



RIV-56



Northern States Power Company

414 Nicollet Mall
Minneapolis, Minnesota 55401
Telephone (612) 330-5500

February 15, 1993

10 CFR Part 30
Section 30.36

US Nuclear Regulatory Commission
Region IV
Material Radiation Protection Section
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 70611

SEARCHED
SERIALIZED
FEB 3 1993

Byproduct Material License No. 22-08799-02
Pathfinder Generating Plant

Evaluation of Decommissioning Radionuclide Release Data

This report is submitted in compliance with Condition 14 of Materials License 22-08799-02, Amendment 11, for the Pathfinder Generating Plant.

Decommissioning activities at the Pathfinder Plant authorized by the Commission have been completed, including demolition of the Reactor Building. During the decommissioning activities, all ventilation exhaust releases potentially containing radioactive material were monitored. The purpose of this report is to provide the Commission with the results of the monitoring program and an evaluation of the health effects of decommissioning operations on the general public.

The following information is attached:

Attachment 1

Effluent and Waste Disposal Report for the decommissioning period.

Attachment 2

Solid waste shipment summary.

Attachment 3

Fuel Handling Building vent monthly release summary.

Attachment 4

Reactor Building vent release monthly summary.

SEARCHED
SERIALIZED
FEB 16 1993
RECORDS

G/3

February 15, 1993

Northern States Power Company

Attachment 5

Evaluation of Atmospheric Releases for the Pathfinder Decommissioning Project.

Summary of Radioactive Releases and Impact on Public

During the decommissioning period, June 28, 1990 to November 9, 1992, an estimated 0.0172 Curies of radioactive particulates were measured in ventilation exhaust air released from plant buildings. Much of the measured activity recorded on monitoring equipment was due to naturally occurring radon gas. Where we could not positively identify measured activity as radon related, it was conservatively reported as decommissioning related radioactivity. The principal radionuclides assumed released were Co-60, Ni-63, and Fe-55 based on isotopic analysis of equipment dismantled during the project.

The Reactor Building filtered ventilation exhaust system was operated for a total of ~~6,519~~ hours and the Fuel Handling Building filtered ventilation exhaust system was operated for a total of ~~4,129~~ hours during this period.

6,579

Evaluation of the offsite consequences of the radioactive material assumed released were evaluated using the methodology of NRC Regulatory Guide 1.109 and the NRC GASPARG computer program. Very conservative atmospheric dispersion factors were obtained from NRC Regulatory Guide 1.3. Dose to a hypothetical adult located 24 hours/day at the restricted area boundary (plant security fence), site property boundary, and in the nearby community of Brandon, SD, during the decommissioning period were conservatively calculated to be:

<u>Location</u>	<u>Dose Rate (mRem/Year)</u>	<u>Total Dose (mRem)</u>
Restricted Area Boundary	2.42	5.92
Site Boundary	0.68	1.66
Nearby Community	0.06	0.15

These doses are very small. They are a very small fraction of the dose received from natural sources and a small fraction of the limits established by the Commission in 10 CFR Part 20.

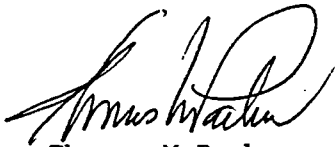
Solid waste shipped offsite to a licensed disposal site or licensed decontamination contractor consisted of:

Dry Waste, Rubble, Etc.	784 Cubic Meters
	0.663 Curies
Reactor Vessel & Internals	113 Cubic Meters
	561 Curies
Biological Shield Waste	78.3 Cubic Meters
	0.233 Curies

February 15, 1993

Solid waste was transported by truck and rail without incident.

Please contact us if you have any questions or comments regarding this information.



Thomas M Parker
Director of Licensing

c: Director NMSS, NRC
D Martin, NRC, NMSS
W Fisher, NRC, Region IV
South Dakota Department of Water and Natural Resources
Attn: M Pochop
Pathfinder Atomic Plant Service List (Attached)

Attachments

2025 RELEASE UNDER E.O. 14176

ATTACHMENT 1

EFFLUENT AND WASTE DISPOSAL REPORT

Faint, illegible text at the bottom of the page, possibly a signature or stamp.

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Supplemental Information

1. Regulatory Limits - Quarterly levels requiring reporting to Nuclear Regulatory Commission

(Not Applicable)

2. Maximum Permissible Concentrations:

10 CFR Part 20, Appendix B, Table II, Column 1

3. Average Energy:

(Not Applicable)

4. Measurements and Approximations of Total Radioactivity:

- A. Noble Gases:

None - Not Applicable

- B. Iodines in Gaseous Effluent:

None - Not Applicable

- C. Particulates in Gaseous Effluent:

Continuous monitoring with Continuous Air Monitors (CAMs) in Reactor Building and Fuel Handling Building ventilation exhausts. CAMs set to alarm at 25% of Co-60 limit of 10CFR Part 20, Appendix B, Table I, Column 1. This setpoint is conservative with respect to Table II, Column 1 concentrations at the restricted area boundary. See NSP correspondence date September 24, 1990 for setpoint basis.

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Supplemental Information (continued)

D. Tritium in Gaseous Effluent:

None - Not Applicable

E. Liquid Effluents:

None - Not Applicable

5. Batch Releases:

A. Liquid:

None - Not Applicable

B. Gaseous:

	Reactor Bldg		FH Bldg	
	-----		-----	
1. Number of Batch Releases	354		242	
2. Total Time Period for Batch Releases	4129	Hrs	6519	Hrs
3. Maximum Time Period for Batch Release	655	Hrs	1018	Hrs
4. Average Time Period for Batch Release	11.7	Hrs	26.9	Hrs
5. Minimum Time Period for Batch Release	0.7	Hrs	3.4	Hrs

6. Abnormal Releases:

A. Liquid:

1. Number of Releases	0
2. Total Activity Released	0.00E+00 Ci

B. Gaseous:

1. Number of Releases	0
2. Total Activity Released	0.00E+00 Ci

REPRODUCED FROM THE ORIGINAL RECORDS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 1A Gaseous Effluents - Summation of all Releases

	Units	Total	Pcnt Est Error

A. Noble Gases:			
None - Not Applicable			
B. Iodines:			
None - Not applicable			
C. Long Lived Particulates and Gross Alpha Releases:			
1. Total Particulates:			
A. Elevated Release	Ci	0.00E+00	
B. Building Vent Release	Ci	1.72E-02	
C. Total	Ci	1.72E-02	3.00E+01
2. Average Release Rate:			
A. Elevated Release	uCi/sec	0.00E+00	
B. Building Vent Release	uCi/sec	2.29E-04	
C. Total	uCi/sec	2.29E-04	
3. Gross Alpha Radioactivity:			
A. Elevated Release	Ci	0.00E+00	
B. Building Vent Release	Ci	0.00E+00	
C. Total	Ci	0.00E+00	
D. Tritium:			
None - Not Applicable			
E. Percent Tech Spec Reporting Level for Long Lived Iodines, Particulates, and Tritium			
Not Applicable			

2025 RELEASE UNDER E.O. 14176

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 1B Gaseous Effluents - Elevated Release

Nuclides Released	Units	Continuous Mode Total	Batch Mode Total
	-----	-----	-----
1. Noble Gases:			
None - Not Applicable			
2. Iodines:			
None - Not Applicable			
3. Particulates:			
None - Not Applicable			

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 1C Gaseous Effluents - Building Vent Release

Nuclides Released	Units	Continuous Mode Total	Batch Mode Total
	-----	-----	-----
1. Noble Gases:			
None - Not Applicable			
2. Iodines:			
None - Not Applicable			
3. Particulates:			
CO-60	Ci	0.00E+00	9.16E-03
Ni-63	Ci	0.00E+00	6.53E-03
Fe-55	Ci	0.00E+00	1.36E-03
Others	Ci	0.00E+00	1.32E-04
Total	Ci	0.00E+00	1.72E-02

PATHFINDER GENERATING PLANT
 NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
 License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 2A Liquid Effluents - Summation of All Releases

Units	Total	Pcnt Est Error
-----	-----	-----

None - Not Applicable

Table 2B Liquid Effluents

Nuclides Released	Units	Continuous Mode Total	Batch Mode Total
	-----	-----	-----

None - Not Applicable

OTHER TRAINING RECORDS

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 3 Solid Waste and Irradiated Fuel Shipments

A. Solid Waste Shipped Offsite For Burial or Disposal:

1. Type of Waste:

	Units	Total	Pcnt Est Error
	-----	-----	-----
A. Spent Resins, Filter Sludges, Evaporator Bottoms, Etc.	Cu Meter Ci	0.00E+00 0.00E+00	0.00E+00
B. Dry Waste, Rubble, Contaminated Equip, Etc.	Cu Meter Ci	7.84E+02 6.63E-01	3.50E+00
C. Irradiated Components (Reactor Vessel & Internals)	Cu Meter Ci	1.13E+02 5.61E+02	5.00E+01
D. Other (described below):			
Biological Shield (Concrete & Steel Rebar)	Cu Meter Ci	7.83E+01 2.33E-01	3.50E+01

DECOMMISSIONING RECORDS

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 3 Solid Waste and Irradiated Fuel Shipments (Continued)

2. Measured Major Nuclide Composition by Type of Waste:

TYPE -----	Nuclide -----	Percent -----
A	None	
B&C	H-3	1.30E-01
	C-14	5.00E-02
	Fe-55	7.92E+00
	Co-60	5.34E+01
	Ni-59	3.20E-01
	Ni-63	3.80E+01
	Eu-152	3.00E-02
D	H-3	1.20E-01
	C-14	7.00E-02
	Fe-55	1.13E+01
	Co-60	9.64E+00
	Ni-59	3.00E-02
	Ni-63	7.14E+01
	Nb-94	6.00E-02
	Tc-99	2.50E+00
	I-129	1.00E-02
	Eu-152	3.11E+00
	Eu-154	2.00E-01
	Am-241	4.80E-01
	Pu-241	1.02E+00

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Table 3 Solid Waste and Irradiated Fuel Shipments (Continued)

3. Solid Waste Disposition:

No. of Shipments	Mode	Destination
-----	-----	-----
1	Rail	US Ecology, Richland, WA
25	Truck	ATG, Richland, WA
31	Truck	US Ecology, Richland, WA

B. Irradiated Fuel Shipments:

Number of Shipments	Mode	Destination
-----	-----	-----

None

C. Shipping Container and Solidification Method:

No.	Volume (M3)	Activity (Ci)	Type of Waste	Container Code	Solidification Code
-----	-----	-----	-----	-----	-----

See Attached Table

7-10-92 11:00 AM

PATHFINDER GENERATING PLANT
NORTHERN STATES POWER COMPANY

PERIOD: JUN 28, 1990 - NOV 9, 1992
License No. 22-08799-02

EFFLUENT AND WASTE DISPOSAL REPORT

Notes:

-
1. Release of individual isotopes from Reactor Building and Fuel Handling Building vents was determined using gross Continuous Air Monitor (CAM) strip charts, CAM calibration data, known exhaust fan flow rates, and known isotopic percentages in decontamination waste.
 2. Naturally occurring radon contributed significantly to recorded CAM count rates. Nearly all measured CAM activity was actually due to radon. This activity was conservatively attributed to decommissioning activities and reported as such in this report.
 3. Periodic gamma spectrum analysis of CAM filter media showed no activity above the lower limit of detection confirming that background radon was the principal contributor to CAM readings.
 3. Information specified in Regulatory Guide 1.21 which is not applicable to the Pathfinder Decommissioning Project is indicated by a 'Not Applicable' entry.

