+00	3.80E+00	8.14E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.175	4.41E+00	4.20E+00	3.87E+00	9.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.200	4.45E+00	4.25E+00	3.90E+00	9.97E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.225	4.50E+00	4.30E+00	3.95E+00	1.14E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.250	4.53E+00	4.33E+00	4.00E+00	1.21E+00	7.03E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.275	4.58E+00	4.36E+00	4.02E+00	1.30E+00	3.42E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.300	4.62E+00	4.40E+00	4.05E+00	1.38E+00	1.13E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.325	4.67E+00	4.45E+00	4.09E+00	1.43E+00	1.90E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.350	4.74E+00	4.50E+00	4.17E+00	1.56E+00	2.55E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.375	4.79E+00	4.54E+00	4.21E+00	1.64E+00	3.46E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.400	4.84E+00	4.62E+00	4.25E+00	1.68E+00	3.99E-01	6.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.425	4.88E+00	4.66E+00	4.30E+00	1.71E+00	4.71E-01	3.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.450	4.93E+00	4.72E+00	4.35E+00	1.75E+00	4.93E-01	5.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.475	4.99E+00	4.75E+00	4.40E+00	1.80E+00	5.57E-01	1.07E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.500	5.06E+00	4.81E+00	4.49E+00	1.87E+00	6.33E-01	1.44E-01	1.43E-04	0.00E+00	0.00E+00	0.00E+00
0.525	5.14E+00	4.90E+00	4.55E+00	1.95E+00	6.90E-01	1.79E-01	9.91E-03	0.00E+00	0.00E+00	0.00E+00
0.550	5.18E+00	4.98E+00	4.60E+00	2.00E+00	7.62E-01	2.07E-01	2.55E-02	0.00E+00	0.00E+00	0.00E+00
0.575	5.27E+00	5.04E+00	4.67E+00	2.04E+00	8.21E-01	2.34E-01	4.01E-02	0.00E+00	0.00E+00	0.00E+00
0.600	5.35E+00	5.14E+00	4.70E+00	2.09E+00	8.48E-01	2.74E-01	5.86E-02	0.00E+00	0.00E+00	0.00E+00
0.625	5.40E+00	5.18E+00	4.78E+00	2.16E+00	8.99E-01	3.15E-01	8.28E-02	0.00E+00	0.00E+00	0.00E+00
0.650	5.48E+00	5.26E+00	4.84E+00	2.24E+00	9.42E-01	3.35E-01	9.30E-02	0.00E+00	0.00E+00	0.00E+00
0.675	5.61E+00	5.32E+00	4.89E+00	2.29E+00	9.67E-01	3.56E-01	1.17E-01	0.00E+00	0.00E+00	0.00E+00
0.700	5.73E+00	5.44E+00	5.00E+00	2.34E+00	9.98E-01	4.01E-01	1.40E-01	0.00E+00	0.00E+00	0.00E+00
0.725	5.84E+00	5.58E+00	5.09E+00	2.39E+00	1.03E+00	4.28E-01	1.76E-01	0.00E+00	0.00E+00	0.00E+00
0.750	5.94E+00	5.66E+00	5.23E+00	2.43E+00	1.08E+00	4.59E-01	1.87E-01	0.00E+00	0.00E+00	0.00E+00
0.775	5.97E+00	5.72E+00	5.29E+00	2.48E+00	1.13E+00	4.87E-01	2.07E-01	0.00E+00	0.00E+00	0.00E+00
0.800	5.99E+00	5.76E+00	5.35E+00	2.57E+00	1.22E+00	5.49E-01	2.36E-01	6.04E-05	0.00E+00	0.00E+00
0.825	6.00E+00	5.79E+00	5.39E+00	2.63E+00	1.30E+00	6.26E-01	2.87E-01	3.58E-04	5.65E-06	2.98E-09
0.850	6.01E+00	5.81E+00	5.44E+00	2.72E+00	1.33E+00	7.07E-01	3.66E-01	9.17E-04	1.72E-05	1.95E-08
0.875	6.01E+00	5.83E+00	5.47E+00	2.83E+00	1.39E+00	7.26E-01	3.98E-01	2.82E-03	3.02E-05	3.02E-08
0.900	6.02E+00	5.84E+00	5.50E+00	2.91E+00	1.47E+00	7.81E-01	4.15E-01	3.48E-03	3.95E-05	1.02E-07
0.925	6.03E+00	5.85E+00	5.54E+00	3.04E+00	1.56E+00	8.24E-01	4.57E-01	4.23E-03	4.81E-05	1.41E-07
0.950	6.04E+00	5.87E+00	5.57E+00	3.19E+00	1.75E+00	9.60E-01	5.27E-01	4.49E-03	5.18E-05	2.90E-07
0.975	6.06E+00	5.88E+00	5.60E+00	3.36E+00	1.87E+00	1.04E+00	5.79E-01	5.28E-03	6.07E-05	7.24E-07
