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Radionuclide Inventories of Liquid Waste Disposal Sites on the Hanford Site

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FLUOR DANIEL HANFORD, INC.
Richland, Washington

Hanford Management and Integration Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

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Thanks

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Radionuclide Inventories of Liquid Waste Disposal Sites on the Hanford Site

Prepared by:
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Waste Management Federal Services of Hanford, Inc.

Date Published
August 1999

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GLOSSARY

ARH	Atlantic Richfield Hanford
CDI	cumulative decayed inventory
CWM	crib waste management
ERS	environmental release summary
HNF	Hanford Nuclear Facility (document identifier)
UNC	United Nuclear Industries, Inc.
pCi/g	picocuries per gram

METRIC CONVERSION CHART

Into metric units			Out of metric units		
If you know	Multiply by	To get	If you know	Multiply by	To get
Length			**Length**		
inches	25.40	millimeters	millimeters	0.0393	inches
inches	2.54	centimeters	centimeters	0.393	inches
feet	0.3048	meters	meters	3.2808	feet
yards	0.914	meters	meters	1.09	yards
miles	1.609	kilometers	kilometers	0.62	miles
Area			**Area**		
square inches	6.4516	square centimeters	square centimeters	0.155	square inches
square feet	0.092	square meters	square meters	10.7639	square feet
square yards	0.836	square meters	square meters	1.20	square yards
square miles	2.59	square kilometers	square kilometers	0.39	square miles
acres	0.404	hectares	hectares	2.471	acres
Mass (weight)			**Mass (weight)**		
ounces	28.35	grams	grams	0.0352	ounces
pounds	0.453	kilograms	kilograms	2.2046	pounds
short ton	0.907	metric ton	metric ton	1.10	short ton
Volume			**Volume**		
fluid ounces	29.57	milliliters	milliliters	0.03	fluid ounces
quarts	0.95	liters	liters	1.057	quarts
gallons	3.79	liters	liters	0.26	gallons
cubic feet	0.03	cubic meters	cubic meters	35.3147	cubic feet
cubic yards	0.76456	cubic meters	cubic meters	1.308	cubic yards
Temperature			**Temperature**		
Fahrenheit	subtract 32 then multiply by 5/9ths	Celsius	Celsius	multiply by 9/5ths, then add 32	Fahrenheit
Energy			**Energy**		
kilowatt hour	3,412	British thermal unit	British thermal unit	0.000293	kilowatt hour
kilowatt	0.948	British thermal unit per second	British thermal unit per second	1.055	kilowatt
Force			**Force**		
pounds per square inch	6.895	kilopascals	kilopascals	1.4504×10^{-4}	pounds per square inch

Source: *Engineering Unit Conversions*, M. R. Lindeburg, PE., Second Ed., 1990, Professional Publications, Inc., Belmont, California.

RADIONUCLIDE INVENTORIES OF LIQUID WASTE DISPOSAL SITES ON THE HANFORD SITE

1.0 INTRODUCTION

The data in this document were compiled to provide a single comprehensive source of radionuclide inventories for the liquid waste sites on the Hanford Site. The types of sites include cribs, trenches, ditches, retention basins, and miscellaneous ground disposal sites. The data were derived from liquid sampling and analysis of effluent discharges, spills, and leaks, as well as soil sampling after the fact for characterization. These waste sites received primarily low-level radioactive liquid effluent from reactor operations in the 100 Areas and from fuel reprocessing in the 200 Areas. This report has updated waste site inventories using historical databases, characterization reports, and the published annual effluent reports (refer to Attachments). The inventories have been decay-corrected to be current through calendar year 1998. This document does not include radionuclide inventories of burial grounds or underground storage tanks, such as tank farms in the 200 Areas.

2.0 LIQUID WASTE SITES IN THE 100 AREAS

The cumulative inventories of radioactive liquid waste discharged to soil column disposal facilities, or waste sites, in the 100 Areas are presented in this section. Tables 1 and 2 provide the decay-corrected inventories, in curies.

United Nuclear Industries, Inc conducted a radiological characterization program of waste sites in the 100 Areas between 1975-1976 (UNI-1946). As part of this characterization effort, a literature search was performed that located and reviewed historical records of past solid and liquid waste disposal activities. Sampling patterns and techniques for the liquid waste disposal sites were selected and implemented.

During 1975, sampling of all the retired radioactive liquid waste disposal sites in the 100 Areas was performed. All of the retired 107 retention basin systems and associated diversion trenches were sampled. Samples were taken of the contaminated fill inside of the basins. Boreholes for sampling were drilled along the effluent lines, along the outside of the retention basin walls, and through the basin floors to characterize the remaining contamination from past leakage. Samples also were taken of the scale and sludge contained in the effluent lines and junction boxes.

Sampling of the miscellaneous liquid waste disposal cribs and trenches in the retired 100 Areas was completed by April 1976. These waste disposal sites included the Lewis Canal, 105 Pluto (assumed to be a slang term used for 'plutonium') cribs, 105 storage basin trenches, and all other liquid disposal sites in the 100 Areas. Boreholes were drilled using standard well drilling techniques.

2.1 CHARACTERIZATION METHODS

The radioactive liquid waste disposal sites and leakage areas in the deactivated 100 Areas contain a total estimated radioactive inventory of several thousand curies. These sites included the 107 retention basin systems and their associated diversion trenches and leakage areas, and the other miscellaneous cribs and trenches in the deactivated 100 Areas . Over half of this inventory is contained within the mile long

116-K-2 trench, and the two cribs at 100-N Area (116-N-1 and 116-N-3). The remaining radioactivity is contained in the retention basins and the miscellaneous cribs and trenches.

Most of the deactivated reactors in the 100 Areas have been shutdown for over 30 years. Short-lived radionuclides, such as Zn-65, Cr-51, Mn-56, were of primary concern during operating periods. These nuclides now have decayed to below detection levels. The principal radionuclides remaining in these sites include Eu-152, Eu-154, Eu-155, Co-60, Cs-137, Sr-90, and Ni-63. C-14 and H-3 are dominant radionuclides in a few cribs, i.e., 116-KE-1 and 116-KW-1, and H-3 in 116-B-5. Maximum beta-gamma concentrations for the various radioactive liquid waste disposal sites range from 10^{-1} to 10^{6} pCi/g, and generally are less than 10^{4} pCi/g. Soil contamination generally drops off to near background levels within 10 to 20 feet below the crib, trench, or retention basin bottoms.

Low-level Pu-239/240 contamination also is present within the liquid waste disposal sites. Plutonium might be the most significant radionuclide in determining the ultimate disposition of the individual sites. The highest plutonium concentrations are primarily in sludge along the 107 retention basin floors, typically being 100 pCi/g. Plutonium concentrations of up to 130 pCi/g are present in the K-trench, averaging 8.5 pCi/g. 116-N-1 crib and 116-K-2 trench contain the highest plutonium inventory, with approximately 23 and 5 curies, respectively.

Average plutonium concentrations are less than 100 pCi/g in most of the 105 metal storage basin trenches and Pluto cribs. The 105-C Pluto crib sand filter, however, has plutonium up to 3,100 pCi/g and averages 38 pCi/g. About 0.2 curie of plutonium is contained in the 116-C-8 Pluto crib sand filter. Average plutonium concentrations in the majority of the other cribs and trenches usually are less than 1 pCi/g.

2.2 REACTORS AND ASSOCIATED SITES

The highest concentrations and inventories of radioactivity remaining in the deactivated 100 Areas are in the reactor blocks. Based on core sampling, approximately 1,000 curies are estimated to be contained in the thermal shields of the 105-DR reactor. Approximately 98 percent of the activity is Co-60, and the remaining activity is Ni-63. An estimated 9,000 curies of radioactivity are contained in the 105-DR reactor graphite; approximately 67 percent of the inventory is from H-3 and 27 percent from C-14. Other mixed fission and activation products also are present (primarily Sr-90, Ni-63, and Co-60) and account for the remaining portion of the inventory. Pu-238 and Pu-239/240 are present with inventories of 7 and 4 curies and average concentrations of 4.1×10^{3} and 2.6×10^{3} pCi/g, respectively. For the radionuclide concentrations and inventories in the 105-DR reactor graphite, calculations indicate plutonium and Sr-90 have the highest radiotoxicity. Because of the long half-lives of plutonium, Sr-90, Ni-63, and C-14, these radionuclides will be instrumental in establishing the ultimate disposition strategy to be used for the reactors.

Significant Pu-238 and Pu-239/240 concentrations are present in sludge along the floors of the 105 fuel storage basins. Average Pu-239/240 concentrations for the 105-B and C basin sludge are approximately 3.0×10^{4} pCi/g. Average Pu-239/240 concentrations in the other 105 metal storage basins are about 1,000 pCi/g. Sludge in a fuel storage basin typically contains 100 curies of mixed fission and activation products. Plutonium inventories range from 0.07 to 1.7 curies.

3.0 LIQUID WASTE SITES IN THE 200 AREAS

The cumulative inventories of radioactive liquid waste discharged to soil column disposal facilities, or waste sites, in the 200 Areas are presented in this section. Tables 3, 4, and 5 provide the decay-corrected inventories, in curies, for each pond, ditch, crib, and each 'specific retention crib'. The term 'specific retention crib' was used to distinguish the manner, quantity, and type of waste discharged to these sites. The waste quantity received by a specific retention crib was determined and specified before discharge. The intent was to limit the volume of liquid waste to 6 to 10% of the soil volume between the site and the groundwater so that the groundwater would not be impacted (WHC-MR-0227). After the specified quantity of waste had been discharged, the specific retention crib was no longer used to receive waste. These liquid waste discharges tended to be smaller in volume and higher in activity. Specific retention cribs were used primarily during the 1950's and 1960's and were not used after 1973.

3.1 BACKGROUND ON 200 AREAS LIQUID WASTE SITES

Since 1944, low- and intermediate-level liquid waste from chemical separations reprocessing of spent reactor fuel elements was discharged to the ground in the 200 Areas. Large volumes of process cooling water, normally free of radioactive contaminants, were discharged to surface ditches or natural surface depressions (ponds). Lesser volumes of liquid waste, such as steam condensate, process condensate, scavenged process waste supernatant, and plutonium processing waste were discharged to subsurface disposal sites (cribs). Discharge volumes and radioactivity discharged to each disposal site were reported periodically. This initially was documented in 1973 in a summary report: ARH-2761, *Input and Decayed Values of Radioactive Liquid Wastes Discharged to the Ground in the 200 Areas*. This document included the annual volumes of liquid discharged, grams of plutonium and uranium, and curies of total beta and certain specific fission products. Since that time, data were obtained from the annual effluent reports and installed into an environmental release summary (ERS) database (ERS 1996). The portion of the ERS database designed to accommodate cumulative inventories for the Hanford Site is the cumulative decayed inventory report, or CDI report.

Many of the streams that discharged to ground during the early years of chemical separations (1950's and 1960's) were analyzed for total beta, plutonium, and uranium (HW-69071). Analyses for other specific fission products were not made. An earlier document, ARH-231, *Hanford Low-Level Waste Management Reevaluation Study*, in some cases arbitrarily provided total curies of several specific fission products discharged to each site through calendar year 1966, based on total curies of beta activity. Assumptions were made on the distribution of radionuclides based on typical mixtures of known ratios. Atlantic Richfield Hanford Company also corrected some plutonium discharge data (before 1967) based on improved information. A more recent document (ARH-CD-745) adjusted some beta values listed in ARH-2761 as a result of more current information. Also, some sites listed in ARH-231 were eliminated as further studies showed that the sites received no measurable contamination. The data in ARH-CD-745 superceded all previous reports of liquid discharges to ground in the 200 Areas. By 1978, the data on 200 Areas waste site inventories had been installed into a database called crib waste management (CWM).

This report updates the 200 Areas waste site inventories using CWM and the annual effluent reports published since 1975 (Appendix A). These data have been compiled with decay correction in the ERS database, along with waste sites in the 100 Areas.

3.2 CRIB WASTE MANAGEMENT DATABASE

Rockwell Hanford Operations published computer generated quarterly reports on the liquid radioactive waste materials under their control. Those reports give detailed accounts of liquid radioactive waste for the specified year. The reports include information concerning the volume and amount of the different isotopes discharged to individual sites. The reports on liquid discharges contained summaries of the total amounts deposited following startup and the amounts left after decay of the isotopes. Waste covered in these reports include liquid discharges to ponds, ditches, cribs, and specific retention sites under Rockwell Hanford Operations. The reports were generated by the CWM database between 1974 and 1990, when the 100 and 200 Areas waste sites were consolidated and reported in ERS.

The CWM database accounted for the radioactivity of all the isotopes that were not measured directly by sampling and laboratory analysis. Cooling time after irradiation of the nuclear fuel was accounted for in 1-year increments, e.g., 1, 2, 3, or 4 years. A draft of the CWM database was reviewed, which provided descriptions of the data files and algorithms used. Although there is no formal documentation on the CWM database, the database indicates an established radionuclide distribution, probably based on the first version of the model for nuclear fuel irradiation, i.e., ORIGEN (Section 3.3).

3.3 ENVIRONMENTAL RELEASE SUMMARY (ERS) DATABASE

The historical data files in the ERS contain the total radioactive inventory, in curies, of liquid waste sites on the Hanford Site. The decay calculations and distribution of daughter products performed by ERS and the CDI programs are based on decay tables generated by ORIGEN2 (ORNL-5621), which is the nuclear industry standard decay program. The decay tables reflect the percentages of decay and daughter products produced in 1 year for each radionuclide of interest. The use of decay tables restricts decay calculations to an annual basis, but greatly reduces the computational burden of solving the Bateman equations for each radionuclide in each waste site.

This model accounts for fission and activation products generated during the nuclear fuel cycle. The model is designed to accommodate many variables such as in-reactor irradiation periods, enrichments, reactor power levels, and cooling periods, to predict nuclides in final high-level waste after the separation process. The amounts of corrosion products, such as Co-60, are affected by impurities in the fuel and model predictions typically underestimated the amount of Co-60 produced. Co-60 exists in more significant quantities in the 100 Areas, where sampling and analysis, not numerical calculations, determined the concentrations in waste sites.

The activity or total inventory of each waste site is updated routinely each year within the ERS database. Any discharges during the previous calendar year are added to the existing inventory of each waste site, and the new total is decay corrected. The ERS database includes a history file (CDI.HIST.DAT) containing the current CDI for each of 252 liquid waste disposal sites in the 100 and 200 Areas. Inventories, either current or decay corrected to any future year, for any of the 252 liquid disposal waste sites can be calculated and printed using the ERS CDIRPT program. Each year, the newly calculated inventories replace the previous year's inventories in the history file. These data were entered into the Waste Information Data System (WIDS) and contained current through 1996 (DOE/RL-88-30, Rev. 6).

Because untreated discharges to soil have ceased on the Hanford Site, the inventories provided in this document should not need to be updated with new effluent data. The attached tables provide the inventory of each radionuclide, in curies, decay corrected through December 31, 1998.

4.0 REFERENCES

ARH-231, *Hanford Low-Level Waste Management Reevaluation Study*, R. J. Sloat, December 29, 1967, Atlantic Richfield Hanford Company, Richland, WA.

ARH-2761, *Input and Decayed Values of Radioactive Liquid Wastes Discharged to the Ground in the 200 Areas*, J. D. Anderson, et.al., dated March 1973, Atlantic Richfield Hanford Company, Richland, WA.

ARH-CD-745, *Input and Decayed Values of Radioactive Liquid Wastes Discharged to the Ground in the 200 Areas through 1975*, J. D. Anderson, July 8, 1976, Atlantic Richfield Hanford Company, Richland, WA.

DOE/RL-88-30, Revision 6, Volumes 1 and 2, *Hanford wite Waste Management Units Report,* May 1996, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

ERS, 1996, *Environmental Release Summary* database, WHC-CM-EN-CWSD-043, "A User's Guide for the ERS System", also refer to WHC-CM-EN-CWSD-038, "Project Management Plan", and WHC-CM-EN-CWSD-041, "Software Design". The Cumulative Decayed Inventory Report is a subset of the ERS.

HW-69071, *Radioactive Contamination in Liquid Wastes Discharged to Ground at the Separations Facilities through June 1990,* dated April 7, 1961, declassified 09/09/71, General Electric Hanford Atomic Products Operation, Richland, Washington.

ORNL-5621, *ORIGEN2 – Oak Ridge Isotope Generation and Depletion Code*, RSIC code package CCC-371, dated October 1987, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

UNI-946, *Radiological Characterization of the Retired 100 Areas*, May 26, 1978, UNC Nuclear Industries, Inc., Richland, Washington.

WHC-MR-0227, *Tank Wastes Discharged Directly to the Soil at the Hanford Site,* 1991, Westinghouse Hanford Company, Richland, Washington.

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ATTACHMENTS

A ENVIRONMENTAL RELEASE REPORTS

B CUMULATIVE, DECAYED INVENTORY OF 100 AREA CRIBS, TRENCHES, AND BASINS (radionuclides in curies, decayed to 12/31/98)

C CUMULATIVE DECAYED INVENTORY OF LIQUID WASTE SITES

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ATTACHMENT A

ENVIRONMENTAL RELEASE REPORTS
(Effluents from Hanford Site operating contractors)

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ATTACHMENT A

ENVIRONMENTAL RELEASE REPORTS
(Effluents from Hanford Site operating contractors)

Calendar Year, Document Number

200 Areas: air emissions; liquid effluents

1944-1972, ARH-3026; 1944-1975, ARH-CD-745

1973, ARH-2807 4Q
1974, ARH-3094 4Q
1975, ARH-CD-370 4Q
1976, ARH-CD-742 4Q; -743 4Q
1977, RHO-CD-35 4Q; -34 4Q LIQ
1978, RHO-CD-78-35 4Q; 78-34 4Q LIQ
1979, RHO-CD-79-35 4Q; 79-34 4Q LIQ
1980, RHO-CD-80-35-4Q; 80-34 4Q LIQ
1981, RHO-HS-SR-81-2 4Q GAS; 81-3 4Q LIQ
1982, RHO-HS-SR-82-2 4Q GAS P; 82-3 4Q LIQ P
1983, RHO-HS-SR-83-2 4Q GAS P; 83-3 4Q LIQ P
1984, RHO-HS-SR-84-2 4Q GAS P; 84-3 4Q LIQ P
1985, RHO-HS-SR-85-2 4Q GAS P; 85-3 4Q LIQ P
1986, RHO-HS-SR-86-2 4Q GAS P; 86-3 4Q LIQ P

100, 300 Areas: all effluents

1944-1972, PNWD-2222 (Air)
1944-1971, PNWD-2223 (Liquid)
1971, DUN-7972
1972, DUN-8133
1973, UNI-158
1974, UNI-349
1975, UNI-544
1976, UNI-732
1977, UNI-999
1978, UNI-1261
1979, UNI-1474
1980, UNI-1701
1981, UNI-2003
1982, UNI-2358
1983, UNI-2795
1984, UNI-3284
1985, UNI-3880
1986, UNI-4370

200 Areas: all effluents

1987, WHC-EP-0141
1988, WHC-EP-0141-1
1989, WHC-EP-0165-2

100 Areas: all effluents

1987, WHC-EP-0165
1988, WHC-EP-0165-1
1989, WHC-EP-0141-2

300, 400 Areas: all effluents

1987, WHC-SP-0385
1988, WHC-EP-0267
1989, WHC-EP-0267-1

All Areas: all effluents

1990, WHC-EP-0527
1991, WHC-EP-0527-1
1992, WHC-EP-0527-2
1993, WHC-EP-0527-3
1994, WHC-EP-0527-4
1995, WHC-EP-0527-5
1996, HNF-EP-0527-6
1997, HNF-EP-0527-7

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ATTACHMENT B

CUMULATIVE, DECAYED INVENTORY OF 100 AREA CRIBS, TRENCHES, AND BASINS (radionuclides in curies, decayed to 12/31/98)

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Table 1

CUMULATIVE, DECAYED INVENTORY OF 100-AREA CRIBS AND TRENCHES

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Co-60	Sr-90	Cs-137	Eu-152	Eu-154	Eu-155	Pu-238	Pu-239/40
116-N-1	5.29E+03	7.96E+02	1.61E+03	2.11E+03	--------	--------	--------	--------	2.30E+01
116-N-3	3.23E+02	2.27E+02	1.61E+02	2.92E+02	--------	--------	--------	5.76E-02	2.80E+00
116-B-2	3.59E-02	4.37E-05	8.10E-02	4.57E-02	2.54E-03	1.72E-04	1.80E-04	--------	2.59E-03
116-B-3	9.94E-02	4.57E-02	1.39E-02	9.95E-02	1.30E-01	1.14E-02	1.00E-03	1.08E-04	6.68E-03
116-B-5	8.29E+01	5.35E-03	8.10E-04	1.46E-03	4.33E-02	7.04E-03	2.81E-05	--------	--------
116-B-6-1	--------	3.16E-04	6.37E-01	1.05E-01	2.66E-05	4.07E-05	2.93E-04	--------	2.00E-03
116-B-6-2	3.31E-03	2.14E-06	1.33E-04	1.46E-04	7.43E-05	--------	5.61E-06	--------	--------
116-C-2	1.38E-01	1.90E-03	6.94E-01	5.86E-04	4.33E-03	1.49E-04	5.61E-03	--------	--------
116-C-8	1.24E-01	1.12E+01	1.27E+00	5.86E+00	2.45E+00	9.54E-02	2.69E-01	1.00E-01	1.20E-01
116-KE-2	1.88E-01	1.60E+00	4.63E-01	2.34E-03	1.02E-01	7.51E-03	--------	1.58E-02	--------
116-KW-1	3.59E+01	1.46E-04	4.40E-03	2.58E-03	--------	2.50E-05	1.20E-04	--------	--------
116-D-1A	3.87E-01	1.99E+00	8.68E-02	7.61E-01	3.41E-01	3.44E-02	4.41E-03	--------	2.00E-02
116-D-1B	5.52E-02	9.72E-03	1.16E-01	3.63E-01	1.33E-01	1.30E-02	3.53E-02	--------	6.68E-03
116-DR-3	9.12E-02	1.46E-03	3.65E-02	2.52E-02	9.29E-03	9.38E-04	3.21E-05	--------	3.29E-03
116-DR-4	--------	1.70E-04	3.07E-03	2.69E-02	1.49E-03	--------	2.33E-05	--------	9.98E-05
116-F-1	8.84E-02	3.21E-02	3.65E-02	6.44E-01	2.63E-01	5.94E-02	1.68E-04	--------	6.58E-03
116-F-3	2.10E-04	6.81E-06	2.55E-04	--------	1.42E-04	--------	1.20E-05	--------	--------
116-F-4	4.70E-03	2.72E-05	7.52E-01	1.11E+00	3.41E-03	7.51E-03	4.41E-03	4.67E-04	4.19E-02
116-F-5	--------	--------	1.85E-05	2.81E-05	--------	1.02E-04	7.62E-06	--------	--------
116-F-6	6.35E-01	4.86E-02	1.22E-01	3.86E-01	5.26E-01	8.29E-02	2.97E-03	--------	9.78E-03
116-F-7	--------	--------	9.84E-06	5.74E-06	2.48E-05	4.07E-04	2.49E-04	--------	3.09E-05
116-F-8	1.63E-02	1.46E-03	4.11E-05	4.74E-03	5.57E-03	4.07E-04	2.49E-04	--------	8.08E-05
116-H-2	9.39E-02	1.41E-03	3.47E-01	1.82E-01	2.51E-02	3.13E-03	5.21E-04	--------	4.19E-04
116-H-3	3.87E-04	7.29E-04	9.84E-05	2.34E-02	3.10E-03	4.22E-04	1.48E-05	--------	8.38E-05

Table 2

CUMULATIVE, DECAYED INVENTORY OF 100-AREA RETENTION BASINS

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Co-60	Sr-90	Cs-137	Eu-152	Eu-154	Eu-155	Pu-238	Pu-239/40
116-B-11s	2.07E-02	7.78E-01	3.36E-02	2.87E-01	7.43E+00	1.88E+00	4.41E-02	2.33E-03	8.68E-02
116-B-11f	1.71E-01	2.14E-01	3.36E-02	3.16E-01	1.98E+00	5.00E-01	1.28E-02	8.33E-05	1.80E-02
116-B-11a	3.31E-01	3.40E-01	2.78E-01	4.45E+00	1.58E+00	2.50E-01	1.64E-02	--------	5.99E-02
116-B-11u	1.30E+00	4.37E+00	3.13E-01	1.87E-01	3.41E+01	6.57E+00	1.44E-01	1.25E-02	7.48E-01
116-C-5s	6.91E-02	9.24E-02	8.10E-02	3.16E-01	6.50E-01	3.28E-01	1.48E-04	1.00E-03	3.19E-02
116-C-5f	--------	3.21E-02	9.26E-02	4.51E-01	3.72E-01	1.00E-01	2.65E-02	7.17E-04	1.30E-02
116-C-5a	1.44E-01	4.72E-02	1.33E-01	--------	1.61E-01	2.66E-02	7.22E-03	6.67E-03	--------
116-C-5u	1.55E-01	2.92E+00	1.39E+00	1.11E-01	1.61E-01	2.66E-02	1.76E-01	--------	2.49E-01
116-B-1	2.51E-02	1.41E-02	4.98E-02	2.17E-01	5.57E-01	5.79E-02	3.09E-03	8.33E-05	8.18E-03
116-C-1	3.87E-01	1.56E+00	1.16E+00	4.10E+00	7.12E+00	1.88E+00	4.81E-02	--------	1.30E-01
116-B-Eff	3.31E-01	1.17E-01	8.10E-02	3.45E+00	5.26E-01	5.63E-02	8.82E-01	6.08E-04	2.69E-02
116-B-2-1	8.29E-02	8.26E-02	1.79E-01	5.09E+00	5.88E-01	8.13E-02	1.32E+00	--------	1.30E-02
116-KE-4s	2.49E-04	2.43E-03	5.73E-04	7.61E-04	1.24E-02	4.22E-03	4.41E-04	1.75E-05	2.39E-04
116-KE-4f	--------	3.40E-04	8.68E-04	1.52E-03	2.35E-02	4.69E-03	1.12E-03	--------	--------
116-KE-4a	3.59E-02	5.35E-02	9.26E-02	9.95E-01	6.19E-01	1.16E-01	1.28E-02	--------	2.99E-04
116-KW-3s	6.63E-05	6.81E-03	1.97E-03	1.29E-03	3.41E-02	9.23E-03	8.42E-06	--------	4.19E-04
116-KW-3f	3.04E-02	9.72E-03	2.78E-03	2.11E-03	3.10E-02	6.88E-03	6.02E-04	--------	--------
116-KW-3a	1.08E-01	1.85E-02	4.17E-02	2.99E-01	4.33E-01	7.04E-02	2.73E-02	--------	3.19E-03
116-K-1	--------	4.08E-01	4.11E-01	1.29E+01	3.10E-01	6.41E-01	1.36E-02	1.17E-02	1.40E-01
116-K-1a	--------	4.76E-03	2.84E-02	3.16E-02	2.41E-02	7.51E-03	7.22E-04	--------	7.78E-04
116-K-2	6.91E+00	7.78E+00	6.37E+00	1.05E+02	3.41E+02	6.41E+01	1.36E+00	1.58E-01	4.99E+00
116-K-2u	7.46E+00	2.09E-02	4.46E+00	6.44E-01	6.19E-01	--------	3.57E-02	--------	--------
116-D-7s	6.08E-03	4.72E-01	6.37E-02	5.09E-01	8.98E+00	2.50E+00	6.82E-02	2.25E-03	1.40E-01
116-D-7f	2.43E-01	7.29E-04	9.84E-02	1.17E+00	2.01E-01	5.63E-02	8.82E-07	6.33E-03	--------

Table 2, Cont'd

CUMULATIVE, DECAYED INVENTORY OF 100-AREA RETENTION BASINS

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Co-60	Sr-90	Cs-137	Eu-152	Eu-154	Eu-155	Pu-238	Pu-239/40
116-D-7a	2.24E-01	5.83E-01	6.37E-02	7.61E-01	2.88E+00	4.85E-01	1.60E-02	9.17E-04	5.29E-02
116-D-7u	1.82E-01	9.72E-02	4.80E-02	1.41E+00	3.10E-01	5.47E-02	1.72E-03	--------	1.70E-02
116-DR-9s	9.39E-03	4.08E-01	1.10E-01	1.46E+00	5.26E+00	1.25E+00	1.36E-02	1.08E-03	5.69E-02
116-DR-9f	--------	4.62E-02	1.91E-02	3.98E-01	1.39E+00	1.53E-01	4.81E-03	1.33E-04	9.98E-03
116-DR-9a	4.70E-02	4.42E-02	1.68E-02	4.22E-01	3.72E-01	6.26E-02	2.29E-03	--------	4.49E-03
116-DR-9u	1.05E-01	1.94E-01	2.03E-01	2.87E+00	1.11E+00	1.88E-01	6.42E-03	--------	3.89E-02
116-DR-9	--------	1.51E-02	1.39E-02	8.20E-01	9.91E-02	1.42E-02	--------	6.50E-05	1.70E-03
116-DR-1&2	1.96E-01	1.56E-01	2.14E-01	9.37E+00	2.54E+00	2.97E-01	1.36E-02	--------	3.49E-02
116-F-14s	8.01E-03	1.65E-01	2.20E-02	7.03E-01	2.79E+00	9.85E-01	5.61E-02	4.67E-04	2.00E-02
116-F-14f	--------	1.99E-02	3.53E-03	2.23E-02	4.33E-01	7.66E-02	2.93E-03	--------	2.19E-03
116-F-14a	7.46E-02	1.70E-01	5.79E-02	1.70E-01	2.54E+00	3.91E-01	1.32E-02	1.08E-05	1.60E-02
116-F-14u	1.13E-01	3.50E-01	3.53E-02	5.86E-01	3.00E+00	4.69E-01	6.42E-03	--------	4.09E-02
116-F-2	1.52E-01	9.24E-02	3.94E-02	4.51E-01	2.51E+00	3.75E-01	2.33E-02	--------	6.98E-03
116-F-2-BP	1.19E-02	2.28E-02	9.84E-03	8.78E-02	3.41E-01	7.66E-02	2.97E-03	--------	1.20E-03
116-F-14D	1.55E-03	2.28E-02	4.80E-03	4.86E-02	1.89E-01	2.97E-02	1.36E-03	--------	1.40E-03
116-H-7s	6.91E-02	3.79E-01	1.10E-01	7.61E-01	7.12E+00	1.36E+00	8.42E-02	3.33E-03	1.10E-01
116-H-7f	--------	1.51E-01	1.62E-01	5.50E-01	2.94E+00	6.10E-01	1.16E-02	--------	6.78E-02
116-H-7a	2.15E-02	2.43E-01	1.50E-01	1.05E+00	2.11E+00	3.44E-01	1.56E-02	1.33E-03	4.79E-02
116-H-7u	3.31E-01	9.72E-02	1.45E-01	4.04E+00	5.57E-01	9.70E-02	1.56E-02	--------	7.38E-03
116-H-1	1.35E-02	1.31E-01	5.32E-01	2.69E+00	4.33E+00	1.53E+00	1.84E-02	2.75E-03	6.68E-02
116-H-7	4.97E-03	4.86E-02	8.68E-03	2.69E-02	2.01E-01	1.88E-02	3.05E-04	1.00E-04	2.49E-03

Table 3

CUMULATIVE, DECAYED INVENTORY OF 200-AREA PONDS AND DITCHES

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-A-25	1.29E+02	2.08E+02	1.46E-06	1.66E+02	<4.23E+00	--------	--------	<5.20E-04	2.76E+01	9.39E+02	3.07E+11
216-B-22E	--------	3.48E+02	--------	2.54E-01	--------	--------	--------	--------	--------	8.64E+02	Unknown
216-B-22W	--------	1.19E+02	--------	2.54E-01	<1.57E-05	--------	--------	--------	<2.58E-03	2.95E+02	4.97E+07
216-B-3	5.02E+02	<8.23E+01	3.58E-02	<7.76E+01	<2.10E+00	3.34E-03	9.60E-01	4.21E+00	<1.63E+01	<3.91E+02	2.83E+11
216-B-63	1.28E+00	1.98E+00	4.92E-10	5.91E-01	<1.50E-01	--------	1.72E-02	3.82E-02	<7.51E-02	<6.32E+00	7.78E+09
216-C-9	--------	1.96E+00	1.78E-10	5.70E-01	<3.05E-04	--------	--------	--------	2.07E-02	6.24E+00	1.03E+09
216-N-4	--------	5.76E-02	6.84E-16	6.60E-02	1.51E-03	--------	--------	--------	6.14E-02	3.00E-01	9.46E+08
216-N-6	--------	5.76E-02	6.84E-16	6.60E-02	1.51E-03	--------	--------	--------	6.14E-02	3.00E-01	9.46E+08
216-S-10	--------	<8.67E-01	7.14E-04	1.02E+00	6.70E-02	--------	8.17E-03	1.87E-02	2.50E-02	<3.51E+00	4.66E+09
216-S-11	--------	6.57E-01	6.03E-04	6.65E-01	6.83E-03	--------	--------	--------	<5.53E-03	1.94E+00	2.23E+09
216-S-16	--------	3.64E+01	9.21E-09	2.43E+01	1.05E+00	--------	--------	--------	2.26E+01	1.48E+02	4.07E+10
216-S-17	--------	1.28E+01	6.42E-13	1.03E+01	4.52E-02	--------	--------	--------	1.84E-01	5.63E+01	6.43E+09
216-S-19	1.13E-01	1.05E+00	<1.12E-09	1.05E+00	5.17E-02	--------	--------	--------	1.26E+00	5.12E+00	1.33E+09
216-T-1	--------	<2.93E-02	9.04E-16	<3.14E-02	1.50E-03	--------	--------	--------	<6.14E-03	1.47E-01	1.78E+08
216-T-4	--------	2.72E+00	1.80E-09	5.06E+00	2.32E-01	--------	--------	--------	2.28E-01	1.89E+01	4.25E+10
216-U-14	2.08E+00	5.34E-02	2.84E-13	5.74E-02	6.38E-02	--------	1.60E-04	2.86E-04	3.11E-02	2.45E-01	1.22E+09

Table 4

CUMULATIVE, DECAYED INVENTORY OF 200-AREA CRIBS

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-A-3	--------	3.48E-02	3.15E-10	<3.69E-02	5.58E-01	--------	--------	--------	1.23E-02	1.82E-01	3.05E+06
216-A-4	--------	3.54E+00	9.02E-11	5.62E+00	1.33E-01	--------	--------	--------	8.60E+00	2.21E+01	6.21E+06
216-A-5	--------	3.35E+01	2.22E-10	9.83E+00	8.75E-02	--------	--------	--------	3.99E+00	1.09E+02	1.63E+09
216-A-6	--------	3.56E+01	1.13E-08	8.53E+01	5.49E-02	--------	--------	--------	2.19E+00	2.91E+02	3.40E+09
216-A-7	--------	3.48E-01	2.27E-10	1.87E+00	2.26E-03	--------	--------	--------	6.14E-02	5.30E+00	3.26E+05
216-A-8	2.09E-01	4.16E+01	9.66E-08	4.23E+02	1.23E-01	--------	--------	--------	3.07E+00	1.11E+03	1.15E+09
216-A-9	--------	8.91E+00	7.49E-11	3.77E+00	7.55E-05	--------	--------	--------	3.07E-02	3.10E+01	9.81E+08
216-A-10	1.12E+04	6.66E+01	6.37E-04	6.53E+01	8.08E-02	3.06E-01	3.49E+00	1.25E+00	2.81E+01	3.60E+02	3.21E+09
216-A-21	--------	6.06E+00	2.99E-09	6.37E+01	6.49E-02	--------	--------	--------	9.21E+00	1.67E+02	7.79E+07
216-A-24	--------	1.48E+01	2.72E-09	2.17E+02	1.67E-02	--------	--------	--------	3.11E-01	5.52E+02	8.20E+08
216-A-27	--------	1.98E+01	2.85E-08	2.63E+01	2.26E-02	--------	--------	--------	5.93E+00	1.12E+02	2.32E+07
216-A-28	--------	--------	--------	--------	2.10E-01	--------	--------	--------	--------	7.47E-03	3.00E+04
216-A-30	1.07E+01	8.25E+01	7.67E-04	9.48E+01	1.00E-01	4.79E-03	7.92E-02	2.06E-01	4.65E+00	4.32E+02	7.50E+09
216-A-36B	3.07E+02	2.68E+02	6.54E-03	2.84E+02	3.97E-02	--------	5.69E-02	2.20E-01	1.10E+01	1.36E+03	3.17E+08
216-A-37	9.68E+02	4.41E-02	8.72E-05	7.79E-02	1.09E-02	--------	<2.01E-04	<3.64E-04	8.45E-03	5.08E-01	3.77E+08
216-A-37-2	4.08E+00	2.50E-01	3.80E-04	1.71E-01	1.74E-02	--------	3.93E-02	1.02E-01	1.07E-01	1.89E+00	1.29E+09
216-A-45	2.33E+03	<6.74E-03	<2.74E-05	7.90E-03	2.25E-03	5.71E-03	5.56E-02	1.16E-01	5.51E-02	1.12E-01	1.03E+08
216-B-5	--------	2.06E+01	2.13E-14	2.37E+01	--------	--------	--------	--------	2.63E+02	1.08E+02	3.06E+07
216-B-7	--------	1.78E+03	5.78E-12	3.50E+01	6.05E-02	--------	--------	--------	2.64E+02	4.49E+03	4.36E+07
216-B-8	--------	4.50E+00	1.47E-13	1.61E+01	1.51E-02	--------	--------	--------	1.84E+00	4.93E+01	2.72E+07
216-B-9	--------	4.46E+00	1.66E-13	3.18E+00	1.51E-02	--------	--------	--------	1.07E+01	2.00E+01	3.60E+07
216-B-10	--------	1.52E+00	3.05E-14	3.25E-01	3.02E-03	--------	--------	--------	6.02E-01	4.55E+00	9.99E+06
216-B-10B	--------	1.60E-04	<5.96E-15	5.67E-05	2.48E-07	--------	--------	--------	2.91E-06	5.31E-04	2.80E+04
216-B-11	--------	1.62E+00	8.76E-13	1.73E+01	4.53E-03	--------	--------	--------	2.46E-01	4.49E+01	2.96E+07
216-B-12	--------	6.40E+01	1.21E-07	5.80E+02	6.95E+00	--------	--------	--------	2.30E+01	1.54E+03	5.20E+08

Table 4, Cont'd

CUMULATIVE, DECAYED INVENTORY OF 200-AREA CRIBS

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-B-14	--------	1.39E+02	6.67E-09	9.22E+01	7.24E-02	--------	--------	--------	1.53E+00	5.67E+02	8.71E+06
216-B-15	--------	7.05E+01	2.98E-09	7.49E+01	3.47E-02	--------	--------	--------	3.07E-01	3.57E+02	6.32E+06
216-B-16	--------	2.43E+02	1.47E-09	2.40E+02	1.07E-01	--------	--------	--------	6.14E-01	1.18E+03	5.60E+06
216-B-17	--------	5.57E+01	2.83E-11	8.11E+01	1.18E-01	--------	--------	--------	6.14E-01	3.30E+02	3.41E+06
216-B-18	--------	6.61E+01	2.15E-09	9.22E+01	7.85E-02	--------	--------	--------	6.14E-01	3.85E+02	8.52E+06
216-B-19	--------	7.13E+01	1.15E-09	1.02E+02	6.04E-02	--------	--------	--------	6.14E-01	4.18E+02	6.40E+06
216-B-43	--------	4.64E+02	1.42E-12	1.06E+02	4.53E-03	--------	--------	--------	3.07E-02	1.40E+03	2.12E+06
216-B-44	--------	9.66E+02	2.88E-10	2.50E+02	7.55E-04	--------	--------	--------	9.21E-01	2.99E+03	5.60E+06
216-B-45	--------	9.50E+02	9.64E-10	5.40E+02	2.26E-03	--------	--------	--------	6.14E-01	3.64E+03	4.92E+06
216-B-46	--------	5.09E+02	1.59E-09	7.21E+01	6.34E-02	--------	--------	--------	1.23E+00	1.45E+03	6.70E+06
216-B-47	--------	2.10E+02	1.08E-09	5.40E+01	2.26E-03	--------	--------	--------	3.07E-01	6.51E+02	3.71E+06
216-B-48	--------	4.41E+02	3.86E-10	1.62E+02	7.55E-04	--------	--------	--------	3.07E-01	1.49E+03	4.09E+06
216-B-49	--------	9.16E+02	1.36E-09	1.48E+02	1.06E-01	--------	--------	--------	9.21E-01	2.63E+03	6.70E+06
216-B-50	--------	<2.74E+00	2.22E-09	4.15E+01	<9.49E-05	--------	--------	--------	1.47E-02	1.05E+02	5.48E+07
216-B-55	1.62E+00	5.84E+00	2.92E-07	1.11E+01	<2.67E-02	--------	3.94E-06	4.01E-06	4.32E-02	4.09E+01	1.23E+09
216-B-57	--------	1.48E+00	9.81E-09	1.83E+02	2.96E-04	--------	--------	--------	<1.15E-02	4.37E+02	8.44E+07
216-B-62	8.86E+00	6.03E+01	7.88E-05	1.09E+02	1.00E-02	--------	2.28E-03	<1.01E-01	1.05E-01	4.18E+02	2.83E+08
216-C-1	--------	6.91E+01	3.89E-11	<3.69E-02	9.81E-02	--------	--------	--------	4.91E-01	1.73E+02	2.34E+07
216-C-3	--------	6.49E+00	1.71E-13	<3.44E-02	1.51E-02	--------	--------	--------	6.14E-02	1.62E+01	5.00E+06
216-C-5	--------	3.39E+00	2.84E-13	<3.60E-02	1.81E-02	--------	--------	--------	6.14E-02	8.51E+00	3.79E+04
216-C-7	--------	<4.13E-02	2.18E-11	<4.33E-02	<3.33E-05	--------	--------	--------	6.77E-02	2.13E-01	6.01E+04
216-C-10	--------	2.78E+01	1.85E-10	<6.93E-02	<1.51E-05	--------	--------	--------	<9.21E-03	6.91E+01	8.97E+05
216-N-2	--------	5.55E-02	9.74E-17	6.37E-02	--------	--------	--------	--------	--------	2.90E-01	7.57E+06
216-N-3	--------	6.27E-02	3.07E-15	7.14E-02	--------	--------	--------	--------	--------	3.26E-01	7.57E+06
216-N-5	--------	6.27E-02	3.07E-15	7.14E-02	--------	--------	--------	--------	--------	3.26E-01	7.57E+06