ATTACHMENT 2

SOLID WASTE SHIPMENT SUMMARY

BOX NUMBER	WIGHT POUNDS	CONTACT DOSE mr	1 METER DOSE mr	FILL DATE	TOTAL CUBIC FEET	TOTP Mill Curies	COMMENTS	SHIP DATE	SHIP NUMBER	CF SHIPPED	VAL NDS SHIPPED
PFV-001	561,000#	.8	.2	08/07/91	3990	560920.00	Pathfinder Reactor Vessel	08/07/91	91-37	3,990	561,000#
C90-001	24,940#	.2	.1	09/13/90	449	.05	Asbestos Shipped to ATG	09/13/90	90-03	2,222	24,940#
C90-002	13,400#	.2	.1	10/07/90	240	.05	and Buried at USE Handford	10/08/90	90-05	1,200	13,400#
C91-003	34,000#	.2	.1	01/09/91	600	.31	Recirc Motors to ATG	01/09/91	91-01	600	34,000#
C91-004	42,250#	12.0	2.0	02/04/91	1280	9.00	SEA VAN TO ATG	02/05/91	91-07	1,280	42,250#
C91-005	42,120#	4.6	1.0	02/13/91	947	20.00	SEA VAN TO ATG	02/19/91	91-08	2,222	42,120#
C91-006	33,700#	.2	.2	03/25/91	960	1.00	SEA VAN-ATG, 8 FUEL RACKS	03/25/91	91-20	960	33,700#
C91-007	13,240#	1.6	.4	04/01/91	596	2.00	SEA VAN-ATG, TRASH & 1-RACK	04/01/91	91-21	596	13,240#
C91-008	10,408#	.2	.2	06/27/91	1280	2.00	SEA VAN-ATG, TRASH	06/27/91	91-35	1,280	37,008#
C91-009	40,000#	.2	.2	10/17/91	278	26.02	CV-20 ATG, 2 BIO BLOCKS	10/18/91	91-39	278	40,000#
C91-010	40,000#	.2	.2	10/28/91	278	26.02	CV-20 ATG, 2 BLOCK, 1 WB	10/28/91	91-40	278	40,000#
C91-011	38,000#	.2	.2	10/29/91	244	24.72	CV-21 ATG, 2 BIO BLOCKS	10/29/91	91-41	244	38,000#
C91-012	40,000#	.2	.2	11/07/91	322	26.02	CV-21 ATG, 2 BLOCK, 2 WB	11/07/91	91-42	322	40,000#
C91-013	39,980#	.2	.2	11/07/91	269	26.00	CV-20 ATG, 2 BLOCK, 2 BR	11/07/91	91-43	269	39,980#
C91-014	40,000#	.2	.2	11/14/91	247	26.02	CV-21 ATG, 1 BLOCK, 2 WB	11/14/91	91-44	247	40,000#
C91-015	40,000#	.2	.2	11/14/91	252	26.02	CV-20 ATG, 2 BLOCK, 1 BR	11/14/91	91-45	252	40,000#
C91-016	7,000#	.2	.1	11/21/91	1000	1.00	CV-5 ATG, + 3, B-25 BOXES	11/21/91	91-47	1,000	7,000#
C91-017	39,800#	.2	.1	11/25/91	240	25.89	CV-20 ATG, 1 BLOCK, 4 WB	11/25/91	91-48	240	39,800#
C91-018	39,960#	.2	.1	11/25/91	270	25.99	CV-21 ATG, 1 BLOCK, 3 WB	11/25/91	91-49	270	39,960#
C91-019	40,400#	.2	.1	12/09/91	366	26.28	CV-20 ATG, 1 BLOCK, 7 WB	12/09/91	91-50	366	40,400#
C91-020	30,260#	.2	.1	12/09/91	340	19.69	CV-21 ATG, 1 LSA, 24 BR, 5 WB	12/09/91	91-51	340	30,260#
C92-021	29,475#	.2	.1	02/25/92	837	9.59	CV-20 ATG, 22 BR, 3 WB	02/28/92	92-03	837	29,475#
C92-022	27,700#	.2	.1	03/31/92	884	9.01	CV-20 ATG, 530 DAW, 10 WB	03/31/92	92-04	884	27,700#
P91-011	30,000#	3.5	1.0	02/05/91	250	2.00	#11 RECIRC PUMP TO ATG	02/05/91	91-05	250	30,000#
P91-012	30,000#	3.5	.6	02/05/91	250	6.00	#12 RECIRC PUMP TO ATG	02/05/91	91-04	250	30,000#
P91-013	30,000#	3.2	1.0	02/05/91	250	10.00	#13 RECIRC PUMP TO ATG	02/05/91	91-06	250	30,000#
B91-001	6,900#	.2	.2	09/08/90	90	2.00	Pipe & Misc. Steel	03/21/91	91-19	540	39,300#
B91-002	5,600#	.2	.2	09/09/90	90	2.00	Pipe & 6 bag trash	03/21/91	91-19		
B91-003	4,600#	.2	.2	09/10/90	90	2.00	Pipe & valves	04/01/91	91-21	360	20,400#
B91-004	5,500#	.2	.2	09/10/90	90	2.00	Pipe	03/21/91	91-19		
B91-005	7,400#	.3	.3	09/11/90	90	3.00	Pipe, Conduit & rubble	07/25/91	91-36	480	44,200#
B91-006	9,500#	.2	.2	09/12/90	90	2.00	Pipe, Barrels & rubble	04/11/91	91-29	480	40,000#
B91-007	8,000#	.2	.2	10/01/90	90	2.00	Cable, Plates & rubble	04/11/91	91-29		
B91-008	7,600#	.3	.2	10/01/90	90	2.00	Pipe, Conduit & Rubble	04/11/91	91-29		
B91-009	7,500#	.2	.2	10/01/90	90	2.00	Pipe, Conduit & Rubble	04/11/91	91-29		
B91-010	9,000#	.3	.1	10/03/90	90	1.00	Pipe, Barrels & sand	04/11/91	91-30		
B91-011	8,300#	.7	.1	10/04/90	90	1.00	Pipe, Wire, Plate & sand	03/19/91	91-14	540	40,100#
B91-012	6,200#	.8	.2	10/04/90	90	2.00	Plate, Pipe, Valves, Sand	03/21/91	91-18	630	39,800#
B91-013	5,900#	.9	.1	10/04/90	90	1.00	Barrels, Pipe, Valve, Sand	03/21/91	91-19		
B91-014	8,500#	.1	.1	10/08/90	90	1.00	Cable, Wire, Pipe & Sand	04/08/91	91-22	450	39,800#
B91-015	9,200#	.1	.1	10/11/90	90	1.00	Cable, Plate, Trash	04/08/91	91-22		
B91-016	7,300#	.1	.1	10/11/90	90	1.00	Plate, Conduit	03/19/91	91-13	540	40,400#
B91-017	7,100#	.5	.1	10/11/90	90	1.00	Pipe, Valves, Wire	03/19/91	91-13		
B91-018	8,500#	3.0	.1	10/15/90	90	1.00	Pipe, Valves, Wire	03/20/91	91-17	540	40,600#
B91-019	5,000#	.5	.1	10/16/90	90	1.00	Pipe, Conduit, Wire	02/05/91	91-04	192	10,300#
B91-020	4,600#	.1	.1	10/16/90	90	1.00	Conduit, Wire, Steel	02/05/91	91-06	192	10,200#
B91-021	7,300#	.2	.1	10/16/90	90	1.00	Pipe, Conduit, Steel	03/19/91	91-14		
B91-022	7,000#	.2	.2	10/31/90	90	2.00	Heater, Valves, Pump	03/19/91	91-14		
B91-023	6,500#	.1	.1	10/18/90	90	1.00	Pipe, Conduit, Wire	03/21/91	91-18		
B91-024	6,500#	.2	.1	10/22/90	90	1.00	Conduit, Pump, Valve	03/19/91	91-12	540	40,100#
B91-025	9,900#	.2	.2	10/23/90	90	2.00	Valve, Pipe, Wire	03/21/91	91-19		
B91-026	6,000#	.1	.1	10/23/90	90	1.00	Pipe, Valve, Wire	03/21/91	91-18		
B91-027	7,500#	.8	.2	10/23/90	90	2.00	MSIV, Pipe, Wire	03/20/91	91-17		
B91-028	9,600#	35.0	1.0	10/24/90	90	10.00	MSIV, Conduit, Steel	03/20/91	91-17		
B91-029	5,000#	.2	.1	10/25/90	90	1.00	Valve, Pipe, Steel	04/01/91	91-21		
B91-030	5,500#	.2	.1	10/29/90	90	1.00	Steel, Pipe, Valve	03/21/91	91-19		
B91-031	5,200#	.2	.2	10/30/90	90	2.00	Steel, Pipe,	03/20/91	91-17		
B91-032	4,400#	.4	.2	10/31/90	90	2.00	Wire, Conduit	03/20/91	91-17		
B91-033	5,300#	.3	.2	11/12/90	90	2.00	Pipe, Valve, Steel	03/19/91	91-14		
B91-034	6,400#	.2	.1	11/12/90	90	1.00	Conduit, Valve, Pipe	03/20/91	91-17		
B91-035	7,300#	10.0	.2	11/12/90	90	2.00	MSIV header, Conduit, Wire	03/20/91	91-15	540	39,900#

B91-036	7,000#	.4	.2	11/12/90	90	2.0	Valves, Pipe, Steel	03/20/91	91-15			36
B91-037	,900#	.1	.1	11/12/90	90	1.	Pipe, Ducts, Valves	03/20/91	91-16	630	900#	37
B91-038	,500#	1.5	.2	11/12/90	90	2.	Pipe, Motor, Pump	03/20/91	91-15			38
B91-039	4,200#	.5	.1	11/12/90	90	1.00	Ducts, Valves, Conduit	03/21/91	91-18			39
B91-040	6,200#	1.5	.2	11/13/90	90	2.00	Pipes, Valve, Steel	03/20/91	91-16			40
B91-041	5,900#	.6	.2	11/13/90	90	2.00	Pipe(ES),Conduit,Wire	03/19/91	91-12			41
B91-042	5,600#	8.0	1.0	11/26/90	90	10.00	Pipe, Conduit, Ducts	02/05/91	91-06			42
B91-043	6,000#	1.6	.2	11/14/90	90	2.00	Pipe, Valves, Steel	03/20/91	91-15			43
B91-044	6,500#	.5	.2	11/14/90	90	2.00	Pipes, Valves, Pumps	03/20/91	91-16			44
B91-045	6,000#	10.0	.5	11/14/90	90	5.00	Pipes, Valves, Steel	03/19/91	91-14			45
B91-046	5,700#	90.0	1.0	11/27/90	90	10.00	PIPE, STEEL, VALVES	03/19/91	91-12			46
B91-047	7,400#	.3	.1	11/19/90	90	1.00	Blocks, Rubble, Pipe	04/11/91	91-29			47
B91-048	7,500#	.2	.1	11/19/90	90	1.00	Blocks, Rubble, Pipe	04/11/91	91-28	480	40,100#	48
B91-049	7,000#	.2	.1	11/20/90	90	1.00	Blocks, Rubble, Pipe	04/11/91	91-28			49
B91-050	9,000#	.2	.1	11/20/90	90	1.00	Blocks, Rubble, Sand	04/11/91	91-28			50
B91-051	7,300#	10.0	.3	11/21/90	90	3.00	Blocks, Rubble, Trash	04/11/91	91-28			51
B91-052	9,300#	.2	.1	11/21/90	90	1.00	Blocks, Rubble, Trash	04/11/91	91-28			52
B91-053	5,300#	.2	.2	12/06/90	90	2.00	HOIST,CABLE,PIPE	02/05/91	91-04			53
B91-054	5,700#	2.0	1.0	11/27/90	90	10.00	Pipe, Conduit, Valves	03/19/91	91-13			54
B91-055	8,000#	.2	.1	11/26/90	90	1.00	Blocks, Rubble, Trash	12/11/90	90-08	480	44,900#	55
B91-056	9,000#	.2	.1	11/26/90	90	1.00	Blocks, Rubble, Trash	12/11/90	90-08			56
B91-057	9,300#	.2	.1	11/27/90	90	1.00	Blocks, Rubble, Trash	12/11/90	90-08			57
B91-058	4,400#	5.0	.4	11/27/90	90	4.00	Pipes,Valves,Steel	03/21/91	91-18			
B91-059	10,000#	.2	.1	11/28/90	90	1.00	Blocks, Rubble, Trash	04/11/91	91-30			58
B91-060	5,500#	6.0	1.0	11/29/90	90	10.00	Pipe(Asbestos), Sand	04/10/91	91-25	576	40,300#	60
B91-061	8,600#	.1	.1	11/29/90	90	1.00	Blocks, Rubble, Trash	12/11/90	90-08			61
B91-062	10,200#	.4	.2	12/03/90	90	2.00	Blocks, Rubble, Trash	04/11/91	91-30			62
B91-063	9,200#	.1	.1	11/27/90	90	1.00	Blocks, Rubble, Trash	04/11/91	91-30			63
B91-064	5,200#	7.0	1.2	11/29/90	90	12.00	Pipe, Conduit, Valves	03/19/91	91-12			64
B91-065	10,500#	.2	.2	12/03/90	90	2.00	Blocks, Rubble, Trash	04/11/91	91-27	384	39,500#	65
B91-066	9,700#	.2	.2	12/03/90	90	2.00	Blocks, Rubble, Trash	04/11/91	91-27			66
B91-067	9,500#	.2	.2	12/04/90	90	2.00	Blocks, Rubble, Trash	04/11/91	91-27			67
B91-068	9,500#	.2	.2	12/05/90	90	2.00	Blocks, Rubble, Trash	04/10/91	91-26	480	41,000#	68
B91-069	9,800#	10.0	.6	12/06/90	90	6.00	Blocks, Rubble, Trash	04/11/91	91-27			69
B91-070	10,000#	.2	.2	12/06/90	90	2.00	Blocks, Rubble, Trash	12/11/90	90-08			70
B91-071	8,600#	1.0	.2	12/10/90	90	2.00	Blocks, Rubble, Trash	04/10/91	91-26			71
B91-072	5,500#	.3	.2	12/12/90	90	2.00	Pool lites,Pipe,Steel	03/20/91	91-16			72
B91-073	5,000#	.3	.1	12/12/90	90	1.00	Grating,Steel,Wire	03/20/91	91-16			73
B91-074	5,500#	.2	.1	12/14/90	90	1.00	Grating,Valves,Steel	03/21/91	91-18			74
B91-075	7,500#	.8	.2	12/11/90	90	2.00	Asbestos,Sand,Block,Rubble	04/10/91	91-26			75
B91-076	8,000#	.2	.1	12/14/90	90	1.00	Sand,Blocks,Rubble	04/10/91	91-26			76
B91-077	6,000#	3.5	.2	12/18/90	90	2.00	Blocks,Rubble,Trash	04/10/91	91-25			77
B91-078	5,400#	.2	.1	12/20/90	90	1.00	Steel,Pipe,Valves	04/01/91	91-21			78
B91-079	6,000#	1.4	.4	01/07/91	90	4.00	Neut mixer, pipe, valves	04/08/91	91-22			79
B91-080	6,200#	.2	.1	01/04/91	90	1.00	Blocks,Rubble,Trash	04/10/91	91-25			
B91-081	8,400#	12.0	2.5	01/08/91	90	25.00	Piping,cooler,tank	02/05/91	91-05	96	8,400#	
B91-082	7,300#	8.0	1.2	01/19/91	90	12.00	FHB Tank Steel & Wire	03/20/91	91-16			82
B91-083	5,400#	.5	.2	01/09/91	90	2.00	Steel,Transfer Rail	04/01/91	91-21			83
B91-084	7,000#	6.0	.8	01/17/91	90	8.00	Conc waste tank steel	03/21/91	91-18			84
B91-085	8,500#	.2	.1	01/22/91	90	1.00	Fuel trans track, steel	06/18/91	91-33	450	40,000#	85
B91-086	9,300#	.2	.1	01/29/91	90	1.00	Shield Pool Steel	04/08/91	91-22			86
B91-087	6,800#	.6	.2	01/31/91	90	2.00	Storage pool things	04/08/91	91-22			87
B91-088	7,800#	20.0	8.0	01/28/91	90	80.00	Filters trash Hi sand	04/10/91	91-25			88
B91-089	5,600#	10.0	.4	01/28/91	90	4.00	Concrete wood Hi sand	04/09/91	91-24	672	40,600#	89
B91-090	7,400#	2.0	.4	01/30/91	90	4.00	Shield pool steel	03/20/91	91-15			90
B91-091	5,500#	1.0	.2	01/30/91	90	2.00	Stor pool pipe steel	03/20/91	91-16			91
B91-092	6,000#	40.0	3.0	01/30/91	90	30.00	Filter trash Hi sand	04/10/91	91-25			92
B91-093	4,500#	3.6	.5	01/31/91	90	5.00	Filter trash Hi sand	04/09/91	91-24			93
B91-094	5,700#	.6	.2	02/06/91	90	2.00	CRD's and steel	03/20/91	91-15			94
B91-095	6,200#	20.0	.6	02/14/91	90	6.00	CRD's, Steel, Pipe	03/19/91	91-14			95
B91-096	10,000#	.2	.1	02/07/91	90	1.00	Shield pool steel	03/19/91	91-11	450	39,700#	96
B91-097	7,800#	.2	.1	02/07/91	90	1.00	Lo Solid Sand & Trash	04/08/91	91-23	576	40,500#	97
B91-098	7,400#	.8	.2	02/11/91	90	2.00	Lo Solid Sand & Trash	04/09/91	91-24			98
B91-099	7,400#	6.0	.5	02/12/91	90	5.00	Lo Solid Sand & Trash	04/10/91	91-26			99
B91-100	8,800#	110.0	2.0	02/13/91	90	20.00	Lo Solid Sand & Trash	04/10/91	91-25			100
B91-101	5,500#	14.0	2.0	02/14/91	90	20.00	Fuel pool pipe, Vacuum	03/19/91	91-13			101