1.000	6.15E+00	5.97E+00	5.68E+00	3.37E+00	1.89E+00	1.06E+00	5.96E-01	6.09E-03	1.08E-04	1.46E-06
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Summary of dose at graphical times, reptition 1								
Dose statistics at graphical times, mrem/yr								
Time Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	2.58E+00	6.15E+00	5.13E+00	5.06E+00	6.02E+00	6.04E+00	6.06E+00	6.11E+00
1.00E+00	5.45E-03	5.97E+00	4.86E+00	4.80E+00	5.84E+00	5.87E+00	5.88E+00	5.95E+00
1.33E+00	0.00E+00	5.92E+00	4.78E+00	4.74E+00	5.77E+00	5.82E+00	5.83E+00	5.89E+00
1.78E+00	0.00E+00	5.85E+00	4.68E+00	4.66E+00	5.70E+00	5.75E+00	5.77E+00	5.81E+00
2.37E+00	0.00E+00	5.76E+00	4.56E+00	4.57E+00	5.60E+00	5.66E+00	5.69E+00	5.71E+00
3.00E+00	0.00E+00	5.68E+00	4.43E+00	4.48E+00	5.50E+00	5.57E+00	5.61E+00	5.63E+00
3.16E+00	0.00E+00	5.66E+00	4.40E+00	4.46E+00	5.47E+00	5.54E+00	5.58E+00	5.61E+00
4.22E+00	0.00E+00	5.51E+00	4.21E+00	4.28E+00	5.30E+00	5.38E+00	5.45E+00	5.47E+00
5.62E+00	0.00E+00	5.33E+00	3.96E+00	4.05E+00	5.09E+00	5.19E+00	5.27E+00	5.29E+00
7.50E+00	0.00E+00	5.10E+00	3.67E+00	3.76E+00	4.84E+00	4.94E+00	5.05E+00	5.06E+00
1.00E+01	0.00E+00	4.80E+00	3.32E+00	3.41E+00	4.50E+00	4.61E+00	4.76E+00	4.77E+00
1.33E+01	0.00E+00	4.44E+00	2.90E+00	3.00E+00	4.08E+00	4.23E+00	4.40E+00	4.42E+00
1.78E+01	0.00E+00	3.99E+00	2.42E+00	2.52E+00	3.59E+00	3.79E+00	3.97E+00	3.98E+00
2.37E+01	0.00E+00	3.47E+00	1.90E+00	1.97E+00	3.03E+00	3.29E+00	3.46E+00	3.47E+00
2.50E+01	0.00E+00	3.37E+00	1.80E+00	1.87E+00	2.91E+00	3.19E+00	3.36E+00	3.37E+00
3.16E+01	0.00E+00	2.89E+00	1.36E+00	1.40E+00	2.36E+00	2.72E+00	2.88E+00	2.89E+00
4.22E+01	0.00E+00	2.27E+00	8.90E-01	8.90E-01	1.77E+00	2.11E+00	2.25E+00	2.26E+00
5.00E+01	0.00E+00	1.89E+00	6.62E-01	6.24E-01	1.47E+00	1.75E+00	1.87E+00	1.89E+00
5.62E+01	0.00E+00	1.64E+00	5.25E-01	4.46E-01	1.24E+00	1.51E+00	1.62E+00	1.64E+00
7.50E+01	0.00E+00	1.06E+00	2.68E-01	1.43E-01	7.80E-01	9.60E-01	1.04E+00	1.06E+00
7.50E+01	0.00E+00	1.06E+00	2.68E-01	1.43E-01	7.80E-01	9.60E-01	1.04E+00	1.06E+00
1.00E+02	0.00E+00	5.96E-01	1.17E-01	8.90E-05	4.15E-01	5.27E-01	5.81E-01	5.95E-01
1.00E+02	0.00E+00	5.96E-01	1.17E-01	8.90E-05	4.15E-01	5.27E-01	5.81E-01	5.95E-01
1.33E+02	0.00E+00	2.76E-01	4.25E-02	0.00E+00	1.85E-01	2.37E-01	2.66E-01	2.75E-01
1.78E+02	0.00E+00	9.91E-02	1.24E-02	0.00E+00	6.31E-02	8.07E-02	9.39E-02	9.84E-02
2.37E+02	0.00E+00	2.54E-02	2.82E-03	0.00E+00	1.55E-02	1.95E-02	2.34E-02	2.50E-02
3.00E+02	0.00E+00	6.09E-03	6.23E-04	0.00E+00	3.48E-03	4.48E-03	5.39E-03	5.90E-03
3.16E+02	0.00E+00	4.23E-03	4.24E-04	0.00E+00	2.38E-03	3.08E-03	3.69E-03	4.07E-03
4.22E+02	0.00E+00	4.43E-04	3.81E-05	0.00E+00	2.09E-04	2.77E-04	3.19E-04	3.88E-04
5.00E+02	0.00E+00	1.08E-04	7.81E-06	0.00E+00	3.95E-05	5.18E-05	6.47E-05	8.71E-05
5.62E+02	0.00E+00	4.75E-05	2.78E-06	0.00E+00	1.18E-05	1.87E-05	2.50E-05	4.45E-05
7.50E+02	0.00E+00	1.06E-05	3.64E-07	0.00E+00	9.26E-07	2.20E-06	4.85E-06	7.66E-06
1.00E+03	0.00E+00	1.46E-06	4.75E-08	0.00E+00	1.00E-07	2.90E-07	7.40E-07	1.13E-06
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 Probabilistic results summary : Dose for Detected Radionuclides Using a Cattle
 Grazing Scenario File: Grazing DCGL Dose.RAD
 Peak of the mean dose (averaged over observations) at graphical times

