

0094250

DOE/RL-88-30 REVISION 20

HANFORD SITE WASTE MANAGEMENT UNITS REPORT

SECTION

3 OF 5

Site Description: The ditch was backfilled and surface stabilized in 1991. It is posted as an Underground Radioactive Material area.

Waste Type: Process Effluent

Waste Description: The unit received waste from 202-A Chemical Sewer, acid fractionator condensate and condenser cooling water that flow to 216-B-3 Pond. Until December 1957, the site received process cooling water and chemical sewer waste from 202-A. From December 1957 to February 1958, the site received all of the above, but the process cooling water was rerouted to 216-A-25 Pond. From February 1958 to December 1962, the ditch received the above plus acid fractionator condensate from 202-A. From December 1962 to December 1963, the ditch also received seal cooling water from air sampler vacuum pumps in 202-A. From December 1963 to January 1966 the vacuum pump cooling water was rerouted to 216-A-35 French Drain.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-E-51

Site Names: UPR-200-E-51, Liquid Release from Purex to B-Pond, UN-200-E-51

Reason: Within Boundary Of Larger Site

Site Code: 216-A-30 **Classification:** Accepted

Site Names: 216-A-30, 216-A-30 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1961

Site Status: Inactive **End Date:** 1992

Site Description: The crib is surrounded with concrete AC-540 markers and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: Until 11/65, the site received the steam condensate, equipment disposal tunnel floor and water-filled door drainage, and the slug storage basin overflow waste from 202-A Building. From 11/65 to 1/70, the 216-A-6 Crib was restored to service to receive some of the above effluents because the effluent flow rate had exceeded the infiltration capacity of this unit. From 1/70 to 6/92, the site received the above effluent because the 216-A-6 Crib was deactivated. The waste was low in salt and is neutral to basic. TPA Milestone M-17-22A required that PUREX steam condensate discharge to 216-A-30 Crib be discontinued by June 1992. The fourth amendment to the TPA (89-10 Rev 3) documents that the steam condensate stream was shut down in June 1992 and that all discharges to this crib were discontinued. The unit was permanently isolated in 1995.

Site Code: 216-A-33 **Classification:** Accepted

Site Names: 216-A-33, 216-A-33 Dry Well, 216-A-26B **ReClassification:**

Site Type: French Drain **Start Date:** 1955

Site Status: Inactive **End Date:** 1964

Site Description: The 291-AE Filter Building has been built over top of the site where this drain was located. The stainless steel (M21-UD) inlet pipe entered the unit 1.5 meters (5 feet) below grade. The french drain had a carbon steel cover.

Waste Type: Process Effluent

Waste Description: The site received the bearing coolant waste from the 291-A-1 Stack electrical exhaust fans. The waste is low in salt, neutral to basic, and contains less than 1 curie of total beta activity.

Site Code: 216-A-34 **Classification:** Accepted

Site Names: 216-A-34, 216-A-34 Ditch, 216-A-34 Crib **ReClassification:**

Site Type: Ditch **Start Date:** 1955

Site Status: Inactive **End Date:** 1957

Site Description: The site is marked and posted with Underground Radioactive Material signs. It has a small amount of bunch grass vegetation growing on it. In February 2001, a posted Soil Contamination Area extended northward from the edge of 216-A-34 to 216-A-19.

Waste Type: Water

Waste Description: The site received the cooling water from the contact condenser in the 241-A-431 Building in route to the 216-A-19 and 216-A-20 Trenches. The site contains less than 1 curie total beta activity.

Site Code: 216-A-36A **Classification:** Accepted

Site Names: 216-A-36A, 216-A-36 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1965

Site Status: Inactive **End Date:** 1966

Site Description: The 216-A-36A and 216-A-36B cribs are located inside a common light post and chain area. The 216-A-36A is the at the north end of the chained area. The large chained area is posted with Underground Radioactive Material signs. The risers near the center of the cribs had been posted with Soil Contamination signs, but were surface stabilized in May 2010.

Waste Type: Process Effluent

Waste Description: The site received the ammonia scrubber waste from the 202-A Building. The waste is low in salt and is neutral to basic. The site was deactivated because of a large discharge of fission products. In December 1965, it was calculated (from bore hole soil samples) that approximately 400,000 curies of contaminants had been discharged to the crib that included 1600 curies of cesium-137.

Site Code: 216-A-36B **Classification:** Accepted

Site Names: 216-A-36B, 216-A-36 Crib, Purex Ammonia Scrubber Distillate (ASD) **ReClassification:**

Site Type: Crib **Start Date:** 1966

Site Status: Inactive **End Date:** 1987

Site Description: The 216-A-36B portion of the crib is located inside the same light post and chain area as the 216-A-36A Crib. The 216-A-36B is the southern end of the chained area. The large chained area is

posted with Underground Radioactive Material signs. The risers near the center of the cribs had been posted with Soil Contamination Area signs, but were surface stabilized in May 2010. The 216-A-36B portion of the chained area is considerably larger than the 216-A-36A portion.

Waste Type: Process Effluent

Waste Description: Until October 1972, the site received the ammonia scrubber waste from the 202-A Building (Plutonium Uranium Extraction [PUREX]). The site was retired in October 1972 when the PUREX plant shut down. In November 1982, the site was reactivated to receive the above wastes when PUREX operations resumed. The waste is low in salt and is neutral to basic. The concentrations of ammonium hydroxide discharged to the crib resulted in the waste stream being classified as a dangerous waste.

During the week of May 21 to May 28, 1970, an abnormally large quantity of radionuclides was discharged to the A36-B crib. A letter from C. W. Malody reports that the volume was 1.6 million liters (420,000 gallons). The sample analysis showed 9.3 kilograms (20.5 pounds) of uranium; 82.3 grams (2.9 ounces) of plutonium; 15,900 Curies of total beta; 9,050 Curies of 95-zirconium; 4,390 Curies of 106-ruthenium; and 5,800 Curies of 144-cerium were released to the crib during those dates.

For 1969, the 12 month total of waste to the crib was 10 kilograms (22 pounds) of uranium; 7.2 grams (2.5 ounces) of plutonium; 1790.8 Curies of beta; 6.6 Curies of cobalt-60; 99.1 Curies of strontium-90, 110.2 Curies of cesium-137, and 454.0 Curies of ruthenium-106 in 17.8 million liters (4.695 gallons) volume of liquid.

Site Code:	216-A-37-1	Classification:	Accepted
Site Names:	216-A-37-1, 216-A-37 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1977
Site Status:	Inactive	End Date:	1989
Site Description:	The crib is marked and surrounded with concrete AC-540 markers and Underground Radioactive Material signs.		

Waste Type: Process Effluent

Waste Description: The site received process condensate from the 242-A Evaporator. The process condensate had been determined to be regulated as a mixed waste due to the presence of spent halogenated and nonhalogenated solvents and for the toxicity of ammonia. The estimated annual quantity of dangerous waste was 4.912E+07 kilograms (1.083E+08 pounds), representing the maximum annual output of evaporator process condensate during operating campaigns.

Site Code:	216-A-37-2	Classification:	Accepted
Site Names:	216-A-37-2, 216-A-37-2 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1983
Site Status:	Inactive	End Date:	1995
Site Description:	The crib is marked with concrete AC-540 posts and Underground Radioactive Material signs.		

Waste Type: Steam Condensate

Waste Description: The site received steam condensate from PUREX (parallel operation of this unit and 216-A-30). The PUREX steam condensate stream was shut down in June 1992 (DOE/RL-82-28). TPA milestone M-17-22A required that PUREX steam condensate discharge to 216-A-37-2 Crib be discontinued by June 1992.

Site Code: 216-A-38-1 **Classification:** Accepted

Site Names: 216-A-38-1, 216-A-38 Crib (See Subsites) **ReClassification:**

Site Type: Crib **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The crib is surrounded by light posts and a chain. It is posted with Underground Radioactive Material signs. There are no concrete AC-540 markers or signs to label the site.

Waste Type: Process Effluent

Waste Description: Although the crib was built to receive PUREX effluent, it was never used.

SubSites:

SubSite Code: 216-A-38-1:1

SubSite Name: 216-A-38-1:1, 216-A-38-2 Crib

Classification: Accepted

ReClassification:

Description: The 216-A-38-2 Crib was proposed to be built directly south of and adjoining to the 216-A-38-1 Crib. The 216-A-38-2 Crib was never built.

Site Code: 216-A-40 **Classification:** Accepted

Site Names: 216-A-40, 216-A-40 Retention Basin, 216-A-39 Crib, 216-A-39 Trench **ReClassification:**

Site Type: Retention Basin **Start Date:** 1968

Site Status: Inactive **End Date:** 1979

Site Description: The site is currently a surface stabilized area that is posted Underground Radioactive Material. The corners are marked with concrete AC-540 markers. Some contaminated equipment is being stored on top of the backfilled basin. The equipment is posted Radioactive Material Area/Contamination Area.

Waste Type: Steam Condensate

Waste Description: The site received and stored in rubber bladders, the diverted cooling water and steam condensate from the 244-AR Vault.

Site Code: 216-A-41 **Classification:** Accepted

Site Names: 216-A-41, Crib, 291-AR Stack Drain, 296-A-13 Stack Drain **ReClassification:**

0367). TPA milestone M-17-20A required all discharge to the 216-A-45 Crib be ceased by September 1991. The Fourth Amendment to the TPA confirms that this milestone was met.

Site Code:	207-B	Classification:	Accepted
Site Names:	207-B, B Plant Retention Basin, 207-B Retention Basin	ReClassification:	
Site Type:	Retention Basin	Start Date:	1945
Site Status:	Inactive	End Date:	1997
Site Description:	The unit is a concrete-lined basin, divided into two equal sized sections. The basin is surrounded by a 2.4 meter (8 foot) chain link fence and posted with Contamination Area signs.		
Waste Type:	Water		
Waste Description:	The unit received process cooling water from process equipment jackets in the 221-B Building. Normally, activity levels were low, and the water was discharged to the 216-B-3 Pond via the 216-B-2-1, 216-B-2-2, 216-B-2-3 and 216-B-3-1, 216-B-3-2 and 216-B-3-3 ditches. The valve box on the east side of the retention basin tied into the pipeline that fed the 216-B-63 Ditch (sitecode 216-E-191-PL). The B Plant Chemical Sewer pipeline, a pipeline from 242-B Evaporator building and a cooling water pipeline from 241-BX tank farm also fed the retention basin.		

The Following Sites Were Consolidated With This Site:

Site Code:	UPR-200-E-32
Site Names:	UPR-200-E-32, UN-200-E-32, Coil Leak from 221-B
Reason:	Within Boundary Of Larger Site

Site Code:	216-B-2-1	Classification:	Accepted
Site Names:	216-B-2-1, 216-B-1, B Swamp Ditch, 216-B-2, B Ditch, 216-B-2W	ReClassification:	
Site Type:	Ditch	Start Date:	1945
Site Status:	Inactive	End Date:	1963
Site Description:	The ditch has been backfilled and surface stabilized. It is located within a larger Underground Radioactive Material area that includes the 216-B-2-1, 216-B-2-2 and 216-B-2-3 stabilized ditches.		
Waste Type:	Process Effluent		
Waste Description:	Until March 1952, the site transported steam condensate, process cooling water, and chemical sewer from 221-B waste. After March 1952, the site transported the streams identified above in addition to the 241-CR Vault cooling water.		