B91-102	7,800#	6.0	.5	02/14/91	90	5.0	Shield Pool Steel	03/19/91	91-13			102
B91-103	7,800#	4.0	.3	02/14/91	90	3.	Lo Solid Sand & Trash	04/09/91	91-24			103
B91-104	7,800#	.4	.2	02/18/91	90	2.	Lo Solids Steel	03/19/91	91-12			104
B91-105	7,000#	2.0	.2	02/18/91	90	2.0	Fuel Pool CRD, Pipe	03/19/91	91-13			105
B91-106	6,400#	1.0	.2	02/18/91	90	2.00	Fuel Pool CRD, Pipe	03/19/91	91-11			106
B91-107	4,800#	4.0	.2	02/19/91	90	2.00	Trash & Asbestos	04/09/91	91-24			107
B91-108	5,200#	1.0	.2	02/19/91	90	2.00	Asbestos & Concrete	04/09/91	91-24			108
B91-109	7,300#	.5	.2	02/19/91	90	2.00	Asbestos & Concrete	04/09/91	91-24			109
B91-110	7,900#	.2	.2	02/19/91	90	2.00	Asbestos & Concrete	04/08/91	91-23			110
B91-111	7,000#	.2	.2	02/20/91	90	2.00	Shield pool platform	03/19/91	91-12			111
B91-112	5,600#	1.0	.2	02/20/91	90	2.00	Fuel pool steel	03/19/91	91-11			112
B91-113	4,700#	1.0	.2	02/21/91	90	2.00	Steel from Fuel Pool	06/18/91	91-33			113
B91-114	8,500#	2.0	.2	02/25/91	90	2.00	Lo-Solids Tank Steel	03/19/91	91-11			114
B91-115	6,700#	1.0	.3	03/04/91	90	3.00	Trash and Sand-Resin Tank	04/08/91	91-23			115
B91-116	5,400#	1.0	.1	03/04/91	90	1.00	Trash and Sand-Resin Tank	04/08/91	91-23			116
B91-117	6,000#	.4	.2	03/05/91	90	2.00	Trash and Sand-Resin Tank	04/08/91	91-23			117
B91-118	6,700#	.6	.2	03/05/91	90	2.00	Trash and Sand-Resin Tank	04/08/91	91-23			118
B91-119	7,000#	.4	.2	03/21/91	90	2.00	Steel & FHB transfer rack	06/27/91	91-35			119
B91-120	9,200#	.2	.2	03/04/91	90	2.00	Lo-Solids Tank Steel	03/19/91	91-11			120
B91-121	8,900#	6.0	.2	06/12/91	90	2.00	Recirc Pipe & dirt	07/25/91	91-36			121
B91-122	8,500#	.8	.2	03/08/91	90	2.00	Steel from Fuel Pool	11/18/91	91-46	450	39,300#	122
B91-123	8,900#	10.0	2.0	07/10/91	90	20.00	Recirc Pipe & Concrete	07/25/91	91-36			123
B91-124	9,600#	2.0	.4	07/15/91	90	4.00	Recirc Pipe & Concrete	07/25/91	91-36			124
B91-125	9,400#	1.2	.2	07/15/91	90	2.00	Recirc Pipe & Concrete	07/25/91	91-36			125
B91-126	9,800#	.6	.2	07/22/91	90	2.00	Recirc Pipe & Concrete	10/07/91	91-38	480	41,700#	126
B91-127	7,600#	.2	.2	04/29/91	90	2.00	Steel from Fuel Pool	06/27/91	91-35			127
B91-128	8,700#	.2	.2	04/25/91	90	2.00	Steel from Fuel Pool	06/18/91	91-33			128
B91-129	8,100#	.2	.2	05/28/91	90	2.00	Steel from Resin Tank	06/18/91	91-33			129
B91-130	10,000#	.2	.2	05/31/91	90	2.00	Rx Sump Steel & Vessel Fee	06/18/91	91-33			130
B91-131	9,100#	.2	.2	06/06/91	90	2.00	Rx Grating & Resin Tank	11/18/91	91-46			131
B91-132	8,000#	.1	.1	07/22/91	90	1.00	Resin Tank & Track Steel	11/18/91	91-46			132
B91-133	12,000#	.1	.1	06/25/91	90	1.00	Steel Reactor Columns	06/27/91	91-35			133
B91-134	8,000#	.2	.2	09/03/91	90	2.00	Concrete from RB & FHB	10/07/91	91-38			134
B91-135	7,300#	.2	.2	08/28/91	90	2.00	Steel From Rb & FHB	11/18/91	91-46			135
B91-136	7,000#	.2	.2	08/29/91	90	2.00	Concrete from RB & FHB	10/07/91	91-38			136
B91-137	6,400#	2.5	.2	10/17/91	90	2.00	Steel Floor Drains, Rebar	11/18/91	91-46			137
B91-138	8,000#	.1	.1	09/17/91	90	1.00	Concrete /grout blocks	10/07/91	91-38			138
B91-139	8,900#	.2	.2	09/18/91	90	2.00	Concrete - Rx Floor Drains	10/07/91	91-38			139
B91-140	8,800#	1.2	.2	09/17/91	90	2.00	Concrete /grout blocks	11/21/91	91-47	270	25,400#	140
B91-141	8,000#	.2	.2	11/06/91	90	2.00	Concrete /grout blocks	11/21/91	91-47			141
B91-142	8,600#	.2	.2	11/11/91	90	2.00	Concrete and Metal Scrap	11/21/91	91-47			142
B91-143	8,800#	.2	.2	11/20/91	90	5.72	Concrete and Metal Scrap	12/09/91	91-51	90	8,800#	143
B92-144	8,000#	.2	.2	01/13/92	90	2.60	Concrete and Metal Scrap	05/05/92	92-05	90	8,000#	144
B92-145	9,000#	.2	.2	02/25/92	90	2.93	Concrete and Metal Scrap	05/05/92	92-05	90	9,000#	145
B92-146	6,700#	.2	.1	04/09/92	90	2.18	Concrete and Re-Bar	05/05/92	92-06	90	6,700#	146
B92-147	10,000#	.2	.1	04/09/92	90	3.25	Concrete and Re-Bar	05/05/92	92-06	90	10,000#	147
B92-148	7,900#	.2	.1	04/13/92	90	2.57	Concrete and Re-Bar	05/05/92	92-05	90	7,900#	148
B92-149	7,900#	.2	.1	04/29/92	90	2.57	Concrete and Re-Bar	05/05/92	92-06	90	7,900#	149

2,447,333# Accumulated Weight
 2,447,333# Material Shipped
 000# Material on hand
 30,329 CF Cubic Feet Generated
 34,439 CF Cubic Feet Shipped
 561.816 Ci Curies processed

ATTACHMENT 3

FUEL HANDLING BUILDING VENT MONTHLY RELEASE SUMMARY
AND FLOW DIAGRAM

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES - FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
				ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
09/08/90 07:00		15:30	6000	0	0.0					INITIAL TEST RUN
09/07/90 07:20		16:50	6000	0	0.0					
09/08/90					0.0					FAN NOT RUN
09/09/90					0.0					FAN NOT RUN
09/10/90 07:35		16:55	6000	0	0.0					
09/11/90 07:20		17:00	6000	0	0.0					
09/12/90 06:55		17:05	6000	0	0.0					
09/13/90 07:17		16:35	6000	0	0.0					
09/14/90					0.0					FAN NOT RUN
09/15/90					0.0					FAN NOT RUN
09/16/90					0.0					FAN NOT RUN
09/17/90 08:00		16:50	6000	0	0.0					
09/18/90 07:30		16:50	6000	0	0.0					
09/19/90					0.0					FAN NOT RUN
09/20/90 08:40		16:45	6000	0	0.0					
09/21/90					0.0					FAN NOT RUN
09/22/90					0.0					FAN NOT RUN
09/23/90					0.0					FAN NOT RUN
09/24/90 07:50		16:45	6000	0	0.0					CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED
09/25/90 07:25		16:45	6000	25	3.7					FAN SHUTDOWN 1130-1230
09/26/90 07:20		16:45	6000	0	0.0					
09/27/90 07:05		16:35	6000	0	0.0					
09/28/90					0.0					FAN NOT RUN
09/29/90					0.0					FAN NOT RUN
09/30/90					0.0					FAN NOT RUN
MONTHLY TOTALS							119.88 HOURS		3.7 MICROCURIES	
10/01/90 07:13		16:45	6000	50	7.6					CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED
10/02/90 07:10		16:47	6000	0	0.0					
10/03/90 07:19		16:47	6000	100	15.2					
10/04/90 07:25		16:45	6000	0	0.0					
10/05/90 07:10		11:25	6000	150	10.2					
10/06/90					0.0					FAN NOT RUN
10/07/90					0.0					FAN NOT RUN
10/08/90 07:30		16:50	6000	0	0.0					CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED
10/09/90 07:12		16:55	6000	0	0.0					
10/10/90 07:05		16:47	6000	0	0.0					
10/11/90 07:10		16:45	6000	0	0.0					
10/12/90					0.0					FAN NOT RUN
10/13/90					0.0					FAN NOT RUN
10/14/90					0.0					FAN NOT RUN
10/15/90 07:25		16:55	6000	50	7.6					CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED ?
10/16/90 07:15		16:55	6000	300	46.5					
10/17/90 07:08		16:50	6000	0	0.0					
10/18/90 07:05		16:46	6000	0	0.0					
10/19/90 08:20		14:15			0.0					
10/20/90					0.0					FAN NOT RUN
10/21/90					0.0					FAN NOT RUN
10/22/90 07:05		16:55	6000	0	0.0					CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED
10/23/90 07:10		16:50	6000	0	0.0					
10/24/90 07:12		16:44	6000	0	0.0					

*2 pmi due to Radon
All the following cases are from Radon*

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON TIME FAN OFF		AVG CAM CPM MICROCURIES			NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
	TIME FAN ON	TIME FAN OFF	AVG CFM	ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
10/25/90 07:10	16:00		6000	0	0.0						
10/26/90					0.0					FAN NOT RUN	
10/27/90					0.0					FAN NOT RUN	
10/28/90					0.0					FAN NOT RUN	
10/29/90 07:15	16:50		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
10/30/90 07:15	16:51		6000	0	0.0						
10/31/90 07:09	16:45		6000	0	0.0						
MONTHLY TOTALS						191.65 HOURS			87.1 MICROCURIES		
11/01/90 07:10	16:45		6000	0	0.0						
11/02/90					0.0					FAN NOT RUN	
11/03/90					0.0					FAN NOT RUN	
11/04/90					0.0					FAN NOT RUN	
11/05/90 07:00	16:45		6000	100	15.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED ?					
11/06/90 07:12	16:45		6000	0	0.0						
11/07/90 07:12	16:40		6000	50	7.6						
11/08/90 07:05	16:15		6000	50	7.3						
11/09/90					0.0					FAN NOT RUN	
11/10/90					0.0					FAN NOT RUN	
11/11/90					0.0					FAN NOT RUN	
11/12/90 07:20	16:45		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
11/13/90 07:05	16:45		6000	0	0.0						
11/14/90 07:10	16:50		6000	0	0.0						
11/15/90 07:05	16:35		6000	100	15.2						
11/16/90					0.0					FAN NOT RUN	
11/17/90					0.0					FAN NOT RUN	
11/18/90					0.0					FAN NOT RUN	
11/19/90 07:03	16:48		6000	75	11.7	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED ?					
11/20/90 06:58	16:50		6000	50	7.9						
11/21/90 06:55	11:45		6000	50	3.9						
11/22/90					0.0					FAN NOT RUN	
11/23/90					0.0					FAN NOT RUN	
11/24/90					0.0					FAN NOT RUN	
11/25/90					0.0					FAN NOT RUN	
11/26/90 07:14	16:48		6000	50	7.7	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED ?					
11/27/90 07:00	16:43		6000	25	3.9						
11/28/90 07:01	16:45		6000	50	7.8						
11/29/90 07:00	16:50		6000	50	7.9						
11/30/90					0.0					FAN NOT RUN	
MONTHLY TOTALS						149.07 HOURS			96.5 MICROCURIES		
12/01/90					0.0					FAN NOT RUN	
12/02/90					0.0					FAN NOT RUN	
12/03/90 07:10	16:50		6000	25	3.9	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
12/04/90 07:04	16:50		6000	100	15.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
12/05/90 07:04	16:45		6000	125	19.4						
12/06/90 07:05	16:45		6000	125	19.4						
12/07/90					0.0					FAN NOT RUN	
12/08/90					0.0					FAN NOT RUN	
12/09/90					0.0					FAN NOT RUN	

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- FUEL HANDLING BUILDING VENT

01/11/93

DATE			AVG CAM CPM MICROCURIES			NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
	TIME FAN ON	TIME FAN OFF	AVG CFM	ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
12/10/90 07:05	16:50		6000	125	19.5	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
12/11/90 07:00	16:50		6000	300	47.3						
12/12/90 07:00	16:50		6000	150	23.6						
12/13/90 07:00	16:45		6000	150	23.4						
12/14/90 08:35	15:15		6000	150	16.0						
12/15/90					0.0					FAN NOT RUN	
12/16/90					0.0					FAN NOT RUN	
12/17/90 07:00	16:42		6000	150	23.3	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
12/18/90 07:00	16:45		6000	150	23.4						
12/19/90 07:05	16:44		6000	150	23.2						
12/20/90 07:03	11:40		6000	150	11.1						
12/21/90					0.0					FAN NOT RUN	
12/22/90					0.0					FAN NOT RUN	
12/23/90					0.0					FAN NOT RUN	
12/24/90					0.0					FAN NOT RUN	
12/25/90					0.0					FAN NOT RUN	
12/26/90					0.0					FAN NOT RUN	
12/27/90					0.0					FAN NOT RUN	
12/28/90					0.0					FAN NOT RUN	
12/29/90					0.0					FAN NOT RUN	
12/30/90					0.0					FAN NOT RUN	
12/31/90					0.0					FAN NOT RUN	
MONTHLY TOTALS						118.33 HOURS			269.1 MICROCURIES		
01/01/91					0.0					FAN NOT RUN	
01/02/91 07:07	16:50		6000	150	23.3	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
01/03/91 07:10	16:45		6000	150	23.0						
01/04/91 07:06	16:50		6000	250	39.0						
01/05/91 07:25	14:45		6000	100	11.7						
01/06/91					0.0					FAN NOT RUN	
01/07/91 07:00	16:45		6000	150	23.4	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
01/08/91 07:04	16:54		6000	150	23.6						
01/09/91 06:59	16:46		6000	150	23.5						
01/10/91 07:06	16:48		6000	150	23.2						
01/11/91					0.0					FAN NOT RUN	
01/12/91					0.0					FAN NOT RUN	
01/13/91					0.0					FAN NOT RUN	
01/14/91 07:06	16:50		6000	200	31.2	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
01/15/91 07:00	16:45		6000	150	23.4						
01/16/91 06:59	16:50		6000	150	23.7						
01/17/91 07:03	16:40		6000	150	23.1						
01/18/91 08:45	13:20		6000	50	3.7						
01/19/91					0.0					FAN NOT RUN	
01/20/91					0.0					FAN NOT RUN	
01/21/91 07:10	16:45		6000	50	7.7	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
01/22/91 07:02	16:50		6000	50	7.8						
01/23/91 07:00	16:55		6000	50	7.9						
01/24/91 07:05	16:45		0000	150	23.2						
01/25/91					0.0					FAN NOT RUN	
01/26/91					0.0					FAN NOT RUN	
01/27/91					0.0					FAN NOT RUN	