Repetition	Time of peak mean dose Years	Peak mean dose mrem/yr
1	0.000E+00	5.129E+00

Coefficients for peak of mean dose time Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	42	0.04
Kd of Ni-63 in Contaminated Zone	66	-0.01
Kd of Co-60 in Contaminated Zone	49	0.04
Kd of Sr-90 in Contaminated Zone	60	-0.02
Kd of Cs-137 in Contaminated Zone	3	0.21
Kd of Cs-134 in Contaminated Zone	63	-0.01
Contaminated zone erosion rate	2	-0.35
Contaminated zone total porosity	50	-0.04
Contaminated zone hydraulic conductivity	32	-0.06
Contaminated zone b parameter	48	0.04
Density of Unsaturated zone 1	24	-0.07
Kd of C-14 in Unsaturated Zone 1	28	0.06
Kd of Ni-63 in Unsaturated Zone 1	39	0.05
Kd of Co-60 in Unsaturated Zone 1	34	0.05
Kd of Sr-90 in Unsaturated Zone 1	59	0.02
Kd of Cs-134 in Unsaturated Zone 1	71	0.00
Kd of Cs-137 in Unsaturated Zone 1	36	-0.05
Total Porosity of Unsaturated zone 1	18	0.08
Effective Porosity of Unsaturated zone 1	74	0.00
Field Capacity of Unsaturated zone 1	19	-0.08
Hydraulic Conductivity of Unsaturated zone 1	23	-0.07
b Parameter of Unsaturated zone 1	17	-0.08
Density of Unsaturated zone 2	9	0.10
Kd of C-14 in Unsaturated Zone 2	58	0.02
Kd of Ni-63 in Unsaturated Zone 2	35	0.05
Kd of Co-60 in Unsaturated Zone 2	44	-0.04
Kd of Sr-90 in Unsaturated Zone 2	20	0.07
Kd of Cs-134 in Unsaturated Zone 2	45	0.04
Kd of Cs-137 in Unsaturated Zone 2	55	0.03
Total Porosity of Unsaturated zone 2	67	0.01
Effective Porosity of Unsaturated zone 2	7	0.11
Field Capacity of Unsaturated zone 2	10	0.10
Hydraulic Conductivity of Unsaturated zone 2	41	0.05
b Parameter of Unsaturated zone 2	38	-0.05
Density of Unsaturated zone 3	31	-0.06
Kd of C-14 in Unsaturated Zone 3	72	0.00
Kd of Ni-63 in Unsaturated Zone 3	13	-0.08
Kd of Co-60 in Unsaturated Zone 3	27	-0.06
Kd of Sr-90 in Unsaturated Zone 3	65	0.01
Kd of Cs-134 in Unsaturated Zone 3	5	0.12
Kd of Cs-137 in Unsaturated Zone 3	15	-0.08
Hydraulic Conductivity of Unsaturated zone 3	43	0.04
b Parameter of Unsaturated zone 3	40	0.05
Density of Unsaturated zone 4	68	0.01
Kd of C-14 in Unsaturated Zone 4	25	0.07
Kd of Ni-63 in Unsaturated Zone 4	26	0.06

Kd of Co-60 in Unsaturated Zone 4	22	0.07
Kd of Sr-90 in Unsaturated Zone 4	62	0.02
Kd of Cs-134 in Unsaturated Zone 4	12	-0.09
Kd of Cs-137 in Unsaturated Zone 4	69	0.01
Hydraulic Conductivity of Unsaturated zone 4	52	0.03
b Parameter of Unsaturated zone 4	46	-0.04
Density of saturated zone	53	0.03
Kd of C-14 in Saturated Zone	57	-0.02
Kd of Ni-63 in Saturated Zone	64	-0.01
Kd of Co-60 in Saturated Zone	61	0.02
Kd of Sr-90 in Saturated Zone	11	-0.10
Kd of Cs-134 in Saturated Zone	47	0.04
Kd of Cs-137 in Saturated Zone	54	0.03
Saturated zone hydraulic gradient	70	0.00
Saturated zone b parameter	16	-0.08
Evapotranspiration coefficient	51	-0.03
Runoff coefficient	21	0.07
Weathering removal constant of all vegetation	30	-0.06
Plant transfer factor for C	29	-0.06
Plant transfer factor for Co	8	0.11
Plant transfer factor for Sr	14	0.08
Meat transfer factor for C	73	0.00
Meat transfer factor for Co	4	0.21
Meat transfer factor for Ni	56	-0.03
Meat transfer factor for Sr	33	0.05
Plant transfer factor for Ni	6	-0.11
Depth of soil mixing layer	1	-0.98
Thickness of evasion layer of C-14 in soil	37	0.05
R-SQUARE		0.96