Site Code:	216-B-2-2	Classification:	Accepted
Site Names:	216-B-2-2, 216-B-2-2W, 216-B-1 Ditch	ReClassification:	

Site Type: Ditch **Start Date:** 1963
Site Status: Inactive **End Date:** 1970

Site Description: The ditch has been backfilled and surface stabilized. It is located within a large Underground Radioactive Material area that includes the 216-B-2-1, 216-B-2-2 and 216-B-2-3 backfilled ditches. The individual ditches are not marked. The head end of the ditch is located near the 207-B Retention Basin. The lower end terminated near the northeast corner of the 218-E-12A Burial Ground.

Waste Type: Process Effluent

Waste Description: Until January 1965, the ditch transported and percolated 241-CR Vault cooling water, 221-B cooling water and steam condensate (replacing 216-B-2-1), and chemical sewer toward 216-B-3 Pond. From January 1965 to November 1967, the same effluents as those listed above in addition to 241-BY Tank Farm In Tank Solidification (ITS) Unit 1 cooling water were transported and percolated by the ditch. From November 1967 to February 1968, the same effluents as those listed above minus 284-E Powerhouse waste and steam condensate were released to the ditch. From February 1968 to April 1970, the same effluents as those listed above plus the 241-BY Tank Farm ITS Unit 2 were released to the ditch. An Unplanned Release on March 22, 1970 released approximately 1000 curies of strontium-90. After April 1970, the site received cleanup waste from 207-B Retention Basin.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-E-138
Site Names: UPR-200-E-138, Liquid Release from B-Plant, UN-200-E-138, UPR-200-W-66
Reason: Within Boundary Of Larger Site

Site Code: 216-B-2-3 **Classification:** Accepted
Site Names: 216-B-2-3, B Pond Ditch, B Swamp Ditch, 216-B-2-3W **ReClassification:**

Site Type: Ditch **Start Date:** 1970
Site Status: Inactive **End Date:** 1987

Site Description: The ditch is currently backfilled and surface stabilized. It is located inside a large Underground Radioactive Material area that includes the 216-B-2-1, 216-B-2-2 and 216-B-2-3 ditches

Waste Type: Process Effluent

Waste Description: From April 1970 to July 1973, the site transported and percolated the 241-CR Vault cooling water, 221-B Plant cooling water, and condenser cooling water from 241-BY Tank Farm ITS (In Tank Solidification) Units 1 and 2. The waste flowed into the 216-B-3 Pond. After July 1973, the ditch received the above-listed effluents except from 241-BY Tank Farm ITS Units 1 and 2.

Site Code: 216-B-6 **Classification:** Accepted
Site Names: 216-B-6, 222-B-110 Reverse Well, 216-B-6 Dry Well, 216-B-6 Crib, 222-B-110 Dry Well **ReClassification:**

Waste Description: From December 1949 to December 1951 the site received the decontamination sink and sample slurper waste from the 222-B Building and the floor drainage from the 292-B Building. From December 1951 to May 1969 the site received only the floor drainage from the 292-B Building. From May 1969 to October 1973 the site received only the decontamination sink and shower waste from the 221-BC Building.

Site Code: 216-B-12 **Classification:** Accepted

Site Names: 216-B-12; 216-ER Crib; 216-ER-1,2,3 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1952

Site Status: Inactive **End Date:** 1973

Site Description: The crib is marked and posted with Underground Radioactive Material and Cave-in Potential signs.

Waste Type: Process Effluent

Waste Description: From November 1952 to December 1957, the site received the process condensate waste from the tributyl phosphate uranium recovery processes at the 221-U and 224-U Buildings as well as B Plant condensate. From December 1957 to May 1967, the site was inactive. From May 1967 to November 1967, the site received construction waste from 221-B Building. After November 1967, the site received process condensate from 221-B Building. The waste is low in salt and is neutral to basic.

Site Code: 216-B-51 **Classification:** Accepted

Site Names: 216-B-51, 216-BY-9 Crib **ReClassification:**

Site Type: French Drain **Start Date:** 1956

Site Status: Inactive **End Date:** 1958

Site Description: The site is a small Underground Radioactive Material area measuring approximately 3 meters by 3 meters (10 feet by 10 feet). The concrete drain structure extends approximately 0.3 meters (1 foot) above the ground surface. The structure is approximately 1.5 meters (5 feet) in diameter with a wooden lid. The structure is also posted with Fixed Contamination Area signs.

Waste Type: Process Effluent

Waste Description: The site received drainage from the BC Crib pipeline. The pipeline carried high salt, neutral to basic scavenged tributyl phosphate waste via 241-BY tank farm to the BC Crib area. The site contains less than 10 curies total beta.

Site Code: 216-B-55 **Classification:** Accepted

Site Names: 216-B-55, 216-B-55 Enclosed Trench, 216-B-55 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1967

Site Status: Inactive **End Date:** 1991

Site Description: The site is marked with concrete AC-540 markers and posted with Underground Radioactive Material signs.

The unit is filled with approximately 1380 cubic meters (1,800 cubic yards) of gravel. A perforated 30 centimeter (30 inch) diameter galvanized pipe runs the length of the unit, 0.9 meters (3 feet) above the bottom. The site had two gage wells of 20 centimeter (8 inch) steel pipe with a galvanized sheet metal cap. Each well extended from the crib bottom to approximately 0.9 meters (3 feet) above grade. The crib was constructed with 19,500 square feet of membrane barrier.

Waste Type: Steam Condensate

Waste Description: The site has received steam condensate from 221-B Building. The waste is low in salt and is neutral to basic. The steam condensate was sent to the 216-B-55 Crib from 1967 to 1990. (DOE/RL-89-28) TPA milestone M-17-25 required all discharge to the crib to be ceased by Sept. 1991.

Site Code: 216-B-59 **Classification:** Accepted

Site Names: 216-B-59, 216-B-58 Trench, 216-B-58 Ditch **ReClassification:**

Site Type: Trench **Start Date:** 1967

Site Status: Inactive **End Date:** 1974

Site Description: The original 216-B-59 was an unlined trench. The site was upgraded to a retention basin in 1974 (see 216-B-59B). The lined retention basin was constructed over top of the unlined 216-B-59 trench. There are currently no visual features remaining of the unlined trench. The concrete-lined basin is enclosed by a 2 meter (6 foot) chain link fence

Waste Type: Process Effluent

Waste Description: The unlined trench received diverted cooling water from the 221-B Building. Only one diversion occurred (3/68) before the unit was lined and renamed the 216-B-59B Retention Basin.

Site Code: 216-B-59B **Classification:** Accepted

Site Names: 216-B-59B, 216-B-59 Retention Basin **ReClassification:**

Site Type: Retention Basin **Start Date:** 1974

Site Status: Inactive **End Date:** 1997

Site Description: The site is a concrete structure enclosed by a six foot (2 meter) chain link fence.

Waste Type: Process Effluent

Waste Description: This unit received contaminated cooling water from the 221-B Building. The diverted effluent was pumped back into 221-B for reprocessing.

Site Code: 216-B-63 **Classification:** Accepted

Site Names: 216-B-63, B Plant Chemical Sewer Ditch, 216-B-63 Trench, 216-B-63 Ditch **ReClassification:**

Site Type: Ditch **Start Date:** 1970

Site Status: Inactive **End Date:** 1992

Site Description: The site is a ditch that has been backfilled and surface stabilized. It is posted as an Underground Radioactive Material area and has Danger- Keep Out signs. Prior to stabilization, the ditch had an earth shielding berm and a side slope of 1.5:1.

Waste Type: Process Effluent

Waste Description: From March 1970 to May 1970, the 216-B-63 ditch received 241-BY tank farm In-Tank Solidification (ITS-2) cooling water. The site has received effluent from the 221-B, 225-B, and 271-B Building floor drains and chemical sewer wastes. Waste included corrosive (acidic and caustic) dangerous waste from the regeneration of demineralizer columns at B Plant. Radiological discharges were considered to be relatively low, with a total of approximately 8.7 curies of beta and 7.6 kilograms (16.7 pounds) of uranium. The unit has not received dangerous waste since September 1985. In 1987, two incidental acid releases occurred. In February 1992, the chemical sewer discharge to the 216-B-63 ditch was eliminated. Effluent was rerouted to 216-B-3 Ponds via underground pipelines. TPA milestone M-17-04B required the elimination of B-Plant Chemical Sewer effluent to the 216-B-63 Ditch by February 1992.

Site Code: 216-B-64 **Classification:** Accepted

Site Names: 216-B-64, 216-B-64 Retention Basin, 216-B-64 Trench, 216-B-64 Crib **ReClassification:** No Action (11/29/2004)

Site Type: Retention Basin **Start Date:** 1974

Site Status: Inactive **End Date:** 1997

Site Description: The chain link fence that once surrounded the basin has been removed. It is currently surrounded with light post and chain and posted as an Underground Radioactive Material Area.

The basin contains a rubber bladder with a 190,000 liter (50,000 gallon) capacity. The unit is divided into two 6.1 meter (20 feet) by 19.8 meter (65 feet) sections. A concrete roof covers the basin.

Waste Type: Steam Condensate

Waste Description: The unit was intended to receive steam condensate from the 221-B Building that exceeded release limits. A facility test was conducted, but the basin was never used.

Site Code: 241-B-361 **Classification:** Accepted

Site Names: 241-B-361, 241-B-361 Settling Tank, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Settling Tank **Start Date:** 1945

Site Status: Inactive **End Date:** 1947

Site Description: The site is delineated with light post and chain. It is posted with Underground Radioactive Material and Inactive Miscellaneous Underground Storage Tank signs. The surface is covered

with coarse rock.

Waste Type: Sludge

Waste Description: The unit received low salt, alkaline radioactive liquid wastes from cell washings collected in the 5-6W Cells in 221-B and low level concentrator condensate from the 224-B facility. Although some reports estimate the quantity of waste in the tank as 121,000 liters (32,000 gallons), the unit is now estimated to contain 83,000 liters (22,000 gallons) of sludge containing 2.46 kilograms (5.42 pounds) of plutonium and 1,060 curies beta/gamma. The tank solids are primarily bismuth phosphate residue described as black in color with a pudding like consistency. The current volume is unknown and not monitored. The tank contents was sampled in 1979. The sludge contained 3.4 micro curies/gram of Pu-239, 1.4 micro curies/gram of Cs-137, and 23 micro curies/gram of SR-90. The liquid contained 6.1 E-7 micro curies/ml of Pu-239, 2.5 E-3 micro curies/ml of Cs-137, and 3.1 E-5 micro curies/ml of Sr-90.

Site Code: 216-BY-201 **Classification:** Accepted

Site Names: 216-BY-201, 241-BY Flush Tank, 216-BY-47, Supernatant Disposal Flush Tank, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Settling Tank **Start Date:** 1954

Site Status: Inactive **End Date:** 1955

Site Description: The unit is an underground tank that is not discernible from the surface. It is located within an Underground Radioactive Material area and has a sign stating "Restricted Access - 216-BY-201" and "IMUST" (Inactive Miscellaneous Underground Storage Tank). There is one metal covered manhole visible at the tank site and no visible riseres or vents. A steel monitoring pit, located near the southeast corner of the tank, is visible and may be identified by a steel cover.