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES - FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CAM CPM MICROCURIES			NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
			AVG CFM	ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
01/28/91	07:05	16:50	6000	50	7.8	CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED					
01/29/91	07:05	16:50	6000	50	7.8						
01/30/91	07:00	16:55	6000	150	23.8						
01/31/91	07:03	16:47	6000	150	23.4					FAN SHUTDOWN 0704-0740	
MONTHLY TOTALS						197.05 HOURS		405.5 MICROCURIES			
02/01/91					0.0					FAN NOT RUN	
02/02/91					0.0					FAN NOT RUN	
02/03/91					0.0					FAN NOT RUN	
02/04/91	06:57	16:42	6000	100	15.6	CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED					
02/05/91	06:57	16:48	6000	150	23.7						
02/06/91	07:05	16:48	6000	200	31.1						
02/07/91	07:00	16:50	6000	100	15.8						
02/08/91					0.0					FAN NOT RUN	
02/09/91					0.0					FAN NOT RUN	
02/10/91					0.0					FAN NOT RUN	
02/11/91	06:58	16:50	6000	50	7.9	CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED					
02/12/91	07:00	16:44	6000	150	23.4						
02/13/91	07:20	16:55	6000	150	23.0						
02/14/91	06:57	16:47	6000	100	15.8						
02/15/91					0.0					FAN NOT RUN	
02/16/91					0.0					FAN NOT RUN	
02/17/91					0.0					FAN NOT RUN	
02/18/91	07:20	16:40	6000	50	7.5	CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED					
02/19/91	07:04	16:53	6000	50	7.9						
02/20/91	07:00	16:49	6000	100	15.7						
02/21/91	06:55	16:45	6000	0	0.0						
02/22/91					0.0					FAN NOT RUN	
02/23/91					0.0					FAN NOT RUN	
02/24/91					0.0					FAN NOT RUN	
02/25/91	07:05	16:55	6000	0	0.0						
02/26/91	07:05	16:50	6000	50	7.8						
02/27/91	07:05	16:50	6000	0	0.0						
02/28/91	07:00	17:00	6000	0	0.0						
MONTHLY TOTALS						156.30 HOURS		195.1 MICROCURIES			
03/01/91					0.0					FAN NOT RUN	
03/02/91					0.0					FAN NOT RUN	
03/03/91					0.0					FAN NOT RUN	
03/04/91	07:06	16:50	6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED					
03/05/91	06:50	16:50	6000	50	8.0						
03/06/91	07:03	16:49	6000	50	7.8						
03/07/91	07:00	16:46	6000	50	7.8						
03/08/91					0.0					FAN NOT RUN	
03/09/91					0.0					FAN NOT RUN	
03/10/91					0.0					FAN NOT RUN	
03/11/91	07:05	16:45	6000	100	15.5	CAM FILTER SPECTRUM ANALYSIS - NONE DETECTED					
03/12/91	07:05	16:45	6000	0	0.0						
03/13/91	07:00	16:30	6000	0	0.0						
03/14/91					0.0					FAN NOT RUN	

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CAM CPM MICROCURIES			NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
			AVG CFM	ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
03/15/91					0.0					FAN NOT RUN
03/16/91					0.0					FAN NOT RUN
03/17/91					0.0					FAN NOT RUN
03/18/91 07:00	16:50		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
03/19/91 07:00	16:50		6000	100	15.8					
03/20/91 06:30	16:50		6000	0	0.0					
03/21/91 06:30	16:45		6000	0	0.0					
03/22/91					0.0					FAN NOT RUN
03/23/91					0.0					FAN NOT RUN
03/24/91					0.0					FAN NOT RUN
03/25/91 07:03	16:50		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
03/26/91 06:58	16:50		6000	50	7.9					
03/27/91 06:45	16:54		6000	0	0.0					
03/28/91 13:00	16:22		6000	75	4.0					
03/29/91					0.0					FAN NOT RUN
03/30/91					0.0					FAN NOT RUN
03/31/91					0.0					FAN NOT RUN
MONTHLY TOTALS						141.52 HOURS			66.8 MICROCURIES	
04/01/91 07:30	16:45		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
04/02/91 07:02	16:52		6000	0	0.0					
04/03/91 07:00	16:50		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
04/04/91 06:57	16:50		6000	75	11.9					
04/05/91					0.0					FAN NOT RUN
04/06/91					0.0					FAN NOT RUN
04/07/91					0.0					FAN NOT RUN
04/08/91 07:10	16:45		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
04/09/91 07:00	16:45		6000	0	0.0					
04/10/91 06:50	16:50		6000	25	4.0					
04/11/91 07:10	16:45		6000	0	0.0					
04/12/91 09:16	23:59		6000	0	0.0					
04/13/91 00:00	23:59		6000	200	76.8					
04/14/91 00:00	23:59		6000	300	115.3					
04/15/91 00:00	16:45		6000	150	40.3	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
04/16/91 07:00	23:59		6000	50	13.6					
04/17/91 00:00	23:59		6000	25	9.6					
04/18/91 00:00	23:59		6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
04/19/91 00:00	23:59		6000	0	0.0					
04/20/91 00:00	23:59		6000	0	0.0					
04/21/91 00:00	23:59		6000	50	19.2					
04/22/91 00:00	23:59		6000	0	0.0					
04/23/91 00:00	23:59		6000	50	19.2					
04/24/91 00:00	23:59		6000	50	19.2					
04/25/91 00:00	23:59		6000	0	0.0					
04/26/91 00:00	23:59		6000	0	0.0					
04/27/91 00:00	23:59		6000	0	0.0					
04/28/91 00:00	23:59		6000	0	0.0					
04/29/91 00:00	23:59		6000	75	26.6	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
			AVG CFM	ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	
04/30/91 00:00		23:59	6000	75	28.8				
MONTHLY TOTALS						509.90 HOURS	386.7 MICROCURIES		
05/01/91 00:00		23:59	6000	25	9.6				
05/02/91 00:00		23:59	6000	25	9.6				
05/03/91 00:00		23:59	6000	25	9.6				
05/04/91 00:00		23:59	6000	25	9.6				
05/05/91 00:00		23:59	6000	25	9.6				
05/06/91 00:00		23:59	6000	25	9.6	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED			
05/07/91 00:00		23:59	6000	100	38.4				
05/08/91 00:00		23:59	6000	150	57.6				
05/09/91 00:00		23:59	6000	100	38.4				
05/10/91 00:00		23:59	6000	100	38.4				
05/11/91 00:00		23:59	6000	150	57.6				
05/12/91 00:00		21:30	6000	150	51.7				LOSS OF POWER TO FAN
05/13/91 07:09		21:00	6000	100	22.2	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED			
05/14/91 06:20		23:59	6000	50	14.1				
05/15/91 00:00		21:00	6000	0	0.0				FAN SHUTDOWN UNK CAUSE
05/16/91 06:56		23:59	6000	0	0.0				
05/17/91 00:00		23:59	6000	250	96.1				
05/18/91 00:00		23:59	6000	250	96.1				
05/19/91 00:00		23:59	6000	250	96.1				
05/20/91 00:00		23:59	6000	100	38.4				
05/21/91 00:00		23:59	6000	100	38.4				
05/22/91 00:00		23:59	6000	50	19.2				
05/23/91 00:00		23:59	6000	0	0.0				
05/24/91 00:00		23:59	6000	0	0.0				
05/25/91 00:00		23:59	6000	50	19.2				
05/26/91 00:00		23:59	6000	50	19.2				
05/27/91 00:00		23:59	6000	50	19.2				
05/28/91 00:00		23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED			
05/29/91 00:00		23:59	6000	0	0.0				
05/30/91 00:00		23:59	6000	0	0.0				
05/31/91 00:00		23:59	6000	0	0.0				
MONTHLY TOTALS						714.62 HOURS	837.2 MICROCURIES		
06/01/91 00:00		23:59	6000	0	0.0				
06/02/91 00:00		23:59	6000	0	0.0				
06/03/91 00:00		23:59	6000	50	19.2				
06/04/91 00:00		23:59	6000	50	19.2				
06/05/91 00:00		23:59	6000	50	19.2				
06/06/91 00:00		23:59	6000	50	19.2				
06/07/91 00:00		23:59	6000	50	19.2				
06/08/91 00:00		23:59	6000	50	19.2				
06/09/91 00:00		23:59	6000	50	19.2				
06/10/91 00:00		23:59	6000	50	19.2				
06/11/91 00:00		23:59	6000	100	38.4				
06/12/91 00:00		23:59	6000	0	0.0				
06/13/91 00:00		23:59	6000	0	0.0				
06/14/91 00:00		21:00	6000	0	0.0				SPURIOUS HIGH ALARM TRIP

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
				ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
06/15/91	08:50	23:59	6000	0	0.0					
06/16/91	00:00	23:59	6000	0	0.0					
06/17/91	00:00	23:59	6000	50	19.2					
06/18/91	00:00	23:59	6000	50	19.2					
06/19/91	00:00	23:59	6000	50	19.2					
06/20/91	00:00	23:59	6000	100	38.4					
06/21/91	00:00	23:59	6000	50	19.2					
06/22/91	00:00	23:59	6000	50	19.2					
06/23/91	00:00	23:59	6000	50	19.2					
06/24/91	00:00	23:59	6000	50	19.2					
06/25/91	00:00	23:59	6000	50	19.2					
06/26/91	00:00	23:59	6000	50	19.2					
06/27/91	07:09	23:59	6000	50	13.5					POWER LOSS DURING NIGHT
06/28/91	00:00	23:59	6000	50	19.2					
06/29/91	00:00	23:59	6000	50	19.2					
06/30/91	00:00	23:59	6000	0	0.0					
MONTHLY TOTALS						700.53 HOURS		455.3 MICROCURIES		
07/01/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/02/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/03/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/04/91	00:00	21:30	6000	100	34.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				FAN SHUTDOWN
07/05/91					0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				FAN NOT RUN
07/06/91					0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				FAN NOT RUN
07/07/91					0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/08/91	07:02	23:59	6000	50	13.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/09/91	00:00	23:59	6000	200	76.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/10/91	00:00	23:59	6000	200	76.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/11/91	00:00	23:59	6000	75	28.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/12/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/13/91	00:00	23:59	6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/14/91	00:00	23:59	6000	300	115.3	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/15/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/16/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/17/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/18/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/19/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/20/91	00:00	23:59	6000	75	28.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/21/91	00:00	21:30	6000	50	17.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				POWER LOSS DURING NIGHT
07/22/91	07:00	21:30	6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				POWER LOSS DURING NIGHT
07/23/91	06:59	21:30	6000	50	11.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/24/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/25/91	00:00	23:59	6000	100	38.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/26/91	00:00	23:59	6000	100	38.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/27/91	00:00	23:59	6000	75	28.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/28/91	00:00	23:59	6000	75	28.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/29/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/30/91	00:00	23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – FUEL HANDLING BUILDING VENT

02/15/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CAM CPM MICROCURIES			NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
			AVG CFM	ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
07/31/91 00:00		23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
MONTHLY TOTALS						640.58 HOURS		787.7 MICROCURIES			
08/01/91 00:00		23:59	6000	50	19.2						
08/02/91 00:00		21:30	6000	100	34.4					POWER LOSS DURING NIGHT	
08/03/91 07:00		23:59	6000	50	13.6						
08/04/91 00:00		23:59	6000	100	38.4						
08/05/91 00:00		23:59	6000	100	38.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
08/06/91 00:00		23:59	6000	100	38.4						
08/07/91 00:00		23:59	6000	100	38.4						
08/08/91 00:00		23:59	6000	75	28.8						
08/09/91 00:00		21:30	6000	100	34.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				POWER LOSS DURING NIGHT	
08/10/91 07:13		21:30	6000	0	0.0					POWER LOSS DURING NIGHT	
08/11/91 07:00		21:30	6000	0	0.0					POWER LOSS DURING NIGHT	
08/12/91 07:00		21:30	6000	0	0.0					POWER LOSS DURING NIGHT	
08/13/91 08:10		21:30	6000	0	0.0					POWER LOSS DURING NIGHT	
08/14/91 07:14		21:30	6000	0	0.0					POWER LOSS DURING NIGHT	
08/15/91 06:58		23:59	6000	0	0.0					POWER LOSS DURING NIGHT	
08/16/91 06:58		23:59	6000	0	0.0						
08/17/91 00:00		23:59	6000	25	9.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
08/18/91 00:00		23:59	6000	50	19.2						
08/19/91 00:00		23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
08/20/91 00:00		23:59	6000	100	38.4						
08/21/91 00:00		23:59	6000	100	38.4						
08/22/91 00:00		23:59	6000	0	0.0						
08/23/91 00:00		23:59	6000	50	19.2						
08/24/91 00:00		23:59	6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
08/25/91 00:00		23:59	6000	0	0.0						
08/26/91 00:00		23:59	6000	0	0.0						
08/27/91 00:00		23:59	6000	0	0.0						
08/28/91 00:00		23:59	6000	50	19.2						
08/29/91 00:00		23:59	6000	50	19.2						
08/30/91 00:00		23:59	6000	100	38.4						
08/31/91 00:00		23:59	6000	50	19.2						
MONTHLY TOTALS						668.55 HOURS		524.3 MICROCURIES			
09/01/91 00:00		23:59	6000	25	9.6						
09/02/91 00:00		23:59	6000	50	19.2						
09/03/91 00:00		23:59	6000	200	76.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
09/04/91 00:00		23:59	6000	0	0.0						
09/05/91 00:00		23:59	6000	0	0.0						
09/06/91 00:00		23:59	6000	50	19.2						
09/07/91 00:00		21:30	6000	50	17.2					POWER LOSS DURING NIGHT	
09/08/91				0	0.0					FAN NOT RUN	
09/09/91 06:57		23:59	6000	50	13.6						
09/10/91 00:00		23:59	6000	0	0.0						
09/11/91 00:00		23:59	6000	0	0.0						
09/12/91 00:00		23:59	6000	0	0.0						
09/13/91 00:00		23:59	6000	0	0.0						
09/14/91 00:00		23:59	6000	0	0.0						

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
				ABOVE BKG	RFI FASFD	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
09/15/91 00:00		23:59	6000	150	57.6					
09/16/91 00:00		23:59	6000	100	38.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
09/17/91 00:00		23:59	6000	0	0.0					
09/18/91 00:00		23:59	6000	0	0.0					
09/19/91 00:00		23:59	6000	25	9.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
09/20/91 00:00		23:59	6000	0	0.0					
09/21/91 00:00		23:59	6000	0	0.0					
09/22/91 00:00		23:59	6000	0	0.0					
09/23/91 00:00		23:59	6000	50	19.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
09/24/91 00:00		23:59	6000	0	0.0					
09/25/91 00:00		23:59	6000	0	0.0					
09/26/91 00:00		23:59	6000	0	0.0					
09/27/91 00:00		23:59	6000	0	0.0					
09/28/91 00:00		23:59	6000	0	0.0					
09/29/91 00:00		23:59	6000	0	0.0					
09/30/91 00:00		23:59	6000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
MONTHLY TOTALS						686.08 HOURS		280.6 MICROCURIES		
10/01/91 00:00		23:59	6000	150	57.6					
10/02/91 00:00		23:59	6000	25	9.6					
10/03/91 00:00		23:59	6000	100	38.4					
10/04/91 00:00		23:59	6000	0	0.0					
10/05/91 00:00		23:59	6000	0	0.0					
10/06/91 00:00		23:59	6000	0	0.0					
10/07/91 00:00		23:59	6000	150	57.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/08/91 00:00		23:59	6000	150	57.6					
10/09/91 00:00		23:59	6000	400	153.7					
10/10/91 00:00		23:59	6000	400	153.7					
10/11/91 00:00		23:59	6000	150	57.6					
10/12/91 00:00		23:59	6000	200	76.8					
10/13/91 00:00		23:59	6000	100	38.4					
10/14/91 00:00		23:59	6000	100	38.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/15/91 00:00		23:59	6000	200	76.8					
10/16/91 00:00		23:59	6000	150	57.6					
10/17/91 00:00		23:59	6000	150	57.6					
10/18/91 00:00		23:59	6000	150	57.6					
10/19/91 00:00		23:59	6000	300	115.3					
10/20/91 00:00		23:59	6000	500	192.1					
10/21/91 00:00		16:47	6000	300	80.7	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/22/91 07:00		16:46	6000	350	54.8					
10/23/91 07:00		16:50	6000	100	15.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/24/91 07:03		16:47	6000	150	23.4					
10/25/91					0.0					FAN NOT RUN
10/26/91					0.0					FAN NOT RUN
10/27/91					0.0					FAN NOT RUN
10/28/91 07:00		16:46	6000	125	19.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/29/91 07:00		16:47	6000	125	19.6					
10/30/91 07:00		16:48	6000	125	19.6					