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak All Pathways Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	42	0.04	
Kd of Ni-63 in Contaminated Zone	69	-0.01	
Kd of Co-60 in Contaminated Zone	48	0.04	
Kd of Sr-90 in Contaminated Zone	60	-0.02	
Kd of Cs-137 in Contaminated Zone	3	0.21	
Kd of Cs-134 in Contaminated Zone	62	-0.02	
Contaminated zone erosion rate	2	-0.35	
Contaminated zone total porosity	50	-0.04	
Contaminated zone hydraulic conductivity	31	-0.06	
Contaminated zone b parameter	49	0.04	
Density of Unsaturated zone 1	22	-0.07	
Kd of C-14 in Unsaturated Zone 1	28	0.06	
Kd of Ni-63 in Unsaturated Zone 1	38	0.05	
Kd of Co-60 in Unsaturated Zone 1	34	0.05	
Kd of Sr-90 in Unsaturated Zone 1	59	0.02	
Kd of Cs-134 in Unsaturated Zone 1	70	0.01	
Kd of Cs-137 in Unsaturated Zone 1	36	-0.05	
Total Porosity of Unsaturated zone 1	19	0.08	
Effective Porosity of Unsaturated zone 1	74	0.00	
Field Capacity of Unsaturated zone 1	18	-0.08	
Hydraulic Conductivity of Unsaturated zone 1	23	-0.07	
b Parameter of Unsaturated zone 1	17	-0.08	
Density of Unsaturated zone 2	9	0.10	
Kd of C-14 in Unsaturated Zone 2	58	0.02	
Kd of Ni-63 in Unsaturated Zone 2	35	0.05	
Kd of Co-60 in Unsaturated Zone 2	44	-0.04	
Kd of Sr-90 in Unsaturated Zone 2	20	0.07	
Kd of Cs-134 in Unsaturated Zone 2	46	0.04	
Kd of Cs-137 in Unsaturated Zone 2	55	0.03	
Total Porosity of Unsaturated zone 2	66	0.01	
Effective Porosity of Unsaturated zone 2	7	0.11	
Field Capacity of Unsaturated zone 2	10	0.10	
Hydraulic Conductivity of Unsaturated zone 2	41	0.05	
b Parameter of Unsaturated zone 2	39	-0.05	
Density of Unsaturated zone 3	32	-0.06	
Kd of C-14 in Unsaturated Zone 3	72	0.00	
Kd of Ni-63 in Unsaturated Zone 3	13	-0.08	
Kd of Co-60 in Unsaturated Zone 3	27	-0.06	
Kd of Sr-90 in Unsaturated Zone 3	65	0.01	
Kd of Cs-134 in Unsaturated Zone 3	5	0.12	
Kd of Cs-137 in Unsaturated Zone 3	15	-0.08	
Hydraulic Conductivity of Unsaturated zone 3	43	0.04	
b Parameter of Unsaturated zone 3	40	0.05	
Density of Unsaturated zone 4	67	0.01	
Kd of C-14 in Unsaturated Zone 4	26	0.06	
Kd of Ni-63 in Unsaturated Zone 4	25	0.07	

Kd of Co-60 in Unsaturated Zone 4	24	0.07
Kd of Sr-90 in Unsaturated Zone 4	63	0.01
Kd of Cs-134 in Unsaturated Zone 4	12	-0.09
Kd of Cs-137 in Unsaturated Zone 4	68	0.01
Hydraulic Conductivity of Unsaturated zone 4	52	0.03
b Parameter of Unsaturated zone 4	45	-0.04
Density of saturated zone	54	0.03
Kd of C-14 in Saturated Zone	57	-0.02
Kd of Ni-63 in Saturated Zone	64	-0.01
Kd of Co-60 in Saturated Zone	61	0.02
Kd of Sr-90 in Saturated Zone	11	-0.10
Kd of Cs-134 in Saturated Zone	47	0.04
Kd of Cs-137 in Saturated Zone	53	0.03
Saturated zone hydraulic gradient	73	0.00
Saturated zone b parameter	16	-0.08
Evapotranspiration coefficient	51	-0.03
Runoff coefficient	21	0.07
Weathering removal constant of all vegetation	30	-0.06
Plant transfer factor for C	29	-0.06
Plant transfer factor for Co	8	0.11
Plant transfer factor for Sr	14	0.08
Meat transfer factor for C	71	0.00
Meat transfer factor for Co	4	0.21
Meat transfer factor for Ni	56	-0.02
Meat transfer factor for Sr	33	0.05
Plant transfer factor for Ni	6	-0.11
Depth of soil mixing layer	1	-0.98
Thickness of evasion layer of C-14 in soil	37	0.05
R-SQUARE		0.96

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak External Ground Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Inhalation particles Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Radon (WaterInd.) Dose
Coefficient =
Repetition =

Description of Probabilistic Variable	PRCC	
	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Plant (WaterInd.) Dose
Coefficient =
Repetition =