Waste Type: Process Effluent

Waste Description: The unit received radioactive waste from the 241-BY Tank Farm and the TBP Waste Line. Radiological constituents include strontium and cesium with their associated decay products, yttrium and barium. Chemical waste includes nitrate, sodium, aluminum, carbonate and hydroxide.

Site Code: 216-C-1 **Classification:** Accepted

Site Names: 216-C-1, 216-C-1 Crib, 216-C Crib **ReClassification:**

Site Type: Crib **Start Date:** 1953

Site Status: Inactive **End Date:** 1957

Site Description: The site is marked and posted with Underground Radioactive Material signs. A yellow cement crib marker, labeled 216-C-1, is located inside the chained 241-CX-71 tank area.

Waste Type: Process Effluent

Waste Description: From January 1953 until September 1955, the site received high salt waste (HSW), cold-run waste, and the process condensate from the 201-C Building. From September 1955 to June 1957, the site received the HSW cold-run waste from the 201-C Building. Waste neutralized in

the 241-CX-71 tank was discharged to this crib. The waste is high in salt and is neutral to basic.

Site Code: 216-C-2 **Classification:** Accepted
Site Names: 216-C-2, 291-C Dry Well, 216-C-2 Dry Well, 216-C-2 Reverse Well **ReClassification:**
Site Type: Injection/Reverse Well **Start Date:** 1953
Site Status: Inactive **End Date:** 1988
Site Description: The reverse well is no longer visible. It is not separately marked or posted from the surrounding stabilized area (200-E-41) that is posted as Underground Radioactive Material.
Waste Type: Water
Waste Description: The site received 291-C Stack drainage and the seal water drainage from the stack ventilation filters. The volume discharged to the unit is unknown. The waste is low in salt and is neutral to basic. The site contains less than 1 curie total beta activity.

Site Code: 216-C-3 **Classification:** Accepted
Site Names: 216-C-3, 201-C Leaching Pit, 216-C-3 Crib **ReClassification:**
Site Type: Crib **Start Date:** 1953
Site Status: Inactive **End Date:** 1954
Site Description: The crib is identified with a single AC-540 concrete marker post. The site is located inside a larger posted Underground Radioactive Material area known as 200-E-41 (Strontium Semi-works Stabilized Area).
The site consists of 10 centimeter (4 inch) pipes resting on a gravel bed creating a drain field type crib.
Waste Type: Process Effluent
Waste Description: The site received waste from the 201-C, 215-C, and 271-C buildings. The waste is acidic.

Site Code: 216-C-4 **Classification:** Accepted
Site Names: 216-C-4, 216-C-4 Crib **ReClassification:**
Site Type: Crib **Start Date:** 1955
Site Status: Inactive **End Date:** 1965
Site Description: The crib has been surface stabilized. It is marked and posted with Underground Radioactive Material signs. An access area has been cut through the 209-E security fence.
Waste Type: Process Effluent
Waste Description: The site received contaminated organic waste from the 276-C Building. The waste is low in salt and is neutral to basic.

Site Code: 216-C-5 **Classification:** Accepted
Site Names: 216-C-5, 216-C-5 Crib **ReClassification:**
Site Type: Crib **Start Date:** 1955
Site Status: Inactive **End Date:** 1955
Site Description: The crib is marked with concrete AC-540 markers and Underground Radioactive Material signs. It is located within the larger, surface stabilized area known as 200-E-41.

Waste Type: Process Effluent

Waste Description: The site received the high salt waste (HSW) cold run waste from the 201-C Building. It received some waste that had passed through the 241-CX-71 Neutralization Tank.

Site Code: 216-C-6 **Classification:** Accepted
Site Names: 216-C-6, 241-CX Crib **ReClassification:**
Site Type: Crib **Start Date:** 1955
Site Status: Inactive **End Date:** 1964
Site Description: The crib is covered with gravel and marked with cement posts on the four corners. It is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received the process condensate from the 201-C Building and the 241-CX Vault floor drainage in the 241-CX area. The waste is acidic.

Site Code: 216-C-7 **Classification:** Accepted
Site Names: 216-C-7, 216-C-7 Crib **ReClassification:**
Site Type: Crib **Start Date:** 1961
Site Status: Inactive **End Date:** 1983
Site Description: The site is surrounded by steel post and chain. It is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The 216-C-7 crib received liquid waste from the 209-E Building Critical Mass Laboratory. Small tanks held reflector water that contained nitric acid, plutonium, uranium and neutron poisons such as boron, cadmium and gadolinium. The crib was placed on standby in 1983.

Site Code: 216-C-10 **Classification:** Accepted
Site Names: 216-C-10, 216-C-10 Crib **ReClassification:**
Site Type: Crib **Start Date:** 1964
Site Status: Inactive **End Date:** 1969

Site Description: The site is marked with concrete AC-540 markers and Underground Radioactive Material signs. The surface is covered with gravel.

Waste Type: Process Effluent

Waste Description: The site received process condensate and liquid waste from the 201-C Building. The waste was acidic.

Site Code: 291-C-1 **Classification:** Accepted

Site Names: 291-C-1, 291-C-1 Stack, 291-C Stack Burial Trench **ReClassification:**

Site Type: Burial Ground **Start Date:** 1949

Site Status: Inactive **End Date:** 1987

Site Description: The 291-C Stack was a double-shell structure made of reinforced concrete, acid-resistant brick and mortar. The stack was demolished in 1988 and now lies in a trench south of where it stood. The area has been surface stabilized with an ash cover (sitecode 200-E-41). The stack burial trench is not marked and cannot be separately distinguished from the rest of the surface stabilized area.

Waste Type: Demolition and Inert Waste

Waste Description: The radioactively contaminated stack now lies in a trench south of where it stood. It was estimated to contain 100 curies of plutonium and 600 curies of beta contamination.

Site Code: 2704-C-WS-1 **Classification:** Accepted

Site Names: 2704-C-WS-1, 2704-C French Drain, Gatehouse French Drain **ReClassification:**

Site Type: French Drain **Start Date:** 1949

Site Status: Inactive **End Date:** 1998

Site Description: The 2704-C Building was demolished in 1998. The area where the french drain was located is now within a larger gravel area that is posted Underground Radioactive Material (URM). The drain is no longer visible at the location described. The drain could be covered with gravel or by the two dumpsters located in the area.

There is a possibility that this site is the same site as that identified in HW-22955 as a quench tank. The description follows. Steam condensate drained to a quench tank at the southwest corner of the building (2704C). Sanitary waste drains through a 10.2 centimeter (4 inch) cast iron line running beneath the floor slab from the toilet room to a point 1.5 meters (5 feet) west of the building where it connects to a 10.2 centimeter (4 inch) tile drain. The overflow from the quench tank also flows into this tile drain which runs to the sanitary waste disposal field. The sanitary waste disposal field is part of the 2607-E7 Septic System.

(Drawings H-2-4033, H-2-4012, and H-2-4013 identify a quench tank. Drawing H-2-77665 identifies a french drain).

Waste Type: Steam Condensate

Waste Description: Although the drain received building steam condensate, periodically the drain was labeled with radioactive postings.

Site Code: 200-E BP **Classification:** Accepted

Site Names: 200-E BP, 200-E Burning Pit, 200 East Burn Pit **ReClassification:**

Site Type: Burn Pit **Start Date:** 1950

Site Status: Inactive **End Date:** 1970

Site Description: The burn pit is a large depression. There is limited growing vegetation. The surface is mostly rock and gravel. In 2010, most of the burn pit was posted as a Soil Contamination Area, due to contaminated tumbleweed fragments accumulating within the pit.

Waste Type: Chemicals

Waste Description: This site received construction and office waste 1,500 cubic meters (1,960 cubic yards), paint wastes, and chemical solvents 1,000 cubic meters (1,300 cubic yards).

Waste Type: Asbestos (friable)

Waste Description: A site visit in 1991 noted an area within the pit posted with asbestos warning signs.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-E-106

Site Names: UPR-200-E-106, Contamination at a Burning Ground, UN-200-E-106

Reason: Within Boundary Of Larger Site

Site Code: 200-E PD **Classification:** Accepted

Site Names: 200-E PD 200-E Powerhouse Ditch, 200 East Powerhouse Pond **ReClassification:**

Site Type: Ditch **Start Date:** 1945

Site Status: Active **End Date:**

Site Description: The site currently consists of an open ditch, measuring approximately 580 meters, running east to west. The eastern portion of the original ditch was backfilled in 1996, due to a contamination spread. This portion is currently posted with Underground Radioactive signs.

Waste Type: Process Effluent

Waste Description: The ditch received cooling water, boiler blowdown, floor drain discharge, softener regeneration effluents, filter backwash, and sedimentation basin cleanout from 282-E, 283-E and 284-E. During 1997 and 1998, a small amount of water from the Johnson Controls package boiler was discharged to the ditch. The volume of discharge has varied of the life of the ditch. Only a very small amount of water is currently discharged to the pipeline and ditch.

Site Code: 200-E-4 **Classification:** Accepted

Site Names: 200-E-4, Critical Mass Laboratory Dry Well North, 209-E North Dry Well, Miscellaneous Stream #730 **ReClassification:**

Site Type: French Drain **Start Date:** 1958

Site Status: Inactive **End Date:** 1959

Site Description: The site is a 1.2 meter (4 foot) diameter dry well, covered with a yellow metal cover.

Waste Type: Steam Condensate

Waste Description: The waste was steam condensate from the steam trap in the valve pit plus steam condensate from the equipment room.

Site Code: 200-E-13 **Classification:** Accepted

Site Names: 200-E-13, Rubble Piles from RCRA General Inspection #200EFY95 Item #7 **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: A 1995 site inspection identified this site and described it as numerous rubble piles. These piles contained inert construction debris, such as wood, asphalt, dirt, pipe and concrete.

Another site visit occurred in February 1997. The following debris was identified: asphalt paving, concrete, steel pipe, rebar and PVC pipe.

During a GPS survey on August 26, 1998, it was observed that debris was concentrated in piles south of an old borrow area. However, there were also isolated piles/berms of debris beyond this concentration, primarily to the west. Some scattered debris and half-buried towels or rags were observed in the borrow area.

A site visit on July 26, 1999, confirmed the previous site conditions.

Waste Type: Construction Debris

Waste Description: The waste contains inert construction debris that includes wood, asphalt, dirt, pipe, and concrete.

Site Code: 200-E-25 **Classification:** Accepted

Site Names: 200-E-25, 272-BB French Drain, Insulation Shop French Drain, Miscellaneous Stream #659 **ReClassification:**

Site Type: French Drain **Start Date:** 1971

Site Status: Inactive **End Date:** 1991

Site Description: The french drain structure is not visible from the surface. The french drain's location is marked with an old sign, mounted on two support posts. The sign says "Asbestos Waste Disposal Site - Do No Excavate". A sign stating "200-E-25" has been attached to one of the support posts.

Waste Type: Chemicals

Waste Description: Material used in the 272-BB Insulation Shop that possibly could have been flushed into the sink or floor drain include: Calcium Silicate, Fiberglass, Silicate, "Airball" (an insulation cover material) and latex paint. Prior to 1988, it is possible that organic chemicals, oils and grease may have been introduced into the french drain. A sign posted at the site indicates the presence of asbestos, which is regulated as a hazardous substance under CERCLA.