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
				ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
10/31/91	07:02	14:55	6000	125	15.8					
MONTHLY TOTALS						563.02 HOURS		1545.8 MICROCURIES		
11/01/91					0.0					FAN NOT RUN
11/02/91					0.0					FAN NOT RUN
11/03/91					0.0					FAN NOT RUN
11/04/91	07:09	16:50	6000	250	38.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/05/91	07:00	16:47	6000	300	47.0					
11/06/91	07:00	16:47	6000	50	7.8					
11/07/91	07:00	16:50	6000	500	78.8					
11/08/91					0.0					FAN NOT RUN
11/09/91					0.0					FAN NOT RUN
11/10/91					0.0					FAN NOT RUN
11/11/91	07:00	16:50	6000	150	23.6	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/12/91	07:05	16:50	6000	150	23.4					
11/13/91	07:01	16:45	6000	600	93.6					
11/14/91	07:05	16:50	6000	550	85.9					
11/15/91					0.0					FAN NOT RUN
11/16/91					0.0					FAN NOT RUN
11/17/91					0.0					FAN NOT RUN
11/18/91	07:00	16:50	6000	200	31.5	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/19/91	07:01	16:55	6000	200	31.7					
11/20/91	07:03	16:49	6000	500	78.2					
11/21/91	07:06	16:47	6000	250	38.8					
11/22/91					0.0					FAN NOT RUN
11/23/91					0.0					FAN NOT RUN
11/24/91					0.0					FAN NOT RUN
11/25/91	07:19	16:51	6000	200	30.5					
11/26/91	07:03	16:49	6000	200	31.3					
11/27/91	07:07	16:31	6000	150	22.6					
11/28/91					0.0					FAN NOT RUN
11/29/91					0.0					FAN NOT RUN
11/30/91					0.0					FAN NOT RUN
MONTHLY TOTALS						146.03 HOURS		663.6 MICROCURIES		
12/01/91					0.0					FAN NOT RUN
12/02/91	07:02	16:48	6000	175	27.4					
12/03/91	07:00	16:42	6000	50	7.8					
12/04/91	07:07	16:45	6000	100	15.4					
12/05/91	07:15	16:45	6000	250	38.0					
12/06/91					0.0					FAN NOT RUN
12/07/91					0.0					FAN NOT RUN
12/08/91					0.0					FAN NOT RUN
12/09/91	07:02	16:50	6000	175	27.5					
12/10/91	06:55	16:47	6000	175	27.7					
12/11/91	07:08	16:48	6000	300	46.5					
12/12/91	06:55	16:49	6000	250	39.6					
12/13/91	06:55	16:45	6000	75	11.8					
12/14/91					0.0					FAN NOT RUN
12/15/91					0.0					FAN NOT RUN

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
				ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
12/16/91 08:15		16:48	6000	200	33.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
12/17/91 06:55		16:55	6000	75	12.0					
12/18/91 07:03		16:46	6000	100	15.6					
12/19/91 07:00		16:49	6000	0	0.0					
12/20/91 07:08		13:17	6000	100	9.9					
12/21/91					0.0					FAN NOT RUN
12/22/91					0.0					FAN NOT RUN
12/23/91					0.0					FAN NOT RUN
12/24/91					0.0					FAN NOT RUN
12/25/91					0.0					FAN NOT RUN
12/26/91					0.0					FAN NOT RUN
12/27/91					0.0					FAN NOT RUN
12/28/91					0.0					FAN NOT RUN
12/29/91					0.0					FAN NOT RUN
12/30/91 07:10		16:45	6000	100	15.4					
12/31/91 07:03		16:52	6000	100	15.7					
MONTHLY TOTALS						153.30 HOURS		344.0 MICROCURIES		
01/01/92					0.0					FAN NOT RUN
01/02/92 06:56		16:53	6000	150	23.9					
01/03/92 06:57		16:42	6000	150	23.4					
01/04/92					0.0					FAN NOT RUN
01/05/92					0.0					FAN NOT RUN
01/06/92 06:55		16:50	6000	150	23.8					
01/07/92 06:53		16:45	6000	100	15.8					
01/08/92 06:52		16:44	6000	100	15.8					
01/09/92 06:52		16:46	6000	75	11.9					
01/10/92 07:01		16:44	6000	150	23.3					
01/11/92					0.0					FAN NOT RUN
01/12/92					0.0					FAN NOT RUN
01/13/92 07:12		16:43	6000	50	7.7	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
01/14/92 06:53		16:51	6000	100	16.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
01/15/92 06:54		16:50	6000	75	11.9					
01/16/92 06:54		16:50	6000	100	15.9					
01/17/92 06:59		16:45	6000	50	7.8					
01/18/92					0.0					FAN NOT RUN
01/19/92					0.0					FAN NOT RUN
01/20/92 07:14		16:51	6000	100	15.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
01/21/92 06:51		16:52	6000	175	28.1					
01/22/92 07:01		16:52	6000	175	27.6					
01/23/92 07:03		16:50	6000	50	7.8					
01/24/92 06:51		16:46	6000	50	7.9					
01/25/92					0.0					FAN NOT RUN
01/26/92					0.0					FAN NOT RUN
01/27/92 06:52		18:20	6000	50	9.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
01/28/92 06:57		16:49	6000	150	23.7					
01/29/92 06:50		16:45	6000	150	23.9					
01/30/92 06:53		16:49	6000	100	15.9					

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- FUEL HANDLING BUILDING VENT

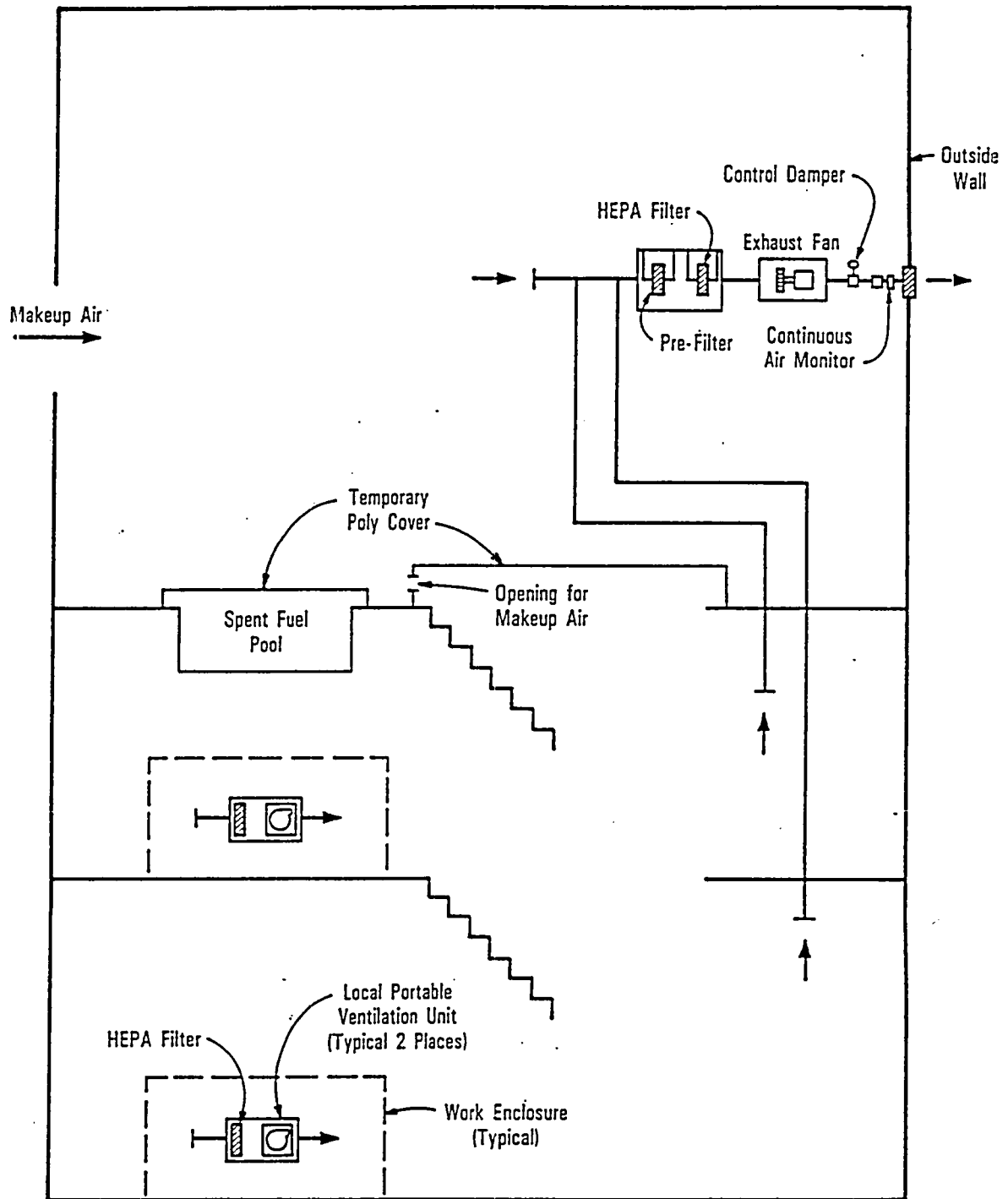
01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
				ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
01/31/92	07:02	16:48	6000	100	15.6	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
MONTHLY TOTALS						218.35 HOURS		372.6 MICROCURIES			
02/01/92					0.0					FAN NOT RUN	
02/02/92					0.0					FAN NOT RUN	
02/03/92	07:08	16:47	6000	125	19.3	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
02/04/92	06:58	16:51	6000	75	11.9						
02/05/92	06:55	16:51	6000	75	11.9						
02/06/92	07:02	16:49	6000	50	7.8						
02/07/92	06:50	16:47	6000	25	4.0						
02/08/92					0.0					FAN NOT RUN	
02/09/92					0.0					FAN NOT RUN	
02/10/92	07:11	16:48	6000	100	15.4	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
02/11/92	06:55	16:47	6000	0	0.0						
02/12/92	06:56	16:50	6000	50	7.9						
02/13/92	06:37	16:49	6000	100	16.3						
02/14/92	06:15	16:45	6000	100	16.8						
02/15/92					0.0					FAN NOT RUN	
02/16/92					0.0					FAN NOT RUN	
02/17/92	07:01	16:45	6000	50	7.8	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
02/18/92	06:24	16:56	6000	50	8.4						
02/19/92	06:29	16:49	6000	50	8.3						
02/20/92	07:07	16:53	6000	75	11.7	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED					
02/21/92	06:37	16:45	6000	100	16.2						
02/22/92					0.0					FAN NOT RUN	
02/23/92					0.0					FAN NOT RUN	
02/24/92	06:27	16:46	6000	150	24.8						
02/25/92	06:31	16:44	6000	100	16.4						
02/26/92	06:32	16:50	6000	125	20.6						
02/27/92	06:32	16:46	6000	100	16.4						
02/28/92	06:49	16:50	6000	100	16.0						
02/29/92	06:22	14:54	6000	150	20.5						
MONTHLY TOTALS						209.40 HOURS		278.7 MICROCURIES			
03/01/92					0.0					FAN NOT RUN	
03/02/92	06:35	16:52	6000	150	24.7						
03/03/92	06:34	16:45	6000	200	32.6						
03/04/92	06:57	16:48	6000	200	31.6						
03/05/92	06:37	16:58	6000	200	33.2						
03/06/92	06:52	16:45	6000	200	31.7						
03/07/92	06:50	14:48	6000	75	9.6						
03/08/92					0.0					FAN NOT RUN	
03/09/92	06:34	16:48	6000	0	0.0						
03/10/92	06:37	16:53	6000	50	8.2						
03/11/92	06:27	16:45	6000	100	16.5						
03/12/92	06:31	16:56	6000	100	16.7						
03/13/92	06:33	14:53	6000	175	23.4						
03/14/92					0.0					FAN NOT RUN	
03/15/92					0.0					FAN NOT RUN	
03/16/92	06:28	16:49	6000	150	24.9						

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- FUEL HANDLING BUILDING VENT

01/11/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM MICROCURIES		NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
				ABOVE BKG	RELEASED	NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
03/17/92	08:26	16:50	6000	75	12.5					
03/18/92	06:14	16:40	6000	75	12.5					
03/19/92	06:39	16:39	6000	100	16.0					
03/20/92					0.0					FAN NOT RUN
03/21/92					0.0					FAN NOT RUN
03/22/92					0.0					FAN NOT RUN
03/23/92	07:20	16:49	6000	250	38.0					
03/24/92	06:36	16:46	6000	150	24.4					
03/25/92	06:21	16:52	6000	50	8.4					
03/26/92	06:34	16:51	6000	50	8.2					
03/27/92					0.0					FAN NOT RUN
03/28/92					0.0					FAN NOT RUN
03/29/92					0.0					FAN NOT RUN
03/30/92	06:05	16:45	6000	50	8.5					
03/31/92	06:25	16:44	6000	50	8.3					
MONTHLY TOTALS						210.68 HOURS		389.9 MICROCURIES		
04/01/92					0.0					FAN NOT RUN
04/02/92					0.0					FAN NOT RUN
04/03/92					0.0					FAN NOT RUN
04/04/92					0.0					FAN NOT RUN
04/05/92					0.0					FAN NOT RUN
04/06/92					0.0					FAN NOT RUN
04/07/92					0.0					FAN NOT RUN
04/08/92					0.0					FAN NOT RUN
04/09/92					0.0					FAN NOT RUN
04/10/92					0.0					FAN NOT RUN
04/11/92					0.0					FAN NOT RUN
04/12/92					0.0					FAN NOT RUN
04/13/92					0.0					FAN NOT RUN
04/14/92					0.0					FAN NOT RUN
04/15/92					0.0					FAN NOT RUN
04/16/92					0.0					FAN NOT RUN
04/17/92					0.0					FAN NOT RUN
04/18/92					0.0					FAN NOT RUN
04/19/92					0.0					FAN NOT RUN
04/20/92	07:33	23:59	6000	75	19.7					POWER LOSS DURING NIGHT
04/21/92	06:53	14:09	6000	0	0.0					PERMANENTLY SHUTDOWN
MONTHLY TOTALS						23.70 HOURS		19.7 MICROCURIES		
TOTAL RELEASE TIME (HOURS)			6518.55	ESTIMATED COMPOSITION		CO-60	53.35%	8010.1 MICROCURIES		
TOTAL MEASURED RELEASE (MICROCURIES)			8010.1			NI-63	37.96%	5699.4 MICROCURIES		
						FE-55	7.92%	1189.1 MICROCURIES		
						OTHERS	0.77%	115.6 MICROCURIES		
						TOTAL	100.00%	15014.3 MICROCURIES		