Table 4, Cont'd

CUMULATIVE, DECAYED INVENTORY OF 200-AREA CRIBS

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-N-7	--------	6.27E-02	3.07E-15	7.14E-02	--------	--------	--------	--------	--------	3.26E-01	7.57E+06
216-S-1&2	--------	1.01E+03	1.28E-10	8.90E+02	7.55E-01	--------	--------	--------	7.37E+01	4.75E+03	1.60E+08
216-S-3	--------	3.35E-01	2.24E-12	1.78E+01	1.27E-04	--------	--------	--------	3.07E-02	4.30E+01	4.20E+06
216-S-5	--------	4.37E+01	1.47E-12	2.14E+01	9.06E-02	--------	--------	--------	3.56E+01	1.59E+02	4.10E+09
216-S-6	--------	1.65E+02	1.21E-08	9.34E+01	9.04E-02	--------	--------	--------	2.90E+01	6.30E+02	4.47E+09
216-S-7	--------	1.12E+03	2.69E-09	5.70E+02	8.60E-01	--------	--------	--------	2.70E+01	4.18E+03	3.90E+08
216-S-9	--------	7.78E+01	5.91E-07	2.35E+02	1.13E-02	--------	--------	--------	3.99E+00	7.53E+02	5.03E+07
216-S-20	--------	1.83E+01	5.13E-10	4.58E+01	1.25E-02	--------	--------	--------	1.05E+01	1.56E+02	1.35E+08
216-S-21	--------	1.76E+01	2.87E-09	6.93E+01	1.39E-03	--------	--------	--------	1.28E-01	2.08E+02	8.71E+07
216-S-22	--------	3.67E-01	2.91E-12	3.88E-01	<1.51E-05	--------	--------	--------	6.20E-03	1.83E+00	9.84E+04
216-S-23	--------	9.19E-01	7.19E-08	2.82E+00	1.29E-04	--------	--------	--------	6.11E-02	9.07E+00	3.41E+07
216-S-25	8.92E+01	3.38E-02	3.43E-07	5.44E-02	5.54E-02	--------	--------	--------	1.20E-02	2.47E-01	2.88E+08
216-S-26	--------	1.93E-03	--------	2.69E-03	4.19E-05	--------	1.99E-04	9.61E-04	8.54E-04	1.04E-02	2.08E+08
216-T-3	--------	1.50E+01	1.08E-14	1.73E+01	--------	--------	--------	--------	2.06E+02	7.84E+01	1.13E+07
216-T-6	--------	1.00E+02	1.25E-13	8.96E+01	7.55E-03	--------	--------	--------	2.39E+01	4.63E+02	4.50E+07
216-T-7	--------	1.94E+01	2.11E-12	1.72E+01	3.03E-03	--------	--------	--------	7.98E+00	8.91E+01	1.10E+08
216-T-8	--------	3.04E-01	1.37E-14	3.25E-01	1.50E-03	--------	--------	--------	3.07E-01	1.54E+00	5.00E+05
216-T-19	2.57E+00	2.25E+01	1.24E-08	1.42E+02	3.19E-03	--------	--------	9.68E-04	8.82E-01	3.92E+02	4.55E+08
216-T-20	--------	3.14E-01	1.53E-14	3.57E-01	1.66E-03	--------	--------	--------	--------	1.63E+00	1.89E+04
216-T-26	--------	2.28E+02	1.65E-10	6.13E+01	4.99E-02	--------	--------	--------	3.62E+00	7.14E+02	1.20E+07
216-T-27	--------	6.08E+01	8.43E-08	4.54E+01	2.42E-03	--------	--------	--------	7.98E-01	2.58E+02	7.19E+06
216-T-28	--------	8.54E+01	4.03E-08	1.56E+02	1.30E-01	--------	--------	--------	4.30E+00	5.99E+02	4.23E+07
216-T-32	--------	8.82E+00	9.16E-14	7.87E+00	7.55E-01	--------	--------	--------	1.97E+02	4.07E+01	2.90E+07
216-T-33	--------	2.07E-01	1.41E-10	2.17E-01	1.51E-03	--------	--------	--------	3.07E-01	1.06E+00	1.90E+06
216-T-34	--------	1.44E+02	1.23E-08	1.28E+02	1.37E-03	--------	--------	--------	6.57E+00	6.68E+02	1.73E+07

Table 4, Cont'd

CUMULATIVE, DECAYED INVENTORY OF 200-AREA CRIBS

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-T-35	--------	9.23E+00	2.97E-08	9.46E+00	1.63E-02	--------	--------	--------	4.06E+00	4.56E+01	5.72E+06
216-T-36	--------	3.52E+00	1.08E-08	3.07E+00	3.92E-04	--------	--------	--------	1.52E-01	1.60E+01	5.22E+05
216-U-1&2	--------	1.70E+00	1.25E-09	3.53E+00	7.01E-01	--------	--------	--------	2.62E+00	1.26E+01	4.62E+07
216-U-3	--------	<3.31E-02	2.84E-14	3.52E-01	6.04E-03	--------	--------	--------	6.14E-03	9.17E-01	7.91E+05
216-U-8	--------	<3.48E-02	2.40E-11	<3.69E-02	8.00E+00	--------	--------	--------	2.27E+01	6.50E-01	3.79E+08
216-U-12	1.18E+02	9.03E+00	<3.88E-07	9.05E+00	<1.87E+00	--------	<7.68E-02	<4.85E-01	5.05E+02	4.42E+01	1.65E+11
216-U-13	1.13E-03	4.51E+01	2.37E-07	4.79E-02	6.76E-01	--------	1.23E-02	6.35E-03	1.05E-01	1.12E+02	1.50E+08
216-U-16	--------	<7.43E-03	<3.30E-08	1.34E-02	5.91E-03	--------	9.01E-02	<2.30E-01	7.39E-03	5.15E-02	4.09E+08
216-U-17	5.09E+01	5.18E-06	--------	--------	1.14E-03	--------	<2.96E-05	7.80E-05	5.77E-04	6.83E-03	5.90E+06
616-A	1.97E+02	2.48E-05	--------	--------	--------	4.33E-06	--------	3.19E-06	1.50E-05	1.90E-05	3.10E+07
216-U-4A	--------	1.29E-02	2.55E-10	1.50E-01	2.95E-03	--------	--------	--------	<5.53E-04	3.87E-01	5.45E+05
216-U-4B	--------	1.33E-03	--------	1.59E-01	--------	--------	--------	--------	3.32E-03	3.81E-01	3.30E+04
216-W-LWC	2.95E-06	1.38E-01	5.59E-06	2.48E-01	1.10E-03	--------	2.60E-02	3.63E-02	2.61E-01	2.13E+00	1.32E+09
216-Z-3	--------	<3.65E-02	1.25E-11	<3.86E-02	<1.66E-05	--------	--------	--------	3.50E+02	1.84E-01	1.78E+08
216-Z-4	--------	<2.65E-02	5.72E-17	<2.86E-02	<1.66E-05	--------	--------	--------	1.23E-01	1.34E-01	1.10E+04
216-Z-5	--------	1.35E+00	1.07E-14	2.92E+00	<1.66E-05	--------	--------	--------	2.09E+01	1.03E+01	3.10E+07
216-Z-6	--------	<2.65E-02	5.72E-17	<2.86E-02	<1.66E-05	--------	--------	--------	3.07E-01	1.34E-01	9.80E+04
216-Z-7	--------	1.64E+02	1.06E-08	1.67E+02	1.50E-03	--------	--------	--------	1.23E+02	8.02E+02	7.99E+07
216-Z-8	--------	--------	--------	--------	--------	--------	--------	--------	2.97E+00	--------	9.59E+03
216-Z-9	--------	<3.93E-02	3.91E-11	<4.14E-02	<1.66E-05	--------	--------	--------	2.35E+03	1.98E-01	4.09E+06
216-Z-1A	--------	<3.65E-02	2.76E-12	<3.86E-02	<1.66E-05	--------	--------	--------	3.07E+00	1.84E-01	1.00E+06
216-Z-10	--------	--------	--------	--------	--------	--------	--------	--------	3.07E+00	--------	1.00E+06
216-Z-12	--------	<4.13E-02	1.92E-09	<4.33E-02	<1.66E-05	--------	--------	--------	1.54E+03	2.10E-01	2.81E+08
216-Z-16	--------	4.39E-05	2.55E-12	4.84E-05	--------	--------	--------	--------	4.40E+00	1.00E-03	1.02E+08
216-Z-17	--------	--------	--------	--------	--------	--------	--------	--------	3.08E+00	4.48E-04	3.68E+07
216-Z-20	--------	8.38E-02	<3.31E-07	1.01E-01	--------	2.23E-02	2.06E+00	1.04E+00	2.25E+00	4.15E-01	4.46E+09

Table 5

CUMULATIVE, DECAYED INVENTORY OF 200-AREA SPECIFIC RETENTION SITES

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-A-1	-------	<3.39E-02	<5.67E-15	<3.60E-02	5.13E-02	-------	-------	-------	<6.14E-03	1.70E-01	9.84E+04
216-A-2	-------	7.43E-01	1.61E-10	1.18E+00	2.60E-02	-------	-------	-------	7.98E+00	4.71E+00	2.30E+05
216-A-18	-------	<3.39E-02	<5.67E-15	<3.60E-02	4.68E-01	-------	-------	-------	<6.14E-03	1.72E-01	4.88E+05
216-A-19	-------	<3.39E-02	<5.67E-15	<3.60E-02	1.30E+01	-------	-------	-------	<6.14E-03	1.70E-01	1.10E+06
216-A-20	-------	<3.39E-02	<5.67E-15	<3.60E-02	1.34E-01	-------	-------	-------	<6.14E-03	1.70E-01	9.61E+05
216-A-31	-------	8.47E-01	2.68E-06	6.65E+01	6.81E-03	-------	-------	-------	5.53E-01	1.62E+02	1.00E+04
216-A-36A	-------	7.89E+02	2.40E-07	6.87E+02	4.83E-02	-------	-------	-------	4.91E+00	3.63E+03	1.07E+06
216-A-39	-------	-------	-------	1.16E+01	-------	-------	-------	-------	-------	2.75E+01	2.00E+01
216-A-40	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	9.46E+05
216-B-20	-------	2.75E+02	1.13E-09	5.55E+02	1.17E-01	-------	-------	-------	7.98E-02	2.00E+03	4.68E+06
216-B-21	-------	2.57E+02	1.66E-09	1.37E+02	2.25E-01	-------	-------	-------	6.32E-01	9.65E+02	4.67E+06
216-B-22	-------	1.42E+02	3.41E-09	1.66E+01	1.39E-01	-------	-------	-------	1.60E-01	3.98E+02	4.74E+06
216-B-23	-------	5.04E+01	1.69E-09	4.13E+01	5.19E-02	-------	-------	-------	1.11E-01	2.26E+02	4.52E+06
216-B-24	-------	6.30E+01	2.61E-09	4.76E+01	8.18E-02	-------	-------	-------	4.73E-01	2.74E+02	4.70E+06
216-B-25	-------	7.13E+01	1.76E-09	2.06E+01	5.09E-02	-------	-------	-------	1.23E-01	2.29E+02	3.76E+06
216-B-26	-------	3.83E+02	4.00E-09	3.55E+02	1.96E-01	-------	-------	-------	1.54E-01	1.80E+03	5.88E+06
216-B-27	-------	2.12E+02	3.93E-09	1.28E+01	1.14E-01	-------	-------	-------	4.30E-02	5.60E+02	4.42E+06
216-B-28	-------	3.99E+01	1.18E-09	8.68E+00	9.98E-02	-------	-------	-------	3.44E-01	1.21E+02	5.05E+06
216-B-29	-------	6.84E+01	3.64E-09	2.23E+01	1.14E-01	-------	-------	-------	6.75E-02	2.26E+02	4.84E+06
216-B-30	-------	2.14E+02	8.76E-10	1.27E+03	2.93E-02	-------	-------	-------	1.29E-01	3.54E+03	4.78E+06
216-B-31	-------	7.45E+01	1.37E-09	1.06E+01	4.06E-02	-------	-------	-------	3.19E-01	2.11E+02	4.74E+06
216-B-32	-------	9.09E+01	8.54E-10	4.75E+01	3.66E-03	-------	-------	-------	1.60E-01	3.39E+02	4.77E+06
216-B-33	-------	1.46E+01	7.30E-10	1.03E+02	6.65E-03	-------	-------	-------	7.25E-01	2.81E+02	4.74E+06
216-B-34	-------	1.46E+01	3.11E-10	6.42E+00	2.83E-02	-------	-------	-------	3.50E-01	5.17E+01	4.87E+06

Table 5, Cont'd

CUMULATIVE, DECAYED INVENTORY OF 200-AREA SPECIFIC RETENTION SITES

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-B-35	-------	7.78E+01	6.52E-12	1.50E+02	5.56E-03	-------	-------	-------	7.37E-02	5.49E+02	1.06E+06
216-B-36	-------	1.61E+02	1.34E-11	2.72E+02	5.31E-03	-------	-------	-------	4.91E-02	1.04E+03	1.94E+06
216-B-37	-------	5.30E+00	1.42E-11	1.09E+03	1.21E-03	-------	-------	-------	1.23E-01	2.60E+03	4.32E+06
216-B-38	-------	6.13E+02	1.59E-11	1.79E+02	1.41E-02	-------	-------	-------	7.37E-02	1.94E+03	1.43E+06
216-B-39	-------	7.48E+00	1.18E-12	1.56E+02	1.93E-03	-------	-------	-------	9.27E-02	3.87E+02	1.54E+06
216-B-40	-------	9.28E+01	6.94E-12	1.24E+02	1.16E-02	-------	-------	-------	6.14E-02	5.23E+02	1.64E+06
216-B-41	-------	1.56E+01	3.73E-12	3.13E+02	2.50E-03	-------	-------	-------	1.84E-02	7.80E+02	1.44E+06
216-B-42	-------	3.73E+02	8.50E-11	3.46E+01	2.26E-01	-------	-------	-------	6.14E-01	1.01E+03	1.50E+06
216-B-52	-------	3.97E+00	2.91E-09	1.30E+02	9.96E-03	-------	-------	-------	1.17E+00	3.17E+02	8.53E+06
216-B-53A	-------	<4.34E-02	2.81E-10	<4.54E-02	7.55E-03	-------	-------	-------	6.14E+00	2.46E-01	5.49E+05
216-B-53B	-------	4.08E+00	4.25E-11	3.00E+00	3.02E-03	-------	-------	-------	3.07E-01	1.73E+01	1.51E+04
216-B-54	-------	4.24E-02	3.24E-10	4.43E-02	3.02E-03	-------	-------	-------	3.07E-01	9.45E-01	9.99E+05
216-B-58	-------	4.48E+00	9.67E-10	3.57E+00	3.03E-03	-------	-------	-------	4.11E-01	1.97E+01	4.13E+05
216-B-59	-------	2.34E-02	-------	9.72E-03	-------	-------	-------	-------	-------	8.32E-02	4.77E+05
216-B-60	-------	-------	-------	3.80E+00	2.38E-01	-------	-------	-------	4.91E-03	9.63E+00	1.89E+04
216-C-4	-------	9.56E+00	1.10E-12	<3.52E-02	1.13E-03	-------	-------	-------	6.14E-02	2.38E+01	1.70E+05
216-C-6	-------	2.33E+01	5.63E-11	<3.77E-02	1.51E-05	-------	-------	-------	6.14E-03	5.81E+01	5.30E+05
216-S-8	-------	3.11E-01	2.69E-13	3.99E+00	6.49E-02	-------	-------	-------	1.23E-01	1.05E+01	1.00E+07
216-S-12	-------	3.31E-01	2.84E-14	3.52E-01	1.66E-03	-------	-------	-------	6.14E-02	1.65E+00	6.81E+04
216-S-13	-------	1.65E-02	4.87E-09	2.25E+00	<3.03E-02	-------	-------	-------	4.91E-01	5.50E+00	5.00E+06
216-T-5	-------	3.39E-01	1.70E-12	2.52E+01	1.51E-03	-------	-------	-------	1.11E+01	6.06E+01	2.60E+06
216-T-12	-------	1.66E+00	2.84E-13	3.52E+00	1.51E-02	-------	-------	-------	6.14E-02	1.25E+01	5.00E+06
216-T-14	-------	1.99E+00	4.27E-13	1.65E+02	1.01E-02	-------	-------	-------	5.40E-02	3.96E+02	1.00E+06
216-T-15	-------	6.96E+00	3.41E-13	3.65E+02	9.05E-03	-------	-------	-------	5.77E-02	8.81E+02	1.00E+06

Table 5, Cont'd

CUMULATIVE, DECAYED INVENTORY OF 200-AREA SPECIFIC RETENTION SITES

Radionuclides in Ci, decayed to 12/31/98

Waste Site	H-3	Sr-90	Ru-106	Cs-137	Total U	Pu-238	Pu-239/40	Am-241	Total Alpha	Total Beta	Volume (L)
216-T-16	--------	2.65E+00	3.70E-13	1.84E+02	7.39E-03	--------	--------	--------	3.99E-02	4.42E+02	1.00E+06
216-T-17	--------	9.94E-01	2.84E-13	1.31E+02	6.75E-03	--------	--------	--------	3.25E-02	3.13E+02	7.85E+05
216-T-18	--------	2.26E+00	2.85E-12	1.96E+01	9.05E-03	--------	--------	--------	1.11E+02	5.22E+01	1.00E+06
216-T-21	--------	2.65E+00	1.76E-12	1.41E+02	3.33E-04	--------	--------	--------	6.14E-02	3.42E+02	4.60E+05
216-T-22	--------	1.69E+01	8.54E-13	6.52E+02	6.65E-04	--------	--------	--------	1.23E-01	1.58E+03	1.53E+06
216-T-23	--------	1.36E+01	7.40E-13	4.68E+02	3.33E-04	--------	--------	--------	6.14E-02	1.14E+03	1.48E+06
216-T-24	--------	1.32E+01	9.10E-13	5.00E+02	2.76E-03	--------	--------	--------	1.23E-01	1.22E+03	1.53E+06
216-T-25	--------	1.32E+00	2.84E-12	3.13E+03	3.03E-04	--------	--------	--------	6.14E-02	7.42E+03	3.00E+06
216-T-30	--------	1.29E+01	7.14E-13	1.38E+01	1.51E-03	--------	--------	--------	6.14E-02	6.47E+01	1.90E+04
216-U-5	--------	<1.58E-02	<3.58E-16	<1.68E-02	1.21E-01	--------	--------	--------	<3.07E-03	7.92E-02	2.25E+06
216-U-6	--------	<1.58E-02	<3.58E-16	<1.68E-02	1.21E-01	--------	--------	--------	<3.07E-03	7.92E-02	2.25E+06
216-U-15	--------	3.57E-02	2.25E-13	3.77E-02	7.55E-04	--------	--------	--------	<6.14E-03	1.80E-01	6.81E+04
216-Z-1&2	--------	<3.00E-02	3.23E-14	<3.21E-02	2.69E-02	--------	--------	--------	4.31E+02	1.57E-01	3.37E+07
216-Z-1AA	--------	<4.24E-02	5.11E-09	<4.43E-02	<1.66E-05	--------	--------	--------	1.84E+03	2.16E-01	1.90E+06
216-Z-1AB	--------	<4.45E-02	5.60E-09	<4.64E-02	<1.66E-05	--------	--------	--------	1.02E+03	2.26E-01	1.90E+06
216-Z-1AC	--------	--------	--------	--------	--------	--------	--------	--------	6.63E+02	--------	1.41E+06
216-Z-18	--------	--------	--------	--------	--------	--------	--------	--------	1.41E+03	--------	3.86E+06

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ATTACHMENT C

CUMULATIVE DECAYED INVENTORY OF LIQUID WASTE SITES

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ATTACHMENT C

CUMULATIVE DECAYED INVENTORY OF LIQUID WASTE SITES

The following provides information on the radioactive liquid waste sites (ERS database). These sites intentionally received radioactive waste, and most were engineered structures, i.e., cribs, ponds, and trenches. Unplanned release sites are not included. The tables provide the total volume of liquid discharged and the years of service that the site was used (if documented). The inventory data were derived from sample collection and analysis; either of the influent or by characterization of the soil after the site was inactive. There are some sites for which no data or records were kept. A few sites were exhumed and cleaned up over the years. Those sites are not included in this list. This listing is of 100 and 200 AreaS sites that remain contaminated at the time of this writing. The Environmental Restoration Contractor (Bechtel Hanford, Inc.) recently has been excavating several sites for cleanup. At this time, the 100 Area sites include: 116-C-1, C-5, B-1, B-11, B-13, B-14, 107-D-1, D-2, D-3, D-4, D-5, 116-D-7, DR-9, and DR-1&2. In the 300 Area, the sites include: 316-1, 316-2, and 316-5.

Only radionuclides with half-lives greater that 1 year and whose abundance is greater that 0.001% of the total activity of the invertory are listed. Also, note that the half-life shown for Total Uranium is that of U-238, and the half-life shown for Pu-239/240 is that of Pu-239.

Site # 68: 116-N-1
1301-N Crib & Trench
(N-Reactor coolant and basin overflow)
Active from 01/01/64 to 09/19/85
Cumulative Waste Volume 8.37E+10 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	5.29E+03
2.	Co-60	5.27 Years	7.96E+02
3.	Sr-90	29.12 Years	1.61E+03
4.	Ru-106	368 Days	1.55E-02
5.	Cs-134	2.1 Years	8.05E-01
6.	Cs-137	30 Years	2.11E+03
7.	U-235	7.04E+8 Years	2.72E-07
8.	Pu-239/40	24,131 Years	2.30E+01

Note: These values were measurements of the influent concentrations. The tritium and other more soluable forms of radionuclides have travelled to the groundwater and reached the river.

Site # 69: 116-N-3
1325-N Crib & Trench
(N-Reactor coolant and basin overflow)
Active from 10/09/83 to 04/24/91
Cumulative Waste Volume 7.61E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.23E+02
2.	Co-60	5.27 Years	2.27E+02
3.	Sr-90	29.12 Years	1.61E+02
4.	Ru-106	368 Days	2.06E-02
5.	Sb-125	2.8 Years	3.68E-01
6.	Cs-134	2.1 Years	2.62E-01
7.	Cs-137	30 Years	2.92E+02
8.	Ra-226	1,600 Years	1.78E-14
9.	U-234	2.45E+5 Years	1.73E-06
10.	U-235	7.04E+8 Years	3.25E-08
11.	U-238	4.47E+9 Years	5.49E-02
12.	Pu-239/40	24,131 Years	2.80E+00
13.	Total α	n/a	1.00E+00
14.	Total β	n/a	3.00E+02

Note: These values were measurements of the influent concentrations. The tritium and other more soluable forms of radionuclides have travelled to the groundwater and reached the river.

Site # 6: 116-B-2
105-B Trench
(received basin water after fuel element cut)
Active from 01/01/46 to 12/31/46

Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.59E-02
2.	Co-60	5.27 Years	4.37E-05
3.	Sr-90	29.12 Years	8.10E-02
4.	Cs-137	30 Years	4.57E-02
5.	Eu-152	13.3 Years	2.54E-03
6.	Eu-154	8.8 Years	1.72E-04
7.	Eu-155	4.96 Years	1.80E-04
8.	U-235	7.04E+8 Years	5.88E-11
9.	Pu-239/40	24,131 Years	2.59E-03

Site # 8: 116-B-3
105-B Pluto Crib
(coolant water after fuel failures)
Active from 01/01/51 to 12/31/56
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	9.94E-02
2.	Co-60	5.27 Years	4.57E-02
3.	Sr-90	29.12 Years	1.39E-02
4.	Cs-137	30 Years	9.95E-02
5.	Eu-152	13.3 Years	1.30E-01
6.	Eu-154	8.8 Years	1.14E-02
7.	Eu-155	4.96 Years	1.00E-03
8.	Ra-226	1,600 Years	1.76E-16
9.	U-234	2.45E+5 Years	7.75E-09
10.	U-235	7.04E+8 Years	1.52E-10
11.	Pu-238	87.8 Years	1.08E-04
12.	Pu-239/40	24,131 Years	6.68E-03

Site # 9: 116-B-5
108-B Crib
(disposal of liquid tritium)
Active from 01/01/50 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	8.29E+01
2.	Co-60	5.27 Years	5.35E-03
3.	Sr-90	29.12 Years	8.10E-04
4.	Cs-137	30 Years	1.46E-03
5.	Eu-152	13.3 Years	4.33E-02
6.	Eu-154	8.8 Years	7.04E-03

7.	Eu-155	4.96 Years	2.81E-05

Site # 10: 116-B-6-1
111-B Crib #1
(received rad liquid waste from 111-B)
Active from 01/01/51 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.16E-04
2.	Sr-90	29.12 Years	6.37E-01
3.	Cs-137	30 Years	1.05E-01
4.	Eu-152	13.3 Years	2.66E-05
5.	Eu-154	8.8 Years	4.07E-05
6.	Eu-155	4.96 Years	2.93E-04
7.	U-235	7.04E+8 Years	4.53E-11
8.	Pu-239/40	24,131 Years	2.00E-03

Site # 11: 116-B-6-2
111-B Crib #2
(received rad liquid waste from 111-B)
Active from 01/01/51 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.31E-03
2.	Co-60	5.27 Years	2.14E-06
3.	Sr-90	29.12 Years	1.33E-04
4.	Cs-137	30 Years	1.46E-04
5.	Eu-152	13.3 Years	7.43E-05
6.	Eu-155	4.96 Years	5.61E-06

Site # 14: 116-C-2
105-C Pluto Crib
(liquid waste from dummy decon)
Note: "Dummy" is slang for "fuel element spacer"
Active from 01/01/52 to 12/31/56
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.38E-01
2.	Co-60	5.27 Years	1.90E-03
3.	Sr-90	29.12 Years	6.94E-01
4.	Cs-137	30 Years	5.86E-04
5.	Eu-152	13.3 Years	4.33E-03

6.	Eu-154	8.8 Years	1.49E-04
7.	Eu-155	4.96 Years	5.61E-03

Site # 19: 116-C-8
105-C Pluto Crib Sand Filter

Active from Unknown to Unknown
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.24E-01
2.	Co-60	5.27 Years	1.12E+01
3.	Sr-90	29.12 Years	1.27E+00
4.	Cs-137	30 Years	5.86E+00
5.	Eu-152	13.3 Years	2.45E+00
6.	Eu-154	8.8 Years	9.54E-02
7.	Eu-155	4.96 Years	2.69E-01
8.	Ra-226	1,600 Years	1.62E-13
9.	U-234	2.45E+5 Years	7.15E-06
10.	U-235	7.04E+8 Years	2.72E-09
11.	Pu-238	87.8 Years	1.00E-01
12.	Pu-239/40	24,131 Years	1.20E-01

Site # 60: 116-KE-2
1706-KER Crib
(waste from cleanup columns in 1706-KER loop)
Active from 01/01/57 to 12/31/64
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.88E-01
2.	Co-60	5.27 Years	1.60E+00
3.	Sr-90	29.12 Years	4.63E-01
4.	Cs-137	30 Years	2.34E-03
5.	Eu-152	13.3 Years	1.02E-01
6.	Eu-154	8.8 Years	7.51E-03
7.	Ra-226	1,600 Years	2.57E-14
8.	U-234	2.45E+5 Years	1.13E-06
9.	Pu-238	87.8 Years	1.58E-02

Site # 64: 116-KW-1
115-KW Crib
(received condensate from reactor gas system)
Active from 01/01/55 to 12/31/71
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.59E+01
2.	Co-60	5.27 Years	1.46E-04
3.	Sr-90	29.12 Years	4.40E-03
4.	Cs-137	30 Years	2.58E-03
5.	Eu-154	8.8 Years	2.50E-05
6.	Eu-155	4.96 Years	1.20E-04

Site # 20: 116-D-1A
Trench #1
(received water and sludge from 105-D basin)
Active from 01/01/47 to 12/31/52
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.87E-01
2.	Co-60	5.27 Years	1.99E+00
3.	Sr-90	29.12 Years	8.68E-02
4.	Cs-137	30 Years	7.61E-01
5.	Eu-152	13.3 Years	3.41E-01
6.	Eu-154	8.8 Years	3.44E-02
7.	Eu-155	4.96 Years	4.41E-03
8.	U-235	7.04E+8 Years	4.53E-10
9.	Pu-239/40	24,131 Years	2.00E-02

Site # 21: 116-D-1B
Trench #2
(received water and sludge from 105-D basin)
Active from 01/01/53 to 12/31/67
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	5.52E-02
2.	Co-60	5.27 Years	9.72E-03
3.	Sr-90	29.12 Years	1.16E-01
4.	Cs-137	30 Years	3.63E-01
5.	Eu-152	13.3 Years	1.33E-01
6.	Eu-154	8.8 Years	1.30E-02
7.	Eu-155	4.96 Years	3.53E-02
8.	U-235	7.04E+8 Years	1.52E-10
9.	Pu-239/40	24,131 Years	6.68E-03

Site # 27: 116-DR-3
Trench
(sludge from 105-DR basin)

Active from 01/01/55 to 12/31/55
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	9.12E-02
2.	Co-60	5.27 Years	1.46E-03
3.	Sr-90	29.12 Years	3.65E-02
4.	Cs-137	30 Years	2.52E-02
5.	Eu-152	13.3 Years	9.29E-03
6.	Eu-154	8.8 Years	9.38E-04
7.	Eu-155	4.96 Years	3.21E-05
8.	U-235	7.04E+8 Years	7.47E-11
9.	Pu-239/40	24,131 Years	3.29E-03

Site # 28: 116-DR-4
105-DR Pluto Crib
(received water during fuel failures)
Active from 01/01/50 to 12/31/56
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.70E-04
2.	Sr-90	29.12 Years	3.07E-03
3.	Cs-137	30 Years	2.69E-02
4.	Eu-152	13.3 Years	1.49E-03
5.	Eu-155	4.96 Years	2.33E-05
6.	U-235	7.04E+8 Years	2.26E-12
7.	Pu-239/40	24,131 Years	9.98E-05

Site # 34: 116-F-1
A ditch, commonly called the Lewis Canal
(received liquid waste from 105-F and 190-F)
Active from 01/01/53 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	8.84E-02
2.	Co--60	5.27 Years	3.21E-02
3.	Sr--90	29.12 Years	3.65E-02
4.	Cs--137	30 Years	6.44E-01
5.	Eu--152	13.3 Years	2.63E-01
6.	Eu--154	8.8 Years	5.94E-02
7.	Eu--155	4.96 Years	1.68E-04
8.	U-235	7.04E+8 Years	1.49E-10
9.	Pu--239/40	24,131 Years	6.58E-03

Site # 42: 116-F-3
Trench
(effluent during fuel failures, and sludge)
Active from 01/01/49 to 12/31/51
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.10E-04
2.	Co-60	5.27 Years	6.81E-06
3.	Sr-90	29.12 Years	2.55E-04
4.	Eu-152	13.3 Years	1.42E-04
5.	Eu-155	4.96 Years	1.20E-05

Site # 43: 116-F-4
105-F Pluto Crib
(effluent during fuel failures)
Active from 01/01/50 to 12/31/56
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	4.70E-03
2.	Co-60	5.27 Years	2.72E-05
3.	Sr-90	29.12 Years	7.52E-01
4.	Cs-137	30 Years	1.11E+00
5.	Eu-152	13.3 Years	3.41E-03
6.	Eu-154	8.8 Years	7.51E-03
7.	Eu-155	4.96 Years	4.41E-03
8.	Ra-226	1,600 Years	7.58E-16
9.	U-234	2.45E+5 Years	3.34E-08
10.	U-235	7.04E+8 Years	9.50E-10
11.	Pu-238	87.8 Years	4.67E-04
12.	Pu-239/40	24,131 Years	4.19E-02

Site # 44: 116-F-5
Ball Washer Crib
(liquid waste from decon of boron balls)
Active from 01/01/53 to 12/31/53
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Sr-90	29.12 Years	1.85E-05
2.	Cs-137	30 Years	2.81E-05
3.	Eu-154	8.8 Years	1.02E-04
4.	Eu-155	4.96 Years	7.62E-06

Site # 45: 116-F-6
1608-F Liquid Waste
(received outage effluent water)
Active from 01/01/52 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	6.35E-01
2.	Co-60	5.27 Years	4.86E-02
3.	Sr-90	29.12 Years	1.22E-01
4.	Cs-137	30 Years	3.86E-01
5.	Eu-152	13.3 Years	5.26E-01
6.	Eu-154	8.8 Years	8.29E-02
7.	Eu-155	4.96 Years	2.97E-03
8.	U-235	7.04E+8 Years	2.22E-10
9.	Pu-239/40	24,131 Years	9.78E-03

Site # 46: 116-F-7
117-F Crib
(drainage from filter seal pits)
Active from 01/01/60 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Sr-90	29.12 Years	9.84E-06
2.	Cs-137	30 Years	5.74E-06
3.	Eu-152	13.3 Years	2.48E-05
4.	Eu-154	8.8 Years	4.07E-04
5.	Eu-155	4.96 Years	2.49E-04
6.	U-235	7.04E+8 Years	7.02E-13
7.	Pu-239/40	24,131 Years	3.09E-05

Site # 47: 116-F-8
Perforated Decontamination Drain
(Outfall structure for discharging to river)
Active from 01/01/45 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.63E-02
2.	Co-60	5.27 Years	1.46E-03
3.	Sr-90	29.12 Years	4.11E-05
4.	Cs-137	30 Years	4.74E-03
5.	Eu-152	13.3 Years	5.57E-03
6.	Eu-154	8.8 Years	4.07E-04
7.	Eu-155	4.96 Years	2.49E-04

8.	U-235	7.04E+8 Years	1.83E-12
9.	Pu-239/40	24,131 Years	8.08E-05

Site # 49: 116-H-2
1608-H Trench
(received coolant during ball system upgrade)
Active from 01/01/53 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	9.39E-02
2.	Co-60	5.27 Years	1.41E-03
3.	Sr-90	29.12 Years	3.47E-01
4.	Cs-137	30 Years	1.82E-01
5.	Eu-152	13.3 Years	2.51E-02
6.	Eu-154	8.8 Years	3.13E-03
7.	Eu-155	4.96 Years	5.21E-04
8.	U-235	7.04E+8 Years	9.50E-12
9.	Pu-239/40	24,131 Years	4.19E-04

Site # 50: 116-H-3
(french drain for 105-H Decon)
received acid wash during dummy decon
Active from 10/01/50 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.87E-04
2.	Co-60	5.27 Years	7.29E-04
3.	Sr-90	29.12 Years	9.84E-05
4.	Cs-137	30 Years	2.34E-02
5.	Eu-152	13.3 Years	3.10E-03
6.	Eu-154	8.8 Years	4.22E-04
7.	Eu-155	4.96 Years	1.48E-05
8.	U-235	7.04E+8 Years	1.90E-12
9.	Pu-239/40	24,131 Years	8.38E-05

Site # 4: 116-B-11s
107-B Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.07E-02

2.	Co-60	5.27 Years	7.78E-01
3.	Sr-90	29.12 Years	3.36E-02
4.	Cs-137	30 Years	2.87E-01
5.	Eu-152	13.3 Years	7.43E+00
6.	Eu-154	8.8 Years	1.88E+00
7.	Eu-155	4.96 Years	4.41E-02
8.	Ra-226	1,600 Years	3.79E-15
9.	U-234	2.45E+5 Years	1.67E-07
10.	U-235	7.04E+8 Years	1.97E-09
11.	Pu-238	87.8 Years	2.33E-03
12.	Pu-239/40	24,131 Years	8.68E-02

Site # 3: 116-B-11f
107-B Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.71E-01
2.	Co-60	5.27 Years	2.14E-01
3.	Sr-90	29.12 Years	3.36E-02
4.	Cs-137	30 Years	3.16E-01
5.	Eu-152	13.3 Years	1.98E+00
6.	Eu-154	8.8 Years	5.00E-01
7.	Eu-155	4.96 Years	1.28E-02
8.	Ra-226	1,600 Years	1.35E-16
9.	U-234	2.45E+5 Years	5.96E-09
10.	U-235	7.04E+8 Years	4.07E-10
11.	Pu-238	87.8 Years	8.33E-05
12.	Pu-239/40	24,131 Years	1.80E-02

Site # 2: 116-B-11a
Adjacent to 107-B Retention Basin
(Contaminated soil)
Active from 01/01/44 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.31E-01
2.	Co-60	5.27 Years	3.40E-01
3.	Sr-90	29.12 Years	2.78E-01
4.	Cs-137	30 Years	4.45E+00
5.	Eu-152	13.3 Years	1.58E+00
6.	Eu-154	8.8 Years	2.50E-01
7.	Eu-155	4.96 Years	1.64E-02
8.	U-235	7.04E+8 Years	1.36E-09
9.	Pu-239/40	24,131 Years	5.99E-02

Site # 5: 116-B-11u
Under 107-B Retention Basin
(Contaminated Soil)
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.30E+00
2.	Co-60	5.27 Years	4.37E+00
3.	Sr-90	29.12 Years	3.13E-01
4.	Cs-137	30 Years	1.87E-01
5.	Eu-152	13.3 Years	3.41E+01
6.	Eu-154	8.8 Years	6.57E+00
7.	Eu-155	4.96 Years	1.44E-01
8.	Ra-226	1,600 Years	2.03E-14
9.	U-234	2.45E+5 Years	8.94E-07
10.	U-235	7.04E+8 Years	1.70E-08
11.	Pu-238	87.8 Years	1.25E-02
12.	Pu-239/40	24,131 Years	7.48E-01

Site # 17: 116-C-5s
107-C Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	6.91E-02
2.	Co-60	5.27 Years	9.24E-02
3.	Sr-90	29.12 Years	8.10E-02
4.	Cs-137	30 Years	3.16E-01
5.	Eu-152	13.3 Years	6.50E-01
6.	Eu-154	8.8 Years	3.28E-01
7.	Eu-155	4.96 Years	1.48E-04
8.	Ra-226	1,600 Years	1.62E-15
9.	U-234	2.45E+5 Years	7.15E-08
10.	U-235	7.04E+8 Years	7.24E-10
11.	Pu-238	87.8 Years	1.00E-03
12.	Pu-239/40	24,131 Years	3.19E-02

Site # 16: 116-C-5f
107-C Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.21E-02
2.	Sr-90	29.12 Years	9.26E-02
3.	Cs-137	30 Years	4.51E-01
4.	Eu-152	13.3 Years	3.72E-01
5.	Eu-154	8.8 Years	1.00E-01
6.	Eu-155	4.96 Years	2.65E-02
7.	Ra-226	1,600 Years	1.16E-15
8.	U-234	2.45E+5 Years	5.13E-08
9.	U-235	7.04E+8 Years	2.94E-10
10.	Pu-238	87.8 Years	7.17E-04
11.	Pu-239/40	24,131 Years	1.30E-02

Site # 15: 116-C-5a
Adjacent to 107-C Retention Basins
(Contaminated soil)
Active from 01/01/52 to 12/31/69
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.44E-01
2.	Co-60	5.27 Years	4.72E-02
3.	Sr-90	29.12 Years	1.33E-01
4.	Eu-152	13.3 Years	1.61E-01
5.	Eu-154	8.8 Years	2.66E-02
6.	Eu-155	4.96 Years	7.22E-03
7.	Ra-226	1,600 Years	1.08E-14
8.	U-234	2.45E+5 Years	4.77E-07
9.	Pu-238	87.8 Years	6.67E-03

Site # 18: 116-C-5u
Under 107-C Retention Basins
(Contaminated Soil)
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.55E-01
2.	Co-60	5.27 Years	2.92E+00
3.	Sr-90	29.12 Years	1.39E+00
4.	Cs-137	30 Years	1.11E-01
5.	Eu-152	13.3 Years	1.61E-01
6.	Eu-154	8.8 Years	2.66E-02
7.	Eu-155	4.96 Years	1.76E-01
8.	U-235	7.04E+8 Years	5.66E-09
9.	Pu-239/40	24,131 Years	2.49E-01

Site # 1: 116-B-1
107-B Liquid Waste Disposal Trench
(effluent water during fuel failure outages)
Active from 01/01/50 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.51E-02
2.	Co-60	5.27 Years	1.41E-02
3.	Sr-90	29.12 Years	4.98E-02
4.	Cs-137	30 Years	2.17E-01
5.	Eu-152	13.3 Years	5.57E-01
6.	Eu-154	8.8 Years	5.79E-02
7.	Eu-155	4.96 Years	3.09E-03
8.	Ra-226	1,600 Years	1.35E-16
9.	U-234	2.45E+5 Years	5.96E-09
10.	U-235	7.04E+8 Years	1.86E-10
11.	Pu-238	87.8 Years	8.33E-05
12.	Pu-239/40	24,131 Years	8.18E-03

Site # 13: 116-C-1
107-C Liquid Waste Disposal Trench
(effluent water during fuel failures)
Active from 01/01/52 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.87E-01
2.	Co-60	5.27 Years	1.56E+00
3.	Sr-90	29.12 Years	1.16E+00
4.	Cs-137	30 Years	4.10E+00
5.	Eu-152	13.3 Years	7.12E+00
6.	Eu-154	8.8 Years	1.88E+00
7.	Eu-155	4.96 Years	4.81E-02
8.	U-235	7.04E+8 Years	2.94E-09
9.	Pu-239/40	24,131 Years	1.30E-01

Site # 12: 116-B-Eff
100-B B/C Effluent Line Junction Box Leakage
(received reactor coolant water)
Active from 01/01/44 to 12/31/68
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.31E-01
2.	Co-60	5.27 Years	1.17E-01

3.	Sr-90	29.12 Years	8.10E-02
4.	Cs-137	30 Years	3.45E+00
5.	Eu-152	13.3 Years	5.26E-01
6.	Eu-154	8.8 Years	5.63E-02
7.	Eu-155	4.96 Years	8.82E-01
8.	Ra-226	1,600 Years	9.88E-16
9.	U-234	2.45E+5 Years	4.35E-08
10.	U-235	7.04E+8 Years	6.11E-10
11.	Pu-238	87.8 Years	6.08E-04
12.	Pu-239/40	24,131 Years	2.69E-02

Site # 7: 116-B-2-1
100-B Effluent Line Leakage

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	8.29E-02
2.	Co-60	5.27 Years	8.26E-02
3.	Sr-90	29.12 Years	1.79E-01
4.	Cs-137	30 Years	5.09E+00
5.	Eu-152	13.3 Years	5.88E-01
6.	Eu-154	8.8 Years	8.13E-02
7.	Eu-155	4.96 Years	1.32E+00
8.	U-235	7.04E+8 Years	2.94E-10
9.	Pu-239/40	24,131 Years	1.30E-02

Site # 63: 116-KE-4s
107-KE Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.49E-04
2.	Co-60	5.27 Years	2.43E-03
3.	Sr-90	29.12 Years	5.73E-04
4.	Cs-137	30 Years	7.61E-04
5.	Eu-152	13.3 Years	1.24E-02
6.	Eu-154	8.8 Years	4.22E-03
7.	Eu-155	4.96 Years	4.41E-04
8.	Ra-226	1,600 Years	2.84E-17
9.	U-234	2.45E+5 Years	1.25E-09
10.	U-235	7.04E+8 Years	5.43E-12
11.	Pu-238	87.8 Years	1.75E-05
12.	Pu-239/40	24,131 Years	2.39E-04