Site Code: 200-E-26 **Classification:** Accepted

Site Names: 200-E-26, Heavy Equipment Storage Area, Diesel Fuel Contaminated Soil **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an area that was used as an equipment staging area for trucks, backhoes, compressors, and other heavy equipment. As of October 2001, the site no longer shows visual evidence of oil contaminating the soil. In 1996, the soil had an odor like diesel fuel, but this was not reported in 2001. The contamination noted in 1996 appeared to be spotty. An electrical receptacle marks each end of the site.

Waste Type: Soil

Waste Description: The soil at the site is contaminated with oil and diesel fuel.

Site Code: 200-E-29 **Classification:** Accepted

Site Names: 200-E-29, Unplanned Release from 241-ER-152 Diversion Box **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a large, irregular shaped, posted Underground Radioactive Material (URM) area. A smaller triangular shaped URM area is located adjacent to the east shoulder of Atlanta Ave., northwest of the larger, stabilized 200-E-29 area. Another small URM area is located adjacent to a row of conex boxes, east of the larger stabilized area.

Waste Type: Animal Waste

Waste Description:

Site Code: 200-E-43 **Classification:** Accepted

Site Names: 200-E-43, Tank Car Storage Area, Regulated Equipment Storage Area, TC-4 Spur Tank Car Storage Area **ReClassification:**

Site Type: Storage **Start Date:**

Site Status: Inactive **End Date:**

Site Description: This site consists of a chain link fenced portion of the TC-4 Spur located northwest of the PUREX facility. The site was used to store railroad tank cars containing liquid radioactive material that require controls due to radiological dose rate conditions. The fence gate is locked.

The area had been posted as a Radioactive Material Area (RMA) and an Underground Radioactive Material area (URM). However, in January 1999, It was only posted as an Underground Radioactive Material area. It is also posted with "Danger- Unauthorized Personnel Keep Out" signs. The ties between the rails are covered with gravel.

Site Code: 200-E-53 **Classification:** Accepted

Site Names: 200-E-53, Contaminated Zone Adjacent to 218-E-12B and 218-E-8, Overground Storage Area, Above Ground Storage Area **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an irregular, wedge shaped area with a rope barrier and posted with Soil Contamination signs.

Waste Type: Soil

Waste Description: Contaminated soil specks, vegetation and animal feces have been identified in this area.

Site Code: 200-E-56 **Classification:** Accepted

Site Names: 200-E-56, 241-C Waste Line Leak Adjacent to 201-C, Waste Line Leak #1 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The area adjacent to the 201-C Building has been surface stabilized with flyash. The stabilized area has been given the WIDS Site code 200-E-41 and is posted as an Underground Radioactive Material area. The release site is not separately marked or posted, and may be combined with 200-E-41.

Waste Type: Process Effluent

Waste Description: A leaking underground waste line caused the soil beneath the line to become contaminated. The pipeline carried waste from the 201-C Building to the 241-C Tank Farm. Maximum contamination levels in 1957 were greater than 100 rad per hour.

Site Code: 200-E-57 **Classification:** Accepted

Site Names: 200-E-57, 241-C Waste Line Leak East of 201-C, Waste Line Leak #2 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The area around the Hot Semiworks Facility has been surface stabilized with flyash. The stabilized area is known as 200-E-41 and is posted with Underground Radioactive Material signs. This release site is separately not marked or posted, and may be combined with 200-E-41.

Waste Type: Process Effluent

Waste Description: A leaking underground waste line caused the soil beneath the line to become contaminated. The pipeline carried waste from the 201-C Building to the 241-C Tank Farm. Maximum contamination levels in 1957 were greater than 100 rad per hour.

Site Code: 200-E-58 **Classification:** Accepted

Site Names: 200-E-58, 216-A-5 Neutralization Tank, 216-A-5 NU, 270A, Tank A5, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Neutralization Tank **Start Date:** 1955

Site Status: Inactive **End Date:** 1987

Site Description: The site is an underground tank used to neutralize acidic waste prior to disposal. A 101-centimeter (40-inch) riser is visible at the surface.

The cylindrical tank sits vertically on a concrete pad. The tank is constructed of welded stainless steel and has a capacity of approximately 28,400 liters (7,500 gallons). A 20-centimeter (8-inch) inlet pipe enters from the north near the base of the tank. The inlet connects into distribution piping constructed of 20-centimeter (8-inch) stainless steel pipe welded into a cross with 1.9-centimeter (3/4-inch) holes drilled at 23-centimeter (9-inch) intervals. A 20-centimeter (8-inch) outlet pipe exits to the south near the top of the tank. A 101-centimeter (40-inch) riser extends 30 centimeters (12 inches) above the surface. The "charging riser" is for adding limestone to the tank to act as a neutralizing agent.

Waste Type: Process Effluent

Waste Description: The tank was used to neutralize acid waste from PUREX prior to ground disposal. From 1955 to 1961, the neutralized waste was discharged to the 216-A-5 Crib. From 1961 to 1987 the neutralized waste was discharged to the 216-A-10 Crib.

Site Code: 200-E-68 **Classification:** Accepted

Site Names: 200-E-68, 291A Control House Steam Condensate, Miscellaneous Stream #59, Injection Well (L) **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a 1.2 meter (4 foot) diameter drain with a metal cover. Several disconnected, asbestos covered steam lines hang above it.

Waste Type: Steam Condensate

Waste Description: The site received non-contaminated steam condensate, but is located inside a posted Contamination Area.

Site Code: 200-E-103 **Classification:** Accepted

Site Names: 200-E-103, Radiologically Controlled **ReClassification:**

Area - South Side of PUREX, PUREX
Stabilized Area

Site Type: Unplanned Release

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site area is covered with gravel and currently posted with Underground Radioactive Material signs.

Waste Type: Soil

Waste Description: The ground around the PUREX facility was contaminated from various sources during years of operation activities.

The Following Sites Were Consolidated With This Site:

Site Code: 200-E-54

Site Names: 200-E-54, Liquid Release to the Environment from PUREX Deep Filter Bed #1

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-13

Site Names: UPR-200-E-13, Overflow from 216-A-4, UN-200-E-13, UPR-200-E-15

Reason: Site is a duplicate of UPR-200-E-15 which was consolidated into 200-E-103.

Site Code: UPR-200-E-15

Site Names: UPR-200-E-15, Overflow at 216-A-4, UN-200-E-15, UPR-200-E-13

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-22

Site Names: UPR-200-E-22, 291-A-1 Stack Fallout Area, UN-200-E-22

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-25

Site Names: UPR-200-E-25, Contamination Spread from the 241-A-151 Diversion Box, UN-200-E-25

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-26

Site Names: UPR-200-E-26, 241-A-151 Release, UN-200-E-26

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-31

Site Names: UPR-200-E-31, 241-A-151 Release, UN-200-E-31

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-40

Site Names: UPR-200-E-40, Release from the 216-A-36B Crib Sampler, UN-200-E-40

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-97

Site Names: UPR-200-E-97, Ground Contamination Around Cribs South of PUREX, Contamination Near PUREX Railroad Tunnel, UN-216-E-25, UN-200-E-97

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-117

Site Names: UPR-200-E-117, Contaminated Liquid Spill, UN-200-E-117

Reason: Within Boundary Of Larger Site

Site Code: 200-E-109 **Classification:** Accepted

Site Names: 200-E-109, Contaminated Tumbleweed Accumulation, Contamination Spread in Northeast Corner of 200 East Area **ReClassification:**

Site Type: Contamination Migration **Start Date:** 1998

Site Status: Inactive **End Date:**

Site Description: 200-E-109 is areas of contaminated tumbleweed accumulation located mostly in the northeast portion of 200 East Area. The contaminated vegetation is carried by the wind. When the site was originally added to the WIDS database, it consisted of numerous radiologically posted areas along 12th Street and Canton Avenue inside the 200 East Area as well as inside and around the Liquid Effluent Retention Facility, east of 200 East Area. Some areas were posted Contamination Area with a Radiological Buffer Area and others were posted High Contamination Area with a Radiological Buffer Area. The original posted areas were eventually cleaned up and the posting was removed. However, additional areas of accumulated tumbleweed fragments continued to be discovered and posted over the years. The number of posted areas, their size and shape vary with additional radiological surveys.

Waste Type: Vegetation

Waste Description: Most of the contamination identified is tumbleweed and tumbleweed fragments.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-E-92

Site Names: UPR-200-E-92, 216-E-20, UN-216-E-20, UN-216-20, Ground Contamination Outside 200 East Fence, UN-200-E-92, UN-216-E-92

Reason: The release occurred within the larger area.

Site Code: UPR-200-E-93

Site Names: UPR-200-E-93, UN-216-E-21 Ground Contamination Along 200 East Area fence

Reason: The release occurred with the larger site.

Site Code: 200-E-115 **Classification:** Accepted

Site Names: 200-E-115, Contamination Area East of 241-C Tank Farm **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site had been a posted Contamination Area surrounded with light posts and chains. Large weeds were growing inside the posted area and there are several radiation flags visible inside the posted area. In June 2004, the site was stabilized with a bio-barrier and gravel. The area was reposted as an Underground Radioactive Material area.

Waste Type: Soil

Waste Description: The contamination consisted of contaminated soil specks and contaminated vegetation .

Site Code: 200-E-117 **Classification:** Accepted

Site Names: 200-E-117, Contamination Zone South of B Plant **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a small, posted Contamination Area. Inside the chained area, two steel pipes extend approximately 0.6 meters (2 feet) above the ground surface. The pipes have valves on them.

Waste Type: Soil

Waste Description:

Site Code: 200-E-121 **Classification:** Accepted

Site Names: 200-E-121, Soil Contamination Area East and West of Baltimore Avenue **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a long, narrow area along the east side of Baltimore Avenue marked with metal posts and chain with Soil Contamination Area signs and two smaller areas on the west side of Baltimore Ave., also posted with Soil Contamination Area signs. The power poles inside the posted area are marked with yellow Fixed Contamination signs.

Waste Type: Soil

Waste Description:

Site Code: 200-E-123 **Classification:** Accepted

Site Names: 200-E-123, Contamination Area South of 216-B-2 Stabilized Ditches **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: In 2001, the area was covered with clean backfill material and downposted to an Underground Radioactive Material Area. The site had been surrounded with light duty steel posts and chain and was originally posted as a Soil Contaminated Area. No significant vegetation was observed on the site. In 2001, the area was covered with clean backfill material and downposted to an Underground Radioactive Material Area.

Waste Type: Soil

Waste Description:

Site Code: 200-E-124 **Classification:** Accepted

Site Names: 200-E-124, URM on East Side of 275-EA **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is posted as an Underground Radioactive Material Area with steel posts. The site has been stabilized with approximately 0.3 meters of clean soil. A few tumbleweeds were observed growing on the site. Railroad tracks run through the site and are buried under the stabilization soil. The contamination area is where railroad cars were parked and offloaded into the 275-EA Building.

Waste Type: Soil

Waste Description:

Site Code: 200-E-125 **Classification:** Accepted

Site Names: 200-E-125, Contamination Area Northwest of 244-AR Building **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is posted as a Contamination Area with light duty posts and chain. The surface is very sandy soil. No vegetation was observed.