Description of Probabilistic Variable	PRCC	
	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Meat (WaterInd.) Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	42	0.04
Kd of Ni-63 in Contaminated Zone	69	-0.01
Kd of Co-60 in Contaminated Zone	48	0.04
Kd of Sr-90 in Contaminated Zone	60	-0.02
Kd of Cs-137 in Contaminated Zone	3	0.21
Kd of Cs-134 in Contaminated Zone	62	-0.02
Contaminated zone erosion rate	2	-0.35
Contaminated zone total porosity	50	-0.04
Contaminated zone hydraulic conductivity	31	-0.06
Contaminated zone b parameter	49	0.04
Density of Unsaturated zone 1	22	-0.07
Kd of C-14 in Unsaturated Zone 1	28	0.06
Kd of Ni-63 in Unsaturated Zone 1	38	0.05
Kd of Co-60 in Unsaturated Zone 1	34	0.05
Kd of Sr-90 in Unsaturated Zone 1	59	0.02
Kd of Cs-134 in Unsaturated Zone 1	70	0.01
Kd of Cs-137 in Unsaturated Zone 1	36	-0.05
Total Porosity of Unsaturated zone 1	19	0.08
Effective Porosity of Unsaturated zone 1	74	0.00
Field Capacity of Unsaturated zone 1	18	-0.08
Hydraulic Conductivity of Unsaturated zone 1	23	-0.07
b Parameter of Unsaturated zone 1	17	-0.08
Density of Unsaturated zone 2	9	0.10
Kd of C-14 in Unsaturated Zone 2	58	0.02
Kd of Ni-63 in Unsaturated Zone 2	35	0.05
Kd of Co-60 in Unsaturated Zone 2	44	-0.04
Kd of Sr-90 in Unsaturated Zone 2	20	0.07
Kd of Cs-134 in Unsaturated Zone 2	46	0.04
Kd of Cs-137 in Unsaturated Zone 2	55	0.03
Total Porosity of Unsaturated zone 2	66	0.01
Effective Porosity of Unsaturated zone 2	7	0.11
Field Capacity of Unsaturated zone 2	10	0.10
Hydraulic Conductivity of Unsaturated zone 2	41	0.05
b Parameter of Unsaturated zone 2	39	-0.05
Density of Unsaturated zone 3	32	-0.06
Kd of C-14 in Unsaturated Zone 3	72	0.00
Kd of Ni-63 in Unsaturated Zone 3	13	-0.08
Kd of Co-60 in Unsaturated Zone 3	27	-0.06
Kd of Sr-90 in Unsaturated Zone 3	65	0.01
Kd of Cs-134 in Unsaturated Zone 3	5	0.12
Kd of Cs-137 in Unsaturated Zone 3	15	-0.08
Hydraulic Conductivity of Unsaturated zone 3	43	0.04
b Parameter of Unsaturated zone 3	40	0.05
Density of Unsaturated zone 4	67	0.01
Kd of C-14 in Unsaturated Zone 4	26	0.06
Kd of Ni-63 in Unsaturated Zone 4	25	0.07

Kd of Co-60 in Unsaturated Zone 4	24	0.07
Kd of Sr-90 in Unsaturated Zone 4	63	0.01
Kd of Cs-134 in Unsaturated Zone 4	12	-0.09
Kd of Cs-137 in Unsaturated Zone 4	68	0.01
Hydraulic Conductivity of Unsaturated zone 4	52	0.03
b Parameter of Unsaturated zone 4	45	-0.04
Density of saturated zone	54	0.03
Kd of C-14 in Saturated Zone	57	-0.02
Kd of Ni-63 in Saturated Zone	64	-0.01
Kd of Co-60 in Saturated Zone	61	0.02
Kd of Sr-90 in Saturated Zone	11	-0.10
Kd of Cs-134 in Saturated Zone	47	0.04
Kd of Cs-137 in Saturated Zone	53	0.03
Saturated zone hydraulic gradient	73	0.00
Saturated zone b parameter	16	-0.08
Evapotranspiration coefficient	51	-0.03
Runoff coefficient	21	0.07
Weathering removal constant of all vegetation	30	-0.06
Plant transfer factor for C	29	-0.06
Plant transfer factor for Co	8	0.11
Plant transfer factor for Sr	14	0.08
Meat transfer factor for C	71	0.00
Meat transfer factor for Co	4	0.21
Meat transfer factor for Ni	56	-0.02
Meat transfer factor for Sr	33	0.05
Plant transfer factor for Ni	6	-0.11
Depth of soil mixing layer	1	-0.98
Thickness of evasion layer of C-14 in soil	37	0.05
R-SQUARE		0.96

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Milk (WaterInd.) Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Soil Ingestion Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Water Ingestion Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Fish Ingestion Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Radon (WaterDep.) Dose
Coefficient =
Repetition =

Description of Probabilistic Variable	PRCC	
	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Plant (WaterDep.) Dose
Coefficient =
Repetition =

Description of Probabilistic Variable	PRCC	
	1	
Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Meat (WaterDep.) Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Milk (WaterDep.) Dose
Coefficient =
Repetition =