Site # 62: 116-KE-4f
107-KE Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.40E-04
2.	Sr-90	29.12 Years	8.68E-04
3.	Cs-137	30 Years	1.52E-03
4.	Eu-152	13.3 Years	2.35E-02
5.	Eu-154	8.8 Years	4.69E-03
6.	Eu-155	4.96 Years	1.12E-03

Site # 61: 116-KE-4a
Adjacent to 107-KE Retention Basins
(Contaminated soil)
Active from 01/01/55 to 12/31/71
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.59E-02
2.	Co-60	5.27 Years	5.35E-02
3.	Sr-90	29.12 Years	9.26E-02
4.	Cs-137	30 Years	9.95E-01
5.	Eu-152	13.3 Years	6.19E-01
6.	Eu-154	8.8 Years	1.16E-01
7.	Eu-155	4.96 Years	1.28E-02
8.	U-235	7.04E+8 Years	6.79E-12
9.	Pu-239/40	24,131 Years	2.99E-04

Site # 67: 116-KW-3s
107-KW Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	6.63E-05
2.	Co-60	5.27 Years	6.81E-03
3.	Sr-90	29.12 Years	1.97E-03
4.	Cs-137	30 Years	1.29E-03
5.	Eu-152	13.3 Years	3.41E-02
6.	Eu-154	8.8 Years	9.23E-03
7.	Eu-155	4.96 Years	8.42E-06
8.	U-235	7.04E+8 Years	9.50E-12

9.	Pu-239/40	24,131 Years	4.19E-04

Site # 66: 116-KW-3f
107-KW Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.04E-02
2.	Co-60	5.27 Years	9.72E-03
3.	Sr-90	29.12 Years	2.78E-03
4.	Cs-137	30 Years	2.11E-03
5.	Eu-152	13.3 Years	3.10E-02
6.	Eu-154	8.8 Years	6.88E-03
7.	Eu-155	4.96 Years	6.02E-04

Site # 65: 116-KW-3a
Adjacent to 107-KW Retention Basins
(Contaminated soil)
Active from 01/01/55 to 12/31/70
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.08E-01
2.	Co-60	5.27 Years	1.85E-02
3.	Sr-90	29.12 Years	4.17E-02
4.	Cs-137	30 Years	2.99E-01
5.	Eu-152	13.3 Years	4.33E-01
6.	Eu-154	8.8 Years	7.04E-02
7.	Eu-155	4.96 Years	2.73E-02
8.	U-235	7.04E+8 Years	7.24E-11
9.	Pu-239/40	24,131 Years	3.19E-03

Site # 56: 116-K-1
100-K Crib
(received reactor coolant water)
Active from 10/15/55 to 12/31/71
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.08E-01
2.	Sr-90	29.12 Years	4.11E-01
3.	Cs-137	30 Years	1.29E+01
4.	Eu-152	13.3 Years	3.10E-01

5.	Eu-154	8.8 Years	6.41E-01
6.	Eu-155	4.96 Years	1.36E-02
7.	Ra-226	1,600 Years	1.90E-14
8.	U-234	2.45E+5 Years	8.35E-07
9.	U-235	7.04E+8 Years	3.17E-09
10.	Pu-238	87.8 Years	1.17E-02
11.	Pu-239/40	24,131 Years	1.40E-01

Site # 57: 116-K-1a
Adjacent to 116-K-1 Crib
(Contaminated soil)
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.76E-03
2.	Sr-90	29.12 Years	2.84E-02
3.	Cs-137	30 Years	3.16E-02
4.	Eu-152	13.3 Years	2.41E-02
5.	Eu-154	8.8 Years	7.51E-03
6.	Eu-155	4.96 Years	7.22E-04
7.	U-235	7.04E+8 Years	1.77E-11
8.	Pu-239/40	24,131 Years	7.78E-04

Site # 58: 116-K-2
K Trench, commonly called Mile-Long Trench
received reactor coolant water
Active from 01/01/55 to 12/31/71
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	6.91E+00
2.	Co-60	5.27 Years	7.78E+00
3.	Sr-90	29.12 Years	6.37E+00
4.	Cs-137	30 Years	1.05E+02
5.	Eu-152	13.3 Years	3.41E+02
6.	Eu-154	8.8 Years	6.41E+01
7.	Eu-155	4.96 Years	1.36E+00
8.	Ra-226	1,600 Years	2.57E-13
9.	U-234	2.45E+5 Years	1.13E-05
10.	U-235	7.04E+8 Years	1.13E-07
11.	Pu-238	87.8 Years	1.58E-01
12.	Pu-239/40	24,131 Years	4.99E+00

Site # 59: 116-K-2u
Adjacent to 116-K-2 Trench
(Contaminated soil)

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	7.46E+00
2.	Co-60	5.27 Years	2.09E-02
3.	Sr-90	29.12 Years	4.46E+00
4.	Cs-137	30 Years	6.44E-01
5.	Eu-152	13.3 Years	6.19E-01
6.	Eu-155	4.96 Years	3.57E-02

Site # 24: 116-D-7s
107-D Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	6.08E-03
2.	Co-60	5.27 Years	4.72E-01
3.	Sr-90	29.12 Years	6.37E-02
4.	Cs-137	30 Years	5.09E-01
5.	Eu-152	13.3 Years	8.98E+00
6.	Eu-154	8.8 Years	2.50E+00
7.	Eu-155	4.96 Years	6.82E-02
8.	Ra-226	1,600 Years	3.66E-15
9.	U-234	2.45E+5 Years	1.61E-07
10.	U-235	7.04E+8 Years	3.17E-09
11.	Pu-238	87.8 Years	2.25E-03
12.	Pu-239/40	24,131 Years	1.40E-01

Site # 23: 116-D-7f
107-D Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.43E-01
2.	Co-60	5.27 Years	7.29E-04
3.	Sr-90	29.12 Years	9.84E-02
4.	Cs-137	30 Years	1.17E+00
5.	Eu-152	13.3 Years	2.01E-01
6.	Eu-154	8.8 Years	5.63E-02
7.	Eu-155	4.96 Years	8.82E-07
8.	Ra-226	1,600 Years	1.03E-14
9.	U-234	2.45E+5 Years	4.53E-07

10.	Pu-238	87.8 Years	6.33E-03

Site # 22: 116-D-7a
Adjacent to 107-D Retention Basin
(Contaminated soil)
Active from 01/01/44 to 12/31/67
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.24E-01
2.	Co-60	5.27 Years	5.83E-01
3.	Sr-90	29.12 Years	6.37E-02
4.	Cs-137	30 Years	7.61E-01
5.	Eu-152	13.3 Years	2.88E+00
6.	Eu-154	8.8 Years	4.85E-01
7.	Eu-155	4.96 Years	1.60E-02
8.	Ra-226	1,600 Years	1.49E-15
9.	U-234	2.45E+5 Years	6.56E-08
10.	U-235	7.04E+8 Years	1.20E-09
11.	Pu-238	87.8 Years	9.17E-04
12.	Pu-239/40	24,131 Years	5.29E-02

Site # 25: 116-D-7u
Under 107-D Retention Basin
(Contaminated soil)
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.82E-01
2.	Co-60	5.27 Years	9.72E-02
3.	Sr-90	29.12 Years	4.80E-02
4.	Cs-137	30 Years	1.41E+00
5.	Eu-152	13.3 Years	3.10E-01
6.	Eu-154	8.8 Years	5.47E-02
7.	Eu-155	4.96 Years	1.72E-03
8.	U-235	7.04E+8 Years	3.85E-10
9.	Pu-239/40	24,131 Years	1.70E-02

Site # 32: 116-DR-9s
107-DR Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	H-3	12.3 Years	9.39E-03
2.	Co-60	5.27 Years	4.08E-01
3.	Sr-90	29.12 Years	1.10E-01
4.	Cs-137	30 Years	1.46E+00
5.	Eu-152	13.3 Years	5.26E+00
6.	Eu-154	8.8 Years	1.25E+00
7.	Eu-155	4.96 Years	1.36E-02
8.	Ra-226	1,600 Years	1.76E-15
9.	U-234	2.45E+5 Years	7.75E-08
10.	U-235	7.04E+8 Years	1.29E-09
11.	Pu-238	87.8 Years	1.08E-03
12.	Pu-239/40	24,131 Years	5.69E-02

Site # 31: 116-DR-9f
107-DR Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.62E-02
2.	Sr-90	29.12 Years	1.91E-02
3.	Cs-137	30 Years	3.98E-01
4.	Eu-152	13.3 Years	1.39E+00
5.	Eu-154	8.8 Years	1.53E-01
6.	Eu-155	4.96 Years	4.81E-03
7.	Ra-226	1,600 Years	2.17E-16
8.	U-234	2.45E+5 Years	9.54E-09
9.	U-235	7.04E+8 Years	2.26E-10
10.	Pu-238	87.8 Years	1.33E-04
11.	Pu-239/40	24,131 Years	9.98E-03

Site # 30: 116-DR-9a
Adjacent to 107-DR Retention Basin
(soil received coolant water leakage)
Active from 01/01/50 to 12/31/64
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	4.70E-02
2.	Co-60	5.27 Years	4.42E-02
3.	Sr-90	29.12 Years	1.68E-02
4.	Cs-137	30 Years	4.22E-01
5.	Eu-152	13.3 Years	3.72E-01
6.	Eu-154	8.8 Years	6.26E-02
7.	Eu-155	4.96 Years	2.29E-03
8.	U-235	7.04E+8 Years	1.02E-10
9.	Pu-239/40	24,131 Years	4.49E-03

Site # 33: 116-DR-9u
Under 107-DR Retention Basin
(Contaminated soil)
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.05E-01
2.	Co-60	5.27 Years	1.94E-01
3.	Sr-90	29.12 Years	2.03E-01
4.	Cs-137	30 Years	2.87E+00
5.	Eu-152	13.3 Years	1.11E+00
6.	Eu-154	8.8 Years	1.88E-01
7.	Eu-155	4.96 Years	6.42E-03
8.	U-235	7.04E+8 Years	8.83E-10
9.	Pu-239/40	24,131 Years	3.89E-02

Site # 29: 116-DR-9
107-DR Inlet Distribution Chamber Sludge
(basins retained reactor coolant water for decay)
Active from 01/01/50 to 12/31/64
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.51E-02
2.	Sr-90	29.12 Years	1.39E-02
3.	Cs-137	30 Years	8.20E-01
4.	Eu-152	13.3 Years	9.91E-02
5.	Eu-154	8.8 Years	1.42E-02
6.	Ra-226	1,600 Years	1.06E-16
7.	U-234	2.45E+5 Years	4.65E-09
8.	U-235	7.04E+8 Years	3.85E-11
9.	Pu-238	87.8 Years	6.50E-05
10.	Pu-239/40	24,131 Years	1.70E-03

Site # 26: 116-DR-1&2
107D/DR Liquid Disposal Trench
received effluent during fuel failures
Active from 01/01/50 to 12/31/67
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.96E-01
2.	Co-60	5.27 Years	1.56E-01

3.	Sr-90	29.12 Years	2.14E-01
4.	Cs-137	30 Years	9.37E+00
5.	Eu-152	13.3 Years	2.54E+00
6.	Eu-154	8.8 Years	2.97E-01
7.	Eu-155	4.96 Years	1.36E-02
8.	U-235	7.04E+8 Years	7.92E-10
9.	Pu-239/40	24,131 Years	3.49E-02

Site # 38: 116-F-14s
107-F Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	8.01E-03
2.	Co-60	5.27 Years	1.65E-01
3.	Sr-90	29.12 Years	2.20E-02
4.	Cs-137	30 Years	7.03E-01
5.	Eu-152	13.3 Years	2.79E+00
6.	Eu-154	8.8 Years	9.85E-01
7.	Eu-155	4.96 Years	5.61E-02
8.	Ra-226	1,600 Years	7.58E-16
9.	U-234	2.45E+5 Years	3.34E-08
10.	U-235	7.04E+8 Years	4.53E-10
11.	Pu-238	87.8 Years	4.67E-04
12.	Pu-239/40	24,131 Years	2.00E-02

Site # 37: 116-F-14f
107-F Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.99E-02
2.	Sr-90	29.12 Years	3.53E-03
3.	Cs-137	30 Years	2.23E-02
4.	Eu-152	13.3 Years	4.33E-01
5.	Eu-154	8.8 Years	7.66E-02
6.	Eu-155	4.96 Years	2.93E-03
7.	U-235	7.04E+8 Years	4.98E-11
8.	Pu-239/40	24,131 Years	2.19E-03

Site # 35: 116-F-14a
Adjacent to 107-F Retention Basin
Contaminated Soil

Active from 01/01/45 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	7.46E-02
2.	Co-60	5.27 Years	1.70E-01
3.	Sr-90	29.12 Years	5.79E-02
4.	Cs-137	30 Years	1.70E-01
5.	Eu-152	13.3 Years	2.54E+00
6.	Eu-154	8.8 Years	3.91E-01
7.	Eu-155	4.96 Years	1.32E-02
8.	Ra-226	1,600 Years	1.76E-17
9.	U-234	2.45E+5 Years	7.75E-10
10.	U-235	7.04E+8 Years	3.62E-10
11.	Pu-238	87.8 Years	1.08E-05
12.	Pu-239/40	24,131 Years	1.60E-02

Site # 39: 116-F-14u
Under 107-F Retention Basin
Contaminated Soil
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.13E-01
2.	Co-60	5.27 Years	3.50E-01
3.	Sr-90	29.12 Years	3.53E-02
4.	Cs-137	30 Years	5.86E-01
5.	Eu-152	13.3 Years	3.00E+00
6.	Eu-154	8.8 Years	4.69E-01
7.	Eu-155	4.96 Years	6.42E-03
8.	U-235	7.04E+8 Years	9.28E-10
9.	Pu-239/40	24,131 Years	4.09E-02

Site # 40: 116-F-2
107-F Liquid Waste Disposal Trench
effluent water during fuel failures
Active from 01/01/50 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.52E-01
2.	Co-60	5.27 Years	9.24E-02
3.	Sr-90	29.12 Years	3.94E-02
4.	Cs-137	30 Years	4.51E-01
5.	Eu-152	13.3 Years	2.51E+00
6.	Eu-154	8.8 Years	3.75E-01

7.	Eu-155	4.96 Years	2.33E-02
8.	U-235	7.04E+8 Years	1.58E-10
9.	Pu-239/40	24,131 Years	6.98E-03

Site # 41: 116-F-2-BP
EM By-Pass Ditch to 116-F-2 Trench

Active from Unknown to Unknown
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.19E-02
2.	Co-60	5.27 Years	2.28E-02
3.	Sr-90	29.12 Years	9.84E-03
4.	Cs-137	30 Years	8.78E-02
5.	Eu-152	13.3 Years	3.41E-01
6.	Eu-154	8.8 Years	7.66E-02
7.	Eu-155	4.96 Years	2.97E-03
8.	U-235	7.04E+8 Years	2.72E-11
9.	Pu-239/40	24,131 Years	1.20E-03

Site # 36: 116-F-14D
Contaminated Drainage Ditch off NE Corner of 107-F Basin
reactor coolant water
Active from 01/01/45 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.55E-03
2.	Co-60	5.27 Years	2.28E-02
3.	Sr-90	29.12 Years	4.80E-03
4.	Cs-137	30 Years	4.86E-02
5.	Eu-152	13.3 Years	1.89E-01
6.	Eu-154	8.8 Years	2.97E-02
7.	Eu-155	4.96 Years	1.36E-03
8.	U-235	7.04E+8 Years	3.17E-11
9.	Pu-239/40	24,131 Years	1.40E-03

Site # 54: 116-H-7s
107-H Retention Basin Sludge

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	H-3	12.3 Years	6.91E-02
2.	Co-60	5.27 Years	3.79E-01
3.	Sr-90	29.12 Years	1.10E-01
4.	Cs-137	30 Years	7.61E-01
5.	Eu-152	13.3 Years	7.12E+00
6.	Eu-154	8.8 Years	1.36E+00
7.	Eu-155	4.96 Years	8.42E-02
8.	Ra-226	1,600 Years	5.42E-15
9.	U-234	2.45E+5 Years	2.38E-07
10.	U-235	7.04E+8 Years	2.49E-09
11.	Pu-238	87.8 Years	3.33E-03
12.	Pu-239/40	24,131 Years	1.10E-01

Site # 53: 116-H-7f
107-H Retention Basin Fill

Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.51E-01
2.	Sr-90	29.12 Years	1.62E-01
3.	Cs-137	30 Years	5.50E-01
4.	Eu-152	13.3 Years	2.94E+00
5.	Eu-154	8.8 Years	6.10E-01
6.	Eu-155	4.96 Years	1.16E-02
7.	U-235	7.04E+8 Years	1.54E-09
8.	Pu-239/40	24,131 Years	6.78E-02

Site # 52: 116-H-7a
Adjacent to 107-H Retention Basin
(leakage to soil during use of retention basins)
Active from 01/01/49 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.15E-02
2.	Co-60	5.27 Years	2.43E-01
3.	Sr-90	29.12 Years	1.50E-01
4.	Cs-137	30 Years	1.05E+00
5.	Eu-152	13.3 Years	2.11E+00
6.	Eu-154	8.8 Years	3.44E-01
7.	Eu-155	4.96 Years	1.56E-02
8.	Ra-226	1,600 Years	2.17E-15
9.	U-234	2.45E+5 Years	9.54E-08
10.	U-235	7.04E+8 Years	1.09E-09
11.	Pu-238	87.8 Years	1.33E-03
12.	Pu-239/40	24,131 Years	4.79E-02

Site # 55: 116-H-7u
Under 107-H Retention Basin
(Contaminated soil)
Active from n/a to n/a
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.31E-01
2.	Co-60	5.27 Years	9.72E-02
3.	Sr-90	29.12 Years	1.45E-01
4.	Cs-137	30 Years	4.04E+00
5.	Eu-152	13.3 Years	5.57E-01
6.	Eu-154	8.8 Years	9.70E-02
7.	Eu-155	4.96 Years	1.56E-02
8.	U-235	7.04E+8 Years	1.67E-10
9.	Pu-239/40	24,131 Years	7.38E-03

Site # 48: 116-H-1
107-H Disposal Trench
(received coolant during fuel failures)
Active from 01/01/52 to 05/01/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.35E-02
2.	Co-60	5.27 Years	1.31E-01
3.	Sr-90	29.12 Years	5.32E-01
4.	Cs-137	30 Years	2.69E+00
5.	Eu-152	13.3 Years	4.33E+00
6.	Eu-154	8.8 Years	1.53E+00
7.	Eu-155	4.96 Years	1.84E-02
8.	Ra-226	1,600 Years	4.47E-15
9.	U-234	2.45E+5 Years	1.97E-07
10.	U-235	7.04E+8 Years	1.52E-09
11.	Pu-238	87.8 Years	2.75E-03
12.	Pu-239/40	24,131 Years	6.68E-02

Site # 51: 116-H-7
107-H Inlet Distribution Chamber Sludge
(retention basins received effluent for decay)
Active from 01/01/49 to 12/31/65
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	H-3	12.3 Years	4.97E-03
2.	Co-60	5.27 Years	4.86E-02
3.	Sr-90	29.12 Years	8.68E-03
4.	Cs-137	30 Years	2.69E-02
5.	Eu-152	13.3 Years	2.01E-01
6.	Eu-154	8.8 Years	1.88E-02
7.	Eu-155	4.96 Years	3.05E-04
8.	Ra-226	1,600 Years	1.62E-16
9.	U-234	2.45E+5 Years	7.15E-09
10.	U-235	7.04E+8 Years	5.66E-11
11.	Pu-238	87.8 Years	1.00E-04
12.	Pu-239/40	24,131 Years	2.49E-03

Site # 78: 216-A-25
Gable Mountain Pond

Active from 12/01/57 to 12/31/85
Cumulative Waste Volume 3.07E+11 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.29E+02
2.	Co-60	5.27 Years	<7.13E-01
3.	Se-79	6.5E+4 Years	5.77E-03
4.	Sr-90	29.12 Years	2.08E+02
5.	Zr-93	1.53E+6 Years	7.46E-02
6.	Tc-99	2.13E+5 Years	3.31E-01
7.	Ru-106	368 Days	1.46E-06
8.	Pd-107	7E+6 Years	9.77E-04
9.	Cd-113M	5.1 Years	1.78E-05
10.	Sb-125	2.8 Years	1.07E-04
11.	Cs-134	2.1 Years	1.61E-04
12.	Cs-135	2.9E+6 Years	6.64E-03
13.	Cs-137	30 Years	1.66E+02
14.	Pm-147	2.6 Years	8.54E-01
15.	Sm-151	70 Years	1.70E+01
16.	Eu-152	13.3 Years	4.77E-03
17.	Eu-154	8.8 Years	5.41E-01
18.	Eu-155	4.96 Years	7.26E-05
19.	Ra-226	1,600 Years	7.41E-08
20.	Th-232	1.41E+10 Years	1.59E-12
21.	U (Gross)	4.5E+9 Years	<4.23E+00
22.	U-233	1.62E+5 Years	<4.57E+00
23.	Am-241	432 Years	<5.20E-04
24.	Total α	n/a	2.76E+01
25.	Total β	n/a	9.39E+02

Site # 110: 216-B-22E
Terminus of B-2-2 Ditch

Active from 03/01/70 to 11/30/70
Cumulative Waste Volume Unknown
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	2.22E-06
2.	Sr-90	29.12 Years	3.48E+02
3.	Zr-93	1.53E+6 Years	2.87E-05
4.	Tc-99	2.13E+5 Years	1.27E-04
5.	Pd-107	7E+6 Years	3.76E-07
6.	Cd-113M	5.1 Years	9.26E-09
7.	Sb-125	2.8 Years	3.25E-20
8.	Cs-134	2.1 Years	1.32E-06
9.	Cs-135	2.9E+6 Years	2.55E-06
10.	Cs-137	30 Years	2.54E-01
11.	Pm-147	2.6 Years	1.36E-03
12.	Sm-151	70 Years	6.85E-03
13.	Eu-152	13.3 Years	2.61E-06
14.	Eu-154	8.8 Years	2.72E-04
15.	Eu-155	4.96 Years	3.97E-06
16.	Total β	n/a	8.64E+02

Site # 111: 216-B-22W
Head of B-2-2 Ditch

Active from 03/01/70 to 05/31/70
Cumulative Waste Volume 4.97E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	5.72E-07
2.	Sr-90	29.12 Years	1.19E+02
3.	Zr-93	1.53E+6 Years	7.39E-06
4.	Tc-99	2.13E+5 Years	3.29E-05
5.	Pd-107	7E+6 Years	9.69E-08
6.	Cd-113M	5.1 Years	2.39E-09
7.	Sb-125	2.8 Years	8.37E-21
8.	Cs-134	2.1 Years	3.42E-07
9.	Cs-135	2.9E+6 Years	6.59E-07
10.	Cs-137	30 Years	2.54E-01
11.	Pm-147	2.6 Years	3.52E-04
12.	Sm-151	70 Years	1.77E-03
13.	Eu-152	13.3 Years	6.74E-07
14.	Eu-154	8.8 Years	7.01E-05
15.	Eu-155	4.96 Years	1.03E-06
16.	Ra-226	1,600 Years	2.75E-13
17.	Th-232	1.41E+10 Years	5.89E-18
18.	U (Gross)	4.5E+9 Years	<1.57E-05
19.	Total α	n/a	<2.58E-03
20.	Total β	n/a	2.95E+02

Site # 119: 216-B-3
B Pond and Ditches

Active from 04/01/45 to 12/31/98
Cumulative Waste Volume 2.83E+11 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	5.02E+02
2.	Co-60	5.27 Years	3.62E-01
3.	Se-79	6.5E+4 Years	6.54E-04
4.	Sr-90	29.12 Years	8.23E+01
5.	Zr-93	1.53E+6 Years	8.45E-03
6.	Tc-99	2.13E+5 Years	3.78E-02
7.	Ru-106	368 Days	3.58E-02
8.	Pd-107	7E+6 Years	1.11E-04
9.	Cd-113M	5.1 Years	1.99E-06
10.	Sb-125	2.8 Years	1.79E-03
11.	Cs-134	2.1 Years	5.04E-04
12.	Cs-135	2.9E+6 Years	7.53E-04
13.	Cs-137	30 Years	7.76E+01
14.	Pm-147	2.6 Years	1.63E-01
15.	Sm-151	70 Years	1.92E+00
16.	Eu-152	13.3 Years	1.48E-03
17.	Eu-154	8.8 Years	8.65E-02
18.	Eu-155	4.96 Years	1.47E-02
19.	Ra-226	1,600 Years	3.68E-08
20.	Th-232	1.41E+10 Years	7.89E-13
21.	U (Gross)	4.5E+9 Years	2.10E+00
22.	U-233	1.62E+5 Years	2.84E-01
23.	U-234	2.45E+5 Years	1.04E-03
24.	U-235	7.04E+8 Years	1.90E-05
25.	U-238	4.47E+9 Years	7.40E-04
26.	Pu-238	87.8 Years	3.34E-03
27.	Pu-239/40	24,131 Years	9.60E-01
28.	Am-241	432 Years	4.21E+00
29.	Total α	n/a	1.63E+01
30.	Total β	n/a	3.91E+02

Site # 152: 216-B-63
Ditch
B-Plant Chemical Sewer
Active from 03/01/70 to 12/31/92
Cumulative Waste Volume 7.78E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.28E+00
2.	Co-60	5.27 Years	2.64E-02

3.	Se-79	6.5E+4 Years	<3.31E-07
4.	Sr-90	29.12 Years	1.98E+00
5.	Zr-93	1.53E+6 Years	<4.28E-06
6.	Tc-99	2.13E+5 Years	<1.90E-05
7.	Ru-106	368 Days	4.92E-10
8.	Pd-107	7E+6 Years	<5.61E-08
9.	Cd-113M	5.1 Years	<1.52E-09
10.	Sb-125	2.8 Years	<3.63E-21
11.	Cs-134	2.1 Years	<2.11E-05
12.	Cs-135	2.9E+6 Years	<3.81E-07
13.	Cs-137	30 Years	5.91E-01
14.	Pm-147	2.6 Years	<1.91E-06
15.	Sm-151	70 Years	<1.02E-03
16.	Eu-152	13.3 Years	<3.67E-07
17.	Eu-154	8.8 Years	<3.96E-05
18.	Eu-155	4.96 Years	<2.91E-04
19.	Ra-226	1,600 Years	2.63E-09
20.	Th-232	1.41E+10 Years	5.63E-14
21.	U (Gross)	4.5E+9 Years	<1.50E-01
22.	U-233	1.62E+5 Years	1.96E-13
23.	U-235	7.04E+8 Years	1.43E-10
24.	Pu-239/40	24,131 Years	1.72E-02
25.	Am-241	432 Years	3.82E-02
26.	Total α	n/a	<7.51E-02
27.	Total β	n/a	<6.32E+00

Site # 163: 216-C-9
Semi-works Pond (Converted to 218-C-9 Burial Ground)

Active from 06/01/53 to 09/30/69
Cumulative Waste Volume 1.03E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<5.67E-03
2.	Se-79	6.5E+4 Years	2.15E-06
3.	Sr-90	29.12 Years	1.96E+00
4.	Zr-93	1.53E+6 Years	2.77E-05
5.	Tc-99	2.13E+5 Years	1.23E-04
6.	Ru-106	368 Days	1.78E-10
7.	Pd-107	7E+6 Years	3.64E-07
8.	Cd-113M	5.1 Years	5.72E-09
9.	Sb-125	2.8 Years	5.38E-21
10.	Cs-134	2.1 Years	1.55E-07
11.	Cs-135	2.9E+6 Years	2.47E-06
12.	Cs-137	30 Years	5.70E-01
13.	Pm-147	2.6 Years	2.18E-04
14.	Sm-151	70 Years	6.14E-03
15.	Eu-152	13.3 Years	1.51E-06
16.	Eu-154	8.8 Years	1.77E-04
17.	Eu-155	4.96 Years	3.92E-07
18.	Ra-226	1,600 Years	5.34E-12

19.	Th-232	1.41E+10 Years	1.14E-16
20.	U (Gross)	4.5E+9 Years	<3.05E-04
21.	Total α	n/a	2.07E-02
22.	Total β	n/a	6.24E+00

Site # 166: 216-N-4
200 North P-Pond

Active from 09/01/44 to 06/30/52
Cumulative Waste Volume 9.46E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	5.27E-07
2.	Sr-90	29.12 Years	5.76E-02
3.	Zr-93	1.53E+6 Years	6.82E-06
4.	Tc-99	2.13E+5 Years	3.03E-05
5.	Ru-106	368 Days	6.84E-16
6.	Pd-107	7E+6 Years	8.94E-08
7.	Cd-113M	5.1 Years	7.64E-10
8.	Sb-125	2.8 Years	3.58E-23
9.	Cs-134	2.1 Years	2.82E-10
10.	Cs-135	2.9E+6 Years	6.07E-07
11.	Cs-137	30 Years	6.60E-02
12.	Pm-147	2.6 Years	1.29E-06
13.	Sm-151	70 Years	1.37E-03
14.	Eu-152	13.3 Years	1.81E-07
15.	Eu-154	8.8 Years	2.55E-05
16.	Eu-155	4.96 Years	3.45E-10
17.	Ra-226	1,600 Years	2.64E-11
18.	Th-232	1.41E+10 Years	5.67E-16
19.	U (Gross)	4.5E+9 Years	1.51E-03
20.	Total α	n/a	6.14E-02
21.	Total β	n/a	3.00E-01

Site # 168: 216-N-6
200 North R-Pond

Active from 09/01/44 to 06/30/52
Cumulative Waste Volume 9.46E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	5.27E-07
2.	Sr-90	29.12 Years	5.76E-02
3.	Zr-93	1.53E+6 Years	6.82E-06
4.	Tc-99	2.13E+5 Years	3.03E-05
5.	Ru-106	368 Days	6.84E-16
6.	Pd-107	7E+6 Years	8.94E-08

7.	Cd-113M	5.1 Years	7.64E-10
8.	Sb-125	2.8 Years	3.58E-23
9.	Cs-134	2.1 Years	2.82E-10
10.	Cs-135	2.9E+6 Years	6.07E-07
11.	Cs-137	30 Years	6.60E-02
12.	Pm-147	2.6 Years	1.29E-06
13.	Sm-151	70 Years	1.37E-03
14.	Eu-152	13.3 Years	1.81E-07
15.	Eu-154	8.8 Years	2.55E-05
16.	Eu-155	4.96 Years	3.45E-10
17.	Ra-226	1,600 Years	2.64E-11
18.	Th-232	1.41E+10 Years	5.67E-16
19.	U (Gross)	4.5E+9 Years	1.51E-03
20.	Total α	n/a	6.14E-02
21.	Total β	n/a	3.00E-01

Site # 171: 216-S-10
REDOX Chemical Sewer Ditch

Active from 02/01/54 to 12/31/91
Cumulative Waste Volume 4.66E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Sr-90	29.12 Years	<8.67E-01
2.	Ru-106	368 Days	7.14E-04
3.	Sb-125	2.8 Years	1.22E-24
4.	Cs-137	30 Years	1.02E+00
5.	Ra-226	1,600 Years	1.17E-09
6.	Th-232	1.41E+10 Years	2.52E-14
7.	U (Gross)	4.5E+9 Years	6.70E-02
8.	U-233	1.62E+5 Years	9.45E-14
9.	U-235	7.04E+8 Years	6.90E-11
10.	Pu-239/40	24,131 Years	8.17E-03
11.	Am-241	432 Years	1.87E-02
12.	Total α	n/a	2.50E-02
13.	Total β	n/a	<3.51E+00

Site # 172: 216-S-11
REDOX Chemical Sewer Ponds

Active from 05/01/54 to 08/31/65
Cumulative Waste Volume 2.23E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	1.73E-06
2.	Sr-90	29.12 Years	6.57E-01

3.	Zr-93	1.53E+6 Years	2.24E-05
4.	Tc-99	2.13E+5 Years	9.95E-05
5.	Ru-106	368 Days	6.03E-04
6.	Pd-107	7E+6 Years	2.93E-07
7.	Cd-113M	5.1 Years	4.70E-09
8.	Sb-125	2.8 Years	5.66E-06
9.	Cs-134	2.1 Years	8.40E-07
10.	Cs-135	2.9E+6 Years	1.99E-06
11.	Cs-137	30 Years	6.65E-01
12.	Pm-147	2.6 Years	5.33E-04
13.	Sm-151	70 Years	4.98E-03
14.	Eu-152	13.3 Years	1.28E-06
15.	Eu-154	8.8 Years	1.48E-04
16.	Ra-226	1,600 Years	1.20E-10
17.	Th-232	1.41E+10 Years	2.57E-15
18.	U (Gross)	4.5E+9 Years	6.83E-03
19.	Total α	n/a	<5.53E-03
20.	Total β	n/a	1.94E+00

Site # 175: 216-S-16
REDOX Pond # 2

Active from 01/01/57 to 12/31/72
Cumulative Waste Volume 4.07E+10 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	8.81E-02
2.	Se-79	6.5E+4 Years	2.02E-05
3.	Sr-90	29.12 Years	3.64E+01
4.	Zr-93	1.53E+6 Years	2.61E-04
5.	Tc-99	2.13E+5 Years	1.16E-03
6.	Ru-106	368 Days	9.21E-09
7.	Pd-107	7E+6 Years	3.42E-06
8.	Cd-113M	5.1 Years	5.23E-08
9.	Sb-125	2.8 Years	3.57E-20
10.	Cs-134	2.1 Years	8.98E-07
11.	Cs-135	2.9E+6 Years	2.32E-05
12.	Cs-137	30 Years	2.43E+01
13.	Pm-147	2.6 Years	1.43E-03
14.	Sm-151	70 Years	5.76E-02
15.	Eu-152	13.3 Years	1.37E-05
16.	Eu-154	8.8 Years	1.62E-03
17.	Eu-155	4.96 Years	2.13E-06
18.	Ra-226	1,600 Years	1.84E-08
19.	Th-232	1.41E+10 Years	3.95E-13
20.	U (Gross)	4.5E+9 Years	1.05E+00
21.	Total α	n/a	2.26E+01
22.	Total β	n/a	1.48E+02

Site # 176: 216-S-17
REDOX Pond # 1

Active from 11/01/51 to 04/30/54
Cumulative Waste Volume 6.43E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	5.46E-05
2.	Sr-90	29.12 Years	1.28E+01
3.	Zr-93	1.53E+6 Years	7.05E-04
4.	Tc-99	2.13E+5 Years	3.13E-03
5.	Ru-106	368 Days	6.42E-13
6.	Pd-107	7E+6 Years	9.25E-06
7.	Cd-113M	5.1 Years	9.70E-08
8.	Sb-125	2.8 Years	9.61E-21
9.	Cs-134	2.1 Years	9.72E-08
10.	Cs-135	2.9E+6 Years	6.28E-05
11.	Cs-137	30 Years	1.03E+01
12.	Pm-147	2.6 Years	3.53E-04
13.	Sm-151	70 Years	1.47E-01
14.	Eu-152	13.3 Years	2.37E-05
15.	Eu-154	8.8 Years	3.16E-03
16.	Eu-155	4.96 Years	1.35E-07
17.	Ra-226	1,600 Years	7.92E-10
18.	Th-232	1.41E+10 Years	1.70E-14
19.	U (Gross)	4.5E+9 Years	4.52E-02
20.	Total α	n/a	1.84E-01
21.	Total β	n/a	5.63E+01

Site # 177: 216-S-19
222-S Laboratory Pond

Active from 02/01/52 to 10/01/84
Cumulative Waste Volume 1.33E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.13E-01
2.	Co-60	5.27 Years	7.29E-03
3.	Se-79	6.5E+4 Years	4.97E-07
4.	Sr-90	29.12 Years	1.05E+00
5.	Zr-93	1.53E+6 Years	6.43E-06
6.	Tc-99	2.13E+5 Years	2.86E-05
7.	Ru-106	368 Days	<1.12E-09
8.	Pd-107	7E+6 Years	8.42E-08
9.	Cd-113M	5.1 Years	1.27E-09
10.	Sb-125	2.8 Years	<4.27E-08
11.	Cs-134	2.1 Years	<4.00E-08
12.	Cs-135	2.9E+6 Years	5.73E-07
13.	Cs-137	30 Years	1.05E+00

14.	Pm-147	2.6 Years	<5.35E-05
15.	Sm-151	70 Years	1.41E-03
16.	Eu-152	13.3 Years	3.34E-07
17.	Eu-154	8.8 Years	3.95E-05
18.	Eu-155	4.96 Years	<1.04E-07
19.	Ra-226	1,600 Years	9.07E-10
20.	Th-232	1.41E+10 Years	1.94E-14
21.	U (Gross)	4.5E+9 Years	5.17E-02
22.	Total α	n/a	1.26E+00
23.	Total β	n/a	5.12E+00

Site # 190: 216-T-1
T-Plant Ditch (Head End)

Active from 11/01/44 to 12/31/89
Cumulative Waste Volume 1.78E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	1.65E-07
2.	Sr-90	29.12 Years	<2.93E-02
3.	Zr-93	1.53E+6 Years	2.13E-06
4.	Tc-99	2.13E+5 Years	9.48E-06
5.	Ru-106	368 Days	9.04E-16
6.	Pd-107	7E+6 Years	2.80E-08
7.	Cd-113M	5.1 Years	2.44E-10
8.	Sb-125	2.8 Years	1.10E-23
9.	Cs-134	2.1 Years	8.14E-11
10.	Cs-135	2.9E+6 Years	1.90E-07
11.	Cs-137	30 Years	<3.14E-02
12.	Pm-147	2.6 Years	3.93E-07
13.	Sm-151	70 Years	4.31E-04
14.	Eu-152	13.3 Years	5.78E-08
15.	Eu-154	8.8 Years	8.13E-06
16.	Eu-155	4.96 Years	9.50E-11
17.	Ra-226	1,600 Years	2.62E-11
18.	Th-232	1.41E+10 Years	5.61E-16
19.	U (Gross)	4.5E+9 Years	1.50E-03
20.	Total α	n/a	<6.14E-03
21.	Total β	n/a	1.47E-01

Site # 214: 216-T-4
T-Plant Pond

Active from 11/01/44 to 12/31/89
Cumulative Waste Volume 4.25E+10 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Co-60	5.27 Years	<5.07E-02
2.	Se-79	6.5E+4 Years	5.91E-07
3.	Sr-90	29.12 Years	2.72E+00
4.	Zr-93	1.53E+6 Years	7.64E-06
5.	Tc-99	2.13E+5 Years	3.40E-05
6.	Ru-106	368 Days	1.80E-09
7.	Pd-107	7E+6 Years	1.00E-07
8.	Cd-113M	5.1 Years	1.29E-09
9.	Sb-125	2.8 Years	2.82E-08
10.	Cs-134	2.1 Years	6.10E-08
11.	Cs-135	2.9E+6 Years	6.81E-07
12.	Cs-137	30 Years	5.06E+00
13.	Pm-147	2.6 Years	6.20E-05
14.	Sm-151	70 Years	1.63E-03
15.	Eu-152	13.3 Years	3.30E-07
16.	Eu-154	8.8 Years	4.06E-05
17.	Eu-155	4.96 Years	1.91E-07
18.	Ra-226	1,600 Years	4.06E-09
19.	Th-232	1.41E+10 Years	8.69E-14
20.	U (Gross)	4.5E+9 Years	2.32E-01
21.	Total α	n/a	2.28E-01
22.	Total β	n/a	1.89E+01

Site # 222: 216-U-14
U-10 Pond, U-14 and Z- Ditches

Active from 03/01/52 to 12/31/94
Cumulative Waste Volume 1.22E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.08E+00
2.	Co-60	5.27 Years	<2.93E-04
3.	Se-79	6.5E+4 Years	1.87E-06
4.	Sr-90	29.12 Years	5.34E-02
5.	Zr-93	1.53E+6 Years	2.41E-05
6.	Tc-99	2.13E+5 Years	1.72E-01
7.	Ru-106	368 Days	2.84E-13
8.	Pd-107	7E+6 Years	3.16E-07
9.	Cd-113M	5.1 Years	3.49E-09
10.	Sb-125	2.8 Years	4.38E-22
11.	Cs-134	2.1 Years	4.93E-09
12.	Cs-135	2.9E+6 Years	2.15E-06
13.	Cs-137	30 Years	5.74E-02
14.	Pm-147	2.6 Years	1.63E-05
15.	Sm-151	70 Years	5.07E-03
16.	Eu-152	13.3 Years	8.61E-07
17.	Eu-154	8.8 Years	1.13E-04
18.	Eu-155	4.96 Years	7.28E-09
19.	Ra-226	1,600 Years	6.90E-10
20.	Th-232	1.41E+10 Years	1.48E-14
21.	U (Gross)	4.5E+9 Years	6.38E-02

22.	U-233	1.62E+5 Years	1.32E-15
23.	U-235	7.04E+8 Years	1.26E-12
24.	Pu-239/40	24,131 Years	1.60E-04
25.	Am-241	432 Years	2.86E-04
26.	Total α	n/a	3.11E-02
27.	Total β	n/a	2.45E-01

Site # 81: 216-A-3
Crib
203-A Acid Pumphouse Silica Gel Wastes
Active from 02/01/56 to 11/30/67
Cumulative Waste Volume 3.05E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<3.35E-04
2.	Se-79	6.5E+4 Years	2.21E-06
3.	Sr-90	29.12 Years	3.48E-02
4.	Zr-93	1.53E+6 Years	2.86E-05
5.	Tc-99	2.13E+5 Years	1.27E-04
6.	Ru-106	368 Days	3.15E-10
7.	Pd-107	7E+6 Years	3.74E-07
8.	Cd-113M	5.1 Years	4.93E-09
9.	Sb-125	2.8 Years	6.84E-10
10.	Cs-134	2.1 Years	2.45E-08
11.	Cs-135	2.9E+6 Years	2.54E-06
12.	Cs-137	30 Years	<3.69E-02
13.	Pm-147	2.6 Years	5.61E-05
14.	Sm-151	70 Years	6.16E-03
15.	Eu-152	13.3 Years	1.25E-06
16.	Eu-154	8.8 Years	1.56E-04
17.	Eu-155	4.96 Years	4.62E-08
18.	Ra-226	1,600 Years	9.78E-09
19.	Th-232	1.41E+10 Years	2.10E-13
20.	U (Gross)	4.5E+9 Years	5.58E-01
21.	Total α	n/a	1.23E-02
22.	Total β	n/a	1.82E-01