Waste Type: Soil

Waste Description:

Site Code: 200-E-128 **Classification:** Accepted

Site Names: 200-E-128, Radioactive Contamination "Hot Spot" Under Gravel Road **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The area where the contamination is located is marked with two Underground Radioactive Material signs, on steel posts. The posts are located on the north and south sides of the road. The contamination is located between the signs, under the surface of the gravel road.

Waste Type: Soil

Waste Description:

Site Code: 200-E-129 **Classification:** Accepted

Site Names: 200-E-129, Stabilized Area on East Side of B Plant Railroad Cut **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The area has been covered with gravel and posted with Underground Radioactive Material signs.

Waste Type: Soil

Waste Description: Soil and rock were found radiologically contaminated with maximum readings of 12,000 disintegrations per minute per 100 centimeter probe area.

Site Code: 200-E-130 **Classification:** Accepted

Site Names: 200-E-130, Stabilized Area on West Side of B Plant Chemical Spur **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is covered with fine gravel and posted with Underground Radioactive Material (URM) signs.

Waste Type: Soil

Waste Description: There were no records found to determine the site conditions of the area prior it being posted as an Underground Radioactive Material area. However, additional radiation surveys done in August 2002 found contamination levels of 20,000 disintegrations per minute per 100 centimeters square on the edge of the previously posted area.

Site Code: 200-E-139 **Classification:** Accepted

Site Names: 200-E-139, Contamination Area North of C Farm **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: A large posted Underground Radioactive Material area is located on the north side of 8th Street. It contains growing vegetation (Rabbitbrush and tumbleweeds). A small posted Underground Radioactive Material area is located on the south side of 8th Street. The area on the south side of 8th Street has been covered with a biobarrier and gravel.

Site Code: 209-E-WS-2 **Classification:** Accepted
Site Names: 209-E-WS-2, Critical Mass Lab French Drain **ReClassification:**
Site Type: French Drain **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The drain is a 1.2 meter (4 foot) diameter drain in a gravel area southeast of the building. It is painted with yellow paint and has a metal cover.
Waste Type: Steam Condensate
Waste Description: The waste at the unit includes steam condensate through a collapsed rusted pipe from the Heat Exchanger located in Room 11 of 209-E and a stainless steel pipe from the clean side of the HEPA filters.

Site Code: 209-E-WS-3 **Classification:** Accepted
Site Names: 209-E-WS-3, Critical Mass Laboratory Valve Pit and Hold Up Tank (209-E-TK-111), IMUST, Inactive Miscellaneous Underground Storage Tank (See Subsites) **ReClassification:**
Site Type: Valve Pit **Start Date:** 1960
Site Status: Inactive **End Date:** 1989
Site Description: The Valve Pit has a steel lid and is posted (as of March 2001) with Radioactive Material, Internally Contaminated Systems Located Within, and Confined Space, Dome Loading, Ignition Control and IMUST warning signs.
Waste Type: Process Effluent
Waste Description: The Semi-Works Source Aggregate Area Management Study Report states that no wastes are present in the Critical Mass Laboratory Valve Pit. However, radioactive contamination is present in the valve pit sump, although no specific waste inventories for this unit were found. The Hold Up tank was routinely sampled to verify plutonium levels were below limits prior to discharging the contents to the crib.

SubSites:

SubSite Code: 209-E-WS-3:1
SubSite Name: 209-E-WS-3:1, 209-E-TK-111 Hold Up Tank
Classification: Accepted
ReClassification:
Description: The 209-E-TK-111 tank is currently inactive. It is a passively ventilated drain tank. A recent vapor sample did not identify any flammable gas within the vessel.
The tank was used to hold condensate from the facility. It was routinely sampled to determine that plutonium levels were below limits prior to discharging the contents to the crib. Therefore, it is estimated to consist of residual water from condensate collection and

low levels of plutonium. This tank meets the definition of an IMUST tank. However, it is managed as part of the 209-E facility.

It is a 189 liter (50 gallon) capacity tank lined with cadmium. It is located underground, adjacent to the CAR at the south end of the 209-E building. It is covered by a steel pit cover and posted with Radioactive Material, Contamination Area and Confined Space Entry signs.

Site Code:	218-E-7	Classification:	Accepted
Site Names:	218-E-7, 200 East 222-B Vaults	ReClassification:	
Site Type:	Burial Vault	Start Date:	1945
Site Status:	Inactive	End Date:	1952
Site Description:	The site consists of three underground vaults. The two original wooden vaults are 3 by 3 meters (10 by 10 feet), and 3.7 meters (12 feet) deep. The tops of the vaults are 1.5 meters (5 feet) below grade. The wooden vaults are open at the bottom. They are constructed of 5-centimeter (2-inch) wood planking. The third replacement vault is an 2.4-meter (8-foot) diameter concrete culvert pipe encasement, 7.7 meters (25.2 feet) deep. The encasement has a 23-centimeter (9-inch) concrete cover and a 0.3-meter (1-foot) thick concrete floor. All three vaults were connected to the surface with waste disposal chutes.		
Waste Type:	Misc. Trash and Debris		
Waste Description:	This site received mixed fission product/transuranic (MFP/TRU) wastes.		

Site Code:	270-E-1	Classification:	Accepted
Site Names:	270-E-1, 270-E CNT, 270-E Condensate Neutralization Tank, 216-ER-1, IMUST, Inactive Miscellaneous Underground Storage Tank	ReClassification:	
Site Type:	Neutralization Tank	Start Date:	1952
Site Status:	Inactive	End Date:	1957
Site Description:	The site is an underground steel tank. It is marked and posted with Restricted Access-Inactive Tank signs. It is located within a large Underground Radioactive Material Area that resulted from the stabilization of the adjacent 216-B-64 basin and UPR-200-E-64 sites.		
Waste Type:	Chemicals		
Waste Description:	A 1974 report indicated the surface of the sludge was located at 2.27 meters (7.58 feet). No liquid was visible at this time. Sludge volume was estimated to be 14,440 liters (3,800 gallons). Radiation readings were less than 100 counts per minute direct and smearable, and less than 0.5 millirad/hour at the risers. Waste in this tank should include: limestone, process condensate precipitates, salts and residual process condensates. The process condensate that passed through this tank contained an average of 0.015 grams per gallon of uranium, 2.6 E-7 grams per gallon of plutonium and 1.8 E-6 curies per gallon of beta emitters.		

Site Code:	299-E24-111	Classification:	Accepted
Site Names:	299-E24-111, Experimental Test Well Site,	ReClassification:	

Miscellaneous Stream #803, Lysimeter
Test Site

Site Type: Injection/Reverse Well **Start Date:** 1980

Site Status: Active **End Date:** 2000

Site Description: The site is an injection well surrounded by 32 observation wells. The 299-E24-111 injection well head is located inside a small posted Underground Radioactive Material area. There is a small Soil Contamination Area (SCA) located southwest of the well. The SCA is where the 5,700 liter (1500 gallon) above ground solution tank (connected to the well) had been located.

Waste Type: Chemicals

Waste Description: Eleven 3,780-liter (1,000-gallon) injections of uniform solutions of calcium chloride, calcium nitrate were made into the injection well. Eight injections contained selected radioactive tracers (cesium-134 and strontium-85). Three injections did not contain tracers. In 1995 the injection well was surveyed with a Radiologic Logging System (RLS) down-hole logging probe. No Strontium-85 was identified. Residual cesium-134 peaks were identified at depths between 4.9 and 5 meters (16 and 16.5 feet). The fact that cesium-134 was detected 15 years after injection is an indication of the tracer's high sorption potential. The maximum activity was 0.04 picocuries per gram (pCi/g) at 5 to 5.2 meters (16.5 to 17 feet) below grade level. PNNL scheduled an additional injection experiment at this site in 2000 that added another injection well (10 meters [30 feet] deep) near the center of the cluster, injected a potassium bromide tracer and collected soil cores. Each of the five injections was equal to 4000 liters.

Data were obtained by lowering sensors to the desired depth in observation wells. Sensors used included neutron-neutron moisture probes, geiger-Muller (GM) probes, gamma energy analysis (GEA) probes, and gamma-gamma probes.

Site Code: 2607-E3 **Classification:** Accepted

Site Names: 2607-E3, 2607-E3 Septic Tank and Drainfield, 2607-E3 Septic System, TFS of 218-E-4, Tile Field South of 218-E-4 **ReClassification:**

Site Type: Septic Tank **Start Date:** 1948

Site Status: Inactive **End Date:** 1997

Site Description: The site is a septic tank and drainfield. It is surrounded with a chain and marked with a sign that reads Sanitary Sewer/Drain Field.

The septic tank is constructed of reinforced concrete. The tank is 8.7 meters (28 feet 8 inches) long, 2.7 meters (9 feet) wide, and 3.8 meters (12 feet 6 inches) deep (interior dimensions). The tank had a design capacity of 38,680 liters (10,220 gallons) based on a user capacity of 292 persons, a flow of 132 liters (35 gallons) of sewage per capita per day, and an average detention time of 1 day. The top of the tank is at the ground surface. The tank was accessed through three 0.9 meter (3 foot) manholes.

The drainfield is comprised of at least 712 meters (2,336 feet) of vitrified clay pipe or drain tile (at least 2.4 meters [8 feet] per capita). The laterals are open jointed and are spaced 2.4 meters (8 feet) apart.

Waste Type: Sanitary Sewage

Waste Description: This site received sanitary wastewater and sewage from B Plant facilities at an estimated rate of 509 cubic feet (14.4 cubic meters) per day. The septic tank was abandoned in 1997. No information was provided related to sampling of the tank contents. DOE/RL-92-05 states that the septic tank and tile field are not known to contain radioactive or hazardous waste.

The Following Sites Were Consolidated With This Site:

Site Code: TFS OF 218-E-4
Site Names: TFS OF 218-E-4, Tile Field South of 218-E-4, 2607-E3 Tile Field
Reason: Duplicate Site

Site Code: 2607-E5 **Classification:** Accepted
Site Names: 2607-E5; 209-E Septic Tank, 209-E, 276-C, and 2718-E Septic Tank **ReClassification:**
Site Type: Septic Tank **Start Date:**
Site Status: Inactive **End Date:**

Site Description: This septic system received sanitary wastewater and sewage from the Critical Mass facilities near 209-E. This system includes a single compartment tank with a dosing system and a leaching trench. An abandoned tile field which was replaced by the sanitary leaching trench is also included with this site.

The construction details for the sanitary leach trench (sanitary crib) are contained in Hanford Drawing H-2-4602. The trench is 22.9 meters (75 feet) long, 1.5 meters (5 feet) wide at the bottom, and approximately 3.1 meters (10 feet) deep. The excavation had a 1.5:1 side slope. Three rows of 20 x 20 x 41 centimeter (8 x 8 x 16 inch) bond beam concrete blocks that run the entire length of the trench site on top of 0.6 meters (2 feet) of cobble fill. The trench was then covered with 0.3 meters (1 foot) of gravel, a polyethylene cover and backfilled with the centerline of the trench filled to 0.3 meters (1 foot) above the original grade. At the eastern end of the trench is a distribution box the received waste from the up gradient septic tanks and distributed it into the concrete block channels.