Description of Probabilistic Variable	PRCC	
	1	
	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak C-14 Dose		PRCC 1
Coefficient =		
Repetition =		
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	2	0.65
Kd of Ni-63 in Contaminated Zone	50	-0.03
Kd of Co-60 in Contaminated Zone	56	0.02
Kd of Sr-90 in Contaminated Zone	6	0.13
Kd of Cs-137 in Contaminated Zone	15	-0.10
Kd of Cs-134 in Contaminated Zone	7	0.13
Contaminated zone erosion rate	4	-0.20
Contaminated zone total porosity	71	0.00
Contaminated zone hydraulic conductivity	59	-0.01
Contaminated zone b parameter	11	0.10
Density of Unsaturated zone 1	31	-0.05
Kd of C-14 in Unsaturated Zone 1	28	0.06
Kd of Ni-63 in Unsaturated Zone 1	55	-0.02
Kd of Co-60 in Unsaturated Zone 1	38	-0.04
Kd of Sr-90 in Unsaturated Zone 1	21	0.08
Kd of Cs-134 in Unsaturated Zone 1	42	0.03
Kd of Cs-137 in Unsaturated Zone 1	61	0.01
Total Porosity of Unsaturated zone 1	12	-0.10
Effective Porosity of Unsaturated zone 1	37	0.05
Field Capacity of Unsaturated zone 1	13	-0.10
Hydraulic Conductivity of Unsaturated zone 1	58	-0.01
b Parameter of Unsaturated zone 1	10	0.11
Density of Unsaturated zone 2	32	0.05
Kd of C-14 in Unsaturated Zone 2	64	0.01
Kd of Ni-63 in Unsaturated Zone 2	44	0.03
Kd of Co-60 in Unsaturated Zone 2	57	-0.01
Kd of Sr-90 in Unsaturated Zone 2	53	0.02
Kd of Cs-134 in Unsaturated Zone 2	20	-0.08
Kd of Cs-137 in Unsaturated Zone 2	74	0.00
Total Porosity of Unsaturated zone 2	27	-0.06
Effective Porosity of Unsaturated zone 2	14	0.10
Field Capacity of Unsaturated zone 2	68	0.00
Hydraulic Conductivity of Unsaturated zone 2	66	0.01
b Parameter of Unsaturated zone 2	54	0.02
Density of Unsaturated zone 3	16	0.09
Kd of C-14 in Unsaturated Zone 3	35	-0.05
Kd of Ni-63 in Unsaturated Zone 3	18	-0.08
Kd of Co-60 in Unsaturated Zone 3	48	-0.03
Kd of Sr-90 in Unsaturated Zone 3	73	0.00
Kd of Cs-134 in Unsaturated Zone 3	70	0.00
Kd of Cs-137 in Unsaturated Zone 3	17	-0.09
Hydraulic Conductivity of Unsaturated zone 3	46	-0.03
b Parameter of Unsaturated zone 3	41	-0.03
Density of Unsaturated zone 4	51	0.03
Kd of C-14 in Unsaturated Zone 4	43	-0.03
Kd of Ni-63 in Unsaturated Zone 4	63	0.01

Kd of Co-60 in Unsaturated Zone 4	49	-0.03
Kd of Sr-90 in Unsaturated Zone 4	34	-0.05
Kd of Cs-134 in Unsaturated Zone 4	19	0.08
Kd of Cs-137 in Unsaturated Zone 4	23	0.08
Hydraulic Conductivity of Unsaturated zone 4	30	-0.06
b Parameter of Unsaturated zone 4	67	0.00
Density of saturated zone	36	0.05
Kd of C-14 in Saturated Zone	52	-0.02
Kd of Ni-63 in Saturated Zone	25	-0.07
Kd of Co-60 in Saturated Zone	72	0.00
Kd of Sr-90 in Saturated Zone	39	-0.04
Kd of Cs-134 in Saturated Zone	45	-0.03
Kd of Cs-137 in Saturated Zone	24	0.07
Saturated zone hydraulic gradient	33	0.05
Saturated zone b parameter	62	0.01
Evapotranspiration coefficient	26	0.07
Runoff coefficient	3	0.21
Weathering removal constant of all vegetation	47	-0.03
Plant transfer factor for C	9	-0.11
Plant transfer factor for Co	5	-0.16
Plant transfer factor for Sr	40	0.03
Meat transfer factor for C	22	-0.08
Meat transfer factor for Co	60	0.01
Meat transfer factor for Ni	29	0.06
Meat transfer factor for Sr	65	0.01
Plant transfer factor for Ni	8	-0.12
Depth of soil mixing layer	69	0.00
Thickness of evasion layer of C-14 in soil	1	1.00
R-SQUARE		1.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Co-60 Dose		PRCC	
Coefficient =		1	
Repetition =			
Description of Probabilistic Variable	Sig	Coeff	
Kd of C-14 in Contaminated Zone	0	0.00	
Kd of Ni-63 in Contaminated Zone	0	0.00	
Kd of Co-60 in Contaminated Zone	0	0.00	
Kd of Sr-90 in Contaminated Zone	0	0.00	
Kd of Cs-137 in Contaminated Zone	0	0.00	
Kd of Cs-134 in Contaminated Zone	0	0.00	
Contaminated zone erosion rate	0	0.00	
Contaminated zone total porosity	0	0.00	
Contaminated zone hydraulic conductivity	0	0.00	
Contaminated zone b parameter	0	0.00	
Density of Unsaturated zone 1	0	0.00	
Kd of C-14 in Unsaturated Zone 1	0	0.00	
Kd of Ni-63 in Unsaturated Zone 1	0	0.00	
Kd of Co-60 in Unsaturated Zone 1	0	0.00	
Kd of Sr-90 in Unsaturated Zone 1	0	0.00	
Kd of Cs-134 in Unsaturated Zone 1	0	0.00	
Kd of Cs-137 in Unsaturated Zone 1	0	0.00	
Total Porosity of Unsaturated zone 1	0	0.00	
Effective Porosity of Unsaturated zone 1	0	0.00	
Field Capacity of Unsaturated zone 1	0	0.00	
Hydraulic Conductivity of Unsaturated zone 1	0	0.00	
b Parameter of Unsaturated zone 1	0	0.00	
Density of Unsaturated zone 2	0	0.00	
Kd of C-14 in Unsaturated Zone 2	0	0.00	
Kd of Ni-63 in Unsaturated Zone 2	0	0.00	
Kd of Co-60 in Unsaturated Zone 2	0	0.00	
Kd of Sr-90 in Unsaturated Zone 2	0	0.00	
Kd of Cs-134 in Unsaturated Zone 2	0	0.00	
Kd of Cs-137 in Unsaturated Zone 2	0	0.00	
Total Porosity of Unsaturated zone 2	0	0.00	
Effective Porosity of Unsaturated zone 2	0	0.00	
Field Capacity of Unsaturated zone 2	0	0.00	
Hydraulic Conductivity of Unsaturated zone 2	0	0.00	
b Parameter of Unsaturated zone 2	0	0.00	
Density of Unsaturated zone 3	0	0.00	
Kd of C-14 in Unsaturated Zone 3	0	0.00	
Kd of Ni-63 in Unsaturated Zone 3	0	0.00	
Kd of Co-60 in Unsaturated Zone 3	0	0.00	
Kd of Sr-90 in Unsaturated Zone 3	0	0.00	
Kd of Cs-134 in Unsaturated Zone 3	0	0.00	
Kd of Cs-137 in Unsaturated Zone 3	0	0.00	
Hydraulic Conductivity of Unsaturated zone 3	0	0.00	
b Parameter of Unsaturated zone 3	0	0.00	
Density of Unsaturated zone 4	0	0.00	
Kd of C-14 in Unsaturated Zone 4	0	0.00	
Kd of Ni-63 in Unsaturated Zone 4	0	0.00	