Site # 89: 216-A-4
Crib
PUREX Laboratory & Stack Drain Wastes
Active from 12/01/55 to 12/31/58
Cumulative Waste Volume 6.21E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.70E-03
2.	Se-79	6.5E+4 Years	8.98E-07
3.	Sr-90	29.12 Years	3.54E+00
4.	Zr-93	1.53E+6 Years	1.16E-05

5.	Tc-99	2.13E+5 Years	5.16E-05
6.	Ru-106	368 Days	9.02E-11
7.	Pd-107	7E+6 Years	1.52E-07
8.	Cd-113M	5.1 Years	1.95E-09
9.	Sb-125	2.8 Years	4.44E-22
10.	Cs-134	2.1 Years	6.28E-09
11.	Cs-135	2.9E+6 Years	1.03E-06
12.	Cs-137	30 Years	5.62E+00
13.	Pm-147	2.6 Years	1.69E-05
14.	Sm-151	70 Years	2.50E-03
15.	Eu-152	13.3 Years	4.92E-07
16.	Eu-154	8.8 Years	6.19E-05
17.	Eu-155	4.96 Years	1.05E-08
18.	Ra-226	1,600 Years	2.33E-09
19.	Th-232	1.41E+10 Years	4.99E-14
20.	U (Gross)	4.5E+9 Years	1.33E-01
21.	Total α	n/a	8.60E+00
22.	Total β	n/a	2.21E+01

Site # 92: 216-A-5
Crib
PUREX Process Condensate
Active from 11/01/55 to 11/30/61
Cumulative Waste Volume 1.63E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	5.45E-01
2.	Se-79	6.5E+4 Years	1.75E-04
3.	Sr-90	29.12 Years	3.35E+01
4.	Zr-93	1.53E+6 Years	2.26E-03
5.	Tc-99	2.13E+5 Years	1.01E-02
6.	Ru-106	368 Days	2.22E-10
7.	Pd-107	7E+6 Years	2.97E-05
8.	Cd-113M	5.1 Years	4.21E-07
9.	Sb-125	2.8 Years	1.58E-19
10.	Cs-134	2.1 Years	2.77E-06
11.	Cs-135	2.9E+6 Years	2.02E-04
12.	Cs-137	30 Years	9.83E+00
13.	Pm-147	2.6 Years	6.13E-03
14.	Sm-151	70 Years	4.95E-01
15.	Eu-152	13.3 Years	1.08E-04
16.	Eu-154	8.8 Years	1.32E-02
17.	Eu-155	4.96 Years	5.26E-06
18.	Ra-226	1,600 Years	1.53E-09
19.	Th-232	1.41E+10 Years	3.29E-14
20.	U (Gross)	4.5E+9 Years	8.75E-02
21.	Total α	n/a	3.99E+00
22.	Total β	n/a	1.09E+02

Site # 93: 216-A-6

Crib
PUREX Steam Condensate
Active from 11/01/55 to 01/31/70
Cumulative Waste Volume 3.40E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.95E-02
2.	Se-79	6.5E+4 Years	2.16E-04
3.	Sr-90	29.12 Years	3.56E+01
4.	Zr-93	1.53E+6 Years	2.79E-03
5.	Tc-99	2.13E+5 Years	1.24E-02
6.	Ru-106	368 Days	1.13E-08
7.	Pd-107	7E+6 Years	3.66E-05
8.	Cd-113M	5.1 Years	5.65E-07
9.	Sb-125	2.8 Years	3.84E-19
10.	Cs-134	2.1 Years	9.96E-06
11.	Cs-135	2.9E+6 Years	2.49E-04
12.	Cs-137	30 Years	8.53E+01
13.	Pm-147	2.6 Years	1.54E-02
14.	Sm-151	70 Years	6.17E-01
15.	Eu-152	13.3 Years	1.48E-04
16.	Eu-154	8.8 Years	1.75E-02
17.	Eu-155	4.96 Years	2.44E-05
18.	Ra-226	1,600 Years	9.62E-10
19.	Th-232	1.41E+10 Years	2.06E-14
20.	U (Gross)	4.5E+9 Years	5.49E-02
21.	Total α	n/a	2.19E+00
22.	Total β	n/a	2.91E+02

Site # 94: 216-A-7
Crib
241-A-152 Diversion Box Drain
Active from 11/01/55 to 07/31/59
Cumulative Waste Volume 3.26E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.35E-04
2.	Se-79	6.5E+4 Years	6.96E-08
3.	Sr-90	29.12 Years	3.48E-01
4.	Zr-93	1.53E+6 Years	9.00E-07
5.	Tc-99	2.13E+5 Years	4.00E-06
6.	Ru-106	368 Days	2.27E-10
7.	Pd-107	7E+6 Years	1.18E-08
8.	Cd-113M	5.1 Years	1.64E-10
9.	Sb-125	2.8 Years	9.66E-23
10.	Cs-134	2.1 Years	2.48E-09
11.	Cs-135	2.9E+6 Years	8.02E-08
12.	Cs-137	30 Years	1.87E+00
13.	Pm-147	2.6 Years	3.87E-06
14.	Sm-151	70 Years	1.96E-04

15.	Eu-152	13.3 Years	4.24E-08
16.	Eu-154	8.8 Years	5.16E-06
17.	Eu-155	4.96 Years	5.96E-09
18.	Ra-226	1,600 Years	3.96E-11
19.	Th-232	1.41E+10 Years	8.49E-16
20.	U (Gross)	4.5E+9 Years	2.26E-03
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	5.30E+00

Site # 95: 216-A-8
Crib
Tank Farms Condensates
Active from 01/01/78 to 04/30/78
Cumulative Waste Volume 1.15E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.09E-01
2.	Co-60	5.27 Years	1.14E-02
3.	Se-79	6.5E+4 Years	4.46E-04
4.	Sr-90	29.12 Years	4.16E+01
5.	Zr-93	1.53E+6 Years	5.76E-03
6.	Tc-99	2.13E+5 Years	2.56E-02
7.	Ru-106	368 Days	9.66E-08
8.	Pd-107	7E+6 Years	7.56E-05
9.	Cd-113M	5.1 Years	1.06E-06
10.	Sb-125	2.8 Years	1.77E-06
11.	Cs-134	2.1 Years	1.96E-05
12.	Cs-135	2.9E+6 Years	5.13E-04
13.	Cs-137	30 Years	4.23E+02
14.	Pm-147	2.6 Years	2.75E-02
15.	Sm-151	70 Years	1.25E+00
16.	Eu-152	13.3 Years	2.74E-04
17.	Eu-154	8.8 Years	3.33E-02
18.	Eu-155	4.96 Years	5.12E-05
19.	Ra-226	1,600 Years	2.15E-09
20.	Th-232	1.41E+10 Years	4.60E-14
21.	U (Gross)	4.5E+9 Years	1.23E-01
22.	Total α	n/a	3.07E+00
23.	Total β	n/a	1.11E+03

Site # 96: 216-A-9
Crib
N-Reactor & Acid Fractionator Wastes
Active from 03/01/56 to 12/31/76
Cumulative Waste Volume 9.81E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	9.53E-04

2.	Se-79	6.5E+4 Years	1.14E-06
3.	Sr-90	29.12 Years	8.91E+00
4.	Zr-93	1.53E+6 Years	1.47E-05
5.	Tc-99	2.13E+5 Years	6.54E-05
6.	Ru-106	368 Days	7.49E-11
7.	Pd-107	7E+6 Years	1.93E-07
8.	Cd-113M	5.1 Years	3.52E-09
9.	Sb-125	2.8 Years	5.11E-21
10.	Cs-134	2.1 Years	1.59E-07
11.	Cs-135	2.9E+6 Years	1.31E-06
12.	Cs-137	30 Years	3.77E+00
13.	Pm-147	2.6 Years	2.09E-04
14.	Sm-151	70 Years	3.34E-03
15.	Eu-152	13.3 Years	9.49E-07
16.	Eu-154	8.8 Years	1.07E-04
17.	Eu-155	4.96 Years	4.15E-07
18.	Ra-226	1,600 Years	1.32E-12
19.	Th-232	1.41E+10 Years	2.84E-17
20.	U (Gross)	4.5E+9 Years	7.55E-05
21.	Total α	n/a	3.07E-02
22.	Total β	n/a	3.10E+01

Site # 71: 216-A-10
Crib
PUREX Process Condensate
Active from 03/01/56 to 03/03/87
Cumulative Waste Volume 3.21E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.12E+04
2.	Co-60	5.27 Years	1.63E+00
3.	Se-79	6.5E+4 Years	7.38E-03
4.	Sr-90	29.12 Years	6.66E+01
5.	Zr-93	1.53E+6 Years	9.54E-02
6.	Tc-99	2.13E+5 Years	4.24E-01
7.	Ru-106	368 Days	6.37E-04
8.	Pd-107	7E+6 Years	1.25E-03
9.	Cd-113M	5.1 Years	2.20E-05
10.	Sb-125	2.8 Years	2.03E-17
11.	I-129	1.57E+7 Years	1.07E-01
12.	Cs-134	2.1 Years	<9.03E-13
13.	Cs-135	2.9E+6 Years	8.50E-03
14.	Cs-137	30 Years	6.53E+01
15.	Pm-147	2.6 Years	8.46E-01
16.	Sm-151	70 Years	2.16E+01
17.	Eu-152	13.3 Years	5.85E-03
18.	Eu-154	8.8 Years	6.71E-01
19.	Ra-226	1,600 Years	1.42E-09
20.	Th-232	1.41E+10 Years	3.03E-14
21.	U (Gross)	4.5E+9 Years	8.08E-02
22.	U-233	1.62E+5 Years	2.63E+00
23.	U-234	2.45E+5 Years	8.10E-06

24.	U-235	7.04E+8 Years	3.10E-08
25.	Pu-238	87.8 Years	3.06E-01
26.	Pu-239/40	24,131 Years	3.49E+00
27.	Pu-241	14.4 Years	2.74E+01
28.	Am-241	432 Years	1.25E+00
29.	Total α	n/a	2.81E+01
30.	Total β	n/a	3.60E+02

Site # 76: 216-A-21
Crib
PUREX Ammonia Scrubber & Laboratory Wastes
Active from 10/01/57 to 06/30/65
Cumulative Waste Volume 7.79E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	7.71E-02
2.	Se-79	6.5E+4 Years	1.31E-04
3.	Sr-90	29.12 Years	6.06E+00
4.	Zr-93	1.53E+6 Years	1.69E-03
5.	Tc-99	2.13E+5 Years	7.53E-03
6.	Ru-106	368 Days	2.99E-09
7.	Pd-107	7E+6 Years	2.22E-05
8.	Cd-113M	5.1 Years	3.71E-07
9.	Sb-125	2.8 Years	2.81E-19
10.	Cs-134	2.1 Years	6.52E-06
11.	Cs-135	2.9E+6 Years	1.51E-04
12.	Cs-137	30 Years	6.37E+01
13.	Pm-147	2.6 Years	1.12E-02
14.	Sm-151	70 Years	3.80E-01
15.	Eu-152	13.3 Years	9.82E-05
16.	Eu-154	8.8 Years	1.14E-02
17.	Eu-155	4.96 Years	1.44E-05
18.	Ra-226	1,600 Years	1.14E-09
19.	Th-232	1.41E+10 Years	2.44E-14
20.	U (Gross)	4.5E+9 Years	6.49E-02
21.	Total α	n/a	9.21E+00
22.	Total β	n/a	1.67E+02

Site # 77: 216-A-24
Crib
Tank Farm Condensate
Active from 05/01/58 to 12/31/67
Cumulative Waste Volume 8.20E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.58E-03
2.	Se-79	6.5E+4 Years	1.92E-04

3.	Sr-90	29.12 Years	1.48E+01
4.	Zr-93	1.53E+6 Years	2.48E-03
5.	Tc-99	2.13E+5 Years	1.10E-02
6.	Ru-106	368 Days	2.72E-09
7.	Pd-107	7E+6 Years	3.25E-05
8.	Cd-113M	5.1 Years	4.69E-07
9.	Sb-125	2.8 Years	2.00E-19
10.	Cs-134	2.1 Years	3.94E-06
11.	Cs-135	2.9E+6 Years	2.21E-04
12.	Cs-137	30 Years	2.17E+02
13.	Pm-147	2.6 Years	7.81E-03
14.	Sm-151	70 Years	5.44E-01
15.	Eu-152	13.3 Years	1.21E-04
16.	Eu-154	8.8 Years	1.47E-02
17.	Eu-155	4.96 Years	8.19E-06
18.	Ra-226	1,600 Years	2.92E-10
19.	Th-232	1.41E+10 Years	6.26E-15
20.	U (Gross)	4.5E+9 Years	1.67E-02
21.	Total α	n/a	3.11E-01
22.	Total β	n/a	5.52E+02

Site # 79: 216-A-27
Crib
PUREX Ammonia Scrubber, Lab, & Stack Drain
Active from 06/01/65 to 07/31/70
Cumulative Waste Volume 2.32E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.92E-02
2.	Se-79	6.5E+4 Years	8.07E-05
3.	Sr-90	29.12 Years	1.98E+01
4.	Zr-93	1.53E+6 Years	1.04E-03
5.	Tc-99	2.13E+5 Years	4.64E-03
6.	Ru-106	368 Days	2.85E-08
7.	Pd-107	7E+6 Years	1.37E-05
8.	Cd-113M	5.1 Years	3.04E-07
9.	Sb-125	2.8 Years	7.50E-19
10.	Cs-134	2.1 Years	2.77E-05
11.	Cs-135	2.9E+6 Years	9.30E-05
12.	Cs-137	30 Years	2.63E+01
13.	Pm-147	2.6 Years	3.12E-02
14.	Sm-151	70 Years	2.45E-01
15.	Eu-152	13.3 Years	8.43E-05
16.	Eu-154	8.8 Years	9.01E-03
17.	Eu-155	4.96 Years	7.93E-05
18.	Ra-226	1,600 Years	3.97E-10
19.	Th-232	1.41E+10 Years	8.50E-15
20.	U (Gross)	4.5E+9 Years	2.26E-02
21.	U-233	1.62E+5 Years	1.60E+00
22.	Total □	n/a	5.93E+00
23.	Total β	n/a	1.12E+02

Site # 80: 216-A-28
Crib
203-A Acid Pumphouse & UNH Tank Wastes
Active from 12/01/58 to 11/30/67
Cumulative Waste Volume 3.00E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	1.96E-06
2.	Zr-93	1.53E+6 Years	2.53E-05
3.	Tc-99	2.13E+5 Years	1.13E-04
4.	Pd-107	7E+6 Years	3.32E-07
5.	Cd-113M	5.1 Years	5.00E-09
6.	Sb-125	2.8 Years	2.20E-21
7.	Cs-134	2.1 Years	3.99E-08
8.	Cs-135	2.9E+6 Years	2.26E-06
9.	Pm-147	2.6 Years	8.57E-05
10.	Sm-151	70 Years	5.59E-03
11.	Eu-152	13.3 Years	1.30E-06
12.	Eu-154	8.8 Years	1.56E-04
13.	Eu-155	4.96 Years	7.63E-08
14.	Ra-226	1,600 Years	3.69E-09
15.	Th-232	1.41E+10 Years	7.90E-14
16.	U (Gross)	4.5E+9 Years	2.10E-01
17.	Total β	n/a	7.47E-03

Site # 82: 216-A-30
Crib
PUREX Steam Condensate
Active from 01/01/61 to 12/31/91
Cumulative Waste Volume 7.50E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.07E+01
2.	Co-60	5.27 Years	1.44E-01
3.	Se-79	6.5E+4 Years	2.72E-04
4.	Sr-90	29.12 Years	8.25E+01
5.	Zr-93	1.53E+6 Years	3.51E-03
6.	Tc-99	2.13E+5 Years	1.56E-02
7.	Ru-106	368 Days	7.67E-04
8.	Pd-107	7E+6 Years	4.60E-05
9.	Cd-113M	5.1 Years	8.02E-07
10.	Sb-125	2.8 Years	2.32E-03
11.	Cs-134	2.1 Years	3.03E-04
12.	Cs-135	2.9E+6 Years	3.13E-04
13.	Cs-137	30 Years	9.48E+01
14.	Pm-147	2.6 Years	1.54E-01
15.	Sm-151	70 Years	7.93E-01
16.	Eu-152	13.3 Years	2.18E-04
17.	Eu-154	8.8 Years	2.70E-02

18.	Eu-155	4.96 Years	2.32E-03
19.	Ra-226	1,600 Years	1.76E-09
20.	Th-232	1.41E+10 Years	3.76E-14
21.	U (Gross)	4.5E+9 Years	1.00E-01
22.	U-233	1.62E+5 Years	<7.09E-02
23.	U-234	2.45E+5 Years	1.12E-07
24.	U-235	7.04E+8 Years	6.99E-10
25.	Pu-238	87.8 Years	4.79E-03
26.	Pu-239/40	24,131 Years	7.92E-02
27.	Am-241	432 Years	2.06E-01
28.	Total α	n/a	4.65E+00
29.	Total β	n/a	4.32E+02

Site # 85: 216-A-36B
Crib
PUREX Ammonia Scrubber Wastes
Active from 11/22/82 to 09/06/87
Cumulative Waste Volume 3.17E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	3.07E+02
2.	Co-60	5.27 Years	1.12E+00
3.	Se-79	6.5E+4 Years	1.07E-03
4.	Sr-90	29.12 Years	2.68E+02
5.	Zr-93	1.53E+6 Years	1.39E-02
6.	Tc-99	2.13E+5 Years	6.16E-02
7.	Ru-106	368 Days	6.54E-03
8.	Pd-107	7E+6 Years	1.82E-04
9.	Cd-113M	5.1 Years	4.11E-06
10.	Sb-125	2.8 Years	1.30E-17
11.	I-129	1.57E+7 Years	8.42E-03
12.	Cs-135	2.9E+6 Years	1.23E-03
13.	Cs-137	30 Years	2.84E+02
14.	Pm-147	2.6 Years	7.36E-01
15.	Sm-151	70 Years	3.24E+00
16.	Eu-152	13.3 Years	1.06E-03
17.	Eu-154	8.8 Years	1.16E-01
18.	Ra-226	1,600 Years	6.96E-10
19.	Th-232	1.41E+10 Years	1.49E-14
20.	U (Gross)	4.5E+9 Years	3.97E-02
21.	U-233	1.62E+5 Years	2.43E-01
22.	U-235	7.04E+8 Years	5.05E-10
23.	Pu-239/40	24,131 Years	5.69E-02
24.	Pu-241	14.4 Years	3.62E-01
25.	Am-241	432 Years	2.20E-01
26.	Total α	n/a	1.10E+01
27.	Total β	n/a	1.36E+03

Site # 86: 216-A-37
Crib

Site # 80: 216-A-28
Crib
203-A Acid Pumphouse & UNH Tank Wastes
Active from 12/01/58 to 11/30/67
Cumulative Waste Volume 3.00E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	1.96E-06
2.	Zr-93	1.53E+6 Years	2.53E-05
3.	Tc-99	2.13E+5 Years	1.13E-04
4.	Pd-107	7E+6 Years	3.32E-07
5.	Cd-113M	5.1 Years	5.00E-09
6.	Sb-125	2.8 Years	2.20E-21
7.	Cs-134	2.1 Years	3.99E-08
8.	Cs-135	2.9E+6 Years	2.26E-06
9.	Pm-147	2.6 Years	8.57E-05
10.	Sm-151	70 Years	5.59E-03
11.	Eu-152	13.3 Years	1.30E-06
12.	Eu-154	8.8 Years	1.56E-04
13.	Eu-155	4.96 Years	7.63E-08
14.	Ra-226	1,600 Years	3.69E-09
15.	Th-232	1.41E+10 Years	7.90E-14
16.	U (Gross)	4.5E+9 Years	2.10E-01
17.	Total β	n/a	7.47E-03

Site # 82: 216-A-30
Crib
PUREX Steam Condensate
Active from 01/01/61 to 12/31/91
Cumulative Waste Volume 7.50E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.07E+01
2.	Co-60	5.27 Years	1.44E-01
3.	Se-79	6.5E+4 Years	2.72E-04
4.	Sr-90	29.12 Years	8.25E+01
5.	Zr-93	1.53E+6 Years	3.51E-03
6.	Tc-99	2.13E+5 Years	1.56E-02
7.	Ru-106	368 Days	7.67E-04
8.	Pd-107	7E+6 Years	4.60E-05
9.	Cd-113M	5.1 Years	8.02E-07
10.	Sb-125	2.8 Years	2.32E-03
11.	Cs-134	2.1 Years	3.03E-04
12.	Cs-135	2.9E+6 Years	3.13E-04
13.	Cs-137	30 Years	9.48E+01
14.	Pm-147	2.6 Years	1.54E-01
15.	Sm-151	70 Years	7.93E-01
16.	Eu-152	13.3 Years	2.18E-04
17.	Eu-154	8.8 Years	2.70E-02

8.	Cd-113M	5.1 Years	9.54E-09
9.	Sb-125	2.8 Years	1.20E-03

18.	Eu-155	4.96 Years	2.32E-03
19.	Ra-226	1,600 Years	1.76E-09

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10.	Cs-134	2.1 Years	1.45E-04
11.	Cs-135	2.9E+6 Years	2.30E-06
12.	Cs-137	30 Years	1.71E-01
13.	Pm-147	2.6 Years	5.78E-02
14.	Sm-151	70 Years	6.84E-03
15.	Eu-152	13.3 Years	5.04E-06
16.	Eu-154	8.8 Years	1.52E-03
17.	Eu-155	4.96 Years	1.15E-03
18.	Ra-226	1,600 Years	3.05E-10
19.	Th-232	1.41E+10 Years	6.53E-15
20.	U (Gross)	4.5E+9 Years	1.74E-02
21.	U-233	1.62E+5 Years	5.24E-13
22.	U-234	2.45E+5 Years	5.13E-08
23.	U-235	7.04E+8 Years	3.47E-10
24.	U-238	4.47E+9 Years	2.50E-03
25.	Pu-239/40	24,131 Years	3.93E-02
26.	Am-241	432 Years	1.02E-01
27.	Total α	n/a	1.07E-01
28.	Total β	n/a	1.89E+00

Site # 91: 216-A-45
Crib
PUREX Process Condensate
Active from 03/04/87 to 12/31/89
Cumulative Waste Volume 1.03E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.33E+03
2.	Se-79	6.5E+4 Years	1.07E-10
3.	Sr-90	29.12 Years	<6.74E-03
4.	Zr-93	1.53E+6 Years	1.38E-09
5.	Tc-99	2.13E+5 Years	6.13E-09
6.	Ru-106	368 Days	<2.74E-05
7.	Pd-107	7E+6 Years	1.81E-11
8.	Cd-113M	5.1 Years	5.95E-13
9.	Sb-125	2.8 Years	9.16E-08
10.	I-129	1.57E+7 Years	1.11E-02
11.	Cs-134	2.1 Years	2.47E-08
12.	Cs-135	2.9E+6 Years	1.23E-10
13.	Cs-137	30 Years	7.90E-03
14.	Pm-147	2.6 Years	3.92E-03
15.	Sm-151	70 Years	3.79E-07
16.	Eu-152	13.3 Years	3.49E-10
17.	Eu-154	8.8 Years	2.81E-08
18.	Eu-155	4.96 Years	1.64E-07
19.	Ra-226	1,600 Years	3.94E-11
20.	Th-232	1.41E+10 Years	8.44E-16
21.	U (Gross)	4.5E+9 Years	2.25E-03
22.	U-233	1.62E+5 Years	5.83E-13
23.	U-234	2.45E+5 Years	1.51E-07
24.	U-235	7.04E+8 Years	4.93E-10
25.	Pu-238	87.8 Years	5.71E-03

26.	Pu-239/40	24,131 Years	5.56E-02
27.	Pu-241	14.4 Years	4.27E-01
28.	Am-241	432 Years	1.16E-01
29.	Total α	n/a	5.51E-02
30.	Total β	n/a	1.12E-01

Site # 140: 216-B-5
Reverse Well
B-Plant & 5-6 Wastes
Active from 04/01/45 to 10/31/47
Cumulative Waste Volume 3.06E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	2.00E-04
2.	Sr-90	29.12 Years	2.06E+01
3.	Zr-93	1.53E+6 Years	2.59E-03
4.	Tc-99	2.13E+5 Years	1.15E-02
5.	Ru-106	368 Days	2.13E-14
6.	Pd-107	7E+6 Years	3.40E-05
7.	Cd-113M	5.1 Years	2.55E-07
8.	Sb-125	2.8 Years	6.30E-21
9.	Cs-134	2.1 Years	3.71E-08
10.	Cs-135	2.9E+6 Years	2.31E-04
11.	Cs-137	30 Years	2.37E+01
12.	Pm-147	2.6 Years	2.20E-04
13.	Sm-151	70 Years	5.12E-01
14.	Eu-152	13.3 Years	5.91E-05
15.	Eu-154	8.8 Years	8.68E-03
16.	Eu-155	4.96 Years	3.82E-08
17.	Total α	n/a	2.63E+02
18.	Total β	n/a	1.08E+02

Site # 153: 216-B-7
Two Cribs in One
224-B, 5-6 Drain, B-Plant Construction Waste
Active from 10/01/46 to 05/31/67
Cumulative Waste Volume 4.36E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.98E-03
2.	Se-79	6.5E+4 Years	4.13E-05
3.	Sr-90	29.12 Years	1.78E+03
4.	Zr-93	1.53E+6 Years	5.33E-04
5.	Tc-99	2.13E+5 Years	2.37E-03
6.	Ru-106	368 Days	5.78E-12
7.	Pd-107	7E+6 Years	6.99E-06

8.	Cd-113M	5.1 Years	7.17E-08
9.	Sb-125	2.8 Years	8.95E-21
10.	Cs-134	2.1 Years	1.46E-07
11.	Cs-135	2.9E+6 Years	4.75E-05
12.	Cs-137	30 Years	3.50E+01
13.	Pm-147	2.6 Years	3.40E-04
14.	Sm-151	70 Years	1.11E-01
15.	Eu-152	13.3 Years	1.75E-05
16.	Eu-154	8.8 Years	2.34E-03
17.	Eu-155	4.96 Years	3.03E-07
18.	Ra-226	1,600 Years	1.06E-09
19.	Th-232	1.41E+10 Years	2.27E-14
20.	U (Gross)	4.5E+9 Years	6.05E-02
21.	Total α	n/a	2.64E+02
22.	Total β	n/a	4.49E+03

Site # 154: 216-B-8
Crib
224-B, 5-6 Cell Drain, & TBP Second Cycle Wastes
Active from 03/01/48 to 07/31/53
Cumulative Waste Volume 2.72E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.54E-03
2.	Se-79	6.5E+4 Years	3.05E-05
3.	Sr-90	29.12 Years	4.50E+00
4.	Zr-93	1.53E+6 Years	3.95E-04
5.	Tc-99	2.13E+5 Years	1.76E-03
6.	Ru-106	368 Days	1.47E-13
7.	Pd-107	7E+6 Years	5.18E-06
8.	Cd-113M	5.1 Years	4.75E-08
9.	Sb-125	2.8 Years	2.82E-21
10.	Cs-134	2.1 Years	2.39E-08
11.	Cs-135	2.9E+6 Years	3.52E-05
12.	Cs-137	30 Years	1.61E+01
13.	Pm-147	2.6 Years	1.02E-04
14.	Sm-151	70 Years	8.05E-02
15.	Eu-152	13.3 Years	1.14E-05
16.	Eu-154	8.8 Years	1.57E-03
17.	Eu-155	4.96 Years	3.02E-08
18.	Ra-226	1,600 Years	2.64E-10
19.	Th-232	1.41E+10 Years	5.67E-15
20.	U (Gross)	4.5E+9 Years	1.51E-02
21.	Total α	n/a	1.84E+00
22.	Total β	n/a	4.93E+01

Site # 155: 216-B-9
Crib
5-6 Cell Drain & TBP Second Cycle Wastes
Active from 08/01/48 to 07/31/61

Cumulative Waste Volume 3.60E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.47E-04
2.	Se-79	6.5E+4 Years	4.77E-04
3.	Sr-90	29.12 Years	4.46E+00
4.	Zr-93	1.53E+6 Years	6.17E-03
5.	Tc-99	2.13E+5 Years	2.75E-02
6.	Ru-106	368 Days	1.66E-13
7.	Pd-107	7E+6 Years	8.09E-05
8.	Cd-113M	5.1 Years	7.27E-07
9.	Sb-125	2.8 Years	3.81E-20
10.	Cs-134	2.1 Years	3.02E-07
11.	Cs-135	2.9E+6 Years	5.50E-04
12.	Cs-137	30 Years	3.18E+00
13.	Pm-147	2.6 Years	1.37E-03
14.	Sm-151	70 Years	1.25E+00
15.	Eu-152	13.3 Years	1.73E-04
16.	Eu-154	8.8 Years	2.42E-02
17.	Eu-155	4.96 Years	3.67E-07
18.	Ra-226	1,600 Years	2.64E-10
19.	Th-232	1.41E+10 Years	5.67E-15
20.	U (Gross)	4.5E+9 Years	1.51E-02
21.	Total α	n/a	1.07E+01
22.	Total β	n/a	2.00E+01

Site # 97: 216-B-10
Crib
222-B Laboratory & 292-B Stack Drain Wastes
Active from 12/01/49 to 01/31/52
Cumulative Waste Volume 9.99E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.63E-04
2.	Se-79	6.5E+4 Years	1.14E-06
3.	Sr-90	29.12 Years	1.52E+00
4.	Zr-93	1.53E+6 Years	1.47E-05
5.	Tc-99	2.13E+5 Years	6.54E-05
6.	Ru-106	368 Days	3.05E-14
7.	Pd-107	7E+6 Years	1.93E-07
8.	Cd-113M	5.1 Years	1.82E-09
9.	Sb-125	2.8 Years	1.16E-22
10.	Cs-134	2.1 Years	9.90E-10
11.	Cs-135	2.9E+6 Years	1.31E-06
12.	Cs-137	30 Years	3.25E-01
13.	Pm-147	2.6 Years	4.20E-06
14.	Sm-151	70 Years	3.01E-03
15.	Eu-152	13.3 Years	4.37E-07
16.	Eu-154	8.8 Years	6.01E-05
17.	Eu-155	4.96 Years	1.25E-09

18.	Ra-226	1,600 Years	5.29E-11
19.	Th-232	1.41E+10 Years	1.13E-15
20.	U (Gross)	4.5E+9 Years	3.02E-03
21.	Total α	n/a	6.02E-01
22.	Total β	n/a	4.55E+00

Site # 98: 216-B-10B
Crib
B-Plant R-13 Waste
Active from 06/01/69 to 10/31/73
Cumulative Waste Volume 2.80E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.15E-08
2.	Se-79	6.5E+4 Years	5.49E-11
3.	Sr-90	29.12 Years	1.60E-04
4.	Zr-93	1.53E+6 Years	7.10E-10
5.	Tc-99	2.13E+5 Years	3.16E-09
6.	Ru-106	368 Days	<5.96E-15
7.	Pd-107	7E+6 Years	9.31E-12
8.	Cd-113M	5.1 Years	2.50E-13
9.	Sb-125	2.8 Years	1.31E-24
10.	Cs-134	2.1 Years	6.34E-11
11.	Cs-135	2.9E+6 Years	6.33E-11
12.	Cs-137	30 Years	5.67E-05
13.	Pm-147	2.6 Years	5.59E-08
14.	Sm-151	70 Years	1.72E-07
15.	Eu-152	13.3 Years	7.17E-11
16.	Eu-154	8.8 Years	7.25E-09
17.	Eu-155	4.96 Years	2.10E-10
18.	Ra-226	1,600 Years	4.35E-15
19.	Th-232	1.41E+10 Years	9.32E-20
20.	U (Gross)	4.5E+9 Years	2.48E-07
21.	Total α	n/a	2.91E-06
22.	Total β	n/a	5.31E-04

Site # 99: 216-B-11
Reverse Well
242-B Evaporator Condensate
Active from 12/01/51 to 10/31/54
Cumulative Waste Volume 2.96E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.35E-04
2.	Se-79	6.5E+4 Years	5.55E-08
3.	Sr-90	29.12 Years	1.62E+00
4.	Zr-93	1.53E+6 Years	7.17E-07
5.	Tc-99	2.13E+5 Years	3.19E-06

6.	Ru-106	368 Days	8.76E-13
7.	Pd-107	7E+6 Years	9.40E-09
8.	Cd-113M	5.1 Years	1.01E-10
9.	Sb-125	2.8 Years	1.09E-23
10.	Cs-134	2.1 Years	1.14E-10
11.	Cs-135	2.9E+6 Years	6.39E-08
12.	Cs-137	30 Years	1.73E+01
13.	Pm-147	2.6 Years	4.03E-07
14.	Sm-151	70 Years	1.50E-04
15.	Eu-152	13.3 Years	2.48E-08
16.	Eu-154	8.8 Years	3.28E-06
17.	Eu-155	4.96 Years	1.62E-10
18.	Ra-226	1,600 Years	7.93E-11
19.	Th-232	1.41E+10 Years	1.70E-15
20.	U (Gross)	4.5E+9 Years	4.53E-03
21.	Total α	n/a	2.46E-01
22.	Total β	n/a	4.49E+01

Site # 100: 216-B-12
Two Cribs in One
U-Plant & B-Plant Process Condensates
Active from 11/01/52 to 11/30/73
Cumulative Waste Volume 5.20E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.79E-02
2.	Se-79	6.5E+4 Years	5.02E-04
3.	Sr-90	29.12 Years	6.40E+01
4.	Zr-93	1.53E+6 Years	6.49E-03
5.	Tc-99	2.13E+5 Years	2.89E-02
6.	Ru-106	368 Days	1.21E-07
7.	Pd-107	7E+6 Years	8.51E-05
8.	Cd-113M	5.1 Years	1.69E-06
9.	Sb-125	2.8 Years	3.39E-18
10.	Cs-134	2.1 Years	1.17E-04
11.	Cs-135	2.9E+6 Years	5.78E-04
12.	Cs-137	30 Years	5.80E+02
13.	Pm-147	2.6 Years	1.40E-01
14.	Sm-151	70 Years	1.49E+00
15.	Eu-152	13.3 Years	4.63E-04
16.	Eu-154	8.8 Years	5.09E-02
17.	Eu-155	4.96 Years	3.21E-04
18.	Ra-226	1,600 Years	1.22E-07
19.	Th-232	1.41E+10 Years	2.61E-12
20.	U (Gross)	4.5E+9 Years	6.95E+00
21.	Total α	n/a	2.30E+01
22.	Total β	n/a	1.54E+03

Site # 101: 216-B-14
To 19 BC Cribs

U-Plant Scavenged Waste
Active from 01/01/56 to 02/29/56
Cumulative Waste Volume 8.71E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.67E-02
2.	Se-79	6.5E+4 Years	1.31E-03
3.	Sr-90	29.12 Years	1.39E+02
4.	Zr-93	1.53E+6 Years	1.69E-02
5.	Tc-99	2.13E+5 Years	7.53E-02
6.	Ru-106	368 Days	6.67E-09
7.	Pd-107	7E+6 Years	2.22E-04
8.	Cd-113M	5.1 Years	2.74E-06
9.	Sb-125	2.8 Years	5.27E-19
10.	Cs-134	2.1 Years	6.90E-06
11.	Cs-135	2.9E+6 Years	1.51E-03
12.	Cs-137	30 Years	9.22E+01
13.	Pm-147	2.6 Years	1.99E-02
14.	Sm-151	70 Years	3.62E+00
15.	Eu-152	13.3 Years	6.88E-04
16.	Eu-154	8.8 Years	8.75E-02
17.	Eu-155	4.96 Years	1.10E-05
18.	Ra-226	1,600 Years	1.27E-09
19.	Th-232	1.41E+10 Years	2.72E-14
20.	U (Gross)	4.5E+9 Years	7.24E-02
21.	Total α	n/a	1.53E+00
22.	Total β	n/a	5.67E+02

Site # 102: 216-B-15
Crib
U-Plant Scavenged Waste
Active from 04/01/56 to 12/31/57
Cumulative Waste Volume 6.32E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.77E-02
2.	Se-79	6.5E+4 Years	1.53E-03
3.	Sr-90	29.12 Years	7.05E+01
4.	Zr-93	1.53E+6 Years	1.98E-02
5.	Tc-99	2.13E+5 Years	8.80E-02
6.	Ru-106	368 Days	2.98E-09
7.	Pd-107	7E+6 Years	2.60E-04
8.	Cd-113M	5.1 Years	3.23E-06
9.	Sb-125	2.8 Years	6.51E-19
10.	Cs-134	2.1 Years	8.68E-06
11.	Cs-135	2.9E+6 Years	1.76E-03
12.	Cs-137	30 Years	7.49E+01
13.	Pm-147	2.6 Years	2.46E-02
14.	Sm-151	70 Years	4.24E+00
15.	Eu-152	13.3 Years	8.13E-04

16.	Eu-154	8.8 Years	1.03E-01
17.	Eu-155	4.96 Years	1.40E-05
18.	Ra-226	1,600 Years	6.08E-10
19.	Th-232	1.41E+10 Years	1.30E-14
20.	U (Gross)	4.5E+9 Years	3.47E-02
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	3.57E+02

Site # 103: 216-B-16
Crib
U-Plant Scavenged Waste
Active from 04/01/56 to 08/31/56
Cumulative Waste Volume 5.60E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.67E-02
2.	Se-79	6.5E+4 Years	1.60E-03
3.	Sr-90	29.12 Years	2.43E+02
4.	Zr-93	1.53E+6 Years	2.07E-02
5.	Tc-99	2.13E+5 Years	9.21E-02
6.	Ru-106	368 Days	1.47E-09
7.	Pd-107	7E+6 Years	2.72E-04
8.	Cd-113M	5.1 Years	3.35E-06
9.	Sb-125	2.8 Years	6.45E-19
10.	Cs-134	2.1 Years	8.44E-06
11.	Cs-135	2.9E+6 Years	1.85E-03
12.	Cs-137	30 Years	2.40E+02
13.	Pm-147	2.6 Years	2.43E-02
14.	Sm-151	70 Years	4.43E+00
15.	Eu-152	13.3 Years	8.42E-04
16.	Eu-154	8.8 Years	1.07E-01
17.	Eu-155	4.96 Years	1.35E-05
18.	Ra-226	1,600 Years	1.88E-09
19.	Th-232	1.41E+10 Years	4.02E-14
20.	U (Gross)	4.5E+9 Years	1.07E-01
21.	Total α	n/a	6.14E-01
22.	Total β	n/a	1.18E+03

Site # 104: 216-B-17
Crib
Tank Farm Scavenged Waste
Active from 01/01/56 to 01/31/56
Cumulative Waste Volume 3.41E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.35E-03
2.	Se-79	6.5E+4 Years	4.79E-05

3.	Sr-90	29.12 Years	5.57E+01
4.	Zr-93	1.53E+6 Years	6.19E-04
5.	Tc-99	2.13E+5 Years	2.75E-03
6.	Ru-106	368 Days	2.83E-11
7.	Pd-107	7E+6 Years	8.11E-06
8.	Cd-113M	5.1 Years	1.00E-07
9.	Sb-125	2.8 Years	1.92E-20
10.	Cs-134	2.1 Years	2.52E-07
11.	Cs-135	2.9E+6 Years	5.51E-05
12.	Cs-137	30 Years	8.11E+01
13.	Pm-147	2.6 Years	7.26E-04
14.	Sm-151	70 Years	1.32E-01
15.	Eu-152	13.3 Years	2.51E-05
16.	Eu-154	8.8 Years	3.20E-03
17.	Eu-155	4.96 Years	4.03E-07
18.	Ra-226	1,600 Years	2.06E-09
19.	Th-232	1.41E+10 Years	4.42E-14
20.	U (Gross)	4.5E+9 Years	1.18E-01
21.	Total α	n/a	6.14E-01
22.	Total β	n/a	3.30E+02

Site # 105: 216-B-18
Crib
U-Plant Scavenged Waste
Active from 03/01/56 to 04/30/56
Cumulative Waste Volume 8.52E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.67E-02
2.	Se-79	6.5E+4 Years	7.68E-04
3.	Sr-90	29.12 Years	6.61E+01
4.	Zr-93	1.53E+6 Years	9.92E-03
5.	Tc-99	2.13E+5 Years	4.41E-02
6.	Ru-106	368 Days	2.15E-09
7.	Pd-107	7E+6 Years	1.30E-04
8.	Cd-113M	5.1 Years	1.60E-06
9.	Sb-125	2.8 Years	3.09E-19
10.	Cs-134	2.1 Years	4.04E-06
11.	Cs-135	2.9E+6 Years	8.84E-04
12.	Cs-137	30 Years	9.22E+01
13.	Pm-147	2.6 Years	1.16E-02
14.	Sm-151	70 Years	2.12E+00
15.	Eu-152	13.3 Years	4.03E-04
16.	Eu-154	8.8 Years	5.12E-02
17.	Eu-155	4.96 Years	6.46E-06
18.	Ra-226	1,600 Years	1.38E-09
19.	Th-232	1.41E+10 Years	2.95E-14
20.	U (Gross)	4.5E+9 Years	7.85E-02
21.	Total α	n/a	6.14E-01
22.	Total β	n/a	3.85E+02

Site # 106: 216-B-19
Crib
U-Plant & Tank Farm Scavenged Waste
Active from 02/01/57 to 10/31/57
Cumulative Waste Volume 6.40E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.91E-02
2.	Se-79	6.5E+4 Years	2.32E-06
3.	Sr-90	29.12 Years	7.13E+01
4.	Zr-93	1.53E+6 Years	3.00E-05
5.	Tc-99	2.13E+5 Years	1.33E-04
6.	Ru-106	368 Days	1.15E-09
7.	Pd-107	7E+6 Years	3.93E-07
8.	Cd-113M	5.1 Years	5.09E-09
9.	Sb-125	2.8 Years	1.20E-21
10.	Cs-134	2.1 Years	1.71E-08
11.	Cs-135	2.9E+6 Years	2.67E-06
12.	Cs-137	30 Years	1.02E+02
13.	Pm-147	2.6 Years	4.58E-05
14.	Sm-151	70 Years	6.46E-03
15.	Eu-152	13.3 Years	1.29E-06
16.	Eu-154	8.8 Years	1.62E-04
17.	Eu-155	4.96 Years	2.86E-08
18.	Ra-226	1,600 Years	1.06E-09
19.	Th-232	1.41E+10 Years	2.27E-14
20.	U (Gross)	4.5E+9 Years	6.04E-02
21.	Total α	n/a	6.14E-01
22.	Total β	n/a	4.18E+02