The following information was obtained from HW-22955, Hot Semiworks Manual Part 1:

All wastes from the 2704-C (Office and Gate House) and 2707-C (Change House) were considered sanitary waste and were disposed of separately from the chemical, or production waste. A 10.2 centimeters (4 inch) tile sewer ran from these buildings to a septic tank and tile field outside the Hot Semiworks exclusion area. The sewer ran parallel to and 20.7 meters (68 feet) south of the exclusion area north fence. The septic tank is 19.2 meters (63 feet) west of the exclusion area west fence.

The septic tank is a buried concrete settling tank 3.65 meters (12 feet) long by 1.8 meters (6 feet) long by 1.5 meters (5 feet) deep (inside dimensions). The bottom and walls are 20.3 centimeters (8 inches) thick. The top is 15.2 centimeters (6 inches) thick and has two .61 meter (24 inch) diameter manholes. The overflow is 1.18 meters (46.5 inches) from the bottom resulting in a hold-up of 7948.5 liters (2100) gallons. The overflow from the septic tank drained to a tile field. This field consists of 6 runs of 10.2 centimeter (4 inch) tile each 15.2 meters (50 feet) long. The tile was laid with open joints in an 45.7 centimeter (18 inch) gravel bed .61 to .91 meters (2 to 3 feet) below grade.

Waste Type: Sanitary Sewage

Waste Description: WHC-SD-LL-SP-001 states this system received sanitary wastewater and sewage from the 209-E, the 2704-C, and the 2718-E Buildings at an estimated rate of 78 cubic feet (2.21 cubic meters) per day. Originally, the 2607-E5 tank serviced the 2707-C Change House. The change house had both a toilet and shower used by personnel working within the Hot Semiworks facilities. There may be a potential for radiological contamination within the 2607-E5, 2607-E7 (WIDS 2607-E7A), 2607-E (WIDS 2607-E7B), Sanitary Leaching Trench, or the Abandoned Tile Field. A 2010 drawing review and facility walkdown found no drains, sinks or toilet facilities in the 2718E building.

Site Code: 2607-E6 **Classification:** Accepted
Site Names: 2607-E6, 2607-E6 Septic Tank and Tile Field **ReClassification:**
Site Type: Septic Tank **Start Date:** 1953
Site Status: Inactive **End Date:** 1997
Site Description: The site is a septic tank and drainfield. The drain field is surrounded by a wooden fence. The surface is vegetated with brush.
Waste Type: Sanitary Sewage
Waste Description: The site received sanitary wastewater and sewage from MO-405 and the PUREX facility. The estimated rate of waste generation is 43.5 cubic meters per day.

Site Code: 2607-E7A **Classification:** Accepted
Site Names: 2607-E7A, 2607-E7 **ReClassification:**
Site Type: Septic Tank **Start Date:** 1963
Site Status: Inactive **End Date:**
Site Description: This septic tank receives sanitary wastewater and sewage. This tank is a 1.7 meters (66 inches) by 2.7 meters (105 inches) precast concrete septic tank with a single 61 centimeters (24 inch) diameter cover. The tank is inline with the 2607-E5 septic tank and the 2607-E (WIDS 2607-E7B). The septic tank drains to the sanitary leaching trench.
Waste Type: Sanitary Sewage
Waste Description: The 2607-E7A Septic System receives sanitary wastewater and sewage at an estimated rate of 58 cubic feet (1.64 cubic meters) per day.

Site Code: 2607-E7B **Classification:** Accepted
Site Names: 2607-E7B, 2607-E7B Septic System, 2607-E7 **ReClassification:**
Site Type: Septic Tank **Start Date:** 1963
Site Status: Inactive **End Date:**
Site Description: This septic tank receives sanitary wastewater and sewage. This tank is a 1.7 meters (66 inches) by 2.7 meters (105 inches) precast concrete septic tank with a single 61 centimeters (24 inch) diameter cover. The tank is inline with the 2607-E5 septic tank and the 2607-E7 (WIDS 2607-

E7A). The septic tank drains to the sanitary leaching trench.

Waste Type: Sanitary Sewage

Waste Description: The 2607-E7B Septic System receives sanitary wastewater and sewage at an estimated rate of 58 cubic feet (1.64 cubic meters) per day.

Site Code: 2607-E9 **Classification:** Accepted

Site Names: 2607-E9, 242B/BL Septic Tank and Drain Field, 2607-E9 Septic System **ReClassification:**

Site Type: Septic Tank **Start Date:** 1951

Site Status: Inactive **End Date:**

Site Description: This 1,900-liter (500-gallon) septic tank received sanitary wastewater and sewage from the 242-B and the 242-BL Buildings. This system has an associated drain field. It was abandoned and the tank filled with sand. The site is in a contamination area.

A brief visit was made to the site in February 2000 to find the drainfield and to try to improve the mapping of the site. A "Drainfield" sign was found on the ground on the eastern side of the contamination area that surrounds the site. The former extent of the drainfield can be approximated using fence posts inside the contamination area (some of which still have chain attached), fallen chain on the ground plus the fence posts making up the eastern boundary of the contamination area. No access ports, lids or risers associated with the septic tank were visible. Evidence of the septic tank may have been obscured by tumbleweeds growing in the center of the contamination area near the drainfield.

Waste Type: Sanitary Sewage

Waste Description: The 2607-E9 Septic Tank received sanitary wastewater and sewage at an estimated rate of 0.71 cubic feet (0.02 cubic meters) per day.

Site Code: 2607-E12 **Classification:** Accepted

Site Names: 2607-E12, 2607-E12 Septic System, See Subsites **ReClassification:**

Site Type: Septic Tank **Start Date:**

Site Status: Active **End Date:**

Site Description: The septic system consists of the original 242-A septic tank and seepage pit (see subsite 1), two newer septic tanks and two drain fields (see subsite 2) that service multiple buildings. The 5,000 gallon (18,927 liters) tank was converted to a dosing chamber when the new 10,000 gallon (37,854 liters) septic tank was installed approximately 45 feet (13.7 meters) to the south. The first drain field is located west of the 207-A Retention Basins. It was replaced with a trench-like drainfield located approximately 400 feet (122 meters) east of the septic tanks and east of the 207-A Retention Basins.

Waste Type: Sanitary Sewage

Waste Description: Characteristics of the sanitary waste water from the 200 Areas are considered to be similar to residential sanitary waste. There are no known process or radioactive waste streams entering

the sanitary waste system.

SubSites:

SubSite Code: 2607-E12:1

SubSite Name: 2607-E12:1, Original Septic Tank and Seepage Pit

Classification: Accepted

ReClassification:

Description: The original Septic Tank and Seepage Pit for the 242-A evaporator building is located beneath the building parking lot, east of 242-A. It is surrounded by yellow protective concrete posts. This portion is inactive.

SubSite Code: 2607-E12:2

SubSite Name: 2607-E12:2, 2607-E12 Septic System

Classification: Accepted

ReClassification:

Description: 2607-E12 septic tanks and drain filed are located east of Canton Avenue, north of 4th Street and west of the 207-A South retention basins. The drainfield is located east of the retention basins and has a barricade marker fence around the large depression.

Site Code: 2607-EA

Classification: Accepted

Site Names: 2607-EA, 2607-EA Septic Tank and Drywell

ReClassification:

Site Type: Septic Tank

Start Date: 1976

Site Status: Inactive

End Date:

Site Description: The 2607-EA Septic System is a small septic tank and an associated drywell (cesspool).

The septic tank is approximately 3.0 meters (10 feet) long and 2.4 meters (8 feet) wide with rounded ends.

The associated drywell is connected to the tank by a short (approximately 5 foot [1.5 meter] long) pipeline. The drywell is constructed of 8 courses of concrete blocks arranged in a circle. The alternating courses of blocks have staggered joints with no mortar. It is filled with 1.3 to 5.1 centimeter (0.5 to 2.0 inch) gravel and capped with a concrete lid with a vent in the middle. A vent pipe extends from the lid to 0.6 meters (2 feet) above grade.

Waste Type: Sanitary Sewage

Waste Description: The system received sanitary sewage. When in use, the system was estimated to receive waste at the rate of 60 liters/day (16 gallons/day). There is concern of possible rad contamination based on the facilities served.

Site Code: UPR-200-E-9

Classification: Accepted

Site Names: UPR-200-E-9, Liquid Overflow at 216-BY-201, UN-200-E-9

ReClassification:

Site Description: The 216-A-22 crib is marked with a single cement post and posted with Underground Radioactive Material signs. The unplanned release is not separately marked or posted. The release cannot be visually identified.

Waste Type: Process Effluent

Waste Description: The release consisted of uranium (from UNH storage) contamination on the ground surface from the failed 216-A-22 Crib inlet.

Site Code: UPR-200-E-19 **Classification:** Accepted

Site Names: UPR-200-E-19, Contamination Release at 216-A-6 Sampler, UN-200-E-19 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1959

Site Status: Inactive **End Date:**

Site Description: The unplanned release is not separately marked or posted. The 216-A-6 crib has been surface stabilized and is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received low-level fission products that dripped onto the ground from the vent pipe bonnet.

Site Code: UPR-200-E-20 **Classification:** Accepted

Site Names: UPR-200-E-20, Contaminated Purex Railroad Spur, UN-200-E-20 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1959

Site Status: Inactive **End Date:**

Site Description: The site is located at the PUREX railroad right-of-way. The release is not separately marked or posted.

Waste Type: Process Effluent

Waste Description: While transporting PUREX tube bundles to the burial ground via railcar, spotty contamination was found on the railroad track.

Site Code: UPR-200-E-21 **Classification:** Accepted

Site Names: UPR-200-E-21, 216-A-6 Overflow, UN-200-E-21 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1959

Site Status: Inactive **End Date:**

Site Description: The unplanned release is not separately marked or posted. The 216-A-6 Crib area has been surface stabilized and is posted as "Underground Radioactive Material."

Waste Type: Process Effluent

Waste Description: The release contaminated the crib surface with beta/gamma with readings to 500 millirads/hour.

Site Code: UPR-200-E-29 **Classification:** Accepted
Site Names: UPR-200-E-29, 216-A-6 Overflow, UN-200-E-29 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1961
Site Status: Inactive **End Date:**
Site Description: The 216-A-6 Crib area has been surface stabilized and is posted as "Underground Radioactive Material."

Waste Type: Process Effluent

Waste Description: The release contaminated the crib surface with beta/gamma with readings to 30 rads/hour at a distance of 1.2 meters (4 feet).

Site Code: UPR-200-E-33 **Classification:** Accepted
Site Names: UPR-200-E-33, Contaminated Purex Railroad Tracks, UN-200-E-33 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1964
Site Status: Inactive **End Date:** 1964
Site Description: A contamination spread occurred on the PUREX railroad bed and right-of-way to the burial ground. The contamination was located both inside and outside the PUREX exclusion fence. The contamination inside the fence is considered part of the PUREX Railroad Cut (Waste Information Data System [WIDS] site code 200-E-44).

Waste Type: Chemicals

Waste Description: A description of the waste is not available from documents. Contamination resulted from a leaking tube bundle in a burial box on a railcar.

Site Code: UPR-200-E-35 **Classification:** Accepted
Site Names: UPR-200-E-35, Buried Contaminated Pipe, UN-218-E-1, 218-E-13 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1966
Site Status: Inactive **End Date:** 1966
Site Description: The site is the location of a (1966) contaminated concrete pipe repair. The site is no longer marked or posted. It is inside the PUREX exclusion fence.