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Cs-134 Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Cs-137 Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Ni-63 Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	0	0.00
Kd of Ni-63 in Contaminated Zone	0	0.00
Kd of Co-60 in Contaminated Zone	0	0.00
Kd of Sr-90 in Contaminated Zone	0	0.00
Kd of Cs-137 in Contaminated Zone	0	0.00
Kd of Cs-134 in Contaminated Zone	0	0.00
Contaminated zone erosion rate	0	0.00
Contaminated zone total porosity	0	0.00
Contaminated zone hydraulic conductivity	0	0.00
Contaminated zone b parameter	0	0.00
Density of Unsaturated zone 1	0	0.00
Kd of C-14 in Unsaturated Zone 1	0	0.00
Kd of Ni-63 in Unsaturated Zone 1	0	0.00
Kd of Co-60 in Unsaturated Zone 1	0	0.00
Kd of Sr-90 in Unsaturated Zone 1	0	0.00
Kd of Cs-134 in Unsaturated Zone 1	0	0.00
Kd of Cs-137 in Unsaturated Zone 1	0	0.00
Total Porosity of Unsaturated zone 1	0	0.00
Effective Porosity of Unsaturated zone 1	0	0.00
Field Capacity of Unsaturated zone 1	0	0.00
Hydraulic Conductivity of Unsaturated zone 1	0	0.00
b Parameter of Unsaturated zone 1	0	0.00
Density of Unsaturated zone 2	0	0.00
Kd of C-14 in Unsaturated Zone 2	0	0.00
Kd of Ni-63 in Unsaturated Zone 2	0	0.00
Kd of Co-60 in Unsaturated Zone 2	0	0.00
Kd of Sr-90 in Unsaturated Zone 2	0	0.00
Kd of Cs-134 in Unsaturated Zone 2	0	0.00
Kd of Cs-137 in Unsaturated Zone 2	0	0.00
Total Porosity of Unsaturated zone 2	0	0.00
Effective Porosity of Unsaturated zone 2	0	0.00
Field Capacity of Unsaturated zone 2	0	0.00
Hydraulic Conductivity of Unsaturated zone 2	0	0.00
b Parameter of Unsaturated zone 2	0	0.00
Density of Unsaturated zone 3	0	0.00
Kd of C-14 in Unsaturated Zone 3	0	0.00
Kd of Ni-63 in Unsaturated Zone 3	0	0.00
Kd of Co-60 in Unsaturated Zone 3	0	0.00
Kd of Sr-90 in Unsaturated Zone 3	0	0.00
Kd of Cs-134 in Unsaturated Zone 3	0	0.00
Kd of Cs-137 in Unsaturated Zone 3	0	0.00
Hydraulic Conductivity of Unsaturated zone 3	0	0.00
b Parameter of Unsaturated zone 3	0	0.00
Density of Unsaturated zone 4	0	0.00
Kd of C-14 in Unsaturated Zone 4	0	0.00
Kd of Ni-63 in Unsaturated Zone 4	0	0.00