Site # 133: 216-B-43
Crib
U-Plant Scavenged Waste
Active from 11/01/54 to 11/30/54
Cumulative Waste Volume 2.12E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.57E-03
2.	Se-79	6.5E+4 Years	2.72E-06
3.	Sr-90	29.12 Years	4.64E+02
4.	Zr-93	1.53E+6 Years	3.52E-05
5.	Tc-99	2.13E+5 Years	1.56E-04
6.	Ru-106	368 Days	1.42E-12
7.	Pd-107	7E+6 Years	4.62E-07
8.	Cd-113M	5.1 Years	5.15E-09
9.	Sb-125	2.8 Years	6.55E-22
10.	Cs-134	2.1 Years	7.29E-09
11.	Cs-135	2.9E+6 Years	3.14E-06
12.	Cs-137	30 Years	1.06E+02

13.	Pm-147	2.6 Years	2.43E-05
14.	Sm-151	70 Years	7.41E-03
15.	Eu-152	13.3 Years	1.27E-06
16.	Eu-154	8.8 Years	1.67E-04
17.	Eu-155	4.96 Years	1.06E-08
18.	Ra-226	1,600 Years	7.93E-11
19.	Th-232	1.41E+10 Years	1.70E-15
20.	U (Gross)	4.5E+9 Years	4.53E-03
21.	Total α	n/a	3.07E-02
22.	Total β	n/a	1.40E+03

Site # 134: 216-B-44
Crib
U-Plant Scavenged Waste
Active from 11/01/54 to 03/31/55
Cumulative Waste Volume 5.60E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.39E-02
2.	Se-79	6.5E+4 Years	2.44E-04
3.	Sr-90	29.12 Years	9.66E+02
4.	Zr-93	1.53E+6 Years	3.15E-03
5.	Tc-99	2.13E+5 Years	1.40E-02
6.	Ru-106	368 Days	2.88E-10
7.	Pd-107	7E+6 Years	4.13E-05
8.	Cd-113M	5.1 Years	4.66E-07
9.	Sb-125	2.8 Years	6.21E-20
10.	Cs-134	2.1 Years	7.05E-07
11.	Cs-135	2.9E+6 Years	2.81E-04
12.	Cs-137	30 Years	2.50E+02
13.	Pm-147	2.6 Years	2.31E-03
14.	Sm-151	70 Years	6.64E-01
15.	Eu-152	13.3 Years	1.15E-04
16.	Eu-154	8.8 Years	1.50E-02
17.	Eu-155	4.96 Years	1.04E-06
18.	Ra-226	1,600 Years	1.32E-11
19.	Th-232	1.41E+10 Years	2.83E-16
20.	U (Gross)	4.5E+9 Years	7.55E-04
21.	Total α	n/a	9.21E-01
22.	Total β	n/a	2.99E+03

Site # 135: 216-B-45
Crib
U-Plant Scavenged Waste
Active from 04/01/55 to 06/30/55
Cumulative Waste Volume 4.92E+06 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Co-60	5.27 Years	1.47E-02
2.	Se-79	6.5E+4 Years	6.65E-04
3.	Sr-90	29.12 Years	9.50E+02
4.	Zr-93	1.53E+6 Years	8.60E-03
5.	Tc-99	2.13E+5 Years	3.82E-02
6.	Ru-106	368 Days	9.64E-10
7.	Pd-107	7E+6 Years	1.13E-04
8.	Cd-113M	5.1 Years	1.32E-06
9.	Sb-125	2.8 Years	2.07E-19
10.	Cs-134	2.1 Years	2.50E-06
11.	Cs-135	2.9E+6 Years	7.66E-04
12.	Cs-137	30 Years	5.40E+02
13.	Pm-147	2.6 Years	7.74E-03
14.	Sm-151	70 Years	1.82E+00
15.	Eu-152	13.3 Years	3.30E-04
16.	Eu-154	8.8 Years	4.25E-02
17.	Eu-155	4.96 Years	3.82E-06
18.	Ra-226	1,600 Years	3.96E-11
19.	Th-232	1.41E+10 Years	8.49E-16
20.	U (Gross)	4.5E+9 Years	2.26E-03
21.	Total α	n/a	6.14E-01
22.	Total β	n/a	3.64E+03

Site # 136: 216-B-46
Crib
U-Plant Scavenged Waste
Active from 09/01/55 to 12/31/55
Cumulative Waste Volume 6.70E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.47E-02
2.	Se-79	6.5E+4 Years	3.83E-03
3.	Sr-90	29.12 Years	5.09E+02
4.	Zr-93	1.53E+6 Years	4.96E-02
5.	Tc-99	2.13E+5 Years	2.20E-01
6.	Ru-106	368 Days	1.59E-09
7.	Pd-107	7E+6 Years	6.50E-04
8.	Cd-113M	5.1 Years	7.62E-06
9.	Sb-125	2.8 Years	1.19E-18
10.	Cs-134	2.1 Years	1.44E-05
11.	Cs-135	2.9E+6 Years	4.42E-03
12.	Cs-137	30 Years	7.21E+01
13.	Pm-147	2.6 Years	4.46E-02
14.	Sm-151	70 Years	1.05E+01
15.	Eu-152	13.3 Years	1.90E-03
16.	Eu-154	8.8 Years	2.45E-01
17.	Eu-155	4.96 Years	2.20E-05
18.	Ra-226	1,600 Years	1.11E-09
19.	Th-232	1.41E+10 Years	2.38E-14
20.	U (Gross)	4.5E+9 Years	6.34E-02
21.	Total α	n/a	1.23E+00
22.	Total β	n/a	1.45E+03

Site # 137: 216-B-47
Crib
U-Plant Scavenged Waste
Active from 09/01/55 to 09/30/55
Cumulative Waste Volume 3.71E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.93E-03
2.	Se-79	6.5E+4 Years	3.46E-04
3.	Sr-90	29.12 Years	2.10E+02
4.	Zr-93	1.53E+6 Years	4.47E-03
5.	Tc-99	2.13E+5 Years	1.99E-02
6.	Ru-106	368 Days	1.08E-09
7.	Pd-107	7E+6 Years	5.87E-05
8.	Cd-113M	5.1 Years	6.88E-07
9.	Sb-125	2.8 Years	1.08E-19
10.	Cs-134	2.1 Years	1.30E-06
11.	Cs-135	2.9E+6 Years	3.99E-04
12.	Cs-137	30 Years	5.40E+01
13.	Pm-147	2.6 Years	4.03E-03
14.	Sm-151	70 Years	9.50E-01
15.	Eu-152	13.3 Years	1.71E-04
16.	Eu-154	8.8 Years	2.21E-02
17.	Eu-155	4.96 Years	1.98E-06
18.	Ra-226	1,600 Years	3.96E-11
19.	Th-232	1.41E+10 Years	8.49E-16
20.	U (Gross)	4.5E+9 Years	2.26E-03
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	6.51E+02

Site # 138: 216-B-48
Crib
U-Plant Scavenged Waste
Active from 11/01/55 to 11/30/55
Cumulative Waste Volume 4.09E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.93E-03
2.	Se-79	6.5E+4 Years	2.78E-03
3.	Sr-90	29.12 Years	4.41E+02
4.	Zr-93	1.53E+6 Years	3.59E-02
5.	Tc-99	2.13E+5 Years	1.60E-01
6.	Ru-106	368 Days	3.86E-10
7.	Pd-107	7E+6 Years	4.71E-04
8.	Cd-113M	5.1 Years	5.53E-06
9.	Sb-125	2.8 Years	8.64E-19
10.	Cs-134	2.1 Years	1.04E-05

11.	Cs-135	2.9E+6 Years	3.20E-03
12.	Cs-137	30 Years	1.62E+02
13.	Pm-147	2.6 Years	3.23E-02
14.	Sm-151	70 Years	7.62E+00
15.	Eu-152	13.3 Years	1.38E-03
16.	Eu-154	8.8 Years	1.78E-01
17.	Eu-155	4.96 Years	1.59E-05
18.	Ra-226	1,600 Years	1.32E-11
19.	Th-232	1.41E+10 Years	2.84E-16
20.	U (Gross)	4.5E+9 Years	7.55E-04
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	1.49E+03

Site # 139: 216-B-49
Crib
U-Plant Scavenged Waste
Active from 11/01/55 to 12/31/55
Cumulative Waste Volume 6.70E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.47E-02
2.	Se-79	6.5E+4 Years	3.53E-03
3.	Sr-90	29.12 Years	9.16E+02
4.	Zr-93	1.53E+6 Years	4.56E-02
5.	Tc-99	2.13E+5 Years	2.03E-01
6.	Ru-106	368 Days	1.36E-09
7.	Pd-107	7E+6 Years	5.98E-04
8.	Cd-113M	5.1 Years	7.02E-06
9.	Sb-125	2.8 Years	1.10E-18
10.	Cs-134	2.1 Years	1.32E-05
11.	Cs-135	2.9E+6 Years	4.07E-03
12.	Cs-137	30 Years	1.48E+02
13.	Pm-147	2.6 Years	4.11E-02
14.	Sm-151	70 Years	9.68E+00
15.	Eu-152	13.3 Years	1.75E-03
16.	Eu-154	8.8 Years	2.26E-01
17.	Eu-155	4.96 Years	2.02E-05
18.	Ra-226	1,600 Years	1.85E-09
19.	Th-232	1.41E+10 Years	3.96E-14
20.	U (Gross)	4.5E+9 Years	1.06E-01
21.	Total α	n/a	9.21E-01
22.	Total β	n/a	2.63E+03

Site # 141: 216-B-50
Crib
ITS-1 Waste
Active from 01/01/65 to 01/03/74
Cumulative Waste Volume 5.48E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<4.63E-03
2.	Se-79	6.5E+4 Years	6.22E-07
3.	Sr-90	29.12 Years	<2.74E+00
4.	Zr-93	1.53E+6 Years	8.03E-06
5.	Tc-99	2.13E+5 Years	3.57E-05
6.	Ru-106	368 Days	2.22E-09
7.	Pd-107	7E+6 Years	1.05E-07
8.	Cd-113M	5.1 Years	2.18E-09
9.	Sb-125	2.8 Years	3.87E-21
10.	Cs-134	2.1 Years	1.24E-07
11.	Cs-135	2.9E+6 Years	7.16E-07
12.	Cs-137	30 Years	4.15E+01
13.	Pm-147	2.6 Years	1.59E-04
14.	Sm-151	70 Years	1.87E-03
15.	Eu-152	13.3 Years	5.98E-07
16.	Eu-154	8.8 Years	6.54E-05
17.	Eu-155	4.96 Years	3.29E-07
18.	Ra-226	1,600 Years	1.66E-12
19.	Th-232	1.41E+10 Years	3.56E-17
20.	U (Gross)	4.5E+9 Years	<9.49E-05
21.	Total α	n/a	1.47E-02
22.	Total β	n/a	1.05E+02

Site # 146: 216-B-55
Crib
B-Plant Steam Condensate
Active from 09/01/67 to 12/31/90
Cumulative Waste Volume 1.23E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.62E+00
2.	Co-60	5.27 Years	2.10E-02
3.	Se-79	6.5E+4 Years	2.15E-06
4.	Sr-90	29.12 Years	5.84E+00
5.	Zr-93	1.53E+6 Years	2.77E-05
6.	Tc-99	2.13E+5 Years	1.23E-04
7.	Ru-106	368 Days	2.92E-07
8.	Pd-107	7E+6 Years	3.64E-07
9.	Cd-113M	5.1 Years	9.73E-09
10.	Sb-125	2.8 Years	3.84E-05
11.	Cs-134	2.1 Years	5.36E-06
12.	Cs-135	2.9E+6 Years	2.47E-06
13.	Cs-137	30 Years	1.11E+01
14.	Pm-147	2.6 Years	3.67E-03
15.	Sm-151	70 Years	6.77E-03
16.	Eu-152	13.3 Years	2.99E-06
17.	Eu-154	8.8 Years	1.69E-03
18.	Eu-155	4.96 Years	3.53E-05
19.	Ra-226	1,600 Years	4.68E-10
20.	Th-232	1.41E+10 Years	1.00E-14

21.	U (Gross)	4.5E+9 Years	<2.67E-02
22.	U-233	1.62E+5 Years	2.06E-17
23.	U-235	7.04E+8 Years	3.48E-14
24.	Pu-239/40	24,131 Years	3.94E-06
25.	Am-241	432 Years	4.01E-06
26.	Total α	n/a	4.32E-02
27.	Total β	n/a	4.09E+01

Site # 147: 216-B-57
Crib
ITS-2 Waste
Active from 02/01/68 to 06/28/73
Cumulative Waste Volume 8.44E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.40E-03
2.	Se-79	6.5E+4 Years	3.29E-06
3.	Sr-90	29.12 Years	1.48E+00
4.	Zr-93	1.53E+6 Years	4.25E-05
5.	Tc-99	2.13E+5 Years	1.89E-04
6.	Ru-106	368 Days	9.81E-09
7.	Pd-107	7E+6 Years	5.57E-07
8.	Cd-113M	5.1 Years	1.27E-08
9.	Sb-125	2.8 Years	3.32E-20
10.	Cs-134	2.1 Years	1.23E-06
11.	Cs-135	2.9E+6 Years	3.79E-06
12.	Cs-137	30 Years	1.83E+02
13.	Pm-147	2.6 Years	1.38E-03
14.	Sm-151	70 Years	1.00E-02
15.	Eu-152	13.3 Years	3.54E-06
16.	Eu-154	8.8 Years	3.76E-04
17.	Eu-155	4.96 Years	3.52E-06
18.	Ra-226	1,600 Years	5.19E-12
19.	Th-232	1.41E+10 Years	1.11E-16
20.	U (Gross)	4.5E+9 Years	2.96E-04
21.	Total α	n/a	<1.15E-02
22.	Total β	n/a	4.37E+02

Site # 151: 216-B-62
Crib
B-Plant Process Condensate
Active from 11/01/73 to 12/31/89
Cumulative Waste Volume 2.83E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	8.86E+00
2.	Co-60	5.27 Years	2.83E-02
3.	Se-79	6.5E+4 Years	1.47E-04

4.	Sr-90	29.12 Years	6.03E+01
5.	Zr-93	1.53E+6 Years	1.90E-03
6.	Tc-99	2.13E+5 Years	8.46E-03
7.	Ru-106	368 Days	7.88E-05
8.	Pd-107	7E+6 Years	2.49E-05
9.	Cd-113M	5.1 Years	6.91E-07
10.	Sb-125	2.8 Years	8.79E-03
11.	Cs-134	2.1 Years	8.48E-04
12.	Cs-135	2.9E+6 Years	1.69E-04
13.	Cs-137	30 Years	1.09E+02
14.	Pm-147	2.6 Years	4.94E-01
15.	Sm-151	70 Years	4.76E-01
16.	Eu-152	13.3 Years	2.42E-04
17.	Eu-154	8.8 Years	9.27E-01
18.	Eu-155	4.96 Years	6.56E-03
19.	Ra-226	1,600 Years	1.75E-10
20.	Th-232	1.41E+10 Years	3.75E-15
21.	U (Gross)	4.5E+9 Years	1.00E-02
22.	U-233	1.62E+5 Years	5.24E-13
23.	U-235	7.04E+8 Years	2.02E-11
24.	Pu-239/40	24,131 Years	2.28E-03
25.	Am-241	432 Years	<1.01E-01
26.	Total α	n/a	1.05E-01
27.	Total β	n/a	4.18E+02

Site # 156: 216-C-1
Crib

Semi-works Process Condensate

Active from 01/01/53 to 06/30/57
Cumulative Waste Volume 2.34E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<3.35E-04
2.	Se-79	6.5E+4 Years	6.20E-04
3.	Sr-90	29.12 Years	6.91E+01
4.	Zr-93	1.53E+6 Years	8.01E-03
5.	Tc-99	2.13E+5 Years	3.56E-02
6.	Ru-106	368 Days	3.89E-11
7.	Pd-107	7E+6 Years	1.05E-04
8.	Cd-113M	5.1 Years	1.28E-06
9.	Sb-125	2.8 Years	2.33E-19
10.	Cs-134	2.1 Years	2.99E-06
11.	Cs-135	2.9E+6 Years	7.14E-04
12.	Cs-137	30 Years	<3.69E-02
13.	Pm-147	2.6 Years	8.77E-03
14.	Sm-151	70 Years	1.71E+00
15.	Eu-152	13.3 Years	3.20E-04
16.	Eu-154	8.8 Years	4.08E-02
17.	Eu-155	4.96 Years	4.74E-06
18.	Ra-226	1,600 Years	1.72E-09
19.	Th-232	1.41E+10 Years	3.68E-14
20.	U (Gross)	4.5E+9 Years	9.81E-02

21.	Total α	n/a	4.91E-01
22.	Total β	n/a	1.73E+02

Site # 158: 216-C-3
Crib
Chemical Makeup Waste
Active from 01/01/53 to 03/31/54
Cumulative Waste Volume 5.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.25E-04
2.	Se-79	6.5E+4 Years	8.84E-06
3.	Sr-90	29.12 Years	6.49E+00
4.	Zr-93	1.53E+6 Years	1.14E-04
5.	Tc-99	2.13E+5 Years	5.08E-04
6.	Ru-106	368 Days	1.71E-13
7.	Pd-107	7E+6 Years	1.50E-06
8.	Cd-113M	5.1 Years	1.61E-08
9.	Sb-125	2.8 Years	1.74E-21
10.	Cs-134	2.1 Years	1.82E-08
11.	Cs-135	2.9E+6 Years	1.02E-05
12.	Cs-137	30 Years	<3.44E-02
13.	Pm-147	2.6 Years	6.43E-05
14.	Sm-151	70 Years	2.39E-02
15.	Eu-152	13.3 Years	3.95E-06
16.	Eu-154	8.8 Years	5.23E-04
17.	Eu-155	4.96 Years	2.58E-08
18.	Ra-226	1,600 Years	2.64E-10
19.	Th-232	1.41E+10 Years	5.67E-15
20.	U (Gross)	4.5E+9 Years	1.51E-02
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	1.62E+01

Site # 160: 216-C-5
Crib
Semi-works High Salt Waste
Active from 03/01/55 to 06/30/55
Cumulative Waste Volume 3.79E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.93E-04
2.	Se-79	6.5E+4 Years	4.03E-06
3.	Sr-90	29.12 Years	3.39E+00
4.	Zr-93	1.53E+6 Years	5.21E-05
5.	Tc-99	2.13E+5 Years	2.32E-04
6.	Ru-106	368 Days	2.84E-13
7.	Pd-107	7E+6 Years	6.83E-07
8.	Cd-113M	5.1 Years	8.02E-09

9.	Sb-125	2.8 Years	1.25E-21
10.	Cs-134	2.1 Years	1.51E-08
11.	Cs-135	2.9E+6 Years	4.64E-06
12.	Cs-137	30 Years	<3.60E-02
13.	Pm-147	2.6 Years	4.69E-05
14.	Sm-151	70 Years	1.11E-02
15.	Eu-152	13.3 Years	2.00E-06
16.	Eu-154	8.8 Years	2.58E-04
17.	Eu-155	4.96 Years	2.31E-08
18.	Ra-226	1,600 Years	3.17E-10
19.	Th-232	1.41E+10 Years	6.80E-15
20.	U (Gross)	4.5E+9 Years	1.81E-02
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	8.51E+00

Site # 162: 216-C-7
Crib
209-E Critical Mass Laboratory Waste
Active from 01/01/61 to 12/31/85
Cumulative Waste Volume 6.01E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<8.57E-04
2.	Se-79	6.5E+4 Years	1.11E-06
3.	Sr-90	29.12 Years	<4.13E-02
4.	Zr-93	1.53E+6 Years	1.43E-05
5.	Tc-99	2.13E+5 Years	6.37E-05
6.	Ru-106	368 Days	2.18E-11
7.	Pd-107	7E+6 Years	1.88E-07
8.	Cd-113M	5.1 Years	3.29E-09
9.	Sb-125	2.8 Years	2.88E-21
10.	Cs-134	2.1 Years	6.98E-08
11.	Cs-135	2.9E+6 Years	1.28E-06
12.	Cs-137	30 Years	<4.33E-02
13.	Pm-147	2.6 Years	1.15E-04
14.	Sm-151	70 Years	3.24E-03
15.	Eu-152	13.3 Years	8.75E-07
16.	Eu-154	8.8 Years	1.00E-04
17.	Eu-155	4.96 Years	1.58E-07
18.	Ra-226	1,600 Years	5.83E-13
19.	Th-232	1.41E+10 Years	1.25E-17
20.	U (Gross)	4.5E+9 Years	<3.33E-05
21.	Total α	n/a	6.77E-02
22.	Total β	n/a	2.13E-01

Site # 157: 216-C-10
Crib
Strontium Process Condensate
Active from 11/01/64 to 05/31/67
Cumulative Waste Volume 8.97E+05 Liters

Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.85E-03
2.	Se-79	6.5E+4 Years	8.64E-07
3.	Sr-90	29.12 Years	2.78E+01
4.	Zr-93	1.53E+6 Years	1.12E-05
5.	Tc-99	2.13E+5 Years	4.97E-05
6.	Ru-106	368 Days	1.85E-10
7.	Pd-107	7E+6 Years	1.46E-07
8.	Cd-113M	5.1 Years	2.73E-09
9.	Sb-125	2.8 Years	3.03E-21
10.	Cs-134	2.1 Years	7.95E-08
11.	Cs-135	2.9E+6 Years	9.95E-07
12.	Cs-137	30 Years	<6.93E-02
13.	Pm-147	2.6 Years	1.22E-04
14.	Sm-151	70 Years	2.55E-03
15.	Eu-152	13.3 Years	7.36E-07
16.	Eu-154	8.8 Years	8.29E-05
17.	Eu-155	4.96 Years	1.87E-07
18.	Ra-226	1,600 Years	2.64E-13
19.	Th-232	1.41E+10 Years	5.67E-18
20.	U (Gross)	4.5E+9 Years	<1.51E-05
21.	Total α	n/a	<9.21E-03
22.	Total β	n/a	6.91E+01

Site # 164: 216-N-2
Crib
212-N Basin & Sludge Cleanout
Active from 03/01/47 to 04/30/47
Cumulative Waste Volume 7.57E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	<5.27E-07
2.	Sr-90	29.12 Years	5.55E-02
3.	Zr-93	1.53E+6 Years	<6.82E-06
4.	Tc-99	2.13E+5 Years	<3.03E-05
5.	Ru-106	368 Days	9.74E-17
6.	Pd-107	7E+6 Years	<8.94E-08
7.	Cd-113M	5.1 Years	<7.06E-10
8.	Sb-125	2.8 Years	<2.10E-23
9.	Cs-134	2.1 Years	<1.32E-10
10.	Cs-135	2.9E+6 Years	<6.07E-07
11.	Cs-137	30 Years	6.37E-02
12.	Pm-147	2.6 Years	<7.39E-07
13.	Sm-151	70 Years	<1.36E-03
14.	Eu-152	13.3 Years	<1.65E-07
15.	Eu-154	8.8 Years	<2.38E-05
16.	Eu-155	4.96 Years	<1.41E-10
17.	Total β	n/a	2.90E-01

Site # 165: 216-N-3
Crib
212-N Basin & Sludge Cleanout
Active from 05/01/52 to 06/30/52
Cumulative Waste Volume 7.57E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	<5.27E-07
2.	Sr-90	29.12 Years	6.27E-02
3.	Zr-93	1.53E+6 Years	<6.82E-06
4.	Tc-99	2.13E+5 Years	<3.03E-05
5.	Ru-106	368 Days	3.07E-15
6.	Pd-107	7E+6 Years	<8.94E-08
7.	Cd-113M	5.1 Years	<9.04E-10
8.	Sb-125	2.8 Years	<7.59E-23
9.	Cs-134	2.1 Years	<7.18E-10
10.	Cs-135	2.9E+6 Years	<6.07E-07
11.	Cs-137	30 Years	7.14E-02
12.	Pm-147	2.6 Years	<2.78E-06
13.	Sm-151	70 Years	<1.41E-03
14.	Eu-152	13.3 Years	<2.20E-07
15.	Eu-154	8.8 Years	<2.96E-05
16.	Eu-155	4.96 Years	<9.59E-10
17.	Total β	n/a	3.26E-01

Site # 167: 216-N-5
Crib
212-P Basin & Sludge Cleanout
Active from 05/01/52 to 06/30/52
Cumulative Waste Volume 7.57E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	<5.27E-07
2.	Sr-90	29.12 Years	6.27E-02
3.	Zr-93	1.53E+6 Years	<6.82E-06
4.	Tc-99	2.13E+5 Years	<3.03E-05
5.	Ru-106	368 Days	3.07E-15
6.	Pd-107	7E+6 Years	<8.94E-08
7.	Cd-113M	5.1 Years	<9.04E-10
8.	Sb-125	2.8 Years	<7.59E-23
9.	Cs-134	2.1 Years	<7.18E-10
10.	Cs-135	2.9E+6 Years	<6.07E-07
11.	Cs-137	30 Years	7.14E-02
12.	Pm-147	2.6 Years	<2.78E-06
13.	Sm-151	70 Years	<1.41E-03
14.	Eu-152	13.3 Years	<2.20E-07
15.	Eu-154	8.8 Years	<2.96E-05
16.	Eu-155	4.96 Years	<9.59E-10

17.	Total β	n/a	3.26E-01

Site # 169: 216-N-7
Crib
212-R Basin & Sludge Cleanout
Active from 05/01/52 to 06/30/52
Cumulative Waste Volume 7.57E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	<5.27E-07
2.	Sr-90	29.12 Years	6.27E-02
3.	Zr-93	1.53E+6 Years	<6.82E-06
4.	Tc-99	2.13E+5 Years	<3.03E-05
5.	Ru-106	368 Days	3.07E-15
6.	Pd-107	7E+6 Years	<8.94E-08
7.	Cd-113M	5.1 Years	<9.04E-10
8.	Sb-125	2.8 Years	<7.59E-23
9.	Cs-134	2.1 Years	<7.18E-10
10.	Cs-135	2.9E+6 Years	<6.07E-07
11.	Cs-137	30 Years	7.14E-02
12.	Pm-147	2.6 Years	<2.78E-06
13.	Sm-151	70 Years	<1.41E-03
14.	Eu-152	13.3 Years	<2.20E-07
15.	Eu-154	8.8 Years	<2.96E-05
16.	Eu-155	4.96 Years	<9.59E-10
17.	Total β	n/a	3.26E-01

Site # 170: 216-S-1&2
Crib
REDOX Process Condensate
Active from 01/01/52 to 01/31/56
Cumulative Waste Volume 1.60E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.75E-02
2.	Se-79	6.5E+4 Years	4.64E-02
3.	Sr-90	29.12 Years	1.01E+03
4.	Zr-93	1.53E+6 Years	6.00E-01
5.	Tc-99	2.13E+5 Years	2.66E+00
6.	Ru-106	368 Days	1.28E-10
7.	Pd-107	7E+6 Years	7.86E-03
8.	Cd-113M	5.1 Years	8.99E-05
9.	Sb-125	2.8 Years	1.27E-17
10.	Cs-134	2.1 Years	1.48E-04
11.	Cs-135	2.9E+6 Years	5.34E-02
12.	Cs-137	30 Years	8.90E+02
13.	Pm-147	2.6 Years	4.75E-01
14.	Sm-151	70 Years	1.27E+02

15.	Eu-152	13.3 Years	2.23E-02
16.	Eu-154	8.8 Years	2.90E+00
17.	Eu-155	4.96 Years	2.22E-04
18.	Ra-226	1,600 Years	1.32E-08
19.	Th-232	1.41E+10 Years	2.83E-13
20.	U (Gross)	4.5E+9 Years	7.55E-01
21.	Total α	n/a	7.37E+01
22.	Total β	n/a	4.75E+03

Site # 184: 216-S-3
Crib
241-S, TK-101 & 104 Tank Farm Condensates
Active from 08/01/53 to 08/31/56
Cumulative Waste Volume 4.20E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.72E-03
2.	Se-79	6.5E+4 Years	4.49E-06
3.	Sr-90	29.12 Years	3.35E-01
4.	Zr-93	1.53E+6 Years	5.81E-05
5.	Tc-99	2.13E+5 Years	2.58E-04
6.	Ru-106	368 Days	2.24E-12
7.	Pd-107	7E+6 Years	7.61E-07
8.	Cd-113M	5.1 Years	8.65E-09
9.	Sb-125	2.8 Years	1.21E-21
10.	Cs-134	2.1 Years	1.41E-08
11.	Cs-135	2.9E+6 Years	5.17E-06
12.	Cs-137	30 Years	1.78E+01
13.	Pm-147	2.6 Years	4.52E-05
14.	Sm-151	70 Years	1.22E-02
15.	Eu-152	13.3 Years	2.15E-06
16.	Eu-154	8.8 Years	2.80E-04
17.	Eu-155	4.96 Years	2.12E-08
18.	Ra-226	1,600 Years	2.22E-12
19.	Th-232	1.41E+10 Years	4.76E-17
20.	U (Gross)	4.5E+9 Years	1.27E-04
21.	Total α	n/a	3.07E-02
22.	Total β	n/a	4.30E+01

Site # 185: 216-S-5
Crib
REDOX Steam Condensate
Active from 03/01/54 to 03/31/57
Cumulative Waste Volume 4.10E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.57E-04
2.	Se-79	6.5E+4 Years	3.32E-05

3.	Sr-90	29.12 Years	4.37E+01
4.	Zr-93	1.53E+6 Years	4.29E-04
5.	Tc-99	2.13E+5 Years	1.91E-03
6.	Ru-106	368 Days	1.47E-12
7.	Pd-107	7E+6 Years	5.63E-06
8.	Cd-113M	5.1 Years	6.47E-08
9.	Sb-125	2.8 Years	9.44E-21
10.	Cs-134	2.1 Years	1.12E-07
11.	Cs-135	2.9E+6 Years	3.82E-05
12.	Cs-137	30 Years	2.14E+01
13.	Pm-147	2.6 Years	3.52E-04
14.	Sm-151	70 Years	9.07E-02
15.	Eu-152	13.3 Years	1.61E-05
16.	Eu-154	8.8 Years	2.08E-03
17.	Eu-155	4.96 Years	1.69E-07
18.	Ra-226	1,600 Years	1.59E-09
19.	Th-232	1.41E+10 Years	3.40E-14
20.	U (Gross)	4.5E+9 Years	9.06E-02
21.	Total α	n/a	3.56E+01
22.	Total β	n/a	1.59E+02

Site # 186: 216-S-6
Crib
REDOX Steam Condensate
Active from 11/01/54 to 07/31/72
Cumulative Waste Volume 4.47E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.22E-02
2.	Se-79	6.5E+4 Years	1.12E-04
3.	Sr-90	29.12 Years	1.65E+02
4.	Zr-93	1.53E+6 Years	1.45E-03
5.	Tc-99	2.13E+5 Years	6.42E-03
6.	Ru-106	368 Days	1.21E-08
7.	Pd-107	7E+6 Years	1.90E-05
8.	Cd-113M	5.1 Years	3.10E-07
9.	Sb-125	2.8 Years	2.94E-19
10.	Cs-134	2.1 Years	8.06E-06
11.	Cs-135	2.9E+6 Years	1.29E-04
12.	Cs-137	30 Years	9.34E+01
13.	Pm-147	2.6 Years	1.19E-02
14.	Sm-151	70 Years	3.22E-01
15.	Eu-152	13.3 Years	8.19E-05
16.	Eu-154	8.8 Years	9.53E-03
17.	Eu-155	4.96 Years	1.97E-05
18.	Ra-226	1,600 Years	1.58E-09
19.	Th-232	1.41E+10 Years	3.39E-14
20.	U (Gross)	4.5E+9 Years	9.04E-02
21.	Total α	n/a	2.90E+01
22.	Total β	n/a	6.30E+02

Site # 187: 216-S-7
Crib
REDOX Process Condensate
Active from 01/01/56 to 07/31/65
Cumulative Waste Volume 3.90E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.06E-01
2.	Se-79	6.5E+4 Years	1.70E-02
3.	Sr-90	29.12 Years	1.12E+03
4.	Zr-93	1.53E+6 Years	2.20E-01
5.	Tc-99	2.13E+5 Years	9.78E-01
6.	Ru-106	368 Days	2.69E-09
7.	Pd-107	7E+6 Years	2.88E-03
8.	Cd-113M	5.1 Years	3.84E-05
9.	Sb-125	2.8 Years	1.16E-17
10.	Cs-134	2.1 Years	1.96E-04
11.	Cs-135	2.9E+6 Years	1.96E-02
12.	Cs-137	30 Years	5.70E+02
13.	Pm-147	2.6 Years	4.46E-01
14.	Sm-151	70 Years	4.76E+01
15.	Eu-152	13.3 Years	9.80E-03
16.	Eu-154	8.8 Years	1.22E+00
17.	Eu-155	4.96 Years	3.72E-04
18.	Ra-226	1,600 Years	1.51E-08
19.	Th-232	1.41E+10 Years	3.23E-13
20.	U (Gross)	4.5E+9 Years	8.60E-01
21.	Total α	n/a	2.70E+01
22.	Total β	n/a	4.18E+03

Site # 189: 216-S-9
Crib
REDOX Process Condensate
Active from 07/01/65 to 01/31/69
Cumulative Waste Volume 5.03E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.55E-01
2.	Se-79	6.5E+4 Years	4.89E-04
3.	Sr-90	29.12 Years	7.78E+01
4.	Zr-93	1.53E+6 Years	6.32E-03
5.	Tc-99	2.13E+5 Years	2.81E-02
6.	Ru-106	368 Days	5.91E-07
7.	Pd-107	7E+6 Years	8.28E-05
8.	Cd-113M	5.1 Years	1.66E-06
9.	Sb-125	2.8 Years	2.48E-18
10.	Cs-134	2.1 Years	7.25E-05
11.	Cs-135	2.9E+6 Years	5.63E-04
12.	Cs-137	30 Years	2.35E+02

13.	Pm-147	2.6 Years	1.01E-01
14.	Sm-151	70 Years	1.46E+00
15.	Eu-152	13.3 Years	4.53E-04
16.	Eu-154	8.8 Years	5.00E-02
17.	Eu-155	4.96 Years	1.81E-04
18.	Ra-226	1,600 Years	1.97E-10
19.	Th-232	1.41E+10 Years	4.23E-15
20.	U (Gross)	4.5E+9 Years	1.13E-02
21.	Total α	n/a	3.99E+00
22.	Total β	n/a	7.53E+02

Site # 178: 216-S-20
Crib
222-S & 300-A Laboratory Wastes
Active from 01/01/52 to 05/31/73
Cumulative Waste Volume 1.35E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	9.17E-03
2.	Se-79	6.5E+4 Years	4.50E-04
3.	Sr-90	29.12 Years	1.83E+01
4.	Zr-93	1.53E+6 Years	5.82E-03
5.	Tc-99	2.13E+5 Years	2.59E-02
6.	Ru-106	368 Days	5.13E-10
7.	Pd-107	7E+6 Years	7.63E-05
8.	Cd-113M	5.1 Years	1.18E-06
9.	Sb-125	2.8 Years	6.40E-19
10.	Cs-134	2.1 Years	1.31E-05
11.	Cs-135	2.9E+6 Years	5.19E-04
12.	Cs-137	30 Years	4.58E+01
13.	Pm-147	2.6 Years	2.52E-02
14.	Sm-151	70 Years	1.29E+00
15.	Eu-152	13.3 Years	3.07E-04
16.	Eu-154	8.8 Years	3.66E-02
17.	Eu-155	4.96 Years	2.69E-05
18.	Ra-226	1,600 Years	2.19E-10
19.	Th-232	1.41E+10 Years	4.70E-15
20.	U (Gross)	4.5E+9 Years	1.25E-02
21.	Total α	n/a	1.05E+01
22.	Total β	n/a	1.56E+02

Site # 179: 216-S-21
Crib
241-SX Tank Farm Condensate
Active from 11/01/54 to 02/23/69
Cumulative Waste Volume 8.71E+07 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Co-60	5.27 Years	5.46E-03
2.	Se-79	6.5E+4 Years	1.19E-05
3.	Sr-90	29.12 Years	1.76E+01
4.	Zr-93	1.53E+6 Years	1.54E-04
5.	Tc-99	2.13E+5 Years	6.86E-04
6.	Ru-106	368 Days	2.87E-09
7.	Pd-107	7E+6 Years	2.02E-06
8.	Cd-113M	5.1 Years	3.58E-08
9.	Sb-125	2.8 Years	4.02E-20
10.	Cs-134	2.1 Years	1.11E-06
11.	Cs-135	2.9E+6 Years	1.38E-05
12.	Cs-137	30 Years	6.93E+01
13.	Pm-147	2.6 Years	1.63E-03
14.	Sm-151	70 Years	3.49E-02
15.	Eu-152	13.3 Years	9.59E-06
16.	Eu-154	8.8 Years	1.09E-03
17.	Eu-155	4.96 Years	2.70E-06
18.	Ra-226	1,600 Years	2.44E-11
19.	Th-232	1.41E+10 Years	5.23E-16
20.	U (Gross)	4.5E+9 Years	1.39E-03
21.	Total α	n/a	1.28E-01
22.	Total β	n/a	2.08E+02

Site # 180: 216-S-22
Crib
293-S Caustic Scrubber
Active from 10/01/57 to 12/31/59
Cumulative Waste Volume 9.84E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<4.97E-04
2.	Se-79	6.5E+4 Years	2.40E-08
3.	Sr-90	29.12 Years	3.67E-01
4.	Zr-93	1.53E+6 Years	3.11E-07
5.	Tc-99	2.13E+5 Years	1.38E-06
6.	Ru-106	368 Days	2.91E-12
7.	Pd-107	7E+6 Years	4.08E-09
8.	Cd-113M	5.1 Years	5.78E-11
9.	Sb-125	2.8 Years	2.01E-23
10.	Cs-134	2.1 Years	3.33E-10
11.	Cs-135	2.9E+6 Years	2.77E-08
12.	Cs-137	30 Years	3.88E-01
13.	Pm-147	2.6 Years	7.77E-07
14.	Sm-151	70 Years	6.80E-05
15.	Eu-152	13.3 Years	1.49E-08
16.	Eu-154	8.8 Years	1.82E-06
17.	Eu-155	4.96 Years	6.07E-10
18.	Ra-226	1,600 Years	2.65E-13
19.	Th-232	1.41E+10 Years	5.67E-18
20.	U (Gross)	4.5E+9 Years	<1.51E-05
21.	Total α	n/a	6.20E-03
22.	Total β	n/a	1.83E+00

Site # 181: 216-S-23
Crib
REDOX Process Condensate
Active from 01/01/69 to 07/31/72
Cumulative Waste Volume 3.41E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.39E-02
2.	Se-79	6.5E+4 Years	1.36E-06
3.	Sr-90	29.12 Years	9.19E-01
4.	Zr-93	1.53E+6 Years	1.76E-05
5.	Tc-99	2.13E+5 Years	7.82E-05
6.	Ru-106	368 Days	7.19E-08
7.	Pd-107	7E+6 Years	2.31E-07
8.	Cd-113M	5.1 Years	5.65E-09
9.	Sb-125	2.8 Years	1.95E-20
10.	Cs-134	2.1 Years	8.02E-07
11.	Cs-135	2.9E+6 Years	1.57E-06
12.	Cs-137	30 Years	2.82E+00
13.	Pm-147	2.6 Years	8.22E-04
14.	Sm-151	70 Years	4.20E-03
15.	Eu-152	13.3 Years	1.59E-06
16.	Eu-154	8.8 Years	1.66E-04
17.	Eu-155	4.96 Years	2.42E-06
18.	Ra-226	1,600 Years	2.26E-12
19.	Th-232	1.41E+10 Years	4.84E-17
20.	U (Gross)	4.5E+9 Years	1.29E-04
21.	Total α	n/a	6.11E-02
22.	Total β	n/a	9.07E+00

Site # 182: 216-S-25
Crib
242-S Evaporator Process Condensate
Active from 11/01/73 to 11/26/85
Cumulative Waste Volume 2.88E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	8.92E+01
2.	Co-60	5.27 Years	5.62E-03
3.	Se-79	6.5E+4 Years	2.72E-07
4.	Sr-90	29.12 Years	3.38E-02
5.	Zr-93	1.53E+6 Years	3.52E-06
6.	Tc-99	2.13E+5 Years	1.56E-05
7.	Ru-106	368 Days	3.43E-07
8.	Pd-107	7E+6 Years	4.61E-08
9.	Cd-113M	5.1 Years	1.28E-09
10.	Sb-125	2.8 Years	2.08E-05

11.	Cs-134	2.1 Years	2.64E-06
12.	Cs-135	2.9E+6 Years	3.14E-07
13.	Cs-137	30 Years	5.44E-02
14.	Pm-147	2.6 Years	1.23E-03
15.	Sm-151	70 Years	8.81E-04
16.	Eu-152	13.3 Years	4.57E-07
17.	Eu-154	8.8 Years	4.33E-05
18.	Eu-155	4.96 Years	1.45E-05
19.	Ra-226	1,600 Years	9.71E-10
20.	Th-232	1.41E+10 Years	2.08E-14
21.	U (Gross)	4.5E+9 Years	5.54E-02
22.	Total α	n/a	1.20E-02
23.	Total β	n/a	2.47E-01

Site # 183: 216-S-26
Crib
222-S Laboratory Cooling Water & Sink Wastes
Active from 10/06/84 to 12/31/95
Cumulative Waste Volume 2.08E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Sr-90	29.12 Years	1.93E-03
2.	Cs-137	30 Years	2.69E-03
3.	Ra-226	1,600 Years	3.40E-13
4.	Th-232	1.41E+10 Years	7.27E-18
5.	U (Gross)	4.5E+9 Years	4.19E-05
6.	U-233	1.62E+5 Years	4.56E-15
7.	U-235	7.04E+8 Years	1.63E-12
8.	Pu-239/40	24,131 Years	1.99E-04
9.	Am-241	432 Years	9.61E-04
10.	Total α	n/a	8.54E-04
11.	Total β	n/a	1.04E-02

Site # 207: 216-T-3
Reverse Well
224-T & 5-6 Cell Drain Wastes
Active from 06/01/45 to 08/31/46
Cumulative Waste Volume 1.13E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	1.48E-04
2.	Sr-90	29.12 Years	1.50E+01
3.	Zr-93	1.53E+6 Years	1.91E-03
4.	Tc-99	2.13E+5 Years	8.49E-03
5.	Ru-106	368 Days	1.08E-14
6.	Pd-107	7E+6 Years	2.50E-05
7.	Cd-113M	5.1 Years	1.84E-07
8.	Sb-125	2.8 Years	4.12E-21

9.	Cs-134	2.1 Years	2.32E-08
10.	Cs-135	2.9E+6 Years	1.70E-04
11.	Cs-137	30 Years	1.73E+01
12.	Pm-147	2.6 Years	1.43E-04
13.	Sm-151	70 Years	3.76E-01
14.	Eu-152	13.3 Years	4.24E-05
15.	Eu-154	8.8 Years	6.28E-03
16.	Eu-155	4.96 Years	2.33E-08
17.	Total α	n/a	2.06E+02
18.	Total β	n/a	7.84E+01