FUEL HANDLING BUILDING VENTILATION

DECOMMISSIONING RECORDS

ATTACHMENT 4

REACTOR BUILDING VENT MONTHLY RELEASE SUMMARY
AND FLOW DIAGRAM

DECOMMISSIONING RECORDS

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
09/07/90	07:05	13:45	4000	0	0.0					TEST RUN	
09/08/90					0.0						
09/09/90					0.0						
09/10/90	07:05	16:55	4000	0	0.0					INITIAL SYSTEM OPERATION	
09/11/90					0.0					FAN NOT RUN	
09/12/90					0.0					FAN NOT RUN	
09/13/90					0.0					FAN NOT RUN	
09/14/90					0.0					FAN NOT RUN	
09/15/90					0.0					FAN NOT RUN	
09/16/90					0.0					FAN NOT RUN	
09/17/90	07:50	16:45	4000	0	0.0					STOPPED FOR REPAIR 12:55	
09/18/90	07:30	16:50	4000	0	0.0						
09/19/90					0.0					FAN NOT RUN	
09/20/90	08:58	16:45	4000	0	0.0						
09/21/90					0.0					FAN NOT RUN	
09/22/90					0.0					FAN NOT RUN	
09/23/90					0.0					FAN NOT RUN	
09/24/90	07:40	16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
09/25/90	07:14	16:45	4000	0	0.0						
09/26/90	07:06	16:50	4000	0	0.0						
09/27/90	07:15	16:40	4000	0	0.0						
09/28/90					0.0					FAN NOT RUN	
09/29/90					0.0					FAN NOT RUN	
09/30/90					0.0					FAN NOT RUN	
MONTHLY TOTALS						80.28	HOURS			0.0	MICROCURIES
10/01/90	07:13	16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
10/02/90	07:02	16:50	4000	0	0.0						
10/03/90	07:15	16:50	4000	0	0.0						
10/04/90	07:25	16:45	4000	0	0.0						
10/05/90	07:20	09:40	4000	0	0.0						
10/06/90					0.0					FAN NOT RUN	
10/07/90					0.0					FAN NOT RUN	
10/08/90	07:40	16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
10/09/90	07:15	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
10/10/90	06:59	16:45	4000	0	0.0						
10/11/90	07:45	16:45	4000	0	0.0						
10/12/90					0.0					FAN NOT RUN	
10/13/90					0.0					FAN NOT RUN	
10/14/90					0.0					FAN NOT RUN	
10/15/90	07:20	17:00	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
10/16/90	07:05	16:50	4000	0	0.0						
10/17/90	08:00	16:50	4000	0	0.0						
10/18/90	07:12	16:42	4000	0	0.0						
10/19/90	08:20	14:15	4000	0	0.0						
10/20/90					0.0					FAN NOT RUN	
10/21/90					0.0					FAN NOT RUN	
10/22/90	07:10	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
10/23/90	07:12	16:50	4000	0	0.0						
10/24/90	07:05	16:45	4000	0	0.0						
10/25/90	07:05	16:00	4000	0	0.0						

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM AROVF RKG	MICROCURIES RFI FASFD	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
10/26/90					0.0					FAN NOT RUN
10/27/90					0.0					FAN NOT RUN
10/28/90					0.0					FAN NOT RUN
10/29/90 07:25	16:45		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/30/90 07:05	16:45		4000	0	0.0					
10/31/90 07:35	16:05		4000	0	0.0					
MONTHLY TOTALS						187.07	HOURS			0.0 MICROCURIES
11/01/90 07:15	16:50		4000	0	0.0					
11/02/90					0.0					
11/03/90					0.0					FAN NOT RUN
11/04/90					0.0					FAN NOT RUN
11/05/90 07:17	16:45		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				FAN NOT RUN
11/06/90 06:36	16:43		4000	0	0.0					
11/07/90 07:15	16:45		4000	0	0.0					
11/08/90 06:58	16:40		4000	0	0.0					
11/09/90					0.0					FAN NOT RUN
11/10/90					0.0					FAN NOT RUN
11/11/90					0.0					FAN NOT RUN
11/12/90 07:10	16:43		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/13/90 06:55	16:50		4000	0	0.0					
11/14/90 07:03	16:45		4000	0	0.0					
11/15/90 07:53	16:30		4000	0	0.0					
11/16/90					0.0					FAN NOT RUN
11/17/90					0.0					FAN NOT RUN
11/18/90					0.0					FAN NOT RUN
11/19/90 07:10	16:44		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/20/90 06:58	16:50		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/21/90 07:10	11:50		4000	0	0.0					
11/22/90					0.0					FAN NOT RUN
11/23/90					0.0					FAN NOT RUN
11/24/90					0.0					FAN NOT RUN
11/25/90					0.0					FAN NOT RUN
11/26/90 07:10	16:45		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/27/90 07:14	16:50		4000	0	0.0					
11/28/90 07:10	16:52		4000	0	0.0					
11/29/90 07:02	16:50		4000	0	0.0					
11/30/90					0.0					FAN NOT RUN
MONTHLY TOTALS						148.88	HOURS			0.0 MICROCURIES
12/01/90					0.0					FAN NOT RUN
12/02/90					0.0					FAN NOT RUN
12/03/90 07:10	16:45		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
12/04/90 07:02	16:20		4000	0	0.0					
12/05/90 07:00	16:45		4000	100	10.4					
12/06/90 07:01	16:43		4000	50	5.2					
12/07/90					0.0					FAN NOT RUN
12/08/90					0.0					FAN NOT RUN
12/09/90					0.0					FAN NOT RUN
12/10/90 07:00	16:45		4000	50	5.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
12/11/90 06:57		16:44	4000	0	0.0					
12/12/90 07:01		16:44	4000	300	31.1					
12/13/90 08:02		16:44	4000	0	0.0					
12/14/90 08:45		14:00	4000	0	0.0					
12/15/90					0.0					FAN NOT RUN
12/16/90					0.0					FAN NOT RUN
12/17/90 06:59		16:52	4000	200	21.1	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
12/18/90 07:00		16:43	4000	100	10.4					
12/19/90 06:59		16:01	4000	50	4.8	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
12/20/90 07:00		11:45	4000	0	0.0					
12/21/90					0.0					FAN NOT RUN
12/22/90					0.0					FAN NOT RUN
12/23/90					0.0					FAN NOT RUN
12/24/90					0.0					FAN NOT RUN
12/25/90					0.0					FAN NOT RUN
12/26/90					0.0					FAN NOT RUN
12/27/90					0.0					FAN NOT RUN
12/28/90					0.0					FAN NOT RUN
12/29/90					0.0					FAN NOT RUN
12/30/90					0.0					FAN NOT RUN
12/31/90					0.0					FAN NOT RUN
MONTHLY TOTALS						114.92	HOURS	88.2 MICROCURIES		
01/01/91					0.0					FAN NOT RUN
01/02/91 07:10		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
01/03/91 07:10		16:45	4000	0	0.0					
01/04/91 07:10		16:50	4000	0	0.0					
01/05/91					0.0					FAN NOT RUN
01/06/91					0.0					FAN NOT RUN
01/07/91 07:05		16:45	4000	50	5.2	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
01/08/91 07:05		16:50	4000	0	0.0					
01/09/91 07:03		16:43	4000	150	15.5					
01/10/91 07:38		16:45	4000	100	9.7					
01/11/91					0.0					FAN NOT RUN
01/12/91					0.0					FAN NOT RUN
01/13/91					0.0					FAN NOT RUN
01/14/91 07:52		16:52	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
01/15/91 07:30		16:42	4000	0	0.0					
01/16/91 08:58		16:45	4000	100	10.4					
01/17/91 07:00		16:40	4000	50	5.2					
01/18/91 08:25		13:15	4000	0	0.0					
01/19/91					0.0					FAN NOT RUN
01/20/91					0.0					FAN NOT RUN
01/21/91 07:10		16:40	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				
01/22/91 07:08		16:45	4000	0	0.0					
01/23/91 07:02		16:20	4000	0	0.0					
01/24/91 08:58		16:41	4000	50	5.2					
01/25/91					0.0					FAN NOT RUN
01/26/91					0.0					FAN NOT RUN
01/27/91					0.0					FAN NOT RUN
01/28/91 07:09		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED				

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
01/29/91	07:06	16:50	4000	0	0.0					
01/30/91	07:05	16:52	4000	100	10.4					
01/31/91	07:06	16:45	4000	0	0.0					
MONTHLY TOTALS						186.58	HOURS			61.6 MICROCURIES
02/01/91					0.0					FAN NOT RUN
02/02/91					0.0					FAN NOT RUN
02/03/91					0.0					FAN NOT RUN
02/04/91	07:03	16:37	4000	100	10.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
02/05/91	07:25	16:53	4000	0	0.0					
02/06/91	07:03	16:46	4000	100	10.4					
02/07/91	07:07	16:53	4000	0	0.0					
02/08/91					0.0					FAN NOT RUN
02/09/91					0.0					FAN NOT RUN
02/10/91					0.0					FAN NOT RUN
02/11/91	07:30	16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
02/12/91	07:05	16:45	4000	0	0.0					
02/13/91	07:05	16:47	4000	200	20.7	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
02/14/91	07:04	16:45	4000	0	0.0					
02/15/91					0.0					FAN NOT RUN
02/16/91					0.0					FAN NOT RUN
02/17/91					0.0					FAN NOT RUN
02/18/91	07:15	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
02/19/91	07:00	16:50	4000	50	5.3					
02/20/91	07:00	16:50	4000	0	0.0					
02/21/91	07:00	16:50	4000	0	0.0					
02/22/91					0.0					FAN NOT RUN
02/23/91					0.0					FAN NOT RUN
02/24/91					0.0					FAN NOT RUN
02/25/91	07:09	16:50	4000	0	0.0					
02/26/91	07:04	16:50	4000	100	10.4					
02/27/91	07:06	16:15	4000	50	4.9					
02/28/91	06:56	16:50	4000	0	0.0					
MONTHLY TOTALS						154.40	HOURS			61.9 MICROCURIES
03/01/91					0.0					FAN NOT RUN
03/02/91					0.0					FAN NOT RUN
03/03/91					0.0					FAN NOT RUN
03/04/91	07:10	16:50	4000	100	10.3	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
03/05/91	07:03	16:45	4000	0	0.0					
03/06/91	07:05	16:50	4000	0	0.0					
03/07/91	07:03	16:45	4000	0	0.0					
03/08/91					0.0					FAN NOT RUN
03/09/91					0.0					FAN NOT RUN
03/10/91					0.0					FAN NOT RUN
03/11/91	07:10	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
03/12/91	07:10	18:15	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
03/13/91	07:00	16:30	4000	0	0.0					
03/14/91	09:08	15:40	4000	0	0.0					
03/15/91					0.0					FAN NOT RUN

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
03/16/91					0.0					FAN NOT RUN
03/17/91					0.0					FAN NOT RUN
03/18/91 07:00		16:48	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
03/19/91 06:58		16:45	4000	0	0.0					
03/20/91 07:03		16:50	4000	0	0.0					
03/21/91 06:55		16:45	4000	0	0.0					
03/22/91					0.0					FAN NOT RUN
03/23/91					0.0					FAN NOT RUN
03/24/91					0.0					FAN NOT RUN
03/25/91 07:03		16:50	4000	50	5.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
03/26/91 07:05		16:45	4000	0	0.0					
03/27/91 07:04		16:52	4000	0	0.0					
03/28/91 07:01		16:50	4000	0	0.0					
03/29/91					0.0					FAN NOT RUN
03/30/91					0.0					FAN NOT RUN
03/31/91					0.0					FAN NOT RUN
MONTHLY TOTALS						153.87	HOURS			15.5 MICROCURIES
04/01/91 06:57		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
04/02/91 07:00		16:53	4000	0	0.0					
04/03/91 07:00		16:30	4000	100	10.1					
04/04/91 07:00		18:50	4000	0	0.0					
04/05/91 07:00		16:50	4000	0	0.0					
04/06/91 07:00		16:40	4000	0	0.0					
04/07/91 07:00		16:45	4000	50	5.2					
04/08/91 07:00		16:51	4000	100	10.5	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
04/09/91 07:00		16:45	4000	0	0.0					
04/10/91 07:00		16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
04/11/91 07:00		16:50	4000	0	0.0					
04/12/91 07:00		16:30	4000	0	0.0					
04/13/91					0.0					FAN NOT RUN
04/14/91					0.0					FAN NOT RUN
04/15/91 06:59		16:49	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
04/16/91 06:57		16:50	4000	0	0.0					
04/17/91 06:57		16:52	4000	0	0.0					
04/18/91 06:56		16:50	4000	0	0.0					
04/19/91					0.0					FAN NOT RUN
04/20/91					0.0					FAN NOT RUN
04/21/91					0.0					FAN NOT RUN
04/22/91 07:01		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
04/23/91 06:56		16:49	4000	0	0.0					
04/24/91 07:00		16:48	4000	100	10.5					
04/25/91 07:00		16:50	4000	0	0.0					
04/26/91					0.0					FAN NOT RUN
04/27/91					0.0					FAN NOT RUN
04/28/91					0.0					FAN NOT RUN
04/29/91 06:50		18:00	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
04/30/91 06:30		16:40	4000	0	0.0					
MONTHLY TOTALS						219.23	HOURS			36.3 MICROCURIES

DECOMMISSIONING RECORDS

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS	
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4		
05/01/91	06:50	16:40	4000	0	0.0						
05/02/91	06:30	17:30	4000	0	0.0						
05/03/91	06:30	16:50	4000	0	0.0						
05/04/91					0.0					FAN NOT RUN	
05/05/91					0.0					FAN NOT RUN	
05/06/91	06:45	17:55	4000	0	0.0						
05/07/91	06:40	16:50	4000	0	0.0						
05/08/91	06:40	16:50	4000	0	0.0						
05/09/91	06:40	16:50	4000	0	0.0						
05/10/91	07:03	20:40	4000	0	0.0					20:40 LOSS OF POWER	
05/11/91	00:00	23:59	4000	0	0.0					08:30 SPURIOUS ALARM	
05/12/91	00:00	21:30	4000	0	0.0					21:30 LOSS OF POWER	
05/13/91	06:40	17:00	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
05/14/91	06:09	17:35	4000	0	0.0						
05/15/91	06:10	17:00	4000	0	0.0						
05/16/91	07:00	16:30	4000	100	10.1						
05/17/91					0.0					FAN NOT RUN	
05/18/91					0.0					FAN NOT RUN	
05/19/91					0.0					FAN NOT RUN	
05/20/91	07:02	16:46	4000	0	0.0						
05/21/91	06:54	16:49	4000	0	0.0						
05/22/91	06:56	23:59	4000	0	0.0						
05/23/91	00:00	20:00	4000	0	0.0					20:00 FAN TRIP – ELEC PROB	
05/24/91	09:30	23:59	4000	0	0.0						
05/25/91	00:00	23:59	4000	0	0.0						
05/26/91	00:00	23:59	4000	0	0.0						
05/27/91	00:00	23:59	4000	0	0.0						
05/28/91	00:00	23:59	4000	50	12.8	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED					
05/29/91	00:00	23:59	4000	0	0.0						
05/30/91	00:00	23:59	4000	50	12.8						
05/31/91	00:00	23:59	4000	0	0.0						
MONTHLY TOTALS						413.10	HOURS				35.8 MICROCURIES
06/01/91	00:00	23:59	4000	0	0.0						
06/02/91	00:00	23:59	4000	0	0.0						
06/03/91	00:00	23:59	4000	50	12.8						
06/04/91	00:00	23:59	4000	0	0.0						
06/05/91	00:00	23:59	4000	50	12.8						
06/06/91	00:00	23:59	4000	0	0.0						
06/07/91	00:00	23:59	4000	100	25.6						
06/08/91	00:00	23:59	4000	100	25.6						
06/09/91	00:00	23:59	4000	0	0.0						
06/10/91	00:00	23:59	4000	0	0.0						
06/11/91	00:00	23:59	4000	50	12.8						
06/12/91	00:00	23:59	4000	50	12.8						
06/13/91	00:00	23:59	4000	50	12.8						
06/14/91	00:00	23:59	4000	100	25.6						
06/15/91	00:00	23:59	4000	0	0.0						
06/16/91	00:00	23:59	4000	0	0.0						
06/17/91	00:00	23:59	4000	0	0.0						
06/18/91	00:00	23:59	4000	0	0.0						