Waste Type: Demolition and Inert Waste

Waste Description: This site received broken pieces of contaminated concrete from the pipe trench, which were left in the excavation hole and buried following repair to the piping at that location. The site contains less than 1 curie fission products.

Site Code: UPR-200-E-37 **Classification:** Accepted

Site Names: UPR-200-E-37, Contamination East of Hot Semi-Works, UN-200-E-37, UN-216-E-37, UN-216-E-39 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1967

Site Status: Inactive **End Date:** 1989

Site Description: There is currently no physical evidence of the unplanned release site. It is no longer marked or posted.

Waste Type: Process Effluent

Waste Description: A contamination spread (particulate) was caused by the removal of two Semiworks A cell pumps, with a maximum beta/gamma reading of 200 millirad/hour.

Site Code: UPR-200-E-43 **Classification:** Accepted

Site Names: UPR-200-E-43, Road Contamination Near 241-BY Tank Farm, UN-200-E-43 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1972

Site Status: Inactive **End Date:**

Site Description: The location of this release is not marked or posted.

Waste Type: Process Effluent

Waste Description: The road contaminated with beta/gamma with readings of 1,000 to 100,000 counts per minute while transporting a pump from 241-BY-102 to the burial ground.

Site Code: UPR-200-E-50 **Classification:** Accepted

Site Names: UPR-200-E-50, Soil Contamination at the Overground Equipment Storage Yard, UN-200-E-50 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1974

Site Status: Inactive **End Date:**

Site Description: In 1974, an area of ground contamination was identified that measured from 15 to 30 meters (50 to 100 feet) wide and 137 meters (450 feet) long south southeast of the Overground Storage Area. The release is not currently marked or posted.

Waste Type: Soil

Waste Description: Wind blew specks of contamination out of the Overground Storage Yard posted radiation zone. The source was from contaminated equipment being stored at the Overground Radioactive Equipment Storage Yard. Maximum beta/gamma readings of 3,000 to 100,000 counts/minute were found on a swath of ground south southeast of the storage area. The intensity of the radiological readings decreased with greater distance away from the source.

Site Code: UPR-200-E-62 **Classification:** Accepted

Site Names: UPR-200-E-62, Transportation Spill Near 200-E Burning Ground, UN-216-E-62, UN-200-E-62 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1982

Site Status: Inactive **End Date:** 1982

Site Description: The 1982 release site was an area approximately 5 centimeters (2 inches) wide and 30 meters (100 feet) long on a hill near the 200 East Overground Storage Area. The release was cleaned up within 3 days. The site is no longer marked or posted.

Waste Type: Process Effluent

Waste Description: While transporting a pressure test assembly, contaminated liquid dripped onto the dirt road. Contamination consisted of beta/gamma readings to 350 millirads/hour.

Site Code: UPR-200-E-64 **Classification:** Accepted

Site Names: UPR-200-E-64, Radioactive Soil and Ant Hills, UN-200-E-64, UN-216-E-36 **ReClassification:**

Site Type: Contamination Migration **Start Date:** 1984

Site Status: Inactive **End Date:**

Site Description: The site is a large area posted with chain and Underground Radioactive Material Area signs. The size and shape of the posted area has changed periodically as a result of annual radiological surveys and clean up efforts.

Waste Type: Soil

Waste Description: The contamination found in the soil and ant hills consisted predominantly of cesium-137 and strontium-90, with readings to 60,000 counts per minute. Several sources of contamination have been suggested. A swab riser on an underground pipeline appears to be the source.

Site Code: UPR-200-E-66 **Classification:** Accepted

Site Names: UPR-200-E-66, 216-A-42 Basin Contamination Release, UN-216-E-66, UN-200-E-66 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1984

Site Status: Inactive **End Date:**

Site Description: The release is not separately marked or posted. The 216-A-42 Basin had been surrounded by a wire fence and posted with Soil Contamination signs. In 2001, the fence was removed and the area was surface stabilized. It was covered with clean backfill and down posted to Underground Radioactive Material (URM). The release site is located within the URM area.

Waste Type: Process Effluent

Waste Description: The contamination consisted of beta/gamma particulates, with readings inside the area to 40,000 counts per minute and outside to 3,000 counts per minute. A routine surface radiation survey done in 1988 found spots of contamination on the south edge of the site with readings up to 200,000 disintegrations per minute (or 20,000 counts per minute). A radiation survey done outside the 216-A-42 Basin perimeter fence done in 1998 did not identify any contamination outside the basin.

Site Code: UPR-200-E-69 **Classification:** Accepted

Site Names: UPR-200-E-69, UN-216-E-69, Railroad Car Flush Water Radioactive Spill, UN-200-E-69 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1984

Site Status: Inactive **End Date:**

Site Description: The railroad tunnel area has a 1.2 meter (4 foot) high fence along the side of the tracks. The area was posted with Radiologically Controlled Area signs. In 1998, the track from the tunnel door to Atlanta Ave. was covered with gravel and reposted as Underground Radioactive Material.

Waste Type: Water

Waste Description: Water dripped from a burial box containing waste was from 225-B and the 221-B canyon. The contamination consists of beta/gamma contamination, with readings to 4,000 to 20,000 counts per minute.

Site Code: UPR-200-E-88 **Classification:** Accepted

Site Names: UPR-200-E-88, TC-4 Spur Contaminated Railroad Track, UN-216-E-88, UN-216-E-16, UN-200-E-88. Ground Contamination Around the Western Purex Railroad Spur **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The unfenced portion of the spur was posted as a "Contamination Area." Additional posting on portions of the spur included "Soil Contamination Area" and "Buffer Area." The spur is tracked with the property number "F187418". The site was interim stabilized in December 1998. The stabilized area was posted as an Underground Radioactive Material area. A chain link fenced storage area is located on the north end of the spur (see site code 200-E-43).

Waste Type: Process Effluent

Waste Description: The contamination spread consisted of radioactive particulates from contaminated railcars using the tracks. Surface radiological surveys performed in 1991 identified contamination of 20,000 to 60,000 disintegrations per minute on the railroad track near where the tank cars were being staged. South of the tank cars, along the railway, contaminated areas of 2,000 to 20,000 disintegrations/minute were also identified.

Site Code: UPR-200-E-89 **Classification:** Accepted

Site Names: UPR-200-E-89, UN-216-E-17, UN-200-E-89, Contamination Migration to the North, East & West of BX-BY Tank Farms **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1978

Site Status: Inactive **End Date:**

Site Description: The site is located north of the 241-BY Tank Farm. In 1991, the contaminated soil was consolidated on top of the 216-B-43 through 216-B-50 Cribs and stabilized with a layer of clean dirt. The site also includes an irregularly shaped drill pad area and a contaminated concrete pad that were also covered with clean dirt. All of the stabilized areas of UPR-200-E-89 were zoned off against casual entry and marked with "Underground Radioactive Material" signs.

Waste Type: Process Effluent

Waste Description: Airborne particulate matter contaminated an area near the 241-BY Tank Farm. The matter was resuspended by wind. Beta and gamma contamination with readings of 500 to 2,000 counts per minute were detected at the site.

Site Code: UPR-200-E-95 **Classification:** Accepted

Site Names: UPR-200-E-95, UN-216-E-23, UN-200-E-95, Ground Contamination Around RR Spur Between 218-E-2A and 218-E-2 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:**

Site Description: The site is a railroad spur located south of the 218-E-2 and 218-E-5 Burial Grounds and north of the 218-E-2A Burial Ground. It had been barricaded with steel chain and posted as a Contamination Area. In 1998, the track was covered with gravel and reposted as an Underground Radioactive Material area.

Waste Type: Soil

Waste Description: The material stored on the rail cars contained unknown beta and gamma contamination with a maximum reading of 100,000 counts per minute. The contamination on the rail bed is the result of contaminated equipment being stored on the tracks over an extended amount of time

Site Code: UPR-200-E-98 **Classification:** Accepted

Site Names: UPR-200-E-98, UN-216-E-26, Ground Contamination East of C Plant (Hot Semi Works), UN-200-E-98 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1955

Site Status: Inactive **End Date:** 1965

Site Description: The location of this site is currently within a large surface stabilized area known as 200-E-41. Much of the contamination was removed and placed into the 218-C-9 Burial Pit in 1992. The area has been surface stabilized with powerhouse ash. The covered area has "Underground Radioactive Material" warning signs posted.

Waste Type: Soil

Waste Description: The release consisted of radioactive particulate matter from the Hot Semiworks operation that was deposited onto the ground surface east of the facility. The contamination was primarily strontium-90.

Site Code: UPR-200-E-101 **Classification:** Accepted

Site Names: UPR-200-E-101, UN-216-E-30, UN-216-E-101, UN-200-E-101, Radioactive Spill Near 242-B Evaporator **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1985

Site Status: Inactive **End Date:**

Site Description: The site, adjacent to the B Tank Farm perimeter fence, is currently a posted as an Underground Radioactive Material area.

Waste Type: Soil

Waste Description: The release consisted of an unknown amount of radioactive particulates from the 241-B Tank Farm.

Site Code: UPR-200-E-112 **Classification:** Accepted

Site Names: UPR-200-E-112, UN-200-E-112, Contaminated Railroad Track from B-Plant to the Burial Ground **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1979

Site Status: Inactive **End Date:** 1979

Site Description: The contaminated section of track and the Atlantic Avenue crossing were cleaned by noon, February 12, 1979.

Waste Type: Process Effluent

Waste Description: The release consisted of a spill of liquid from a cesium ion exchange column with beta/gamma readings up to 80,000 counts per minute. The equipment was being transported to the burial ground on a railcar.

Site Code: UPR-200-E-143 **Classification:** Accepted

Site Names: UPR-200-E-143, Contamination Adjacent to 244-A Lift Station, UN-216-E-43 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1990

Site Status: Inactive **End Date:**

Site Description: Various radiological postings exist in this vicinity that are associated with the 244-A Lift Station and 241-C Tank Farm contamination migration. A WIDS sign has been placed at the approximate location of the release.

Waste Type: Animal Waste

Waste Description: Contaminated rabbit feces and soil contamination were found in the area. Laboratory analysis of the feces found cesium-137 to be the most prevalent contaminant.

Site Code: UPR-200-E-144 **Classification:** Accepted

Site Names: UPR-200-E-144, Soil Contamination North of 241-B, UN-216-E-44 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a large area posted as Underground Radioactive Material.

Waste Type: Soil

Waste Description: The site consisted of several acres of particulate surface contamination to the north and east of 241-B Tank Farm. The source is assumed to be activities in the 241-B and 241-BY Tank Farms.

200-IS-1

Site Code: 216-A-508 **Classification:** Accepted
Site Names: 216-A-508, Control Structure for 216-A-8 Crib, 216-A-8 Distribution Box **ReClassification:**
Site Type: Control Structure **Start Date:** 1955
Site Status: Inactive **End Date:** 1995
Site Description: The structure is surrounded with radiological chain and posted with Contamination Area and Radiologically Controlled Area signs.