Site # 216: 216-T-6
Crib
224-T & 5-6 Cell Drain Wastes
Active from 08/01/46 to 10/31/47
Cumulative Waste Volume 4.50E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.99E-03
2.	Se-79	6.5E+4 Years	9.80E-04
3.	Sr-90	29.12 Years	1.00E+02
4.	Zr-93	1.53E+6 Years	1.27E-02
5.	Tc-99	2.13E+5 Years	5.63E-02
6.	Ru-106	368 Days	1.25E-13
7.	Pd-107	7E+6 Years	1.66E-04
8.	Cd-113M	5.1 Years	1.30E-06
9.	Sb-125	2.8 Years	3.76E-20
10.	Cs-134	2.1 Years	2.34E-07
11.	Cs-135	2.9E+6 Years	1.13E-03
12.	Cs-137	30 Years	8.96E+01
13.	Pm-147	2.6 Years	1.32E-03
14.	Sm-151	70 Years	2.52E+00
15.	Eu-152	13.3 Years	3.03E-04
16.	Eu-154	8.8 Years	4.40E-02
17.	Eu-155	4.96 Years	2.49E-07
18.	Ra-226	1,600 Years	1.32E-10
19.	Th-232	1.41E+10 Years	2.84E-15
20.	U (Gross)	4.5E+9 Years	7.55E-03
21.	Total α	n/a	2.39E+01
22.	Total β	n/a	4.63E+02

Site # 217: 216-T-7
Tile Field/Crib
224-T, 5-6 Cell Drain, & Second Cycle Wastes
Active from 04/01/48 to 11/30/55
Cumulative Waste Volume 1.10E+08 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Co-60	5.27 Years	2.33E-03
2.	Se-79	6.5E+4 Years	1.70E-04
3.	Sr-90	29.12 Years	1.94E+01
4.	Zr-93	1.53E+6 Years	2.19E-03
5.	Tc-99	2.13E+5 Years	9.75E-03
6.	Ru-106	368 Days	2.11E-12
7.	Pd-107	7E+6 Years	2.88E-05
8.	Cd-113M	5.1 Years	3.05E-07
9.	Sb-125	2.8 Years	3.36E-20
10.	Cs-134	2.1 Years	3.60E-07
11.	Cs-135	2.9E+6 Years	1.96E-04
12.	Cs-137	30 Years	1.72E+01
13.	Pm-147	2.6 Years	1.24E-03
14.	Sm-151	70 Years	4.58E-01
15.	Eu-152	13.3 Years	7.48E-05
16.	Eu-154	8.8 Years	9.93E-03
17.	Eu-155	4.96 Years	5.19E-07
18.	Ra-226	1,600 Years	5.30E-11
19.	Th-232	1.41E+10 Years	1.14E-15
20.	U (Gross)	4.5E+9 Years	3.03E-03
21.	Total α	n/a	7.98E+00
22.	Total β	n/a	8.91E+01

Site # 218: 216-T-8
Crib
222-T Laboratory Wastes
Active from 05/01/50 to 09/30/51
Cumulative Waste Volume 5.00E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.62E-04
2.	Se-79	6.5E+4 Years	5.44E-06
3.	Sr-90	29.12 Years	3.04E-01
4.	Zr-93	1.53E+6 Years	7.03E-05
5.	Tc-99	2.13E+5 Years	3.13E-04
6.	Ru-106	368 Days	1.37E-14
7.	Pd-107	7E+6 Years	9.22E-07
8.	Cd-113M	5.1 Years	8.67E-09
9.	Sb-125	2.8 Years	5.42E-22
10.	Cs-134	2.1 Years	4.57E-09
11.	Cs-135	2.9E+6 Years	6.27E-06
12.	Cs-137	30 Years	3.25E-01
13.	Pm-147	2.6 Years	1.96E-05
14.	Sm-151	70 Years	1.44E-02
15.	Eu-152	13.3 Years	2.08E-06
16.	Eu-154	8.8 Years	2.86E-04
17.	Eu-155	4.96 Years	5.74E-09
18.	Ra-226	1,600 Years	2.62E-11
19.	Th-232	1.41E+10 Years	5.62E-16
20.	U (Gross)	4.5E+9 Years	1.50E-03
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	1.54E+00

Site # 197: 216-T-19
Tile Field/Crib
(224-T, 242-T, 5-6 Cell Drain, 2nd Cycle Waste Evap.)
Active from 09/01/51 to 12/31/89
Cumulative Waste Volume 4.55E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.57E+00
2.	Co-60	5.27 Years	4.55E-03
3.	Se-79	6.5E+4 Years	5.18E-06
4.	Sr-90	29.12 Years	2.25E+01
5.	Zr-93	1.53E+6 Years	6.69E-05
6.	Tc-99	2.13E+5 Years	2.98E-04
7.	Ru-106	368 Days	1.24E-08
8.	Pd-107	7E+6 Years	8.77E-07
9.	Cd-113M	5.1 Years	1.25E-08
10.	Sb-125	2.8 Years	4.95E-06
11.	Cs-134	2.1 Years	2.36E-05
12.	Cs-135	2.9E+6 Years	5.96E-06
13.	Cs-137	30 Years	1.42E+02
14.	Pm-147	2.6 Years	8.77E-04
15.	Sm-151	70 Years	1.46E-02
16.	Eu-152	13.3 Years	3.25E-06
17.	Eu-154	8.8 Years	3.90E-04
18.	Eu-155	4.96 Years	3.97E-06
19.	Ra-226	1,600 Years	5.58E-11
20.	Th-232	1.41E+10 Years	1.20E-15
21.	U (Gross)	4.5E+9 Years	3.19E-03
22.	U-233	1.62E+5 Years	5.01E-15
23.	Am-241	432 Years	9.68E-04
24.	Total α	n/a	8.82E-01
25.	Total β	n/a	3.92E+02

Site # 198: 216-T-20
Crib
241-TX-155 Diversion Box
Active from 11/01/52 to 11/30/52
Cumulative Waste Volume 1.89E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	2.64E-06
2.	Sr-90	29.12 Years	3.14E-01
3.	Zr-93	1.53E+6 Years	3.41E-05
4.	Tc-99	2.13E+5 Years	1.52E-04
5.	Ru-106	368 Days	1.53E-14
6.	Pd-107	7E+6 Years	4.47E-07
7.	Cd-113M	5.1 Years	4.52E-09

8.	Sb-125	2.8 Years	3.80E-22
9.	Cs-134	2.1 Years	3.59E-09
10.	Cs-135	2.9E+6 Years	3.04E-06
11.	Cs-137	30 Years	3.57E-01
12.	Pm-147	2.6 Years	1.39E-05
13.	Sm-151	70 Years	7.06E-03
14.	Eu-152	13.3 Years	1.10E-06
15.	Eu-154	8.8 Years	1.48E-04
16.	Eu-155	4.96 Years	4.79E-09
17.	Ra-226	1,600 Years	2.92E-11
18.	Th-232	1.41E+10 Years	6.25E-16
19.	U (Gross)	4.5E+9 Years	1.66E-03
20.	Total β	n/a	1.63E+00

Site # 204: 216-T-26
Crib
Scavenged Wastes
Active from 08/01/55 to 11/30/56
Cumulative Waste Volume 1.20E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.10E-03
2.	Se-79	6.5E+4 Years	1.40E-03
3.	Sr-90	29.12 Years	2.28E+02
4.	Zr-93	1.53E+6 Years	1.81E-02
5.	Tc-99	2.13E+5 Years	8.05E-02
6.	Ru-106	368 Days	1.65E-10
7.	Pd-107	7E+6 Years	2.37E-04
8.	Cd-113M	5.1 Years	2.82E-06
9.	Sb-125	2.8 Years	4.70E-19
10.	Cs-134	2.1 Years	5.82E-06
11.	Cs-135	2.9E+6 Years	1.61E-03
12.	Cs-137	30 Years	6.13E+01
13.	Pm-147	2.6 Years	1.76E-02
14.	Sm-151	70 Years	3.85E+00
15.	Eu-152	13.3 Years	7.05E-04
16.	Eu-154	8.8 Years	9.05E-02
17.	Eu-155	4.96 Years	9.03E-06
18.	Ra-226	1,600 Years	8.74E-10
19.	Th-232	1.41E+10 Years	1.87E-14
20.	U (Gross)	4.5E+9 Years	4.99E-02
21.	Total α	n/a	3.62E+00
22.	Total β	n/a	7.14E+02

Site # 205: 216-T-27
Crib
Decontamination, Scavenged Waste 300 Area
Active from 09/01/65 to 11/30/65
Cumulative Waste Volume 7.19E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.10E-02
2.	Se-79	6.5E+4 Years	8.04E-06
3.	Sr-90	29.12 Years	6.08E+01
4.	Zr-93	1.53E+6 Years	1.04E-04
5.	Tc-99	2.13E+5 Years	4.62E-04
6.	Ru-106	368 Days	8.43E-08
7.	Pd-107	7E+6 Years	1.36E-06
8.	Cd-113M	5.1 Years	2.62E-08
9.	Sb-125	2.8 Years	3.26E-20
10.	Cs-134	2.1 Years	8.85E-07
11.	Cs-135	2.9E+6 Years	9.25E-06
12.	Cs-137	30 Years	4.54E+01
13.	Pm-147	2.6 Years	1.32E-03
14.	Sm-151	70 Years	2.39E-02
15.	Eu-152	13.3 Years	7.10E-06
16.	Eu-154	8.8 Years	7.93E-04
17.	Eu-155	4.96 Years	2.12E-06
18.	Ra-226	1,600 Years	4.23E-11
19.	Th-232	1.41E+10 Years	9.07E-16
20.	U (Gross)	4.5E+9 Years	2.42E-03
21.	Total α	n/a	7.98E-01
22.	Total β	n/a	2.58E+02

Site # 206: 216-T-28
Crib
Decontamination & 300 Area
Active from 02/01/60 to 12/31/66
Cumulative Waste Volume 4.23E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	5.21E-02
2.	Se-79	6.5E+4 Years	3.51E-03
3.	Sr-90	29.12 Years	8.54E+01
4.	Zr-93	1.53E+6 Years	4.53E-02
5.	Tc-99	2.13E+5 Years	2.01E-01
6.	Ru-106	368 Days	4.03E-08
7.	Pd-107	7E+6 Years	5.94E-04
8.	Cd-113M	5.1 Years	1.11E-05
9.	Sb-125	2.8 Years	1.22E-17
10.	Cs-134	2.1 Years	3.18E-04
11.	Cs-135	2.9E+6 Years	4.04E-03
12.	Cs-137	30 Years	1.56E+02
13.	Pm-147	2.6 Years	4.91E-01
14.	Sm-151	70 Years	1.03E+01
15.	Eu-152	13.3 Years	2.98E-03
16.	Eu-154	8.8 Years	3.36E-01
17.	Eu-155	4.96 Years	7.48E-04
18.	Ra-226	1,600 Years	2.28E-09
19.	Th-232	1.41E+10 Years	4.88E-14

20.	U (Gross)	4.5E+9 Years	1.30E-01
21.	Total α	n/a	4.30E+00
22.	Total β	n/a	5.99E+02

Site # 209: 216-T-32
Crib
224-T Wastes
Active from 11/01/46 to 05/31/52
Cumulative Waste Volume 2.90E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.35E-03
2.	Se-79	6.5E+4 Years	8.17E-05
3.	Sr-90	29.12 Years	8.82E+00
4.	Zr-93	1.53E+6 Years	1.06E-03
5.	Tc-99	2.13E+5 Years	4.69E-03
6.	Ru-106	368 Days	9.16E-14
7.	Pd-107	7E+6 Years	1.38E-05
8.	Cd-113M	5.1 Years	1.22E-07
9.	Sb-125	2.8 Years	6.16E-21
10.	Cs-134	2.1 Years	4.91E-08
11.	Cs-135	2.9E+6 Years	9.41E-05
12.	Cs-137	30 Years	7.87E+00
13.	Pm-147	2.6 Years	2.21E-04
14.	Sm-151	70 Years	2.14E-01
15.	Eu-152	13.3 Years	2.90E-05
16.	Eu-154	8.8 Years	4.06E-03
17.	Eu-155	4.96 Years	6.01E-08
18.	Ra-226	1,600 Years	1.32E-08
19.	Th-232	1.41E+10 Years	2.84E-13
20.	U (Gross)	4.5E+9 Years	7.55E-01
21.	Total α	n/a	1.97E+02
22.	Total β	n/a	4.07E+01

Site # 210: 216-T-33
Crib
2706-T Building Wastes
Active from 01/01/63 to 02/28/63
Cumulative Waste Volume 1.90E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	8.43E-03
2.	Se-79	6.5E+4 Years	1.71E-06
3.	Sr-90	29.12 Years	2.07E-01
4.	Zr-93	1.53E+6 Years	2.21E-05
5.	Tc-99	2.13E+5 Years	9.83E-05
6.	Ru-106	368 Days	1.41E-10
7.	Pd-107	7E+6 Years	2.90E-07

8.	Cd-113M	5.1 Years	5.06E-09
9.	Sb-125	2.8 Years	4.15E-21
10.	Cs-134	2.1 Years	9.59E-08
11.	Cs-135	2.9E+6 Years	1.97E-06
12.	Cs-137	30 Years	2.17E-01
13.	Pm-147	2.6 Years	1.65E-04
14.	Sm-151	70 Years	5.00E-03
15.	Eu-152	13.3 Years	1.35E-06
16.	Eu-154	8.8 Years	1.55E-04
17.	Eu-155	4.96 Years	2.10E-07
18.	Ra-226	1,600 Years	2.65E-11
19.	Th-232	1.41E+10 Years	5.67E-16
20.	U (Gross)	4.5E+9 Years	1.51E-03
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	1.06E+00

Site # 211: 216-T-34
Crib
300 Area Laboratory Wastes
Active from 05/01/66 to 03/31/67
Cumulative Waste Volume 1.73E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	9.58E-02
2.	Se-79	6.5E+4 Years	1.57E-03
3.	Sr-90	29.12 Years	1.44E+02
4.	Zr-93	1.53E+6 Years	2.03E-02
5.	Tc-99	2.13E+5 Years	9.03E-02
6.	Ru-106	368 Days	1.23E-08
7.	Pd-107	7E+6 Years	2.66E-04
8.	Cd-113M	5.1 Years	5.40E-06
9.	Sb-125	2.8 Years	8.36E-18
10.	Cs-134	2.1 Years	2.48E-04
11.	Cs-135	2.9E+6 Years	1.81E-03
12.	Cs-137	30 Years	1.28E+02
13.	Pm-147	2.6 Years	3.41E-01
14.	Sm-151	70 Years	4.70E+00
15.	Eu-152	13.3 Years	1.48E-03
16.	Eu-154	8.8 Years	1.62E-01
17.	Eu-155	4.96 Years	6.23E-04
18.	Ra-226	1,600 Years	2.40E-11
19.	Th-232	1.41E+10 Years	5.15E-16
20.	U (Gross)	4.5E+9 Years	1.37E-03
21.	Total α	n/a	6.57E+00
22.	Total β	n/a	6.68E+02

Site # 212: 216-T-35
Crib
300 Area Laboratory Wastes
Active from 03/01/67 to 12/31/89

Cumulative Waste Volume 5.72E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.88E-02
2.	Se-79	6.5E+4 Years	3.70E-05
3.	Sr-90	29.12 Years	9.23E+00
4.	Zr-93	1.53E+6 Years	4.79E-04
5.	Tc-99	2.13E+5 Years	2.13E-03
6.	Ru-106	368 Days	2.97E-08
7.	Pd-107	7E+6 Years	6.28E-06
8.	Cd-113M	5.1 Years	1.34E-07
9.	Sb-125	2.8 Years	2.58E-19
10.	Cs-134	2.1 Years	8.35E-06
11.	Cs-135	2.9E+6 Years	4.27E-05
12.	Cs-137	30 Years	9.46E+00
13.	Pm-147	2.6 Years	1.06E-02
14.	Sm-151	70 Years	1.12E-01
15.	Eu-152	13.3 Years	3.69E-05
16.	Eu-154	8.8 Years	4.00E-03
17.	Eu-155	4.96 Years	2.20E-05
18.	Ra-226	1,600 Years	2.85E-10
19.	Th-232	1.41E+10 Years	6.11E-15
20.	U (Gross)	4.5E+9 Years	1.63E-02
21.	Total α	n/a	4.06E+00
22.	Total β	n/a	4.56E+01

Site # 213: 216-T-36
Crib
221-T Decontamination Facility Waste
Active from 05/01/67 to 12/31/89
Cumulative Waste Volume 5.22E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	7.97E-03
2.	Se-79	6.5E+4 Years	4.81E-07
3.	Sr-90	29.12 Years	3.52E+00
4.	Zr-93	1.53E+6 Years	6.22E-06
5.	Tc-99	2.13E+5 Years	2.76E-05
6.	Ru-106	368 Days	1.08E-08
7.	Pd-107	7E+6 Years	8.15E-08
8.	Cd-113M	5.1 Years	1.73E-09
9.	Sb-125	2.8 Years	3.27E-21
10.	Cs-134	2.1 Years	1.04E-07
11.	Cs-135	2.9E+6 Years	5.54E-07
12.	Cs-137	30 Years	3.07E+00
13.	Pm-147	2.6 Years	1.34E-04
14.	Sm-151	70 Years	1.45E-03
15.	Eu-152	13.3 Years	4.77E-07
16.	Eu-154	8.8 Years	5.17E-05
17.	Eu-155	4.96 Years	2.74E-07

18.	Ra-226	1,600 Years	6.87E-12
19.	Th-232	1.41E+10 Years	1.47E-16
20.	U (Gross)	4.5E+9 Years	3.92E-04
21.	Total α	n/a	1.52E-01
22.	Total β	n/a	1.60E+01

Site # 219: 216-U-1&2
Crib
224-U Decontamination Waste
Active from 11/01/51 to 06/30/67
Cumulative Waste Volume 4.62E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.57E-04
2.	Se-79	6.5E+4 Years	1.19E-05
3.	Sr-90	29.12 Years	1.70E+00
4.	Zr-93	1.53E+6 Years	1.53E-04
5.	Tc-99	2.13E+5 Years	6.82E-04
6.	Ru-106	368 Days	1.25E-09
7.	Pd-107	7E+6 Years	2.01E-06
8.	Cd-113M	5.1 Years	2.40E-08
9.	Sb-125	2.8 Years	7.07E-21
10.	Cs-134	2.1 Years	1.54E-07
11.	Cs-135	2.9E+6 Years	1.37E-05
12.	Cs-137	30 Years	3.53E+00
13.	Pm-147	2.6 Years	2.78E-04
14.	Sm-151	70 Years	3.26E-02
15.	Eu-152	13.3 Years	6.03E-06
16.	Eu-154	8.8 Years	7.70E-04
17.	Eu-155	4.96 Years	3.50E-07
18.	Ra-226	1,600 Years	1.23E-08
19.	Th-232	1.41E+10 Years	2.63E-13
20.	U (Gross)	4.5E+9 Years	7.01E-01
21.	Total α	n/a	2.62E+00
22.	Total β	n/a	1.26E+01

Site # 226: 216-U-3
French Drain
241-U-110 Tank Condensate
Active from 05/01/54 to 08/31/55
Cumulative Waste Volume 7.91E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.57E-04
2.	Se-79	6.5E+4 Years	4.93E-08
3.	Sr-90	29.12 Years	<3.31E-02
4.	Zr-93	1.53E+6 Years	6.38E-07
5.	Tc-99	2.13E+5 Years	2.84E-06

6.	Ru-106	368 Days	2.84E-14
7.	Pd-107	7E+6 Years	8.36E-09
8.	Cd-113M	5.1 Years	9.64E-11
9.	Sb-125	2.8 Years	1.41E-23
10.	Cs-134	2.1 Years	1.66E-10
11.	Cs-135	2.9E+6 Years	5.68E-08
12.	Cs-137	30 Years	3.52E-01
13.	Pm-147	2.6 Years	5.26E-07
14.	Sm-151	70 Years	1.35E-04
15.	Eu-152	13.3 Years	2.40E-08
16.	Eu-154	8.8 Years	3.11E-06
17.	Eu-155	4.96 Years	2.51E-10
18.	Ra-226	1,600 Years	1.06E-10
19.	Th-232	1.41E+10 Years	2.27E-15
20.	U (Gross)	4.5E+9 Years	6.04E-03
21.	Total α	n/a	6.14E-03
22.	Total β	n/a	9.17E-01

Site # 231: 216-U-8
Crib
U-Plant Process Condensate & Stack Drain
Active from 06/01/52 to 03/31/60
Cumulative Waste Volume 3.79E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<3.35E-04
2.	Se-79	6.5E+4 Years	1.42E-04
3.	Sr-90	29.12 Years	<3.48E-02
4.	Zr-93	1.53E+6 Years	1.83E-03
5.	Tc-99	2.13E+5 Years	8.14E-03
6.	Ru-106	368 Days	2.40E-11
7.	Pd-107	7E+6 Years	2.40E-05
8.	Cd-113M	5.1 Years	2.93E-07
9.	Sb-125	2.8 Years	5.46E-20
10.	Cs-134	2.1 Years	7.09E-07
11.	Cs-135	2.9E+6 Years	1.63E-04
12.	Cs-137	30 Years	<3.69E-02
13.	Pm-147	2.6 Years	2.06E-03
14.	Sm-151	70 Years	3.91E-01
15.	Eu-152	13.3 Years	7.34E-05
16.	Eu-154	8.8 Years	9.36E-03
17.	Eu-155	4.96 Years	1.13E-06
18.	Ra-226	1,600 Years	1.40E-07
19.	Th-232	1.41E+10 Years	3.00E-12
20.	U (Gross)	4:5E+9 Years	8.00E+00
21.	Total α	n/a	2.27E+01
22.	Total β	n/a	6.50E-01

Site # 220: 216-U-12
Crib

UO3 Process Condensate & Stack Drain
Active from 01/01/68 to 12/31/89
Cumulative Waste Volume 1.65E+11 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.18E+02
2.	Co-60	5.27 Years	<7.03E-02
3.	Se-79	6.5E+4 Years	5.78E-06
4.	Sr-90	29.12 Years	9.03E+00
5.	Zr-93	1.53E+6 Years	7.47E-05
6.	Tc-99	2.13E+5 Years	3.32E-04
7.	Ru-106	368 Days	<3.88E-07
8.	Pd-107	7E+6 Years	9.79E-07
9.	Cd-113M	5.1 Years	2.17E-08
10.	Sb-125	2.8 Years	7.96E-05
11.	Cs-134	2.1 Years	3.79E-04
12.	Cs-135	2.9E+6 Years	6.65E-06
13.	Cs-137	30 Years	9.05E+00
14.	Pm-147	2.6 Years	6.98E-03
15.	Sm-151	70 Years	1.76E-02
16.	Eu-152	13.3 Years	6.62E-06
17.	Eu-154	8.8 Years	6.81E-04
18.	Eu-155	4.96 Years	5.40E-05
19.	Ra-226	1,600 Years	3.28E-08
20.	Th-232	1.41E+10 Years	7.03E-13
21.	U (Gross)	4.5E+9 Years	<1.87E+00
22.	U-233	1.62E+5 Years	2.51E-12
23.	U-235	7.04E+8 Years	6.81E-10
24.	Pu-239/40	24,131 Years	<7.68E-02
25.	Am-241	432 Years	<4.85E-01
26.	Total α	n/a	5.05E+02
27.	Total β	n/a	4.42E+01

Site # 221: 216-U-13
Trench
241-UR Metal Recovery Steam Cleaning Pit
Active from 12/01/81 to 01/31/83
Cumulative Waste Volume 1.50E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.13E-03
2.	Co-60	5.27 Years	<1.10E-03
3.	Se-79	6.5E+4 Years	3.09E-05
4.	Sr-90	29.12 Years	4.51E+01
5.	Zr-93	1.53E+6 Years	3.99E-04
6.	Tc-99	2.13E+5 Years	1.77E-03
7.	Ru-106	368 Days	2.37E-07
8.	Pd-107	7E+6 Years	5.23E-06
9.	Cd-113M	5.1 Years	9.84E-08
10.	Sb-125	2.8 Years	1.96E-05

11.	Cs-134	2.1 Years	5.72E-06
12.	Cs-135	2.9E+6 Years	3.56E-05
13.	Cs-137	30 Years	4.79E-02
14.	Pm-147	2.6 Years	5.93E-03
15.	Sm-151	70 Years	9.13E-02
16.	Eu-152	13.3 Years	2.67E-05
17.	Eu-154	8.8 Years	2.99E-03
18.	Eu-155	4.96 Years	1.58E-05
19.	Ra-226	1,600 Years	1.18E-08
20.	Th-232	1.41E+10 Years	2.54E-13
21.	U (Gross)	4.5E+9 Years	6.76E-01
22.	U-233	1.62E+5 Years	3.29E-14
23.	U-235	7.04E+8 Years	1.09E-10
24.	Pu-239/40	24,131 Years	1.23E-02
25.	Am-241	432 Years	6.35E-03
26.	Total α	n/a	1.05E-01
27.	Total β	n/a	1.12E+02

Site # 224: 216-U-16
Crib
UO3 Cooling Water & Steam Condensate
Active from 09/01/84 to 02/28/85
Cumulative Waste Volume 4.09E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	<6.56E-09
2.	Sr-90	29.12 Years	<7.43E-03
3.	Zr-93	1.53E+6 Years	<8.48E-08
4.	Tc-99	2.13E+5 Years	<3.77E-07
5.	Ru-106	368 Days	<3.30E-08
6.	Pd-107	7E+6 Years	<1.11E-09
7.	Cd-113M	5.1 Years	<3.11E-11
8.	Sb-125	2.8 Years	<1.31E-06
9.	Cs-134	2.1 Years	<2.20E-07
10.	Cs-135	2.9E+6 Years	<7.56E-09
11.	Cs-137	30 Years	1.34E-02
12.	Pm-147	2.6 Years	<9.51E-05
13.	Sm-151	70 Years	<2.23E-05
14.	Eu-152	13.3 Years	<1.55E-08
15.	Eu-154	8.8 Years	<1.35E-06
16.	Eu-155	4.96 Years	<1.12E-06
17.	Ra-226	1,600 Years	1.03E-10
18.	Th-232	1.41E+10 Years	2.22E-15
19.	U (Gross)	4.5E+9 Years	5.91E-03
20.	U-233	1.62E+5 Years	1.19E-12
21.	U-235	7.04E+8 Years	7.99E-10
22.	Pu-239/40	24,131 Years	9.01E-02
23.	Am-241	432 Years	<2.30E-01
24.	Total α	n/a	7.39E-03
25.	Total β	n/a	5.15E-02

Site # 225: 216-U-17
Crib
UO3 Process Condensate
Active from 01/31/88 to 12/31/94
Cumulative Waste Volume 5.90E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	5.09E+01
2.	Sr-90	29.12 Years	5.18E-06
3.	Tc-99	2.13E+5 Years	1.26E-03
4.	Ra-226	1,600 Years	1.49E-11
5.	Th-232	1.41E+10 Years	3.20E-16
6.	U (Gross)	4.5E+9 Years	1.14E-03
7.	U-233	1.62E+5 Years	3.29E-16
8.	U-235	7.04E+8 Years	2.63E-13
9.	Pu-239/40	24,131 Years	<2.96E-05
10.	Am-241	432 Years	7.80E-05
11.	Total α	n/a	5.77E-04
12.	Total β	n/a	6.83E-03

Site # 251: 616-A
SALDS Crib (State-Approved Land Disposal Structure)
200 Area Effluent Treatment Facility Wastes
Active from 12/15/95 to Date
Cumulative Waste Volume 3.10E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	1.97E+02
2.	C-14	5,700 Years	8.50E-05
3.	Sr-90	29.12 Years	2.48E-05
4.	Tc-99	2.13E+5 Years	1.50E-04
5.	Ra-226	1,600 Years	4.03E-20
6.	U-233	1.62E+5 Years	3.65E-18
7.	U-234	2.45E+5 Years	2.48E-11
8.	Pu-238	87.8 Years	4.33E-06
9.	Am-241	432 Years	3.19E-06
10.	Total α	n/a	1.50E-05
11.	Total β	n/a	1.90E-05

Site # 227: 216-U-4A
French Drain
222-U Laboratory Waste
Active from 07/01/55 to 07/31/70
Cumulative Waste Volume 5.45E+05 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Se-79	6.5E+4 Years	2.80E-08
2.	Sr-90	29.12 Years	1.29E-02
3.	Zr-93	1.53E+6 Years	3.62E-07
4.	Tc-99	2.13E+5 Years	1.61E-06
5.	Ru-106	368 Days	2.55E-10
6.	Pd-107	7E+6 Years	4.74E-09
7.	Cd-113M	5.1 Years	7.15E-11
8.	Sb-125	2.8 Years	6.93E-23
9.	Cs-134	2.1 Years	2.14E-09
10.	Cs-135	2.9E+6 Years	3.23E-08
11.	Cs-137	30 Years	1.50E-01
12.	Pm-147	2.6 Years	2.83E-06
13.	Sm-151	70 Years	7.95E-05
14.	Eu-152	13.3 Years	1.87E-08
15.	Eu-154	8.8 Years	2.22E-06
16.	Eu-155	4.96 Years	5.62E-09
17.	Ra-226	1,600 Years	5.16E-11
18.	Th-232	1.41E+10 Years	1.11E-15
19.	U (Gross)	4.5E+9 Years	2.95E-03
20.	Total α	n/a	<5.53E-04
21.	Total β	n/a	3.87E-01

Site # 228: 216-U-4B
French Drain
222-U Laboratory Waste
Active from 01/01/60 to 07/31/70
Cumulative Waste Volume 3.30E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	4.29E-08
2.	Sr-90	29.12 Years	1.33E-03
3.	Zr-93	1.53E+6 Years	5.55E-07
4.	Tc-99	2.13E+5 Years	2.47E-06
5.	Pd-107	7E+6 Years	7.28E-09
6.	Cd-113M	5.1 Years	1.25E-10
7.	Sb-125	2.8 Years	1.08E-22
8.	Cs-134	2.1 Years	2.66E-09
9.	Cs-135	2.9E+6 Years	4.95E-08
10.	Cs-137	30 Years	1.59E-01
11.	Pm-147	2.6 Years	4.31E-06
12.	Sm-151	70 Years	1.25E-04
13.	Eu-152	13.3 Years	3.33E-08
14.	Eu-154	8.8 Years	3.84E-06
15.	Eu-155	4.96 Years	6.11E-09
16.	Total α	n/a	3.32E-03
17.	Total β	n/a	3.81E-01

Site # 232: 216-W-LWC
Laundry Crib

Laundry Waste Water
Active from 09/07/81 to 12/31/93
Cumulative Waste Volume 1.32E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	H-3	12.3 Years	2.95E-06
2.	Co-60	5.27 Years	4.16E-02
3.	Se-79	6.5E+4 Years	1.12E-06
4.	Sr-90	29.12 Years	1.38E-01
5.	Zr-93	1.53E+6 Years	1.45E-05
6.	Tc-99	2.13E+5 Years	6.43E-05
7.	Ru-106	368 Days	5.59E-06
8.	Pd-107	7E+6 Years	1.90E-07
9.	Cd-113M	5.1 Years	5.26E-09
10.	Sb-125	2.8 Years	1.64E-04
11.	I-129	1.57E+7 Years	2.66E-03
12.	Cs-134	2.1 Years	2.68E-05
13.	Cs-135	2.9E+6 Years	1.29E-06
14.	Cs-137	30 Years	2.48E-01
15.	Pm-147	2.6 Years	1.19E-02
16.	Sm-151	70 Years	3.75E-03
17.	Eu-152	13.3 Years	2.40E-06
18.	Eu-154	8.8 Years	8.97E-04
19.	Eu-155	4.96 Years	5.63E-04
20.	Ra-226	1,600 Years	1.64E-11
21.	Th-232	1.41E+10 Years	3.51E-16
22.	U (Gross)	4.5E+9 Years	1.10E-03
23.	U-233	1.62E+5 Years	1.87E-13
24.	U-235	7.04E+8 Years	2.29E-10
25.	Pu-239/40	24,131 Years	2.60E-02
26.	Am-241	432 Years	3.63E-02
27.	Total α	n/a	2.61E-01
28.	Total β	n/a	2.13E+00

Site # 244: 216-Z-3
Crib
PFP D-6 Wastes
Active from 06/01/52 to 03/31/59
Cumulative Waste Volume 1.78E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<4.36E-04
2.	Se-79	6.5E+4 Years	2.60E-07
3.	Sr-90	29.12 Years	<3.65E-02
4.	Zr-93	1.53E+6 Years	3.36E-06
5.	Tc-99	2.13E+5 Years	1.49E-05
6.	Ru-106	368 Days	1.25E-11
7.	Pd-107	7E+6 Years	4.40E-08
8.	Cd-113M	5.1 Years	5.73E-10
9.	Sb-125	2.8 Years	1.43E-22

10.	Cs-134	2.1 Years	2.11E-09
11.	Cs-135	2.9E+6 Years	2.99E-07
12.	Cs-137	30 Years	<3.86E-02
13.	Pm-147	2.6 Years	5.47E-06
14.	Sm-151	70 Years	7.24E-04
15.	Eu-152	13.3 Years	1.45E-07
16.	Eu-154	8.8 Years	1.82E-05
17.	Eu-155	4.96 Years	3.60E-09
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	3.50E+02
22.	Total β	n/a	1.84E-01

Site # 245: 216-Z-4
Trench
231-Z Material Engineering Laboratory Waste
Active from 06/01/45 to 06/30/45
Cumulative Waste Volume 1.10E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<7.85E-05
2.	Se-79	6.5E+4 Years	5.07E-10
3.	Sr-90	29.12 Years	<2.65E-02
4.	Zr-93	1.53E+6 Years	6.55E-09
5.	Tc-99	2.13E+5 Years	2.91E-08
6.	Ru-106	368 Days	5.72E-17
7.	Pd-107	7E+6 Years	8.59E-11
8.	Cd-113M	5.1 Years	6.14E-13
9.	Sb-125	2.8 Years	1.21E-26
10.	Cs-134	2.1 Years	6.47E-14
11.	Cs-135	2.9E+6 Years	5.84E-10
12.	Cs-137	30 Years	<2.86E-02
13.	Pm-147	2.6 Years	4.19E-10
14.	Sm-151	70 Years	1.28E-06
15.	Eu-152	13.3 Years	1.41E-10
16.	Eu-154	8.8 Years	2.10E-08
17.	Eu-155	4.96 Years	6.31E-14
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	1.23E-01
22.	Total β	n/a	1.34E-01

Site # 246: 216-Z-5
Crib
231-Z Material Engineering Process Wastes
Active from 06/01/45 to 02/28/47
Cumulative Waste Volume 3.10E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.26E-04
2.	Se-79	6.5E+4 Years	1.28E-06
3.	Sr-90	29.12 Years	1.35E+00
4.	Zr-93	1.53E+6 Years	1.66E-05
5.	Tc-99	2.13E+5 Years	7.38E-05
6.	Ru-106	368 Days	1.07E-14
7.	Pd-107	7E+6 Years	2.18E-07
8.	Cd-113M	5.1 Years	1.63E-09
9.	Sb-125	2.8 Years	3.98E-23
10.	Cs-134	2.1 Years	2.33E-10
11.	Cs-135	2.9E+6 Years	1.48E-06
12.	Cs-137	30 Years	2.92E+00
13.	Pm-147	2.6 Years	1.39E-06
14.	Sm-151	70 Years	3.28E-03
15.	Eu-152	13.3 Years	3.78E-07
16.	Eu-154	8.8 Years	5.55E-05
17.	Eu-155	4.96 Years	2.40E-10
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	2.09E+01
22.	Total β	n/a	1.03E+01

Site # 247: 216-Z-6
Crib
231-Z Process Wastes
Active from 06/01/45 to 06/30/45
Cumulative Waste Volume 9.80E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<7.85E-05
2.	Se-79	6.5E+4 Years	5.07E-10
3.	Sr-90	29.12 Years	<2.65E-02
4.	Zr-93	1.53E+6 Years	6.55E-09
5.	Tc-99	2.13E+5 Years	2.91E-08
6.	Ru-106	368 Days	5.72E-17
7.	Pd-107	7E+6 Years	8.59E-11
8.	Cd-113M	5.1 Years	6.14E-13
9.	Sb-125	2.8 Years	1.21E-26
10.	Cs-134	2.1 Years	6.47E-14
11.	Cs-135	2.9E+6 Years	5.84E-10
12.	Cs-137	30 Years	<2.86E-02
13.	Pm-147	2.6 Years	4.19E-10
14.	Sm-151	70 Years	1.28E-06
15.	Eu-152	13.3 Years	1.41E-10
16.	Eu-154	8.8 Years	2.10E-08
17.	Eu-155	4.96 Years	6.31E-14
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18

20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	1.34E-01

Site # 248: 216-Z-7
Crib
231-Z Material Engineering Lab & 300 Area Wastes
Active from 02/01/47 to 05/31/66
Cumulative Waste Volume 7.99E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.25E-02
2.	Se-79	6.5E+4 Years	5.49E-05
3.	Sr-90	29.12 Years	1.64E+02
4.	Zr-93	1.53E+6 Years	7.10E-04
5.	Tc-99	2.13E+5 Years	3.16E-03
6.	Ru-106	368 Days	1.06E-08
7.	Pd-107	7E+6 Years	9.31E-06
8.	Cd-113M	5.1 Years	1.87E-07
9.	Sb-125	2.8 Years	2.80E-19
10.	Cs-134	2.1 Years	8.21E-06
11.	Cs-135	2.9E+6 Years	6.32E-05
12.	Cs-137	30 Years	1.67E+02
13.	Pm-147	2.6 Years	1.14E-02
14.	Sm-151	70 Years	1.64E-01
15.	Eu-152	13.3 Years	5.10E-05
16.	Eu-154	8.8 Years	5.63E-03
17.	Eu-155	4.96 Years	2.05E-05
18.	Ra-226	1,600 Years	2.62E-11
19.	Th-232	1.41E+10 Years	5.62E-16
20.	U (Gross)	4.5E+9 Years	1.50E-03
21.	Total α	n/a	1.23E+02
22.	Total β	n/a	8.02E+02

Site # 249: 216-Z-8
French Drain
Silica Tank Overflow
Active from 10/01/57 to 09/30/61
Cumulative Waste Volume 9.59E+03 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Total α	n/a	2.97E+00

Site # 250: 216-Z-9
Crib
RECUPLEX CAW Waste

Active from 07/01/55 to 06/30/62
Cumulative Waste Volume 4.09E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<6.47E-04
2.	Se-79	6.5E+4 Years	1.65E-07
3.	Sr-90	29.12 Years	<3.93E-02
4.	Zr-93	1.53E+6 Years	2.13E-06
5.	Tc-99	2.13E+5 Years	9.48E-06
6.	Ru-106	368 Days	3.91E-11
7.	Pd-107	7E+6 Years	2.80E-08
8.	Cd-113M	5.1 Years	4.05E-10
9.	Sb-125	2.8 Years	1.65E-22
10.	Cs-134	2.1 Years	3.00E-09
11.	Cs-135	2.9E+6 Years	1.90E-07
12.	Cs-137	30 Years	<4.14E-02
13.	Pm-147	2.6 Years	6.42E-06
14.	Sm-151	70 Years	4.68E-04
15.	Eu-152	13.3 Years	1.05E-07
16.	Eu-154	8.8 Years	1.27E-05
17.	Eu-155	4.96 Years	5.79E-09
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	2.35E+03
22.	Total β	n/a	1.98E-01

Site # 239: 216-Z-1A
Drain Field
Overflow from Z1, 2, 3
Active from 06/01/49 to 03/31/59
Cumulative Waste Volume 1.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<4.36E-04
2.	Se-79	6.5E+4 Years	1.46E-07
3.	Sr-90	29.12 Years	<3.65E-02
4.	Zr-93	1.53E+6 Years	1.89E-06
5.	Tc-99	2.13E+5 Years	8.39E-06
6.	Ru-106	368 Days	2.76E-12
7.	Pd-107	7E+6 Years	2.47E-08
8.	Cd-113M	5.1 Years	3.33E-10
9.	Sb-125	2.8 Years	9.68E-23
10.	Cs-134	2.1 Years	1.51E-09
11.	Cs-135	2.9E+6 Years	1.68E-07
12.	Cs-137	30 Years	<3.86E-02
13.	Pm-147	2.6 Years	3.71E-06
14.	Sm-151	70 Years	4.09E-04
15.	Eu-152	13.3 Years	8.50E-08
16.	Eu-154	8.8 Years	1.05E-05

17.	Eu-155	4.96 Years	2.68E-09
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	3.07E+00
22.	Total β	n/a	1.84E-01

Site # 234: 216-Z-10
Reverse Well (a.k.a. French Drain)
231-Z Mat. Engineering Process & Lab Wastes
Active from 02/01/45 to 06/30/45
Cumulative Waste Volume 1.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Total α	n/a	3.07E+00

Site # 235: 216-Z-12
Crib
234-5 PFP Process & Laboratory Wastes
Active from 03/01/59 to 05/31/73
Cumulative Waste Volume 2.81E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<8.43E-04
2.	Se-79	6.5E+4 Years	6.27E-07
3.	Sr-90	29.12 Years	<4.13E-02
4.	Zr-93	1.53E+6 Years	8.10E-06
5.	Tc-99	2.13E+5 Years	3.60E-05
6.	Ru-106	368 Days	1.92E-09
7.	Pd-107	7E+6 Years	1.06E-07
8.	Cd-113M	5.1 Years	1.81E-09
9.	Sb-125	2.8 Years	1.46E-21
10.	Cs-134	2.1 Years	3.48E-08
11.	Cs-135	2.9E+6 Years	7.22E-07
12.	Cs-137	30 Years	<4.33E-02
13.	Pm-147	2.6 Years	5.82E-05
14.	Sm-151	70 Years	1.82E-03
15.	Eu-152	13.3 Years	4.79E-07
16.	Eu-154	8.8 Years	5.54E-05
17.	Eu-155	4.96 Years	7.82E-08
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	1.54E+03
22.	Total β	n/a	2.10E-01

Site # 236: 216-Z-16
Crib
231-Z Material Engineering Waste
Active from 03/01/68 to 01/31/77
Cumulative Waste Volume 1.02E+08 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	6.33E-08
2.	Sr-90	29.12 Years	4.39E-05
3.	Zr-93	1.53E+6 Years	8.18E-07
4.	Tc-99	2.13E+5 Years	3.64E-06
5.	Ru-106	368 Days	2.55E-12
6.	Pd-107	7E+6 Years	1.07E-08
7.	Cd-113M	5.1 Years	2.73E-10
8.	Sb-125	2.8 Years	4.43E-09
9.	Cs-134	2.1 Years	5.36E-08
10.	Cs-135	2.9E+6 Years	7.29E-08
11.	Cs-137	30 Years	4.84E-05
12.	Pm-147	2.6 Years	4.99E-05
13.	Sm-151	70 Years	1.96E-04
14.	Eu-152	13.3 Years	7.75E-08
15.	Eu-154	8.8 Years	7.96E-06
16.	Eu-155	4.96 Years	1.72E-07
17.	Total α	n/a	4.40E+00
18.	Total β	n/a	1.00E-03