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
06/19/91	00:00	23:59	4000	50	12.8					
06/20/91	00:00	17:00	4000	0	0.0					
06/21/91					0.0					FAN NOT RUN
06/22/91					0.0					FAN NOT RUN
06/23/91					0.0					FAN NOT RUN
06/24/91	07:10	16:49	4000	0	0.0					
06/25/91	06:58	16:49	4000	0	0.0					
06/26/91	07:05	16:52	4000	0	0.0					
06/27/91	06:58	16:44	4000	0	0.0					
06/28/91					0.0					FAN NOT RUN
06/29/91					0.0					FAN NOT RUN
06/30/91					0.0					FAN NOT RUN
MONTHLY TOTALS						511.73	HOURS			153.7 MICROCURIES
07/01/91	07:09	16:47	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/02/91	07:00	16:55	4000	0	0.0					
07/03/91	06:58	16:45	4000	0	0.0					
07/04/91					0.0					FAN NOT RUN
07/05/91					0.0					FAN NOT RUN
07/06/91					0.0					FAN NOT RUN
07/07/91					0.0					FAN NOT RUN
07/08/91	07:10	17:00	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/09/91	07:00	17:00	4000	0	0.0					
07/10/91	07:15	16:45	4000	0	0.0					
07/11/91	07:00	16:45	4000	0	0.0					
07/12/91	07:00	16:45	4000	0	0.0					
07/13/91	07:00	16:45	4000	0	0.0					
07/14/91					0.0					FAN NOT RUN
07/15/91	07:00	16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/16/91	07:00	16:45	4000	0	0.0					
07/17/91	06:59	16:45	4000	0	0.0					
07/18/91	07:00	16:46	4000	0	0.0					
07/19/91	07:00	16:30	4000	0	0.0					
07/20/91					0.0					FAN NOT RUN
07/21/91					0.0					FAN NOT RUN
07/22/91	07:00	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/23/91	07:00	16:48	4000	0	0.0					
07/24/91	07:00	16:50	4000	0	0.0					
07/25/91	07:01	16:45	4000	0	0.0					
07/26/91	07:10	14:50	4000	0	0.0					
07/27/91					0.0					FAN NOT RUN
07/28/91					0.0					FAN NOT RUN
07/29/91	07:00	16:48	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
07/30/91	06:55	16:45	4000	0	0.0					
07/31/91	07:01	16:46	4000	0	0.0					
MONTHLY TOTALS						212.70	HOURS			0.0 MICROCURIES
08/01/91	07:00	16:30	4000	0	0.0					
08/02/91	06:58	17:00	4000	0	0.0					
08/03/91	07:00	16:45	4000	0	0.0					

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
08/04/91					0.0					FAN NOT RUN
08/05/91	07:00	16:55	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
08/06/91	07:00	16:50	4000	0	0.0					
08/07/91	07:13	16:47	4000	0	0.0					
08/08/91	07:03	16:53	4000	0	0.0					
08/09/91	07:00	16:45	4000	0	0.0					
08/10/91	07:00	16:48	4000	0	0.0					
08/11/91					0.0					FAN NOT RUN
08/12/91	07:07	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
08/13/91	07:08	16:50	4000	0	0.0					
08/14/91	07:00	16:53	4000	0	0.0					
08/15/91	07:06	16:48	4000	0	0.0					
08/16/91	07:00	16:45	4000	50	5.2					
08/17/91	07:00	16:50	4000	50	5.3					
08/18/91					0.0					FAN NOT RUN
08/19/91	07:05	16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
08/20/91	06:59	16:49	4000	0	0.0					
08/21/91	07:08	16:51	4000	0	0.0					
08/22/91	06:57	16:50	4000	0	0.0					
08/23/91	06:55	16:46	4000	0	0.0					
08/24/91	06:57	16:54	4000	0	0.0					
08/25/91					0.0					FAN NOT RUN
08/26/91	07:25	16:15	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
08/27/91	07:04	16:46	4000	0	0.0					
08/28/91	07:00	16:45	4000	0	0.0					
08/29/91	07:00	16:45	4000	0	0.0					
08/30/91					0.0					FAN NOT RUN
08/31/91					0.0					FAN NOT RUN
MONTHLY TOTALS						243.50	HOURS			10.5 MICROCURIES
09/01/91					0.0					FAN NOT RUN
09/02/91					0.0					FAN NOT RUN
09/03/91	07:14	16:51	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
09/04/91	06:57	16:46	4000	0	0.0					
09/05/91	06:57	16:47	4000	0	0.0					
09/06/91	06:56	16:49	4000	0	0.0					
09/07/91					0.0					FAN NOT RUN
09/08/91					0.0					FAN NOT RUN
09/09/91	06:58	16:47	4000	0	0.0					
09/10/91	06:58	16:47	4000	0	0.0					
09/11/91	06:59	16:48	4000	0	0.0					
09/12/91	07:00	16:47	4000	0	0.0					
09/13/91	07:00	16:45	4000	0	0.0					
09/14/91	07:00	15:45	4000	0	0.0					
09/15/91					0.0					FAN NOT RUN
09/16/91	07:05	16:48	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
09/17/91	06:59	16:45	4000	0	0.0					
09/18/91	07:00	16:51	4000	0	0.0					
09/19/91	07:07	16:50	4000	0	0.0					
09/20/91					0.0					FAN NOT RUN
09/21/91					0.0					FAN NOT RUN

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
09/22/91					0.0					FAN NOT RUN
09/23/91 07:00		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
09/24/91 07:00		16:46	4000	50	5.2					
09/25/91 07:00		16:47	4000	0	0.0					
09/26/91 07:00		16:45	4000	0	0.0					
09/27/91					0.0					FAN NOT RUN
09/28/91					0.0					FAN NOT RUN
09/29/91					0.0					FAN NOT RUN
09/30/91 07:00		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
MONTHLY TOTALS						184.90	HOURS			5.2 MICROCURIES
10/01/91 07:32		16:50	4000	0	0.0					
10/02/91 07:00		16:45	4000	0	0.0					
10/03/91 07:00		16:47	4000	0	0.0					
10/04/91					0.0					FAN NOT RUN
10/05/91					0.0					FAN NOT RUN
10/06/91					0.0					FAN NOT RUN
10/07/91 07:05		16:45	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/08/91 06:59		16:51	4000	0	0.0					
10/09/91 06:58		16:46	4000	0	0.0					
10/10/91 06:57		16:49	4000	0	0.0					
10/11/91					0.0					FAN NOT RUN
10/12/91					0.0					FAN NOT RUN
10/13/91					0.0					FAN NOT RUN
10/14/91 07:00		16:46	4000	0	0.0					
10/15/91 07:00		16:48	4000	0	0.0					
10/16/91 07:00		16:46	4000	0	0.0					
10/17/91 07:00		16:43	4000	0	0.0					
10/18/91					0.0					FAN NOT RUN
10/19/91					0.0					FAN NOT RUN
10/20/91					0.0					FAN NOT RUN
10/21/91 07:00		16:47	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/22/91 07:10		16:50	4000	0	0.0					
10/23/91 06:58		16:47	4000	0	0.0					
10/24/91 07:00		16:30	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/25/91 07:01		16:40	4000	0	0.0					
10/26/91 07:03		16:46	4000	0	0.0					
10/27/91					0.0					FAN NOT RUN
10/28/91 07:04		16:28	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
10/29/91 07:02		16:45	4000	0	0.0					
10/30/91 06:59		16:46	4000	0	0.0					
10/31/91 06:58		14:55	4000	0	0.0					
MONTHLY TOTALS						202.07	HOURS			0.0 MICROCURIES
11/01/91					0.0					FAN NOT RUN
11/02/91					0.0					FAN NOT RUN
11/03/91					0.0					FAN NOT RUN
11/04/91 07:00		16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/05/91 07:00		16:45	4000	400	41.7					
11/06/91 07:00		16:45	4000	0	0.0					

DECOMMISSIONING RECORD

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
11/07/91	07:00	16:50	4000	300	31.5					
11/08/91					0.0					FAN NOT RUN
11/09/91					0.0					FAN NOT RUN
11/10/91					0.0					FAN NOT RUN
11/11/91	06:50	16:50	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/12/91	06:59	16:44	4000	0	0.0					
11/13/91	06:52	16:45	4000	100	10.6					
11/14/91	06:55	16:46	4000	100	10.5					
11/15/91					0.0					FAN NOT RUN
11/16/91					0.0					FAN NOT RUN
11/17/91					0.0					FAN NOT RUN
11/18/91	07:00	16:48	4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
11/19/91	06:56	16:49	4000	200	21.1					
11/20/91	06:56	16:44	4000	300	31.4					
11/21/91	06:55	16:47	4000	0	0.0					
11/22/91					0.0					FAN NOT RUN
11/23/91					0.0					FAN NOT RUN
11/24/91					0.0					FAN NOT RUN
11/25/91	07:05	16:51	4000	0	0.0					
11/26/91	06:57	16:48	4000	0	0.0					
11/27/91	07:00	16:28	4000	200	20.2					
11/28/91					0.0					FAN NOT RUN
11/29/91					0.0					FAN NOT RUN
11/30/91					0.0					FAN NOT RUN
MONTHLY TOTALS						147.08	HOURS			167.0 MICROCURIES
12/01/91					0.0					FAN NOT RUN
12/02/91	07:02	16:45	4000	100	10.4					
12/03/91	06:59	16:45	4000	0	0.0					
12/04/91	07:00	16:45	4000	0	0.0					
12/05/91	06:59	16:44	4000	200	20.8					
12/06/91					0.0					FAN NOT RUN
12/07/91					0.0					FAN NOT RUN
12/08/91					0.0					FAN NOT RUN
12/09/91	07:10	16:45	4000	50	5.1					
12/10/91	06:57	16:46	4000	50	5.2					
12/11/91	06:55	16:45	4000	150	15.8					
12/12/91	06:57	16:50	4000	100	10.6					
12/13/91	06:56	16:28	4000	100	10.2					
12/14/91					0.0					FAN NOT RUN
12/15/91					0.0					FAN NOT RUN
12/16/91	07:00	16:45	4000	100	10.4	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
12/17/91	06:56	16:49	4000	50	5.3					
12/18/91	07:00	16:45	4000	50	5.2					
12/19/91	06:52	16:48	4000	0	0.0					
12/20/91	07:00	13:20	4000	200	13.5					
12/21/91					0.0					FAN NOT RUN
12/22/91					0.0					FAN NOT RUN
12/23/91					0.0					FAN NOT RUN
12/24/91					0.0					FAN NOT RUN
12/25/91					0.0					FAN NOT RUN

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES -- REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS NUCLIDE 1 NUCLIDE 2 NUCLIDE 3 NUCLIDE 4	COMMENTS
12/26/91					0.0		FAN NOT RUN
12/27/91					0.0		FAN NOT RUN
12/28/91					0.0		FAN NOT RUN
12/29/91					0.0		FAN NOT RUN
12/30/91 07:00	16:45		4000	100	10.4	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
12/31/91 06:56	16:49		4000	100	10.6		
MONTHLY TOTALS						152.92 HOURS	133.4 MICROCURIES
01/01/92					0.0		FAN NOT RUN
01/02/92 06:54	16:50		4000	100	10.6		
01/03/92 06:55	16:43			150	0.0		
01/04/92					0.0		FAN NOT RUN
01/05/92					0.0		FAN NOT RUN
01/06/92 06:52	16:50		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
01/07/92 06:52	16:46		4000	100	10.6		
01/08/92 06:58	16:52		4000	150	15.9		
01/09/92 06:55	16:45		4000	100	10.5	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
01/10/92 06:55	16:46		4000	200	21.0		
01/11/92					0.0		FAN NOT RUN
01/12/92					0.0		FAN NOT RUN
01/13/92 06:59	16:47		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
01/14/92 06:58	16:48		4000	100	10.5		
01/15/92 06:55	16:49		4000	100	10.6		
01/16/92 06:59	16:49		4000	100	10.5		
01/17/92 07:04	16:42		4000	50	5.1		
01/18/92					0.0		FAN NOT RUN
01/19/92					0.0		FAN NOT RUN
01/20/92 06:56	16:45		4000	100	10.5	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
01/21/92 06:55	16:51		4000	150	15.9		
01/22/92 06:58	16:48		4000	200	21.0		
01/23/92 06:56	16:47		4000	0	0.0		
01/24/92 06:53	16:45		4000	0	0.0		
01/25/92					0.0		FAN NOT RUN
01/26/92					0.0		FAN NOT RUN
01/27/92 06:53	16:47		4000	0	0.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
01/28/92 06:53	16:49		4000	100	10.6		
01/29/92 06:52	16:48		4000	150	15.9		
01/30/92 06:59	16:48		4000	50	5.2		
01/31/92 06:57	16:47		4000	50	5.3		
MONTHLY TOTALS						216.90 HOURS	189.7 MICROCURIES
02/01/92					0.0		FAN NOT RUN
02/02/92					0.0		FAN NOT RUN
02/03/92 06:58	16:47		4000	200	21.0	CAM FILTER SPECTRUM ANALYSIS -- NONE DETECTED	
02/04/92 06:58	16:47		4000	50	5.2		
02/05/92 06:54	16:47		4000	100	10.6		
02/06/92 07:01	16:48		4000	0	0.0		
02/07/92 06:59	16:45		4000	0	0.0		
02/08/92					0.0		FAN NOT RUN
02/09/92					0.0		FAN NOT RUN