Kd of Co-60 in Unsaturated Zone 4	0	0.00
Kd of Sr-90 in Unsaturated Zone 4	0	0.00
Kd of Cs-134 in Unsaturated Zone 4	0	0.00
Kd of Cs-137 in Unsaturated Zone 4	0	0.00
Hydraulic Conductivity of Unsaturated zone 4	0	0.00
b Parameter of Unsaturated zone 4	0	0.00
Density of saturated zone	0	0.00
Kd of C-14 in Saturated Zone	0	0.00
Kd of Ni-63 in Saturated Zone	0	0.00
Kd of Co-60 in Saturated Zone	0	0.00
Kd of Sr-90 in Saturated Zone	0	0.00
Kd of Cs-134 in Saturated Zone	0	0.00
Kd of Cs-137 in Saturated Zone	0	0.00
Saturated zone hydraulic gradient	0	0.00
Saturated zone b parameter	0	0.00
Evapotranspiration coefficient	0	0.00
Runoff coefficient	0	0.00
Weathering removal constant of all vegetation	0	0.00
Plant transfer factor for C	0	0.00
Plant transfer factor for Co	0	0.00
Plant transfer factor for Sr	0	0.00
Meat transfer factor for C	0	0.00
Meat transfer factor for Co	0	0.00
Meat transfer factor for Ni	0	0.00
Meat transfer factor for Sr	0	0.00
Plant transfer factor for Ni	0	0.00
Depth of soil mixing layer	0	0.00
Thickness of evasion layer of C-14 in soil	0	0.00
R-SQUARE		0.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Coefficients for peak Sr-90 Dose		
Coefficient =		PRCC
Repetition =		1
Description of Probabilistic Variable	Sig	Coeff
Kd of C-14 in Contaminated Zone	2	0.65
Kd of Ni-63 in Contaminated Zone	50	-0.03
Kd of Co-60 in Contaminated Zone	56	0.02
Kd of Sr-90 in Contaminated Zone	6	0.13
Kd of Cs-137 in Contaminated Zone	15	-0.10
Kd of Cs-134 in Contaminated Zone	7	0.13
Contaminated zone erosion rate	4	-0.20
Contaminated zone total porosity	71	0.00
Contaminated zone hydraulic conductivity	59	-0.01
Contaminated zone b parameter	11	0.10
Density of Unsaturated zone 1	31	-0.05
Kd of C-14 in Unsaturated Zone 1	28	0.06
Kd of Ni-63 in Unsaturated Zone 1	55	-0.02
Kd of Co-60 in Unsaturated Zone 1	38	-0.04
Kd of Sr-90 in Unsaturated Zone 1	21	0.08
Kd of Cs-134 in Unsaturated Zone 1	42	0.03
Kd of Cs-137 in Unsaturated Zone 1	61	0.01
Total Porosity of Unsaturated zone 1	12	-0.10
Effective Porosity of Unsaturated zone 1	37	0.05
Field Capacity of Unsaturated zone 1	13	-0.10
Hydraulic Conductivity of Unsaturated zone 1	58	-0.01
b Parameter of Unsaturated zone 1	10	0.11
Density of Unsaturated zone 2	32	0.05
Kd of C-14 in Unsaturated Zone 2	64	0.01
Kd of Ni-63 in Unsaturated Zone 2	44	0.03
Kd of Co-60 in Unsaturated Zone 2	57	-0.01
Kd of Sr-90 in Unsaturated Zone 2	53	0.02
Kd of Cs-134 in Unsaturated Zone 2	20	-0.08
Kd of Cs-137 in Unsaturated Zone 2	74	0.00
Total Porosity of Unsaturated zone 2	27	-0.06
Effective Porosity of Unsaturated zone 2	14	0.10
Field Capacity of Unsaturated zone 2	68	0.00
Hydraulic Conductivity of Unsaturated zone 2	66	0.01
b Parameter of Unsaturated zone 2	54	0.02
Density of Unsaturated zone 3	16	0.09
Kd of C-14 in Unsaturated Zone 3	35	-0.05
Kd of Ni-63 in Unsaturated Zone 3	18	-0.08
Kd of Co-60 in Unsaturated Zone 3	48	-0.03
Kd of Sr-90 in Unsaturated Zone 3	73	0.00
Kd of Cs-134 in Unsaturated Zone 3	70	0.00
Kd of Cs-137 in Unsaturated Zone 3	17	-0.09
Hydraulic Conductivity of Unsaturated zone 3	46	-0.03
b Parameter of Unsaturated zone 3	41	-0.03
Density of Unsaturated zone 4	51	0.03
Kd of C-14 in Unsaturated Zone 4	43	-0.03
Kd of Ni-63 in Unsaturated Zone 4	63	0.01

Kd of Co-60 in Unsaturated Zone 4	49	-0.03
Kd of Sr-90 in Unsaturated Zone 4	34	-0.05
Kd of Cs-134 in Unsaturated Zone 4	19	0.08
Kd of Cs-137 in Unsaturated Zone 4	23	0.08
Hydraulic Conductivity of Unsaturated zone 4	30	-0.06
b Parameter of Unsaturated zone 4	67	0.00
Density of saturated zone	36	0.05
Kd of C-14 in Saturated Zone	52	-0.02
Kd of Ni-63 in Saturated Zone	25	-0.07
Kd of Co-60 in Saturated Zone	72	0.00
Kd of Sr-90 in Saturated Zone	39	-0.04
Kd of Cs-134 in Saturated Zone	45	-0.03
Kd of Cs-137 in Saturated Zone	24	0.07
Saturated zone hydraulic gradient	33	0.05
Saturated zone b parameter	62	0.01
Evapotranspiration coefficient	26	0.07
Runoff coefficient	3	0.21
Weathering removal constant of all vegetation	47	-0.03
Plant transfer factor for C	9	-0.11
Plant transfer factor for Co	5	-0.16
Plant transfer factor for Sr	40	0.03
Meat transfer factor for C	22	-0.08
Meat transfer factor for Co	60	0.01
Meat transfer factor for Ni	29	0.06
Meat transfer factor for Sr	65	0.01
Plant transfer factor for Ni	8	-0.12
Depth of soil mixing layer	69	0.00
Thickness of evasion layer of C-14 in soil	1	1.00
R-SQUARE		1.00

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.