Site # 237: 216-Z-17
Trench
231-Z Material Engineering Waste
Active from 02/01/67 to 02/29/68
Cumulative Waste Volume 3.68E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	6.58E-08
2.	Zr-93	1.53E+6 Years	8.51E-07
3.	Tc-99	2.13E+5 Years	3.78E-06
4.	Pd-107	7E+6 Years	1.12E-08
5.	Cd-113M	5.1 Years	2.40E-10
6.	Sb-125	2.8 Years	4.76E-22
7.	Cs-134	2.1 Years	1.56E-08
8.	Cs-135	2.9E+6 Years	7.58E-08
9.	Pm-147	2.6 Years	1.96E-05
10.	Sm-151	70 Years	1.99E-04
11.	Eu-152	13.3 Years	6.61E-08
12.	Eu-154	8.8 Years	7.15E-06
13.	Eu-155	4.96 Years	4.14E-08
14.	Total α	n/a	3.08E+00
15.	Total β	n/a	4.48E-04

Site # 243: 216-Z-20
Crib
PFP & 231-Z Material Engineering Lab Cooling Water
Active from 09/24/81 to 05/22/95
Cumulative Waste Volume 4.46E+09 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.76E-03
2.	Se-79	6.5E+4 Years	1.63E-07
3.	Sr-90	29.12 Years	8.38E-02
4.	Zr-93	1.53E+6 Years	2.11E-06
5.	Tc-99	2.13E+5 Years	9.39E-06
6.	Ru-106	368 Days	<3.31E-07
7.	Pd-107	7E+6 Years	2.77E-08
8.	Cd-113M	5.1 Years	7.68E-10
9.	Sb-125	2.8 Years	2.06E-05
10.	Cs-134	2.1 Years	2.97E-06
11.	Cs-135	2.9E+6 Years	1.88E-07
12.	Cs-137	30 Years	1.01E-01
13.	Pm-147	2.6 Years	1.48E-03
14.	Sm-151	70 Years	5.47E-04
15.	Eu-152	13.3 Years	3.48E-07
16.	Eu-154	8.8 Years	3.11E-05
17.	Eu-155	4.96 Years	1.38E-05
18.	Ra-226	1,600 Years	4.03E-15
19.	U-233	1.62E+5 Years	5.29E-12
20.	U-234	2.45E+5 Years	5.19E-07
21.	U-235	7.04E+8 Years	1.82E-08
22.	Pu-238	87.8 Years	2.23E-02
23.	Pu-239/40	24,131 Years	2.06E+00
24.	Pu-241	14.4 Years	1.79E+00
25.	Am-241	432 Years	1.04E+00
26.	Total α	n/a	2.25E+00
27.	Total β	n/a	4.15E-01

Site # 70: 216-A-1
Specific Retention Crib
PUREX Startup Wastes
Active from 11/01/55 to 12/31/55
Cumulative Waste Volume 9.84E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.93E-04
2.	Se-79	6.5E+4 Years	1.95E-08
3.	Sr-90	29.12 Years	<3.39E-02
4.	Zr-93	1.53E+6 Years	2.52E-07
5.	Tc-99	2.13E+5 Years	1.12E-06
6.	Ru-106	368 Days	<5.67E-15
7.	Pd-107	7E+6 Years	3.30E-09

8.	Cd-113M	5.1 Years	3.87E-11
9.	Sb-125	2.8 Years	6.06E-24
10.	Cs-134	2.1 Years	7.31E-11
11.	Cs-135	2.9E+6 Years	2.24E-08
12.	Cs-137	30 Years	<3.60E-02
13.	Pm-147	2.6 Years	2.27E-07
14.	Sm-151	70 Years	5.34E-05
15.	Eu-152	13.3 Years	9.66E-09
16.	Eu-154	8.8 Years	1.25E-06
17.	Eu-155	4.96 Years	1.12E-10
18.	Ra-226	1,600 Years	8.99E-10
19.	Th-232	1.41E+10 Years	1.93E-14
20.	U (Gross)	4.5E+9 Years	5.13E-02
21.	Total α	n/a	<6.14E-03
22.	Total β	n/a	1.70E-01

Site # 74: 216-A-2
Specific Retention Crib
PUREX Organic Wastes
Active from 05/01/56 to 07/31/60
Cumulative Waste Volume 2.30E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.86E-03
2.	Se-79	6.5E+4 Years	1.77E-05
3.	Sr-90	29.12 Years	7.43E-01
4.	Zr-93	1.53E+6 Years	2.28E-04
5.	Tc-99	2.13E+5 Years	1.02E-03
6.	Ru-106	368 Days	1.61E-10
7.	Pd-107	7E+6 Years	2.99E-06
8.	Cd-113M	5.1 Years	4.23E-08
9.	Sb-125	2.8 Years	1.52E-20
10.	Cs-134	2.1 Years	2.58E-07
11.	Cs-135	2.9E+6 Years	2.04E-05
12.	Cs-137	30 Years	1.18E+00
13.	Pm-147	2.6 Years	5.86E-04
14.	Sm-151	70 Years	4.99E-02
15.	Eu-152	13.3 Years	1.09E-05
16.	Eu-154	8.8 Years	1.33E-03
17.	Eu-155	4.96 Years	4.79E-07
18.	Ra-226	1,600 Years	4.55E-10
19.	Th-232	1.41E+10 Years	9.75E-15
20.	U (Gross)	4.5E+9 Years	2.60E-02
21.	Total α	n/a	7.98E+00
22.	Total β	n/a	4.71E+00

Site # 72: 216-A-18
Specific Retention Trench (Unfinished Crib
PUREX Startup Wastes
Active from 11/01/55 to 12/31/55

Cumulative Waste Volume 4.88E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.93E-04
2.	Se-79	6.5E+4 Years	5.89E-07
3.	Sr-90	29.12 Years	<3.39E-02
4.	Zr-93	1.53E+6 Years	7.61E-06
5.	Tc-99	2.13E+5 Years	3.38E-05
6.	Ru-106	368 Days	<5.67E-15
7.	Pd-107	7E+6 Years	9.98E-08
8.	Cd-113M	5.1 Years	1.17E-09
9.	Sb-125	2.8 Years	1.83E-22
10.	Cs-134	2.1 Years	2.21E-09
11.	Cs-135	2.9E+6 Years	6.78E-07
12.	Cs-137	30 Years	<3.60E-02
13.	Pm-147	2.6 Years	6.85E-06
14.	Sm-151	70 Years	1.61E-03
15.	Eu-152	13.3 Years	2.92E-07
16.	Eu-154	8.8 Years	3.76E-05
17.	Eu-155	4.96 Years	3.38E-09
18.	Ra-226	1,600 Years	8.20E-09
19.	Th-232	1.41E+10 Years	1.76E-13
20.	U (Gross)	4.5E+9 Years	4.68E-01
21.	Total α	n/a	<6.14E-03
22.	Total β	n/a	1.72E-01

Site # 73: 216-A-19
Specific Retention Trench
PUREX Startup Wastes
Active from 11/01/55 to 12/31/55
Cumulative Waste Volume 1.10E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.93E-04
2.	Se-79	6.5E+4 Years	1.95E-08
3.	Sr-90	29.12 Years	<3.39E-02
4.	Zr-93	1.53E+6 Years	2.52E-07
5.	Tc-99	2.13E+5 Years	1.12E-06
6.	Ru-106	368 Days	<5.67E-15
7.	Pd-107	7E+6 Years	3.30E-09
8.	Cd-113M	5.1 Years	3.87E-11
9.	Sb-125	2.8 Years	6.06E-24
10.	Cs-134	2.1 Years	7.31E-11
11.	Cs-135	2.9E+6 Years	2.24E-08
12.	Cs-137	30 Years	<3.60E-02
13.	Pm-147	2.6 Years	2.27E-07
14.	Sm-151	70 Years	5.34E-05
15.	Eu-152	13.3 Years	9.66E-09
16.	Eu-154	8.8 Years	1.25E-06
17.	Eu-155	4.96 Years	1.12E-10

18.	Ra-226	1,600 Years	2.27E-07
19.	Th-232	1.41E+10 Years	4.87E-12
20.	U (Gross)	4.5E+9 Years	1.30E+01
21.	Total α	n/a	<6.14E-03
22.	Total β	n/a	1.70E-01

Site # 75: 216-A-20
Specific Retention Trench
PUREX Startup Wastes
Active from 11/01/55 to 12/31/55
Cumulative Waste Volume 9.61E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.93E-04
2.	Se-79	6.5E+4 Years	1.95E-08
3.	Sr-90	29.12 Years	<3.39E-02
4.	Zr-93	1.53E+6 Years	2.52E-07
5.	Tc-99	2.13E+5 Years	1.12E-06
6.	Ru-106	368 Days	<5.67E-15
7.	Pd-107	7E+6 Years	3.30E-09
8.	Cd-113M	5.1 Years	3.87E-11
9.	Sb-125	2.8 Years	6.06E-24
10.	Cs-134	2.1 Years	7.31E-11
11.	Cs-135	2.9E+6 Years	2.24E-08
12.	Cs-137	30 Years	<3.60E-02
13.	Pm-147	2.6 Years	2.27E-07
14.	Sm-151	70 Years	5.34E-05
15.	Eu-152	13.3 Years	9.66E-09
16.	Eu-154	8.8 Years	1.25E-06
17.	Eu-155	4.96 Years	1.12E-10
18.	Ra-226	1,600 Years	2.35E-09
19.	Th-232	1.41E+10 Years	5.04E-14
20.	U (Gross)	4.5E+9 Years	1.34E-01
21.	Total α	n/a	<6.14E-03
22.	Total β	n/a	1.70E-01

Site # 83: 216-A-31
Specific Retention Crib
PUREX Organic Wastes
Active from 07/01/64 to 11/30/66
Cumulative Waste Volume 1.00E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	9.61E-04
2.	Se-79	6.5E+4 Years	5.83E-04
3.	Sr-90	29.12 Years	8.47E-01
4.	Zr-93	1.53E+6 Years	7.53E-03
5.	Tc-99	2.13E+5 Years	3.35E-02

6.	Ru-106	368 Days	2.68E-06
7.	Pd-107	7E+6 Years	9.87E-05
8.	Cd-113M	5.1 Years	1.81E-06
9.	Sb-125	2.8 Years	1.83E-18
10.	Cs-134	2.1 Years	4.58E-05
11.	Cs-135	2.9E+6 Years	6.71E-04
12.	Cs-137	30 Years	6.65E+01
13.	Pm-147	2.6 Years	7.33E-02
14.	Sm-151	70 Years	1.72E+00
15.	Eu-152	13.3 Years	4.86E-04
16.	Eu-154	8.8 Years	5.50E-02
17.	Eu-155	4.96 Years	1.05E-04
18.	Ra-226	1,600 Years	1.19E-10
19.	Th-232	1.41E+10 Years	2.56E-15
20.	U (Gross)	4.5E+9 Years	6.81E-03
21.	Total α	n/a	5.53E-01
22.	Total β	n/a	1.62E+02

Site # 84: 216-A-36A
Specific Retention Crib
PUREX Ammonia Scrubber Wastes
Active from 09/01/65 to 03/31/66
Cumulative Waste Volume 1.07E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.16E-01
2.	Se-79	6.5E+4 Years	8.52E-03
3.	Sr-90	29.12 Years	7.89E+02
4.	Zr-93	1.53E+6 Years	1.10E-01
5.	Tc-99	2.13E+5 Years	4.89E-01
6.	Ru-106	368 Days	2.40E-07
7.	Pd-107	7E+6 Years	1.44E-03
8.	Cd-113M	5.1 Years	2.84E-05
9.	Sb-125	2.8 Years	3.88E-17
10.	Cs-134	2.1 Years	1.10E-03
11.	Cs-135	2.9E+6 Years	9.81E-03
12.	Cs-137	30 Years	6.87E+02
13.	Pm-147	2.6 Years	1.58E+00
14.	Sm-151	70 Years	2.54E+01
15.	Eu-152	13.3 Years	7.71E-03
16.	Eu-154	8.8 Years	8.55E-01
17.	Eu-155	4.96 Years	2.70E-03
18.	Ra-226	1,600 Years	8.47E-10
19.	Th-232	1.41E+10 Years	1.81E-14
20.	U (Gross)	4.5E+9 Years	4.83E-02
21.	Total α	n/a	4.91E+00
22.	Total β	n/a	3.63E+03

Site # 88: 216-A-39
Specific Retention Crib

241-AX-801-B Tank Farm Control House Floor Drainage
Active from 06/01/66 to 06/30/66
Cumulative Waste Volume 2.00E+01 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	1.27E-07
2.	Zr-93	1.53E+6 Years	1.64E-06
3.	Tc-99	2.13E+5 Years	7.28E-06
4.	Pd-107	7E+6 Years	2.15E-08
5.	Cd-113M	5.1 Years	4.35E-10
6.	Sb-125	2.8 Years	6.64E-22
7.	Cs-134	2.1 Years	1.96E-08
8.	Cs-135	2.9E+6 Years	1.46E-07
9.	Cs-137	30 Years	1.16E+01
10.	Pm-147	2.6 Years	2.71E-05
11.	Sm-151	70 Years	3.79E-04
12.	Eu-152	13.3 Years	1.19E-07
13.	Eu-154	8.8 Years	1.31E-05
14.	Eu-155	4.96 Years	4.91E-08
15.	Total β	n/a	2.75E+01

Site # 107: 216-B-20
Specific Retention Trench
U-Plant Scavenged TBP Supernatant Waste
Active from 08/01/56 to 09/30/56
Cumulative Waste Volume 4.68E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.47E-02
2.	Se-79	6.5E+4 Years	4.48E-04
3.	Sr-90	29.12 Years	2.75E+02
4.	Zr-93	1.53E+6 Years	5.79E-03
5.	Tc-99	2.13E+5 Years	2.58E-02
6.	Ru-106	368 Days	1.13E-09
7.	Pd-107	7E+6 Years	7.59E-05
8.	Cd-113M	5.1 Years	9.36E-07
9.	Sb-125	2.8 Years	1.80E-19
10.	Cs-134	2.1 Years	2.36E-06
11.	Cs-135	2.9E+6 Years	5.16E-04
12.	Cs-137	30 Years	5.55E+02
13.	Pm-147	2.6 Years	6.79E-03
14.	Sm-151	70 Years	1.24E+00
15.	Eu-152	13.3 Years	2.35E-04
16.	Eu-154	8.8 Years	2.99E-02
17.	Eu-155	4.96 Years	3.77E-06
18.	Ra-226	1,600 Years	2.05E-09
19.	Th-232	1.41E+10 Years	4.40E-14
20.	U (Gross)	4.5E+9 Years	1.17E-01
21.	Total α	n/a	7.98E-02
22.	Total β	n/a	2.00E+03

Site # 108: 216-B-21
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 09/01/56 to 10/31/56
Cumulative Waste Volume 4.67E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.18E-02
2.	Se-79	6.5E+4 Years	9.39E-04
3.	Sr-90	29.12 Years	2.57E+02
4.	Zr-93	1.53E+6 Years	1.21E-02
5.	Tc-99	2.13E+5 Years	5.39E-02
6.	Ru-106	368 Days	1.66E-09
7.	Pd-107	7E+6 Years	1.59E-04
8.	Cd-113M	5.1 Years	1.96E-06
9.	Sb-125	2.8 Years	3.77E-19
10.	Cs-134	2.1 Years	4.94E-06
11.	Cs-135	2.9E+6 Years	1.08E-03
12.	Cs-137	30 Years	1.37E+02
13.	Pm-147	2.6 Years	1.42E-02
14.	Sm-151	70 Years	2.59E+00
15.	Eu-152	13.3 Years	4.93E-04
16.	Eu-154	8.8 Years	6.27E-02
17.	Eu-155	4.96 Years	7.89E-06
18.	Ra-226	1,600 Years	3.94E-09
19.	Th-232	1.41E+10 Years	8.43E-14
20.	U (Gross)	4.5E+9 Years	2.25E-01
21.	Total α	n/a	6.32E-01
22.	Total β	n/a	9.65E+02

Site # 109: 216-B-22
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 10/01/56 to 10/31/56
Cumulative Waste Volume 4.74E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	4.49E-02
2.	Se-79	6.5E+4 Years	2.15E-03
3.	Sr-90	29.12 Years	1.42E+02
4.	Zr-93	1.53E+6 Years	2.78E-02
5.	Tc-99	2.13E+5 Years	1.23E-01
6.	Ru-106	368 Days	3.41E-09
7.	Pd-107	7E+6 Years	3.64E-04
8.	Cd-113M	5.1 Years	4.49E-06
9.	Sb-125	2.8 Years	8.64E-19
10.	Cs-134	2.1 Years	1.13E-05

11.	Cs-135	2.9E+6 Years	2.48E-03
12.	Cs-137	30 Years	1.66E+01
13.	Pm-147	2.6 Years	3.26E-02
14.	Sm-151	70 Years	5.94E+00
15.	Eu-152	13.3 Years	1.13E-03
16.	Eu-154	8.8 Years	1.44E-01
17.	Eu-155	4.96 Years	1.81E-05
18.	Ra-226	1,600 Years	2.44E-09
19.	Th-232	1.41E+10 Years	5.22E-14
20.	U (Gross)	4.5E+9 Years	1.39E-01
21.	Total α	n/a	1.60E-01
22.	Total β	n/a	3.98E+02

Site # 112: 216-B-23
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 10/01/56 to 10/31/56
Cumulative Waste Volume 4.52E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.24E-02
2.	Se-79	6.5E+4 Years	1.06E-03
3.	Sr-90	29.12 Years	5.04E+01
4.	Zr-93	1.53E+6 Years	1.38E-02
5.	Tc-99	2.13E+5 Years	6.12E-02
6.	Ru-106	368 Days	1.69E-09
7.	Pd-107	7E+6 Years	1.80E-04
8.	Cd-113M	5.1 Years	2.22E-06
9.	Sb-125	2.8 Years	4.28E-19
10.	Cs-134	2.1 Years	5.60E-06
11.	Cs-135	2.9E+6 Years	1.23E-03
12.	Cs-137	30 Years	4.13E+01
13.	Pm-147	2.6 Years	1.61E-02
14.	Sm-151	70 Years	2.94E+00
15.	Eu-152	13.3 Years	5.59E-04
16.	Eu-154	8.8 Years	7.10E-02
17.	Eu-155	4.96 Years	8.95E-06
18.	Ra-226	1,600 Years	9.09E-10
19.	Th-232	1.41E+10 Years	1.95E-14
20.	U (Gross)	4.5E+9 Years	5.19E-02
21.	Total α	n/a	1.11E-01
22.	Total β	n/a	2.26E+02

Site # 113: 216-B-24
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 10/01/56 to 11/30/56
Cumulative Waste Volume 4.70E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.45E-02
2.	Se-79	6.5E+4 Years	1.65E-03
3.	Sr-90	29.12 Years	6.30E+01
4.	Zr-93	1.53E+6 Years	2.14E-02
5.	Tc-99	2.13E+5 Years	9.50E-02
6.	Ru-106	368 Days	2.61E-09
7.	Pd-107	7E+6 Years	2.80E-04
8.	Cd-113M	5.1 Years	3.45E-06
9.	Sb-125	2.8 Years	6.65E-19
10.	Cs-134	2.1 Years	8.70E-06
11.	Cs-135	2.9E+6 Years	1.90E-03
12.	Cs-137	30 Years	4.76E+01
13.	Pm-147	2.6 Years	2.51E-02
14.	Sm-151	70 Years	4.57E+00
15.	Eu-152	13.3 Years	8.68E-04
16.	Eu-154	8.8 Years	1.10E-01
17.	Eu-155	4.96 Years	1.39E-05
18.	Ra-226	1,600 Years	1.43E-09
19.	Th-232	1.41E+10 Years	3.07E-14
20.	U (Gross)	4.5E+9 Years	8.18E-02
21.	Total α	n/a	4.73E-01
22.	Total β	n/a	2.74E+02

Site # 114: 216-B-25
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 11/01/56 to 11/30/56
Cumulative Waste Volume 3.76E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.31E-02
2.	Se-79	6.5E+4 Years	1.11E-03
3.	Sr-90	29.12 Years	7.13E+01
4.	Zr-93	1.53E+6 Years	1.43E-02
5.	Tc-99	2.13E+5 Years	6.37E-02
6.	Ru-106	368 Days	1.76E-09
7.	Pd-107	7E+6 Years	1.88E-04
8.	Cd-113M	5.1 Years	2.32E-06
9.	Sb-125	2.8 Years	4.46E-19
10.	Cs-134	2.1 Years	5.83E-06
11.	Cs-135	2.9E+6 Years	1.28E-03
12.	Cs-137	30 Years	2.06E+01
13.	Pm-147	2.6 Years	1.68E-02
14.	Sm-151	70 Years	3.06E+00
15.	Eu-152	13.3 Years	5.82E-04
16.	Eu-154	8.8 Years	7.40E-02
17.	Eu-155	4.96 Years	9.32E-06
18.	Ra-226	1,600 Years	8.92E-10
19.	Th-232	1.41E+10 Years	1.91E-14
20.	U (Gross)	4.5E+9 Years	5.09E-02

21.	Total α	n/a	1.23E-01
22.	Total β	n/a	2.29E+02

Site # 115: 216-B-26
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 12/01/56 to 02/28/57
Cumulative Waste Volume 5.88E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.81E-02
2.	Se-79	6.5E+4 Years	1.53E-03
3.	Sr-90	29.12 Years	3.83E+02
4.	Zr-93	1.53E+6 Years	1.98E-02
5.	Tc-99	2.13E+5 Years	8.78E-02
6.	Ru-106	368 Days	4.00E-09
7.	Pd-107	7E+6 Years	2.59E-04
8.	Cd-113M	5.1 Years	3.26E-06
9.	Sb-125	2.8 Years	6.94E-19
10.	Cs-134	2.1 Years	9.46E-06
11.	Cs-135	2.9E+6 Years	1.76E-03
12.	Cs-137	30 Years	3.55E+02
13.	Pm-147	2.6 Years	2.63E-02
14.	Sm-151	70 Years	4.24E+00
15.	Eu-152	13.3 Years	8.23E-04
16.	Eu-154	8.8 Years	1.04E-01
17.	Eu-155	4.96 Years	1.55E-05
18.	Ra-226	1,600 Years	3.43E-09
19.	Th-232	1.41E+10 Years	7.34E-14
20.	U (Gross)	4.5E+9 Years	1.96E-01
21.	Total α	n/a	1.54E-01
22.	Total β	n/a	1.80E+03

Site # 116: 216-B-27
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 02/01/57 to 04/30/57
Cumulative Waste Volume 4.42E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.90E-02
2.	Se-79	6.5E+4 Years	1.20E-03
3.	Sr-90	29.12 Years	2.12E+02
4.	Zr-93	1.53E+6 Years	1.55E-02
5.	Tc-99	2.13E+5 Years	6.88E-02
6.	Ru-106	368 Days	3.93E-09
7.	Pd-107	7E+6 Years	2.03E-04
8.	Cd-113M	5.1 Years	2.63E-06

9.	Sb-125	2.8 Years	6.22E-19
10.	Cs-134	2.1 Years	8.83E-06
11.	Cs-135	2.9E+6 Years	1.38E-03
12.	Cs-137	30 Years	1.28E+01
13.	Pm-147	2.6 Years	2.36E-02
14.	Sm-151	70 Years	3.33E+00
15.	Eu-152	13.3 Years	6.66E-04
16.	Eu-154	8.8 Years	8.35E-02
17.	Eu-155	4.96 Years	1.48E-05
18.	Ra-226	1,600 Years	2.00E-09
19.	Th-232	1.41E+10 Years	4.28E-14
20.	U (Gross)	4.5E+9 Years	1.14E-01
21.	Total α	n/a	4.30E-02
22.	Total β	n/a	5.60E+02

Site # 117: 216-B-28
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 04/01/57 to 06/30/57
Cumulative Waste Volume 5.05E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	8.79E-03
2.	Se-79	6.5E+4 Years	3.65E-04
3.	Sr-90	29.12 Years	3.99E+01
4.	Zr-93	1.53E+6 Years	4.72E-03
5.	Tc-99	2.13E+5 Years	2.10E-02
6.	Ru-106	368 Days	1.18E-09
7.	Pd-107	7E+6 Years	6.19E-05
8.	Cd-113M	5.1 Years	8.02E-07
9.	Sb-125	2.8 Years	1.90E-19
10.	Cs-134	2.1 Years	2.69E-06
11.	Cs-135	2.9E+6 Years	4.21E-04
12.	Cs-137	30 Years	8.68E+00
13.	Pm-147	2.6 Years	7.21E-03
14.	Sm-151	70 Years	1.02E+00
15.	Eu-152	13.3 Years	2.03E-04
16.	Eu-154	8.8 Years	2.54E-02
17.	Eu-155	4.96 Years	4.51E-06
18.	Ra-226	1,600 Years	1.75E-09
19.	Th-232	1.41E+10 Years	3.75E-14
20.	U (Gross)	4.5E+9 Years	9.98E-02
21.	Total α	n/a	3.44E-01
22.	Total β	n/a	1.21E+02

Site # 118: 216-B-29
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 06/01/57 to 07/31/57
Cumulative Waste Volume 4.84E+06 Liters

Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.71E-02
2.	Se-79	6.5E+4 Years	1.15E-03
3.	Sr-90	29.12 Years	6.84E+01
4.	Zr-93	1.53E+6 Years	1.49E-02
5.	Tc-99	2.13E+5 Years	6.61E-02
6.	Ru-106	368 Days	3.64E-09
7.	Pd-107	7E+6 Years	1.95E-04
8.	Cd-113M	5.1 Years	2.53E-06
9.	Sb-125	2.8 Years	5.98E-19
10.	Cs-134	2.1 Years	8.49E-06
11.	Cs-135	2.9E+6 Years	1.32E-03
12.	Cs-137	30 Years	2.23E+01
13.	Pm-147	2.6 Years	2.27E-02
14.	Sm-151	70 Years	3.20E+00
15.	Eu-152	13.3 Years	6.40E-04
16.	Eu-154	8.8 Years	8.02E-02
17.	Eu-155	4.96 Years	1.42E-05
18.	Ra-226	1,600 Years	2.01E-09
19.	Th-232	1.41E+10 Years	4.30E-14
20.	U (Gross)	4.5E+9 Years	1.14E-01
21.	Total α	n/a	6.75E-02
22.	Total β	n/a	2.26E+02

Site # 120: 216-B-30
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 07/01/57 to 07/31/57
Cumulative Waste Volume 4.78E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	6.50E-03
2.	Se-79	6.5E+4 Years	3.24E-05
3.	Sr-90	29.12 Years	2.14E+02
4.	Zr-93	1.53E+6 Years	4.19E-04
5.	Tc-99	2.13E+5 Years	1.86E-03
6.	Ru-106	368 Days	8.76E-10
7.	Pd-107	7E+6 Years	5.49E-06
8.	Cd-113M	5.1 Years	7.11E-08
9.	Sb-125	2.8 Years	1.68E-20
10.	Cs-134	2.1 Years	2.39E-07
11.	Cs-135	2.9E+6 Years	3.73E-05
12.	Cs-137	30 Years	1.27E+03
13.	Pm-147	2.6 Years	6.40E-04
14.	Sm-151	70 Years	9.03E-02
15.	Eu-152	13.3 Years	1.80E-05
16.	Eu-154	8.8 Years	2.26E-03
17.	Eu-155	4.96 Years	4.00E-07
18.	Ra-226	1,600 Years	5.13E-10

19.	Th-232	1.41E+10 Years	1.10E-14
20.	U (Gross)	4.5E+9 Years	2.93E-02
21.	Total α	n/a	1.29E-01
22.	Total β	n/a	3.54E+03

Site # 121: 216-B-31
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 07/01/57 to 08/31/57
Cumulative Waste Volume 4.74E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.03E-02
2.	Se-79	6.5E+4 Years	4.16E-04
3.	Sr-90	29.12 Years	7.45E+01
4.	Zr-93	1.53E+6 Years	5.38E-03
5.	Tc-99	2.13E+5 Years	2.39E-02
6.	Ru-106	368 Days	1.37E-09
7.	Pd-107	7E+6 Years	7.05E-05
8.	Cd-113M	5.1 Years	9.14E-07
9.	Sb-125	2.8 Years	2.16E-19
10.	Cs-134	2.1 Years	3.07E-06
11.	Cs-135	2.9E+6 Years	4.79E-04
12.	Cs-137	30 Years	1.06E+01
13.	Pm-147	2.6 Years	8.22E-03
14.	Sm-151	70 Years	1.16E+00
15.	Eu-152	13.3 Years	2.32E-04
16.	Eu-154	8.8 Years	2.90E-02
17.	Eu-155	4.96 Years	5.14E-06
18.	Ra-226	1,600 Years	7.11E-10
19.	Th-232	1.41E+10 Years	1.52E-14
20.	U (Gross)	4.5E+9 Years	4.06E-02
21.	Total α	n/a	3.19E-01
22.	Total β	n/a	2.11E+02

Site # 122: 216-B-32
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 08/01/57 to 09/30/57
Cumulative Waste Volume 4.77E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	6.50E-03
2.	Se-79	6.5E+4 Years	2.30E-04
3.	Sr-90	29.12 Years	9.09E+01
4.	Zr-93	1.53E+6 Years	2.97E-03
5.	Tc-99	2.13E+5 Years	1.32E-02
6.	Ru-106	368 Days	8.54E-10

7.	Pd-107	7E+6 Years	3.90E-05
8.	Cd-113M	5.1 Years	5.05E-07
9.	Sb-125	2.8 Years	1.20E-19
10.	Cs-134	2.1 Years	1.70E-06
11.	Cs-135	2.9E+6 Years	2.65E-04
12.	Cs-137	30 Years	4.75E+01
13.	Pm-147	2.6 Years	4.55E-03
14.	Sm-151	70 Years	6.41E-01
15.	Eu-152	13.3 Years	1.28E-04
16.	Eu-154	8.8 Years	1.60E-02
17.	Eu-155	4.96 Years	2.84E-06
18.	Ra-226	1,600 Years	6.41E-11
19.	Th-232	1.41E+10 Years	1.37E-15
20.	U (Gross)	4.5E+9 Years	3.66E-03
21.	Total α	n/a	1.60E-01
22.	Total β	n/a	3.39E+02

Site # 123: 216-B-33
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste
Active from 09/01/57 to 10/31/57
Cumulative Waste Volume 4.74E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	5.35E-03
2.	Se-79	6.5E+4 Years	1.99E-04
3.	Sr-90	29.12 Years	1.46E+01
4.	Zr-93	1.53E+6 Years	2.57E-03
5.	Tc-99	2.13E+5 Years	1.14E-02
6.	Ru-106	368 Days	7.30E-10
7.	Pd-107	7E+6 Years	3.37E-05
8.	Cd-113M	5.1 Years	4.37E-07
9.	Sb-125	2.8 Years	1.03E-19
10.	Cs-134	2.1 Years	1.47E-06
11.	Cs-135	2.9E+6 Years	2.29E-04
12.	Cs-137	30 Years	1.03E+02
13.	Pm-147	2.6 Years	3.93E-03
14.	Sm-151	70 Years	5.54E-01
15.	Eu-152	13.3 Years	1.11E-04
16.	Eu-154	8.8 Years	1.39E-02
17.	Eu-155	4.96 Years	2.45E-06
18.	Ra-226	1,600 Years	1.17E-10
19.	Th-232	1.41E+10 Years	2.50E-15
20.	U (Gross)	4.5E+9 Years	6.65E-03
21.	Total α	n/a	7.25E-01
22.	Total β	n/a	2.81E+02

Site # 124: 216-B-34
Specific Retention Crib
U-Plant Scavenged TBP Supernatant Waste

Active from 10/01/57 to 10/31/57
Cumulative Waste Volume 4.87E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.29E-03
2.	Se-79	6.5E+4 Years	9.37E-05
3.	Sr-90	29.12 Years	1.46E+01
4.	Zr-93	1.53E+6 Years	1.21E-03
5.	Tc-99	2.13E+5 Years	5.39E-03
6.	Ru-106	368 Days	3.11E-10
7.	Pd-107	7E+6 Years	1.59E-05
8.	Cd-113M	5.1 Years	2.06E-07
9.	Sb-125	2.8 Years	4.87E-20
10.	Cs-134	2.1 Years	6.92E-07
11.	Cs-135	2.9E+6 Years	1.08E-04
12.	Cs-137	30 Years	6.42E+00
13.	Pm-147	2.6 Years	1.85E-03
14.	Sm-151	70 Years	2.61E-01
15.	Eu-152	13.3 Years	5.21E-05
16.	Eu-154	8.8 Years	6.54E-03
17.	Eu-155	4.96 Years	1.16E-06
18.	Ra-226	1,600 Years	4.95E-10
19.	Th-232	1.41E+10 Years	1.06E-14
20.	U (Gross)	4.5E+9 Years	2.83E-02
21.	Total α	n/a	3.50E-01
22.	Total β	n/a	5.17E+01

Site # 125: 216-B-35
Specific Retention Trench
First Cycle TBP Supernatant
Active from 02/01/54 to 03/31/54
Cumulative Waste Volume 1.06E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	7.71E-05
2.	Se-79	6.5E+4 Years	2.35E-06
3.	Sr-90	29.12 Years	7.78E+01
4.	Zr-93	1.53E+6 Years	3.04E-05
5.	Tc-99	2.13E+5 Years	1.35E-04
6.	Ru-106	368 Days	6.52E-12
7.	Pd-107	7E+6 Years	3.99E-07
8.	Cd-113M	5.1 Years	4.45E-09
9.	Sb-125	2.8 Years	5.66E-22
10.	Cs-134	2.1 Years	6.30E-09
11.	Cs-135	2.9E+6 Years	2.71E-06
12.	Cs-137	30 Years	1.50E+02
13.	Pm-147	2.6 Years	2.10E-05
14.	Sm-151	70 Years	6.40E-03
15.	Eu-152	13.3 Years	1.10E-06
16.	Eu-154	8.8 Years	1.44E-04

17.	Eu-155	4.96 Years	9.20E-09
18.	Ra-226	1,600 Years	9.74E-11
19.	Th-232	1.41E+10 Years	2.09E-15
20.	U (Gross)	4.5E+9 Years	5.56E-03
21.	Total α	n/a	7.37E-02
22.	Total β	n/a	5.49E+02

Site # 126: 216-B-36
Crib
First Cycle TBP Supernatant
Active from 03/01/54 to 04/30/54
Cumulative Waste Volume 1.94E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.80E-04
2.	Se-79	6.5E+4 Years	6.57E-06
3.	Sr-90	29.12 Years	1.61E+02
4.	Zr-93	1.53E+6 Years	8.50E-05
5.	Tc-99	2.13E+5 Years	3.78E-04
6.	Ru-106	368 Days	1.34E-11
7.	Pd-107	7E+6 Years	1.11E-06
8.	Cd-113M	5.1 Years	1.24E-08
9.	Sb-125	2.8 Years	1.58E-21
10.	Cs-134	2.1 Years	1.76E-08
11.	Cs-135	2.9E+6 Years	7.57E-06
12.	Cs-137	30 Years	2.72E+02
13.	Pm-147	2.6 Years	5.87E-05
14.	Sm-151	70 Years	1.79E-02
15.	Eu-152	13.3 Years	3.07E-06
16.	Eu-154	8.8 Years	4.02E-04
17.	Eu-155	4.96 Years	2.57E-08
18.	Ra-226	1,600 Years	9.30E-11
19.	Th-232	1.41E+10 Years	1.99E-15
20.	U (Gross)	4.5E+9 Years	5.31E-03
21.	Total α	n/a	4.91E-02
22.	Total β	n/a	1.04E+03

Site # 127: 216-B-37
Crib
242-B Evaporator Bottoms
Active from 08/01/54 to 08/31/54
Cumulative Waste Volume 4.32E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.57E-03
2.	Se-79	6.5E+4 Years	3.51E-06
3.	Sr-90	29.12 Years	5.30E+00
4.	Zr-93	1.53E+6 Years	4.53E-05

5.	Tc-99	2.13E+5 Years	2.02E-04
6.	Ru-106	368 Days	1.42E-11
7.	Pd-107	7E+6 Years	5.94E-07
8.	Cd-113M	5.1 Years	6.64E-09
9.	Sb-125	2.8 Years	8.44E-22
10.	Cs-134	2.1 Years	9.38E-09
11.	Cs-135	2.9E+6 Years	4.04E-06
12.	Cs-137	30 Years	1.09E+03
13.	Pm-147	2.6 Years	3.13E-05
14.	Sm-151	70 Years	9.54E-03
15.	Eu-152	13.3 Years	1.64E-06
16.	Eu-154	8.8 Years	2.15E-04
17.	Eu-155	4.96 Years	1.37E-08
18.	Ra-226	1,600 Years	2.12E-11
19.	Th-232	1.41E+10 Years	4.53E-16
20.	U (Gross)	4.5E+9 Years	1.21E-03
21.	Total α	n/a	1.23E-01
22.	Total β	n/a	2.60E+03

Site # 128: 216-B-38
Crib
First Cycle TBP Supernatant
Active from 07/01/54 to 07/31/54
Cumulative Waste Volume 1.43E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.54E-04
2.	Se-79	6.5E+4 Years	1.56E-06
3.	Sr-90	29.12 Years	6.13E+02
4.	Zr-93	1.53E+6 Years	2.02E-05
5.	Tc-99	2.13E+5 Years	8.96E-05
6.	Ru-106	368 Days	1.59E-11
7.	Pd-107	7E+6 Years	2.64E-07
8.	Cd-113M	5.1 Years	2.95E-09
9.	Sb-125	2.8 Years	3.75E-22
10.	Cs-134	2.1 Years	4.17E-09
11.	Cs-135	2.9E+6 Years	1.80E-06
12.	Cs-137	30 Years	1.79E+02
13.	Pm-147	2.6 Years	1.39E-05
14.	Sm-151	70 Years	4.24E-03
15.	Eu-152	13.3 Years	7.29E-07
16.	Eu-154	8.8 Years	9.55E-05
17.	Eu-155	4.96 Years	6.10E-09
18.	Ra-226	1,600 Years	2.47E-10
19.	Th-232	1.41E+10 Years	5.29E-15
20.	U (Gross)	4.5E+9 Years	1.41E-02
21.	Total α	n/a	7.37E-02
22.	Total β	n/a	1.94E+03

Site # 129: 216-B-39

Crib
First Cycle TBP Supernatant
Active from 12/01/53 to 11/30/54
Cumulative Waste Volume 1.54E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.41E-03
2.	Se-79	6.5E+4 Years	5.73E-07
3.	Sr-90	29.12 Years	7.48E+00
4.	Zr-93	1.53E+6 Years	7.41E-06
5.	Tc-99	2.13E+5 Years	3.29E-05
6.	Ru-106	368 Days	1.18E-12
7.	Pd-107	7E+6 Years	9.72E-08
8.	Cd-113M	5.1 Years	1.05E-09
9.	Sb-125	2.8 Years	1.19E-22
10.	Cs-134	2.1 Years	1.26E-09
11.	Cs-135	2.9E+6 Years	6.60E-07
12.	Cs-137	30 Years	1.56E+02
13.	Pm-147	2.6 Years	4.39E-06
14.	Sm-151	70 Years	1.55E-03
15.	Eu-152	13.3 Years	2.59E-07
16.	Eu-154	8.8 Years	3.42E-05
17.	Eu-155	4.96 Years	1.81E-09
18.	Ra-226	1,600 Years	3.38E-11
19.	Th-232	1.41E+10 Years	7.24E-16
20.	U (Gross)	4.5E+9 Years	1.93E-03
21.	Total α	n/a	9.27E-02
22.	Total β	n/a	3.87E+02

Site # 130: 216-B-40
Crib
First Cycle TBP Supernatant
Active from 04/01/54 to 07/31/54
Cumulative Waste Volume 1.64E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<5.14E-05
2.	Se-79	6.5E+4 Years	3.52E-06
3.	Sr-90	29.12 Years	9.28E+01
4.	Zr-93	1.53E+6 Years	4.55E-05
5.	Tc-99	2.13E+5 Years	2.02E-04
6.	Ru-106	368 Days	6.94E-12
7.	Pd-107	7E+6 Years	5.96E-07
8.	Cd-113M	5.1 Years	6.66E-09
9.	Sb-125	2.8 Years	8.46E-22
10.	Cs-134	2.1 Years	9.41E-09
11.	Cs-135	2.9E+6 Years	4.05E-06
12.	Cs-137	30 Years	1.24E+02
13.	Pm-147	2.6 Years	3.14E-05
14.	Sm-151	70 Years	9.57E-03

15.	Eu-152	13.3 Years	1.64E-06
16.	Eu-154	8.8 Years	2.15E-04
17.	Eu-155	4.96 Years	1.38E-08
18.	Ra-226	1,600 Years	2.04E-10
19.	Th-232	1.41E+10 Years	4.37E-15
20.	U (Gross)	4.5E+9 Years	1.16E-02
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	5.23E+02

Site # 131: 216-B-41
Crib
First Cycle TBP Supernatant
Active from 11/01/54 to 11/30/54
Cumulative Waste Volume 1.44E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.57E-05
2.	Se-79	6.5E+4 Years	2.54E-06
3.	Sr-90	29.12 Years	1.56E+01
4.	Zr-93	1.53E+6 Years	3.29E-05
5.	Tc-99	2.13E+5 Years	1.46E-04
6.	Ru-106	368 Days	3.73E-12
7.	Pd-107	7E+6 Years	4.31E-07
8.	Cd-113M	5.1 Years	4.81E-09
9.	Sb-125	2.8 Years	6.12E-22
10.	Cs-134	2.1 Years	6.81E-09
11.	Cs-135	2.9E+6 Years	2.93E-06
12.	Cs-137	30 Years	3.13E+02
13.	Pm-147	2.6 Years	2.27E-05
14.	Sm-151	70 Years	6.92E-03
15.	Eu-152	13.3 Years	1.19E-06
16.	Eu-154	8.8 Years	1.56E-04
17.	Eu-155	4.96 Years	9.95E-09
18.	Ra-226	1,600 Years	4.37E-11
19.	Th-232	1.41E+10 Years	9.37E-16
20.	U (Gross)	4.5E+9 Years	2.50E-03
21.	Total α	n/a	1.84E-02
22.	Total β	n/a	7.80E+02