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

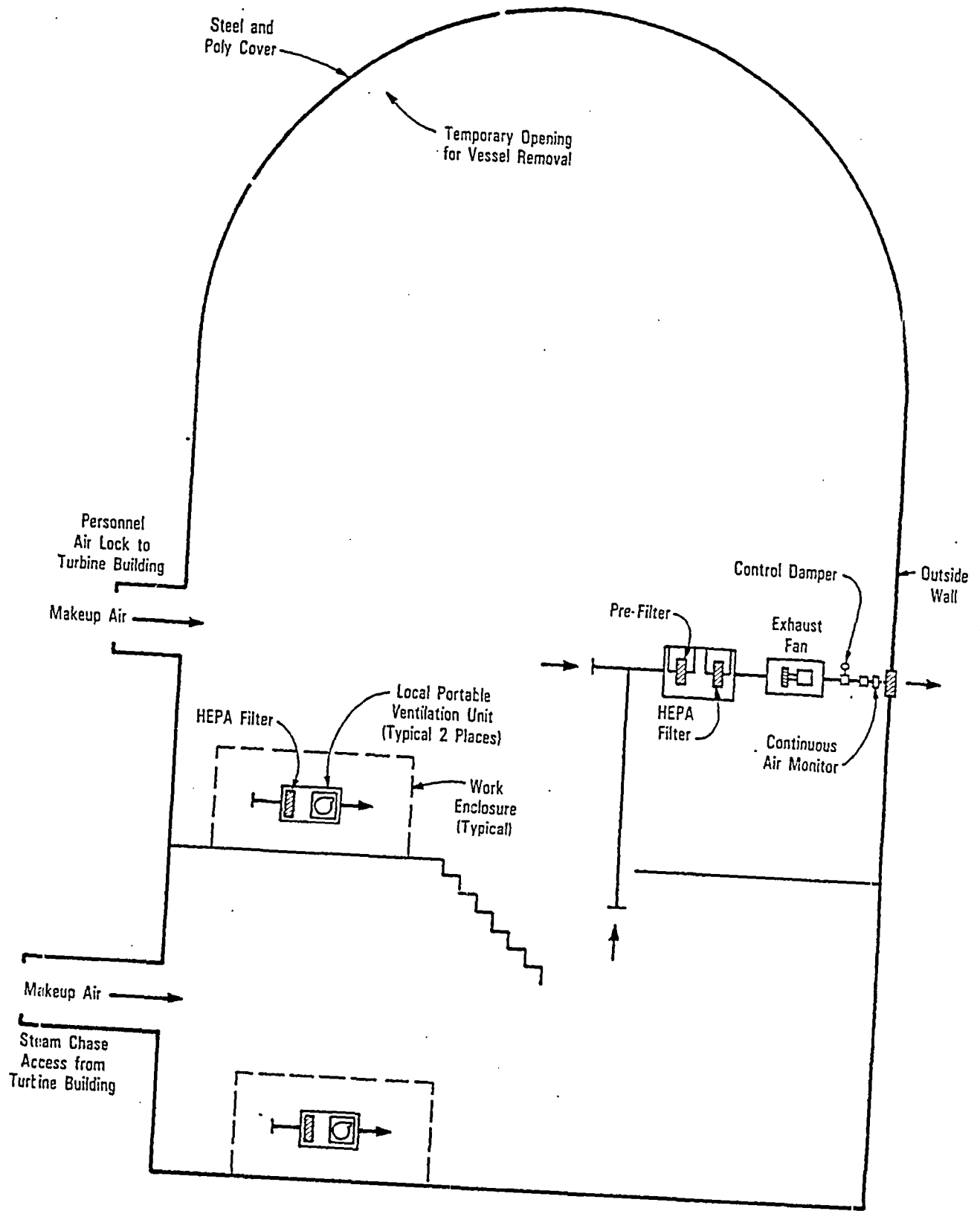
01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
02/10/92	06:58	16:47	4000	100	10.5	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
02/11/92	06:53	16:52	4000	25	2.7					
02/12/92	06:55	16:49	4000	50	5.3					
02/13/92	06:32	16:50	4000	100	11.0					
02/14/92	06:22	16:37	4000	100	10.9					
02/15/92					0.0					FAN NOT RUN
02/16/92					0.0					FAN NOT RUN
02/17/92	06:34	18:08	4000	50	6.2	CAM FILTER SPECTRUM ANALYSIS – NONE DETECTED				
02/18/92	06:18	17:10	4000	50	5.8					
02/19/92	06:24	16:50	4000	50	5.6					
02/20/92	06:28	18:43	4000	50	6.5					
02/21/92	06:28	16:46	4000	0	0.0					
02/22/92					0.0					
02/23/92					0.0					
02/24/92	06:17	16:46	4000	0	0.0					
02/25/92	06:25	16:48	4000	0	0.0					
02/26/92	06:28	16:50	4000	50	5.5					
02/27/92	06:27	16:45	4000	50	5.5					
02/28/92	06:44	16:51	4000	0	0.0					
02/29/92	06:25	14:52	4000	0	0.0					
MONTHLY TOTALS						214.83	HOURS			112.3 MICROCURIES
03/01/92					0.0					FAN NOT RUN
03/02/92	06:21	16:48	4000	0	0.0					
03/03/92	06:30	17:09	4000	0	0.0					
03/04/92	06:43	16:48	4000	0	0.0					
03/05/92	06:30	16:55	4000	0	0.0					
03/06/92	06:58	16:47	4000	0	0.0					
03/07/92	06:50	14:50	4000	0	0.0					
03/08/92					0.0					FAN NOT RUN
03/09/92	06:44	16:44	4000	50	5.3					
03/10/92	06:32	16:50	4000	50	5.5					
03/11/92	06:22	16:44	4000	0	0.0					
03/12/92	06:24	16:47	4000	0	0.0					
03/13/92	06:28	14:53	4000	50	4.5					
03/14/92					0.0					FAN NOT RUN
03/15/92					0.0					FAN NOT RUN
03/16/92	06:09	16:48	4000	50	5.7					
03/17/92	06:19	16:50	4000	0	0.0					
03/18/92	06:07	16:48	4000	50	5.7					
03/19/92	06:31	16:44	4000	50	5.5					
03/20/92					0.0					FAN NOT RUN
03/21/92					0.0					FAN NOT RUN
03/22/92					0.0					FAN NOT RUN
03/23/92	07:30	16:46	4000	50	4.9					
03/24/92	06:30	16:45	4000	50	5.5					
03/25/92	06:16	16:51	4000	0	0.0					
03/26/92	06:28	16:59	4000	0	0.0					
03/27/92	06:59	16:51	4000	0	0.0					
03/28/92	07:07	15:02	4000	0	0.0					
03/29/92					0.0					FAN NOT RUN

PATHFINDER DECOMMISSIONING AIRBORNE RELEASES – REACTOR BUILDING VENT

01/13/93

DATE	TIME FAN ON	TIME FAN OFF	AVG CFM	AVG CAM CPM ABOVE BKG	MICROCURIES RELEASED	NUCLIDES DETECTED BY ISOTOPIC ANALYSIS				COMMENTS
						NUCLIDE 1	NUCLIDE 2	NUCLIDE 3	NUCLIDE 4	
03/30/92 06:15		16:47	4000	50	5.6					
03/31/92 06:17		16:45	4000	0	0.0					
MONTHLY TOTALS						230.35	HOURS	48.2 MICROCURIES		
04/01/92 06:39		16:49	4000	0	0.0					
04/02/92 06:32		16:48	4000	0	0.0					
04/03/92					0.0					FAN NOT RUN
04/04/92					0.0					FAN NOT RUN
04/05/92					0.0					FAN NOT RUN
04/06/92 07:04		16:44	4000	50	5.2					
04/07/92 06:56		16:54	4000	25	2.7					
04/08/92 07:25		16:48	4000	0	0.0					
04/09/92 06:58		16:47	4000	0	0.0					
04/10/92 06:54		12:07	4000	0	0.0					
04/11/92					0.0					FAN NOT RUN
04/12/92					0.0					FAN NOT RUN
04/13/92 07:00		16:46	4000	0	0.0					
04/14/92 06:58		16:47	4000	75	7.9					
04/15/92 06:53		16:46	4000	50	5.3					
04/16/92 06:53		16:44	4000	50	5.3					
04/17/92					0.0					FAN NOT RUN
04/18/92					0.0					FAN NOT RUN
04/19/92					0.0					FAN NOT RUN
04/20/92 06:53		16:47	4000	0	0.0					
04/21/92 06:57		16:44	4000	0	0.0					
04/22/92 06:54		16:48	4000	0	0.0					
04/23/92 07:00		16:35	4000	0	0.0					
04/24/92					0.0					FAN NOT RUN
04/25/92					0.0					FAN NOT RUN
04/26/92					0.0					FAN NOT RUN
04/27/92 07:14		16:48	4000	25	2.6					
04/28/92 06:56		07:40	4000	0	0.0					PERMANENTLY SHUTDOWN
MONTHLY TOTALS						153.27	HOURS	28.8 MICROCURIES		
TOTAL RELEASE TIME (HOURS)			4128.58	ESTIMATED COMPOSITION		CO-60	53.35%	1148.2 MICROCURIES		
TOTAL MEASURED RELEASE (MICROCURIES)			1148.2			NI-63	37.96%	817.0 MICROCURIES		
						FE-55	7.92%	170.5 MICROCURIES		
						OTHERS	0.77%	16.6 MICROCURIES		
						TOTAL	100.00%	2152.2 MICROCURIES		



REACTOR BUILDING VENTILATION
 DECOMMISSIONING RECORDS

ATTACHMENT 5

EVALUATION OF ATMOSPHERIC RELEASES
FOR THE PATHFINDER DECOMMISSIONING PROJECT

DECOMMISSIONING RECORDS

G G G G G G G G A A S S S S S S S S P P P P P P P P A A R R R R R R R R
 G G A A S P P P A A R R A A R
 G A A S S S S S S S P P P A A R R R R R R R R
 G G G G G A A A A A S P P P P P P A A A A A A R R R R
 G G A A S P P A A R R R R
 G G G G G G A A S S S S S S S S P P A A R R R R

EVALUATION OF ATMOSPHERIC RELEASES

PATHFINDER DECOMMISSIONING DOSE ASSESSMENT

K.F. ECKERMAN, D.G. LASH

REVISED 8/19/77

RADIOLOGICAL ASSESSMENT BRANCH

U.S. NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

DECOMMISSIONING RECORD

NLIBA = 3 NLIBT = 6 NIBLC = 9 NLIBI = 12
ADULT DOSE FACTORS

units? mrem/pCi

NUCLIDE	TAU	EXT.BODY	EXT SKIN	BONE	LIVER	T.BODY	THYROID	KIDNEY	LUNG	GI-LLI
26FE 55	7.96E-09	0.00E+00	0.00E+00	2.75E-06	1.90E-06	4.43E-07	0.00E+00	0.00E+00	1.06E-06	1.09E-06
				3.07E-06	2.12E-06	4.93E-07	0.00E+00	0.00E+00	9.01E-06	7.54E-07
27CO 60	4.17E-09	1.70E-08	2.00E-08	0.00E+00	2.14E-06	4.72E-06	0.00E+00	0.00E+00	0.00E+00	4.02E-05
				0.00E+00	1.44E-06	1.85E-06	0.00E+00	0.00E+00	7.46E-04	3.56E-05
28NI 63	2.39E-10	0.00E+00	0.00E+00	1.30E-04	9.01E-06	4.36E-06	0.00E+00	0.00E+00	0.00E+00	1.88E-06
				5.40E-05	3.93E-06	1.81E-06	0.00E+00	0.00E+00	2.23E-05	1.67E-06

INGESTION DOSE FACTORS ARE ON FIRST LINE-INHALATION ON SECOND LINE.
FOR NOBLE GASES LISTED UNDER COLUMNS MARKED

BONE IS THE GAMMA AIR DOSE FACTOR
LIVER IS THE BETA AIR DOSE FACTOR
T.BODY IS THE T.BODY DOSE FACTOR
THYROID IS THE SKIN BETA DOSE FACTOR
LUNG IS THE LUNG INTERNAL DOSE FACTOR

PATHFINDER DECOMMISSIONING DOSE ASSESSMENT

JOB CONTROL(JC)- 1 1 0 0 2 0 0 0 0 0

FRACTIONS OF:

LEAFY VEGETABLES FROM GARDEN(FV)- .50 YEAR MILK COWS/BEEF ANIMALS/GOATS ON PASTURE(FP/FB/FGT)- .50/ .50/ .50
 OTHER EDIBLES FROM GARDEN(FG)- .76 MILK COW/BEEF/GOAT DAILY INTAKE FROM PASTURE(FPF/FBF/FPG)-1.00/1.00/1.00

HUMIDITY (G/M**3)- 5.28

PATHFINDER DECOMMISSIONING RELEASE

UML = 3.15E+01 JC1 = 0 JC2 = 0

NUCLIDE CI/YR

27CO 60 3.91E-03

28NI 63 2.74E-03

26FE 55 5.70E-04

3 7.21665000E-03

20100928 07:10:30 AM

PATHFINDER DECOMMISSIONING DOSE ASSESSMENT

JS	SPECIAL LOCATION	DIR	MILES	X/Q	X/Q DEC	X/Q DEP	DEPOSIT	PL	GD	VT	MT	CM	GM	IN
0	RESTRICTED AREA	S	.05	3.20E-03	3.20E-03	3.20E-03	0.00E+00	1	1	1	1	1	1	0
0	SITE BOUNDARY	S	.50	9.00E-04	9.00E-04	9.00E-04	0.00E+00	1	1	1	1	1	1	0
0	BRANDON, SD	ESE	3.20	8.00E-05	8.00E-05	8.00E-05	0.00E+00	1	1	1	1	1	1	0

PATHFINDER DECOMMISSIONING DOSE ASSESSMENT
 ANNUAL INDIVIDUAL DOSE (MREM) SUMMARY BY PATHWAY & NUCLIDE
 SPECIAL LOCATION # 1 RESTRICTED AREA
 PATHWAY = INHAL

AGE GROUP = ADULT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CO 60	5.86E-03 57.96%	1.13E-01 96.52%	0.00E+00 .00%	4.56E-03 31.95%	0.00E+00 .00%	0.00E+00 .00%	2.36E+00 97.78%	0.00E+00 .00%
NI 63	4.03E-03 39.79%	3.71E-03 3.18%	1.20E-01 98.83%	8.74E-03 61.18%	0.00E+00 .00%	0.00E+00 .00%	4.96E-02 2.05%	0.00E+00 .00%
FE 55	2.28E-04 2.25%	3.49E-04 .30%	1.42E-03 1.17%	9.81E-04 6.87%	0.00E+00 .00%	0.00E+00 .00%	4.17E-03 .17%	0.00E+00 .00%
TOTAL	1.01E-02	1.17E-01	1.22E-01	1.43E-02	0.00E+00	0.00E+00	2.42E+00	0.00E+00

DECOMMISSIONING RECORDS

PATHFINDER DECOMMISSIONING DOSE ASSESSMENT
 ANNUAL INDIVIDUAL DOSE (MREM) SUMMARY BY PATHWAY & NUCLIDE
 SPECIAL LOCATION # 2 SITE BOUNDARY
 PATHWAY = INHAL

AGE GROUP = ADULT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CO 60	1.65E-03 57.96%	3.17E-02 96.52%	0.00E+00 .00%	1.28E-03 31.95%	0.00E+00 .00%	0.00E+00 .00%	6.65E-01 97.78%	0.00E+00 .00%
NI 63	1.13E-03 39.79%	1.04E-03 3.18%	3.38E-02 98.83%	2.46E-03 61.18%	0.00E+00 .00%	0.00E+00 .00%	1.39E-02 2.05%	0.00E+00 .00%
FE 55	6.42E-05 2.25%	9.81E-05 .30%	4.00E-04 1.17%	2.76E-04 6.87%	0.00E+00 .00%	0.00E+00 .00%	1.17E-03 .17%	0.00E+00 .00%
TOTAL	2.85E-03	3.29E-02	3.42E-02	4.02E-03	0.00E+00	0.00E+00	6.80E-01	0.00E+00

PATHFINDER DECOMMISSIONING DOSE ASSESSMENT
 ANNUAL INDIVIDUAL DOSE (MREM) SUMMARY BY PATHWAY & NUCLIDE
 SPECIAL LOCATION # 3 BRANDON, SD
 PATHWAY = INHAL

AGE GROUP = ADULT

NUCLIDE	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
CO 60	1.47E-04 57.96%	2.82E-03 96.52%	0.00E+00 .00%	1.14E-04 31.95%	0.00E+00 .00%	0.00E+00 .00%	5.91E-02 97.78%	0.00E+00 .00%
NI 63	1.01E-04 39.79%	9.29E-05 3.18%	3.00E-03 98.83%	2.19E-04 61.18%	0.00E+00 .00%	0.00E+00 .00%	1.24E-03 2.05%	0.00E+00 .00%
FE 55	5.70E-06 2.25%	8.72E-06 .30%	3.55E-05 1.17%	2.45E-05 6.87%	0.00E+00 .00%	0.00E+00 .00%	1.04E-04 .17%	0.00E+00 .00%
TOTAL	2.53E-04	2.92E-03	3.04E-03	3.57E-04	0.00E+00	0.00E+00	6.05E-02	0.00E+00

DECOMMISSIONING RECORDS