Site # 132: 216-B-42
Crib
U-Plant Scavenged Waste
Active from 02/01/55 to 03/31/55
Cumulative Waste Volume 1.50E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.93E-02
2.	Se-79	6.5E+4 Years	2.31E-05

3.	Sr-90	29.12 Years	3.73E+02
4.	Zr-93	1.53E+6 Years	2.99E-04
5.	Tc-99	2.13E+5 Years	1.33E-03
6.	Ru-106	368 Days	8.50E-11
7.	Pd-107	7E+6 Years	3.92E-06
8.	Cd-113M	5.1 Years	4.60E-08
9.	Sb-125	2.8 Years	7.19E-21
10.	Cs-134	2.1 Years	8.68E-08
11.	Cs-135	2.9E+6 Years	2.66E-05
12.	Cs-137	30 Years	3.46E+01
13.	Pm-147	2.6 Years	2.69E-04
14.	Sm-151	70 Years	6.34E-02
15.	Eu-152	13.3 Years	1.15E-05
16.	Eu-154	8.8 Years	1.48E-03
17.	Eu-155	4.96 Years	1.33E-07
18.	Ra-226	1,600 Years	3.97E-09
19.	Th-232	1.41E+10 Years	8.50E-14
20.	U (Gross)	4.5E+9 Years	2.26E-01
21.	Total α	n/a	6.14E-01
22.	Total β	n/a	1.01E+03

Site # 142: 216-B-52
Trench
Scavenged Waste
Active from 12/01/57 to 01/31/58
Cumulative Waste Volume 8.53E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.84E-02
2.	Se-79	6.5E+4 Years	7.64E-06
3.	Sr-90	29.12 Years	3.97E+00
4.	Zr-93	1.53E+6 Years	9.87E-05
5.	Tc-99	2.13E+5 Years	4.39E-04
6.	Ru-106	368 Days	2.91E-09
7.	Pd-107	7E+6 Years	1.29E-06
8.	Cd-113M	5.1 Years	1.72E-08
9.	Sb-125	2.8 Years	4.55E-21
10.	Cs-134	2.1 Years	6.77E-08
11.	Cs-135	2.9E+6 Years	8.80E-06
12.	Cs-137	30 Years	1.30E+02
13.	Pm-147	2.6 Years	1.74E-04
14.	Sm-151	70 Years	2.14E-02
15.	Eu-152	13.3 Years	4.38E-06
16.	Eu-154	8.8 Years	5.44E-04
17.	Eu-155	4.96 Years	1.16E-07
18.	Ra-226	1,600 Years	1.75E-10
19.	Th-232	1.41E+10 Years	3.74E-15
20.	U (Gross)	4.5E+9 Years	9.96E-03
21.	Total α	n/a	1.17E+00
22.	Total β	n/a	3.17E+02

Site # 143: 216-B-53A
Crib
300 Area PRTR Waste
Active from 10/01/65 to 11/30/65
Cumulative Waste Volume 5.49E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	5.49E-03
2.	Se-79	6.5E+4 Years	2.47E-06
3.	Sr-90	29.12 Years	<4.34E-02
4.	Zr-93	1.53E+6 Years	3.20E-05
5.	Tc-99	2.13E+5 Years	1.42E-04
6.	Ru-106	368 Days	2.81E-10
7.	Pd-107	7E+6 Years	4.19E-07
8.	Cd-113M	5.1 Years	8.07E-09
9.	Sb-125	2.8 Years	1.00E-20
10.	Cs-134	2.1 Years	2.73E-07
11.	Cs-135	2.9E+6 Years	2.85E-06
12.	Cs-137	30 Years	<4.54E-02
13.	Pm-147	2.6 Years	4.06E-04
14.	Sm-151	70 Years	7.34E-03
15.	Eu-152	13.3 Years	2.18E-06
16.	Eu-154	8.8 Years	2.44E-04
17.	Eu-155	4.96 Years	6.54E-07
18.	Ra-226	1,600 Years	1.32E-10
19.	Th-232	1.41E+10 Years	2.83E-15
20.	U (Gross)	4.5E+9 Years	7.55E-03
21.	Total α	n/a	6.14E+00
22.	Total β	n/a	2.46E-01

Site # 144: 216-B-53B
Crib
300 Area Waste
Active from 11/01/62 to 03/31/63
Cumulative Waste Volume 1.51E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	7.90E-03
2.	Se-79	6.5E+4 Years	1.65E-08
3.	Sr-90	29.12 Years	4.08E+00
4.	Zr-93	1.53E+6 Years	2.13E-07
5.	Tc-99	2.13E+5 Years	9.49E-07
6.	Ru-106	368 Days	4.25E-11
7.	Pd-107	7E+6 Years	2.80E-09
8.	Cd-113M	5.1 Years	4.84E-11
9.	Sb-125	2.8 Years	3.86E-23
10.	Cs-134	2.1 Years	8.84E-10
11.	Cs-135	2.9E+6 Years	1.90E-08
12.	Cs-137	30 Years	3.00E+00

13.	Pm-147	2.6 Years	1.54E-06
14.	Sm-151	70 Years	4.82E-05
15.	Eu-152	13.3 Years	1.29E-08
16.	Eu-154	8.8 Years	1.48E-06
17.	Eu-155	4.96 Years	1.93E-09
18.	Ra-226	1,600 Years	5.29E-11
19.	Th-232	1.41E+10 Years	1.13E-15
20.	U (Gross)	4.5E+9 Years	3.02E-03
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	1.73E+01

Site # 145: 216-B-54
Crib
300 Area Waste
Active from 03/01/63 to 10/31/65
Cumulative Waste Volume 9.99E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	9.66E-04
2.	Se-79	6.5E+4 Years	1.50E-04
3.	Sr-90	29.12 Years	4.24E-02
4.	Zr-93	1.53E+6 Years	1.95E-03
5.	Tc-99	2.13E+5 Years	8.65E-03
6.	Ru-106	368 Days	3.24E-10
7.	Pd-107	7E+6 Years	2.55E-05
8.	Cd-113M	5.1 Years	4.68E-07
9.	Sb-125	2.8 Years	4.82E-19
10.	Cs-134	2.1 Years	1.23E-05
11.	Cs-135	2.9E+6 Years	1.73E-04
12.	Cs-137	30 Years	4.43E-02
13.	Pm-147	2.6 Years	1.94E-02
14.	Sm-151	70 Years	4.43E-01
15.	Eu-152	13.3 Years	1.26E-04
16.	Eu-154	8.8 Years	1.42E-02
17.	Eu-155	4.96 Years	2.84E-05
18.	Ra-226	1,600 Years	5.29E-11
19.	Th-232	1.41E+10 Years	1.13E-15
20.	U (Gross)	4.5E+9 Years	3.02E-03
21.	Total α	n/a	3.07E-01
22.	Total β	n/a	9.45E-01

Site # 148: 216-B-58
Trench (BC Area)
300 Area Waste
Active from 11/01/65 to 06/30/67
Cumulative Waste Volume 4.13E+05 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Co-60	5.27 Years	3.23E-02
2.	Se-79	6.5E+4 Years	9.98E-08
3.	Sr-90	29.12 Years	4.48E+00
4.	Zr-93	1.53E+6 Years	1.29E-06
5.	Tc-99	2.13E+5 Years	5.73E-06
6.	Ru-106	368 Days	9.67E-10
7.	Pd-107	7E+6 Years	1.69E-08
8.	Cd-113M	5.1 Years	3.39E-10
9.	Sb-125	2.8 Years	5.00E-22
10.	Cs-134	2.1 Years	1.46E-08
11.	Cs-135	2.9E+6 Years	1.15E-07
12.	Cs-137	30 Years	3.57E+00
13.	Pm-147	2.6 Years	2.04E-05
14.	Sm-151	70 Years	2.98E-04
15.	Eu-152	13.3 Years	9.23E-08
16.	Eu-154	8.8 Years	1.02E-05
17.	Eu-155	4.96 Years	3.64E-08
18.	Ra-226	1,600 Years	5.32E-11
19.	Th-232	1.41E+10 Years	1.14E-15
20.	U (Gross)	4.5E+9 Years	3.03E-03
21.	Total α	n/a	4.11E-01
22.	Total β	n/a	1.97E+01

Site # 149: 216-B-59
Retention Basin (Trench)
B-Plant Emergency Coil Diversion
Active from 03/01/68 to 03/31/68
Cumulative Waste Volume 4.77E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	3.08E-07
2.	Sr-90	29.12 Years	2.34E-02
3.	Zr-93	1.53E+6 Years	3.98E-06
4.	Tc-99	2.13E+5 Years	1.77E-05
5.	Pd-107	7E+6 Years	5.21E-08
6.	Cd-113M	5.1 Years	1.16E-09
7.	Sb-125	2.8 Years	2.69E-21
8.	Cs-134	2.1 Years	9.34E-08
9.	Cs-135	2.9E+6 Years	3.54E-07
10.	Cs-137	30 Years	9.72E-03
11.	Pm-147	2.6 Years	1.12E-04
12.	Sm-151	70 Years	9.36E-04
13.	Eu-152	13.3 Years	3.23E-07
14.	Eu-154	8.8 Years	3.45E-05
15.	Eu-155	4.96 Years	2.56E-07
16.	Total β	n/a	8.32E-02

Site # 150: 216-B-60
French Drain
B-Plant Cell Drain Cleanout

Active from 11/01/67 to 11/30/67
Cumulative Waste Volume 1.89E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Se-79	6.5E+4 Years	9.71E-05
2.	Zr-93	1.53E+6 Years	1.25E-03
3.	Tc-99	2.13E+5 Years	5.58E-03
4.	Pd-107	7E+6 Years	1.64E-05
5.	Cd-113M	5.1 Years	3.50E-07
6.	Sb-125	2.8 Years	6.58E-19
7.	Cs-134	2.1 Years	2.10E-05
8.	Cs-135	2.9E+6 Years	1.12E-04
9.	Cs-137	30 Years	3.80E+00
10.	Pm-147	2.6 Years	2.70E-02
11.	Sm-151	70 Years	2.93E-01
12.	Eu-152	13.3 Years	9.63E-05
13.	Eu-154	8.8 Years	1.04E-02
14.	Eu-155	4.96 Years	5.52E-05
15.	Ra-226	1,600 Years	4.18E-09
16.	Th-232	1.41E+10 Years	8.95E-14
17.	U (Gross)	4.5E+9 Years	2.38E-01
18.	Total α	n/a	4.91E-03
19.	Total β	n/a	9.63E+00

Site # 159: 216-C-4
Crib
Organic Solvent Waste
Active from 07/01/55 to 10/31/64
Cumulative Waste Volume 1.70E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.95E-04
2.	Se-79	6.5E+4 Years	2.13E-06
3.	Sr-90	29.12 Years	9.56E+00
4.	Zr-93	1.53E+6 Years	2.76E-05
5.	Tc-99	2.13E+5 Years	1.23E-04
6.	Ru-106	368 Days	1.10E-12
7.	Pd-107	7E+6 Years	3.62E-07
8.	Cd-113M	5.1 Years	4.27E-09
9.	Sb-125	2.8 Years	6.96E-22
10.	Cs-134	2.1 Years	8.55E-09
11.	Cs-135	2.9E+6 Years	2.46E-06
12.	Cs-137	30 Years	<3.52E-02
13.	Pm-147	2.6 Years	2.61E-05
14.	Sm-151	70 Years	5.86E-03
15.	Eu-152	13.3 Years	1.07E-06
16.	Eu-154	8.8 Years	1.37E-04
17.	Eu-155	4.96 Years	1.32E-08
18.	Ra-226	1,600 Years	1.98E-11
19.	Th-232	1.41E+10 Years	4.25E-16

20.	U (Gross)	4.5E+9 Years	1.13E-03
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	2.38E+01

Site # 161: 216-C-6
Crib
241-CX Tank Condensate
Active from 09/01/55 to 09/30/64
Cumulative Waste Volume 5.30E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<4.03E-04
2.	Se-79	6.5E+4 Years	1.15E-04
3.	Sr-90	29.12 Years	2.33E+01
4.	Zr-93	1.53E+6 Years	1.49E-03
5.	Tc-99	2.13E+5 Years	6.61E-03
6.	Ru-106	368 Days	5.63E-11
7.	Pd-107	7E+6 Years	1.95E-05
8.	Cd-113M	5.1 Years	2.56E-07
9.	Sb-125	2.8 Years	8.47E-20
10.	Cs-134	2.1 Years	1.57E-06
11.	Cs-135	2.9E+6 Years	1.33E-04
12.	Cs-137	30 Years	<3.77E-02
13.	Pm-147	2.6 Years	3.29E-03
14.	Sm-151	70 Years	3.21E-01
15.	Eu-152	13.3 Years	6.52E-05
16.	Eu-154	8.8 Years	8.11E-03
17.	Eu-155	4.96 Years	3.13E-06
18.	Ra-226	1,600 Years	2.65E-13
19.	Th-232	1.41E+10 Years	5.67E-18
20.	U (Gross)	4.5E+9 Years	1.51E-05
21.	Total α	n/a	6.14E-03
22.	Total β	n/a	5.81E+01

Site # 188: 216-S-8
Trench
REDOX Startup Wastes
Active from 11/01/51 to 02/29/52
Cumulative Waste Volume 1.00E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.85E-04
2.	Se-79	6.5E+4 Years	8.70E-05
3.	Sr-90	29.12 Years	3.11E-01
4.	Zr-93	1.53E+6 Years	1.12E-03
5.	Tc-99	2.13E+5 Years	5.00E-03
6.	Ru-106	368 Days	2.69E-13
7.	Pd-107	7E+6 Years	1.47E-05

8.	Cd-113M	5.1 Years	1.45E-07
9.	Sb-125	2.8 Years	1.11E-20
10.	Cs-134	2.1 Years	1.01E-07
11.	Cs-135	2.9E+6 Years	1.00E-04
12.	Cs-137	30 Years	3.99E+00
13.	Pm-147	2.6 Years	4.05E-04
14.	Sm-151	70 Years	2.32E-01
15.	Eu-152	13.3 Years	3.52E-05
16.	Eu-154	8.8 Years	4.78E-03
17.	Eu-155	4.96 Years	1.33E-07
18.	Ra-226	1,600 Years	1.14E-09
19.	Th-232	1.41E+10 Years	2.44E-14
20.	U (Gross)	4.5E+9 Years	6.49E-02
21.	Total α	n/a	1.23E-01
22.	Total β	n/a	1.05E+01

Site # 173: 216-S-12
Trench
REDOX 291-S Stack Wash Waste
Active from 07/01/54 to 07/31/54
Cumulative Waste Volume 6.81E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.57E-04
2.	Se-79	6.5E+4 Years	3.04E-08
3.	Sr-90	29.12 Years	3.31E-01
4.	Zr-93	1.53E+6 Years	3.93E-07
5.	Tc-99	2.13E+5 Years	1.74E-06
6.	Ru-106	368 Days	2.84E-14
7.	Pd-107	7E+6 Years	5.15E-09
8.	Cd-113M	5.1 Years	5.75E-11
9.	Sb-125	2.8 Years	7.31E-24
10.	Cs-134	2.1 Years	8.12E-11
11.	Cs-135	2.9E+6 Years	3.50E-08
12.	Cs-137	30 Years	3.52E-01
13.	Pm-147	2.6 Years	2.71E-07
14.	Sm-151	70 Years	8.26E-05
15.	Eu-152	13.3 Years	1.42E-08
16.	Eu-154	8.8 Years	1.86E-06
17.	Eu-155	4.96 Years	1.19E-10
18.	Ra-226	1,600 Years	2.91E-11
19.	Th-232	1.41E+10 Years	6.23E-16
20.	U (Gross)	4.5E+9 Years	1.66E-03
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	1.65E+00

Site # 174: 216-S-13
Crib
REDOX Organic Wastes
Active from 02/01/51 to 11/30/66

Cumulative Waste Volume 5.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.03E-03
2.	Se-79	6.5E+4 Years	2.66E-05
3.	Sr-90	29.12 Years	1.65E-02
4.	Zr-93	1.53E+6 Years	3.44E-04
5.	Tc-99	2.13E+5 Years	1.53E-03
6.	Ru-106	368 Days	4.87E-09
7.	Pd-107	7E+6 Years	4.51E-06
8.	Cd-113M	5.1 Years	8.44E-08
9.	Sb-125	2.8 Years	9.76E-20
10.	Cs-134	2.1 Years	2.60E-06
11.	Cs-135	2.9E+6 Years	3.06E-05
12.	Cs-137	30 Years	2.25E+00
13.	Pm-147	2.6 Years	3.94E-03
14.	Sm-151	70 Years	7.85E-02
15.	Eu-152	13.3 Years	2.28E-05
16.	Eu-154	8.8 Years	2.56E-03
17.	Eu-155	4.96 Years	6.19E-06
18.	Ra-226	1,600 Years	5.30E-10
19.	Th-232	1.41E+10 Years	1.14E-14
20.	U (Gross)	4.5E+9 Years	<3.03E-02
21.	Total α	n/a	4.91E-01
22.	Total β	n/a	5.50E+00

Site # 215: 216-T-5
Trench
Second Cycle Wastes
Active from 05/01/55 to 05/31/55
Cumulative Waste Volume 2.60E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	1.47E-02
2.	Se-79	6.5E+4 Years	4.18E-07
3.	Sr-90	29.12 Years	3.39E-01
4.	Zr-93	1.53E+6 Years	5.41E-06
5.	Tc-99	2.13E+5 Years	2.40E-05
6.	Ru-106	368 Days	1.70E-12
7.	Pd-107	7E+6 Years	7.09E-08
8.	Cd-113M	5.1 Years	8.31E-10
9.	Sb-125	2.8 Years	1.30E-22
10.	Cs-134	2.1 Years	1.57E-09
11.	Cs-135	2.9E+6 Years	4.82E-07
12.	Cs-137	30 Years	2.52E+01
13.	Pm-147	2.6 Years	4.87E-06
14.	Sm-151	70 Years	1.15E-03
15.	Eu-152	13.3 Years	2.07E-07
16.	Eu-154	8.8 Years	2.67E-05
17.	Eu-155	4.96 Years	2.40E-09

18.	Ra-226	1,600 Years	2.64E-11
19.	Th-232	1.41E+10 Years	5.67E-16
20.	U (Gross)	4.5E+9 Years	1.51E-03
21.	Total α	n/a	1.11E+01
22.	Total β	n/a	6.06E+01

Site # 191: 216-T-12
Trench
Retention Basin Sludge
Active from 11/01/54 to 11/30/54
Cumulative Waste Volume 5.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	5.14E-03
2.	Se-79	6.5E+4 Years	2.40E-07
3.	Sr-90	29.12 Years	1.66E+00
4.	Zr-93	1.53E+6 Years	3.11E-06
5.	Tc-99	2.13E+5 Years	1.38E-05
6.	Ru-106	368 Days	2.84E-13
7.	Pd-107	7E+6 Years	4.08E-08
8.	Cd-113M	5.1 Years	4.55E-10
9.	Sb-125	2.8 Years	5.79E-23
10.	Cs-134	2.1 Years	6.44E-10
11.	Cs-135	2.9E+6 Years	2.77E-07
12.	Cs-137	30 Years	3.52E+00
13.	Pm-147	2.6 Years	2.15E-06
14.	Sm-151	70 Years	6.54E-04
15.	Eu-152	13.3 Years	1.12E-07
16.	Eu-154	8.8 Years	1.47E-05
17.	Eu-155	4.96 Years	9.40E-10
18.	Ra-226	1,600 Years	2.65E-10
19.	Th-232	1.41E+10 Years	5.67E-15
20.	U (Gross)	4.5E+9 Years	1.51E-02
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	1.25E+01

Site # 192: 216-T-14
Trench
First Cycle TBP Supernatant
Active from 01/01/54 to 01/31/54
Cumulative Waste Volume 1.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.86E-03
2.	Se-79	6.5E+4 Years	2.60E-06
3.	Sr-90	29.12 Years	1.99E+00
4.	Zr-93	1.53E+6 Years	3.36E-05
5.	Tc-99	2.13E+5 Years	1.49E-04

6.	Ru-106	368 Days	4.27E-13
7.	Pd-107	7E+6 Years	4.41E-07
8.	Cd-113M	5.1 Years	4.92E-09
9.	Sb-125	2.8 Years	6.25E-22
10.	Cs-134	2.1 Years	6.96E-09
11.	Cs-135	2.9E+6 Years	2.99E-06
12.	Cs-137	30 Years	1.65E+02
13.	Pm-147	2.6 Years	2.32E-05
14.	Sm-151	70 Years	7.07E-03
15.	Eu-152	13.3 Years	1.22E-06
16.	Eu-154	8.8 Years	1.59E-04
17.	Eu-155	4.96 Years	1.02E-08
18.	Ra-226	1,600 Years	1.77E-10
19.	Th-232	1.41E+10 Years	3.78E-15
20.	U (Gross)	4.5E+9 Years	1.01E-02
21.	Total α	n/a	5.40E-02
22.	Total β	n/a	3.96E+02

Site # 193: 216-T-15
Trench
First Cycle TBP Supernatant
Active from 02/01/54 to 02/28/54
Cumulative Waste Volume 1.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.09E-03
2.	Se-79	6.5E+4 Years	6.85E-07
3.	Sr-90	29.12 Years	6.96E+00
4.	Zr-93	1.53E+6 Years	8.85E-06
5.	Tc-99	2.13E+5 Years	3.94E-05
6.	Ru-106	368 Days	3.41E-13
7.	Pd-107	7E+6 Years	1.16E-07
8.	Cd-113M	5.1 Years	1.30E-09
9.	Sb-125	2.8 Years	1.65E-22
10.	Cs-134	2.1 Years	1.83E-09
11.	Cs-135	2.9E+6 Years	7.89E-07
12.	Cs-137	30 Years	3.65E+02
13.	Pm-147	2.6 Years	6.12E-06
14.	Sm-151	70 Years	1.86E-03
15.	Eu-152	13.3 Years	3.20E-07
16.	Eu-154	8.8 Years	4.19E-05
17.	Eu-155	4.96 Years	2.68E-09
18.	Ra-226	1,600 Years	1.59E-10
19.	Th-232	1.41E+10 Years	3.40E-15
20.	U (Gross)	4.5E+9 Years	9.05E-03
21.	Total α	n/a	5.77E-02
22.	Total β	n/a	8.81E+02

Site # 194: 216-T-16
Trench

First Cycle TBP Supernatant
Active from 02/01/54 to 02/28/54
Cumulative Waste Volume 1.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	3.34E-03
2.	Se-79	6.5E+4 Years	2.87E-07
3.	Sr-90	29.12 Years	2.65E+00
4.	Zr-93	1.53E+6 Years	3.71E-06
5.	Tc-99	2.13E+5 Years	1.65E-05
6.	Ru-106	368 Days	3.70E-13
7.	Pd-107	7E+6 Years	4.86E-08
8.	Cd-113M	5.1 Years	5.43E-10
9.	Sb-125	2.8 Years	6.90E-23
10.	Cs-134	2.1 Years	7.67E-10
11.	Cs-135	2.9E+6 Years	3.30E-07
12.	Cs-137	30 Years	1.84E+02
13.	Pm-147	2.6 Years	2.56E-06
14.	Sm-151	70 Years	7.80E-04
15.	Eu-152	13.3 Years	1.34E-07
16.	Eu-154	8.8 Years	1.75E-05
17.	Eu-155	4.96 Years	1.12E-09
18.	Ra-226	1,600 Years	1.29E-10
19.	Th-232	1.41E+10 Years	2.77E-15
20.	U (Gross)	4.5E+9 Years	7.39E-03
21.	Total α	n/a	3.99E-02
22.	Total β	n/a	4.42E+02

Site # 195: 216-T-17
Trench
First Cycle TBP Supernatant
Active from 02/01/54 to 06/30/54
Cumulative Waste Volume 7.85E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.57E-03
2.	Se-79	6.5E+4 Years	1.95E-06
3.	Sr-90	29.12 Years	9.94E-01
4.	Zr-93	1.53E+6 Years	2.53E-05
5.	Tc-99	2.13E+5 Years	1.12E-04
6.	Ru-106	368 Days	2.84E-13
7.	Pd-107	7E+6 Years	3.31E-07
8.	Cd-113M	5.1 Years	3.70E-09
9.	Sb-125	2.8 Years	4.70E-22
10.	Cs-134	2.1 Years	5.23E-09
11.	Cs-135	2.9E+6 Years	2.25E-06
12.	Cs-137	30 Years	1.31E+02
13.	Pm-147	2.6 Years	1.75E-05
14.	Sm-151	70 Years	5.32E-03
15.	Eu-152	13.3 Years	9.14E-07

16.	Eu-154	8.8 Years	1.20E-04
17.	Eu-155	4.96 Years	7.64E-09
18.	Ra-226	1,600 Years	1.18E-10
19.	Th-232	1.41E+10 Years	2.54E-15
20.	U (Gross)	4.5E+9 Years	6.75E-03
21.	Total α	n/a	3.25E-02
22.	Total β	n/a	3.13E+02

Site # 196: 216-T-18
Crib
Scavenged Waste
Active from 11/01/53 to 11/30/53
Cumulative Waste Volume 1.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.25E-02
2.	Se-79	6.5E+4 Years	1.94E-05
3.	Sr-90	29.12 Years	2.26E+00
4.	Zr-93	1.53E+6 Years	2.51E-04
5.	Tc-99	2.13E+5 Years	1.11E-03
6.	Ru-106	368 Days	2.85E-12
7.	Pd-107	7E+6 Years	3.29E-06
8.	Cd-113M	5.1 Years	3.49E-08
9.	Sb-125	2.8 Years	3.61E-21
10.	Cs-134	2.1 Years	3.70E-08
11.	Cs-135	2.9E+6 Years	2.23E-05
12.	Cs-137	30 Years	1.96E+01
13.	Pm-147	2.6 Years	1.33E-04
14.	Sm-151	70 Years	5.23E-02
15.	Eu-152	13.3 Years	8.56E-06
16.	Eu-154	8.8 Years	1.14E-03
17.	Eu-155	4.96 Years	5.17E-08
18.	Ra-226	1,600 Years	1.59E-10
19.	Th-232	1.41E+10 Years	3.40E-15
20.	U (Gross)	4.5E+9 Years	9.05E-03
21.	Total α	n/a	1.11E+02
22.	Total β	n/a	5.22E+01

Site # 199: 216-T-21
Trench
First Cycle TBP Supernatant
Active from 06/01/54 to 08/31/54
Cumulative Waste Volume 4.60E+05 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	5.14E-03
2.	Se-79	6.5E+4 Years	4.62E-04
3.	Sr-90	29.12 Years	2.65E+00

4.	Zr-93	1.53E+6 Years	5.97E-03
5.	Tc-99	2.13E+5 Years	2.65E-02
6.	Ru-106	368 Days	1.76E-12
7.	Pd-107	7E+6 Years	7.83E-05
8.	Cd-113M	5.1 Years	8.74E-07
9.	Sb-125	2.8 Years	1.11E-19
10.	Cs-134	2.1 Years	1.24E-06
11.	Cs-135	2.9E+6 Years	5.32E-04
12.	Cs-137	30 Years	1.41E+02
13.	Pm-147	2.6 Years	4.12E-03
14.	Sm-151	70 Years	1.26E+00
15.	Eu-152	13.3 Years	2.16E-04
16.	Eu-154	8.8 Years	2.83E-02
17.	Eu-155	4.96 Years	1.81E-06
18.	Ra-226	1,600 Years	5.83E-12
19.	Th-232	1.41E+10 Years	1.25E-16
20.	U (Gross)	4.5E+9 Years	3.33E-04
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	3.42E+02

Site # 200: 216-T-22
Trench
First Cycle TBP Supernatant
Active from 07/01/54 to 08/31/54
Cumulative Waste Volume 1.53E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.57E-03
2.	Se-79	6.5E+4 Years	1.43E-05
3.	Sr-90	29.12 Years	1.69E+01
4.	Zr-93	1.53E+6 Years	1.84E-04
5.	Tc-99	2.13E+5 Years	8.19E-04
6.	Ru-106	368 Days	8.54E-13
7.	Pd-107	7E+6 Years	2.41E-06
8.	Cd-113M	5.1 Years	2.70E-08
9.	Sb-125	2.8 Years	3.43E-21
10.	Cs-134	2.1 Years	3.81E-08
11.	Cs-135	2.9E+6 Years	1.64E-05
12.	Cs-137	30 Years	6.52E+02
13.	Pm-147	2.6 Years	1.27E-04
14.	Sm-151	70 Years	3.88E-02
15.	Eu-152	13.3 Years	6.66E-06
16.	Eu-154	8.8 Years	8.72E-04
17.	Eu-155	4.96 Years	5.57E-08
18.	Ra-226	1,600 Years	1.17E-11
19.	Th-232	1.41E+10 Years	2.50E-16
20.	U (Gross)	4.5E+9 Years	6.65E-04
21.	Total α	n/a	1.23E-01
22.	Total β	n/a	1.58E+03

Site # 201: 216-T-23
Trench
First Cycle TBP Supernatant
Active from 07/01/54 to 08/31/54
Cumulative Waste Volume 1.48E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.57E-03
2.	Se-79	6.5E+4 Years	5.13E-05
3.	Sr-90	29.12 Years	1.36E+01
4.	Zr-93	1.53E+6 Years	6.64E-04
5.	Tc-99	2.13E+5 Years	2.95E-03
6.	Ru-106	368 Days	7.40E-13
7.	Pd-107	7E+6 Years	8.70E-06
8.	Cd-113M	5.1 Years	9.71E-08
9.	Sb-125	2.8 Years	1.24E-20
10.	Cs-134	2.1 Years	1.37E-07
11.	Cs-135	2.9E+6 Years	5.91E-05
12.	Cs-137	30 Years	4.68E+02
13.	Pm-147	2.6 Years	4.59E-04
14.	Sm-151	70 Years	1.40E-01
15.	Eu-152	13.3 Years	2.40E-05
16.	Eu-154	8.8 Years	3.14E-03
17.	Eu-155	4.96 Years	2.01E-07
18.	Ra-226	1,600 Years	5.83E-12
19.	Th-232	1.41E+10 Years	1.25E-16
20.	U (Gross)	4.5E+9 Years	3.33E-04
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	1.14E+03

Site # 202: 216-T-24
Trench
First Cycle TBP Supernatant
Active from 08/01/54 to 08/31/54
Cumulative Waste Volume 1.53E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.57E-03
2.	Se-79	6.5E+4 Years	9.35E-05
3.	Sr-90	29.12 Years	1.32E+01
4.	Zr-93	1.53E+6 Years	1.21E-03
5.	Tc-99	2.13E+5 Years	5.38E-03
6.	Ru-106	368 Days	9.10E-13
7.	Pd-107	7E+6 Years	1.59E-05
8.	Cd-113M	5.1 Years	1.77E-07
9.	Sb-125	2.8 Years	2.25E-20
10.	Cs-134	2.1 Years	2.50E-07
11.	Cs-135	2.9E+6 Years	1.08E-04
12.	Cs-137	30 Years	5.00E+02
13.	Pm-147	2.6 Years	8.36E-04

14.	Sm-151	70 Years	2.55E-01
15.	Eu-152	13.3 Years	4.37E-05
16.	Eu-154	8.8 Years	5.72E-03
17.	Eu-155	4.96 Years	3.66E-07
18.	Ra-226	1,600 Years	4.84E-11
19.	Th-232	1.41E+10 Years	1.04E-15
20.	U (Gross)	4.5E+9 Years	2.76E-03
21.	Total α	n/a	1.23E-01
22.	Total β	n/a	1.22E+03

Site # 203: 216-T-25
Trench
First Cycle TBP Bottoms
Active from 09/01/54 to 09/30/54
Cumulative Waste Volume 3.00E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<2.57E-04
2.	Se-79	6.5E+4 Years	4.46E-05
3.	Sr-90	29.12 Years	1.32E+00
4.	Zr-93	1.53E+6 Years	5.77E-04
5.	Tc-99	2.13E+5 Years	2.56E-03
6.	Ru-106	368 Days	2.84E-12
7.	Pd-107	7E+6 Years	7.56E-06
8.	Cd-113M	5.1 Years	8.44E-08
9.	Sb-125	2.8 Years	1.07E-20
10.	Cs-134	2.1 Years	1.19E-07
11.	Cs-135	2.9E+6 Years	5.14E-05
12.	Cs-137	30 Years	3.13E+03
13.	Pm-147	2.6 Years	3.99E-04
14.	Sm-151	70 Years	1.21E-01
15.	Eu-152	13.3 Years	2.09E-05
16.	Eu-154	8.8 Years	2.73E-03
17.	Eu-155	4.96 Years	1.74E-07
18.	Ra-226	1,600 Years	5.30E-12
19.	Th-232	1.41E+10 Years	1.14E-16
20.	U (Gross)	4.5E+9 Years	3.03E-04
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	7.42E+03

Site # 208: 216-T-30
Catch Tank
TX-154 Diversion Box
Active from 07/01/53 to 07/31/53
Cumulative Waste Volume 1.90E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	2.25E-03

2.	Se-79	6.5E+4 Years	1.53E-05
3.	Sr-90	29.12 Years	1.29E+01
4.	Zr-93	1.53E+6 Years	1.98E-04
5.	Tc-99	2.13E+5 Years	8.81E-04
6.	Ru-106	368 Days	7.14E-13
7.	Pd-107	7E+6 Years	2.60E-06
8.	Cd-113M	5.1 Years	2.76E-08
9.	Sb-125	2.8 Years	2.85E-21
10.	Cs-134	2.1 Years	2.92E-08
11.	Cs-135	2.9E+6 Years	1.76E-05
12.	Cs-137	30 Years	1.38E+01
13.	Pm-147	2.6 Years	1.05E-04
14.	Sm-151	70 Years	4.14E-02
15.	Eu-152	13.3 Years	6.76E-06
16.	Eu-154	8.8 Years	8.98E-04
17.	Eu-155	4.96 Years	4.08E-08
18.	Ra-226	1,600 Years	2.65E-11
19.	Th-232	1.41E+10 Years	5.67E-16
20.	U (Gross)	4.5E+9 Years	1.51E-03
21.	Total α	n/a	6.14E-02
22.	Total β	n/a	6.47E+01

Site # 229: 216-U-5
Trench
Cold U-Plant Start-up Waste
Active from 03/01/52 to 03/31/52
Cumulative Waste Volume 2.25E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<9.88E-05
2.	Se-79	6.5E+4 Years	9.74E-09
3.	Sr-90	29.12 Years	<1.58E-02
4.	Zr-93	1.53E+6 Years	1.26E-07
5.	Tc-99	2.13E+5 Years	5.60E-07
6.	Ru-106	368 Days	<3.58E-16
7.	Pd-107	7E+6 Years	1.65E-09
8.	Cd-113M	5.1 Years	1.67E-11
9.	Sb-125	2.8 Years	1.40E-24
10.	Cs-134	2.1 Years	1.33E-11
11.	Cs-135	2.9E+6 Years	1.12E-08
12.	Cs-137	30 Years	<1.68E-02
13.	Pm-147	2.6 Years	5.13E-08
14.	Sm-151	70 Years	2.61E-05
15.	Eu-152	13.3 Years	4.06E-09
16.	Eu-154	8.8 Years	5.47E-07
17.	Eu-155	4.96 Years	1.77E-11
18.	Ra-226	1,600 Years	2.12E-09
19.	Th-232	1.41E+10 Years	4.53E-14
20.	U (Gross)	4.5E+9 Years	1.21E-01
21.	Total α	n/a	<3.07E-03
22.	Total β	n/a	7.92E-02

Site # 230: 216-U-6
Trench
Cold U-Plant Start-up Waste
Active from 03/01/52 to 03/31/52
Cumulative Waste Volume 2.25E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<9.88E-05
2.	Se-79	6.5E+4 Years	9.74E-09
3.	Sr-90	29.12 Years	<1.58E-02
4.	Zr-93	1.53E+6 Years	1.26E-07
5.	Tc-99	2.13E+5 Years	5.60E-07
6.	Ru-106	368 Days	<3.58E-16
7.	Pd-107	7E+6 Years	1.65E-09
8.	Cd-113M	5.1 Years	1.67E-11
9.	Sb-125	2.8 Years	1.40E-24
10.	Cs-134	2.1 Years	1.33E-11
11.	Cs-135	2.9E+6 Years	1.12E-08
12.	Cs-137	30 Years	<1.68E-02
13.	Pm-147	2.6 Years	5.13E-08
14.	Sm-151	70 Years	2.61E-05
15.	Eu-152	13.3 Years	4.06E-09
16.	Eu-154	8.8 Years	5.47E-07
17.	Eu-155	4.96 Years	1.77E-11
18.	Ra-226	1,600 Years	2.11E-09
19.	Th-232	1.41E+10 Years	4.53E-14
20.	U (Gross)	4.5E+9 Years	1.21E-01
21.	Total α	n/a	<3.07E-03
22.	Total β	n/a	7.92E-02

Site # 223: 216-U-15
Trench
Contaminated Solvent
Active from 05/01/57 to 05/31/57
Cumulative Waste Volume 6.81E+04 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<3.82E-04
2.	Se-79	6.5E+4 Years	2.85E-07
3.	Sr-90	29.12 Years	3.57E-02
4.	Zr-93	1.53E+6 Years	3.69E-06
5.	Tc-99	2.13E+5 Years	1.64E-05
6.	Ru-106	368 Days	2.25E-13
7.	Pd-107	7E+6 Years	4.83E-08
8.	Cd-113M	5.1 Years	6.26E-10
9.	Sb-125	2.8 Years	1.48E-22
10.	Cs-134	2.1 Years	2.10E-09
11.	Cs-135	2.9E+6 Years	3.28E-07

12.	Cs-137	30 Years	3.77E-02
13.	Pm-147	2.6 Years	5.63E-06
14.	Sm-151	70 Years	7.94E-04
15.	Eu-152	13.3 Years	1.59E-07
16.	Eu-154	8.8 Years	1.99E-05
17.	Eu-155	4.96 Years	3.52E-09
18.	Ra-226	1,600 Years	1.32E-11
19.	Th-232	1.41E+10 Years	2.83E-16
20.	U (Gross)	4.5E+9 Years	7.55E-04
21.	Total α	n/a	<6.14E-03
22.	Total β	n/a	1.80E-01

Site # 233: 216-Z-1&2
Tile Field/Crib/Ditch (Includes 1A, 1AA, 1AB, 1AC)
PFP D-6 Tank Wastes
Active from 06/01/49 to 05/31/69
Cumulative Waste Volume 3.37E+07 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.52E-04
2.	Se-79	6.5E+4 Years	1.87E-06
3.	Sr-90	29.12 Years	<3.00E-02
4.	Zr-93	1.53E+6 Years	2.41E-05
5.	Tc-99	2.13E+5 Years	1.07E-04
6.	Ru-106	368 Days	3.23E-14
7.	Pd-107	7E+6 Years	3.16E-07
8.	Cd-113M	5.1 Years	2.98E-09
9.	Sb-125	2.8 Years	1.90E-22
10.	Cs-134	2.1 Years	1.63E-09
11.	Cs-135	2.9E+6 Years	2.15E-06
12.	Cs-137	30 Years	<3.21E-02
13.	Pm-147	2.6 Years	6.88E-06
14.	Sm-151	70 Years	4.94E-03
15.	Eu-152	13.3 Years	7.15E-07
16.	Eu-154	8.8 Years	9.84E-05
17.	Eu-155	4.96 Years	2.07E-09
18.	Ra-226	1,600 Years	4.72E-10
19.	Th-232	1.41E+10 Years	1.01E-14
20.	U (Gross)	4.5E+9 Years	2.69E-02
21.	Total α	n/a	4.31E+02
22.	Total β	n/a	1.57E-01

Site # 240: 216-Z-1AA

236-Z PFP & 242-Z Treatment Facility Wastes
Active from 06/01/64 to 05/31/66
Cumulative Waste Volume 1.90E+06 Liters
Radionuclides decayed to 12/31/98

Isotope	Half-life	Curies

1.	Co-60	5.27 Years	<9.61E-04
2.	Se-79	6.5E+4 Years	6.02E-07
3.	Sr-90	29.12 Years	<4.24E-02
4.	Zr-93	1.53E+6 Years	7.78E-06
5.	Tc-99	2.13E+5 Years	3.46E-05
6.	Ru-106	368 Days	5.11E-09
7.	Pd-107	7E+6 Years	1.02E-07
8.	Cd-113M	5.1 Years	1.94E-09
9.	Sb-125	2.8 Years	2.35E-21
10.	Cs-134	2.1 Years	6.38E-08
11.	Cs-135	2.9E+6 Years	6.93E-07
12.	Cs-137	30 Years	<4.43E-02
13.	Pm-147	2.6 Years	9.51E-05
14.	Sm-151	70 Years	1.78E-03
15.	Eu-152	13.3 Years	5.25E-07
16.	Eu-154	8.8 Years	5.88E-05
17.	Eu-155	4.96 Years	1.53E-07
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	1.84E+03
22.	Total β	n/a	2.16E-01

Site # 241: 216-Z-1AB

236-Z PFP & 242-Z Treatment Facility Wastes
Active from 05/01/66 to 10/31/67
Cumulative Waste Volume 1.90E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Co-60	5.27 Years	<1.25E-03
2.	Se-79	6.5E+4 Years	2.85E-07
3.	Sr-90	29.12 Years	<4.45E-02
4.	Zr-93	1.53E+6 Years	3.69E-06
5.	Tc-99	2.13E+5 Years	1.64E-05
6.	Ru-106	368 Days	5.60E-09
7.	Pd-107	7E+6 Years	4.83E-08
8.	Cd-113M	5.1 Years	9.78E-10
9.	Sb-125	2.8 Years	1.49E-21
10.	Cs-134	2.1 Years	4.41E-08
11.	Cs-135	2.9E+6 Years	3.28E-07
12.	Cs-137	30 Years	<4.64E-02
13.	Pm-147	2.6 Years	6.09E-05
14.	Sm-151	70 Years	8.53E-04
15.	Eu-152	13.3 Years	2.67E-07
16.	Eu-154	8.8 Years	2.94E-05
17.	Eu-155	4.96 Years	1.11E-07
18.	Ra-226	1,600 Years	2.91E-13
19.	Th-232	1.41E+10 Years	6.24E-18
20.	U (Gross)	4.5E+9 Years	<1.66E-05
21.	Total α	n/a	1.02E+03

22.	Total β	n/a	2.26E-01

Site # 242: 216-Z-1AC

236-Z PFP & 242-Z Treatment Facility Wastes
Active from 10/01/67 to 05/31/69
Cumulative Waste Volume 1.41E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Total α	n/a	6.63E+02

Site # 238: 216-Z-18
Crib
236-Z PFP & 242-Z Treatment Facility Wastes
Active from 04/01/69 to 05/31/73
Cumulative Waste Volume 3.86E+06 Liters
Radionuclides decayed to 12/31/98

	Isotope	Half-life	Curies
1.	Total α	n/a	1.41E+03

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