Site Code: 216-A-524 **Classification:** Accepted
Site Names: 216-A-524, 216-A-524 Control Structure, 216-A 524 Weir, 216-A-24 Control Structure **ReClassification:**
Site Type: Control Structure **Start Date:** 1958
Site Status: Inactive **End Date:** 1966
Site Description: The 216-A-524 Weir is an underground liquid effluent control structure. The weir is a concrete structure with the interior being divided vertically into three chambers. The outside dimensions are 4.9 meters (16 feet) by 2.4 meters (8 feet) and is 3.4 meters (11 feet) deep. The unit is covered with two removable concrete cover slabs. The aboveground features have been removed.

Waste Type: Process Effluent

Waste Description: The unit is an underground liquid effluent control structure for the 216-A-24 Crib and contains radioactively contaminated piping and cement. The amounts of radionuclides present are not known. A document published in 1987 (K.H. Cramer) reported radiological readings of 500 counts per minute smearable contamination, 10,000 counts per minute direct beta/gamma on the surface structures.

Site Code: 241-A-151 **Classification:** Accepted
Site Names: 241-A-151, 241-A-151 Diversion Box **ReClassification:**
Site Type: Diversion Box **Start Date:** 1956
Site Status: Inactive **End Date:**
Site Description: The site is a reinforced concrete structure with cover blocks. Most of the structure is below grade. It is marked and radiologically posted.

Waste Type: Process Effluent

Waste Description: The unit transferred process effluents from the PUREX facility to the tank farms. Lead shielding may also be contained inside the diversion box.

Site Code: 241-A-302A **Classification:** Accepted
Site Names: 241-A-302A, 241-A-302-A Catch Tank, **ReClassification:**

Waste Description: The diversion box transferred process waste from B Plant to the tank farms. It is estimated that the diversion box also may contain approximately 23 kilograms (50 pounds) of lead shielding inside this unit.

Waste Type: Chemicals

Waste Description: This unit transferred waste from processing and decontamination operations. Volumes of waste present in the system varied with production operations. Contamination in this unit is estimated to include high alpha, beta, and gamma activity levels.

Site Code: 241-B-302B **Classification:** Accepted

Site Names: 241-B-302B, 241-B-302-B Catch Tank, 241-B-302, IMUST, Inactive Miscellaneous Underground Storage Tank, Line V217 **ReClassification:**

Site Type: Catch Tank **Start Date:** 1945

Site Status: Inactive **End Date:** 1985

Site Description: This unit is an underground, horizontal carbon steel tank. The catch tank and the 241-B-154 Diversion Box are surrounded with post and chain. The surface of the area inside the chain has been covered with gravel and sprayed with gray weatherizing material. The site is marked with radiological and IMUST signs.

Waste Type: Process Effluent

Waste Description: This unit collected leaking and excess waste solutions from processing and decontamination operations that passed through the 241-B-154 Diversion Box. Volumes were variable according to specific plant operation. In 1985, the volume of liquid inside the tank was estimated to be 16,027 liters (4240 gallons). Sludge content was estimated to be 2608 liters (690 gallons).

Site Code: 241-BX-154 **Classification:** Accepted

Site Names: 241-BX-154, 241-BX-154 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1948

Site Status: Inactive **End Date:** 1985

Site Description: This diversion box is a reinforced concrete structure.

Waste Type: Process Effluent

Waste Description: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation. It is estimated that approximately 23 kilograms (50 pounds) of lead shielding may be stored in each diversion box.

Waste Type: Equipment

Waste Description: It was estimated that approximately 50 pounds (23 kilograms) of waste lead was stored in this unit.

Site Code: 241-BX-155 **Classification:** Accepted
Site Names: 241-BX-155, 241-BX-155 Diversion Box **ReClassification:**
Site Type: Diversion Box **Start Date:** 1948
Site Status: Inactive **End Date:** 1984

Site Description: This diversion box is a reinforced concrete structure. The diversion box has been isolated and covered with water proof foam sealant. The area around the diversion box has been surface stabilized with gravel and posted with Underground Radioactive Material signs, except for the surface area above the 241-B-302-C tank. This area does not have the additional layer of gravel and remains posted as a Contamination Area.

Waste Type: Process Effluent

Waste Description: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation. High levels of beta, gamma and alpha contamination are estimated to be inside this unit. Lead shielding material may also be present.

Waste Type: Equipment

Waste Description: It was estimated that approximately 50 pounds (23 kilograms) of waste lead was stored in this unit.

Site Code: 241-BX-302B **Classification:** Accepted
Site Names: 241-BX-302B, 241-BX-302-B Catch Tank, **ReClassification:**
IMUST, Inactive Miscellaneous
Underground Storage Tank, Line V288
Site Type: Catch Tank **Start Date:** 1948
Site Status: Inactive **End Date:** 1985

Site Description: The buried tank is covered with gravel. It is surrounded with post and chain. The tank is marked with radiological and IMUST signs.

Waste Type: Process Effluent

Waste Description: This unit collected drainage and spilled waste solutions that passed through the 241-BX-154 Diversion Box. Volumes were variable according to specific plant operation. Residual volume is estimated to be 3591 liters (950 gallons) of sludge and 355 liters (94 gallons) of supernate.

Site Code: 241-BX-302C **Classification:** Accepted
Site Names: 241-BX-302C, 241-BX-302-C Catch Tank, **ReClassification:**
IMUST, Inactive Miscellaneous
Underground Storage Tank, Line V322
Site Type: Catch Tank **Start Date:** 1948
Site Status: Inactive **End Date:** 1985

Site Description: This catch tank is a horizontal cylinder of direct buried carbon steel. It is inside a recently graveled Underground Radioactive Material area, related to the 241-BX-155 Diversion Box surface stabilization. The tank was not covered with extra gravel and is separately posted as a Contamination Area. The tank is marked with radiological and IMUST signs.

Waste Type: Process Effluent

Waste Description: This unit collected processing and decontamination drainage from the 241-BX-155 Diversion Box. Volumes were variable according to specific plant operation. In 1984, the tank was estimated to contain 2400 liters (635 gallons) of sludge and 862 liters (228 gallons) of supernate.

Site Code: 241-C-154 **Classification:** Accepted

Site Names: 241-C-154, 241-C-154 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1946

Site Status: Inactive **End Date:** 1985

Site Description: The diversion box has been covered with clean backfill material (ash) and is no longer visible. It is located within the larger Hot Semiworks surface stabilized area (200-E-41). The diversion box is posted with Underground Radioactive Material Area signs.

Waste Type: Process Effluent

Waste Description: This unit was used to transfer radioactive waste solutions (promethium) from B Plant operations. It is estimated that approximately 23 kilograms (50 pounds) of lead shielding may be stored in each diversion box.

Waste Type: Equipment

Waste Description: The diversion boxes are estimated to contain approximately 50 pounds (23 kilograms) of waste lead.

Site Code: 241-CX-70 **Classification:** Accepted

Site Names: 241-CX-70, 241-CX-TK-70 Tank, Strontium Hot Semi-Works, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Storage Tank **Start Date:** 1952

Site Status: Inactive **End Date:** 1957

Site Description: The 241-CX-70 underground tank is surrounded with post and chain. It is posted with Hazardous Waste, Restricted Area-Inactive Tank signs.

Waste Type: Process Effluent

Waste Description: The unit was used to store high-level process waste in support of the Semiworks process. Prior to sluicing, the unit contained approximately 1.45 meters (4.75 feet) of sludge, that is roughly equivalent to 39,000 liters (10,300 gallons) of waste. Contaminants included 20 curies of plutonium-239/240; 500 curies of cesium-137; 2,900 curies of strontium-90; 7,080 kilograms (7.8 tons) sodium nitrate; 1,000 kilograms (1.1 tons) sodium nitrite; 1,090 kilograms (1.2 tons)

sodium fluoride; 450 kilograms (0.5 tons) aluminum sulfate; and 180 kilograms (0.2 tons) sodium chromate. After sluicing only a small quantity of solids and residual caustic/water remain. The estimated contamination levels for piping and equipment are 3 curies plutonium and 6,000 curies beta/gamma. The residual volume remaining after the tank was sluiced was estimated to be (500 gallons) of liquid and (250 gallons) of solids. Later more liquids and gravel-like solids were removed. The tank was dried and is considered to be empty.

Site Code:	241-CX-71	Classification:	Accepted
Site Names:	241-CX-71, 241-CX-TK-71, 241-CX Neutralization Tank, Strontium Hot Semi-Works, IMUST, Inactive Miscellaneous Underground Storage Tank	ReClassification:	
Site Type:	Neutralization Tank	Start Date:	1952
Site Status:	Inactive	End Date:	1957
Site Description:	The underground tank is surrounded with steel posts and chain. It is posted with Hazardous Waste, Restricted Area-Inactive Tank signs.		
Waste Type:	Process Effluent		
Waste Description:	The tank was used for neutralizing the 201-C process condensate and the coil and condenser cooling water via a limestone layer. It also received process condensates from the Reduction Oxidation (REDOX) and Plutonium Uranium Extraction (PUREX) pilot plant processes, which would include hexone and kerosene solvents. From November 1956 to June 1957, the unit received flush wastes during decontamination. This tank currently contains a bottom layer of sludge and the limestone layer. The remainder of the tank was filled with grout in 1986. In October 1990, a drill was used to collect samples from the bottom of the tank, through the grout. Low concentrations of methyl ethyl ketone, xylene and toluene were measured (7-54 parts per billion). Twenty one parts per million of cyanide was found.		

Site Code:	241-CX-72	Classification:	Accepted
Site Names:	241-CX-72, 241-CX-TK-72 Vault and Tank, 241-CX-72 Waste Self Concentrator, Strontium Hot Semi-Works, IMUST, Inactive Miscellaneous Underground Storage Tank	ReClassification:	
Site Type:	Storage Tank	Start Date:	1957
Site Status:	Inactive	End Date:	1958
Site Description:	The 241-CX-72 tank is located inside a small building. A cover has been placed over the tank with radiological postings and Keep Out signs.		
Waste Type:	Process Effluent		
Waste Description:	The tank was filled with grout in 1986. Original content information was based on process knowledge. Some solid salt cake, similar to that found in tank farm tanks containing PUREX waste, is believed to remain inside the tank as well as the grout. Smears taken from an agitator rod (accidentally pulled out of the tank by heavy equipment) found a maximum of 8000 disintegrations per minute alpha and 5800 picocuries of gamma. Core samples were obtained from the tank in 1989. An 3.3 meter (eleven foot) layer of fission products and TRU isotopes		

was found in the bottom of the tank. Estimated radionuclides present include approximately 200 grams of plutonium-239 (as a fluoride compound).

Site Code: 200-E-111-PL **Classification:** Accepted

Site Names: 200-E-111-PL; Encased Pipeline from 241-ER-151 Diversion Box to 241-C Tank Farm and 244-AR Vault; 3-38 Encasement; Lines V108/V837/8618/8653/8901PAS, 809, 818, V836, and V834 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an underground piping encasement that contains three 7.5 centimeter (3 inch) diameter stainless steel waste transfer pipelines, numbered V108, 8618, 8653, that run from the 241-ER-151 diversion box through a "Y," which branches to the 241-C Tank Farm and the 244-AR Vault. The section from the "Y" junction to the 244-AR Vault contains two 7.5 centimeter (3 inch) pipelines numbered 809 and 818. There is a posted Contamination Area on top of the line at the Y Junction where the line branches to the 241-C Tank Farm and the 244-AR Vault. Line 8653 was replaced with V836. V836 is a direct buried carbon steel line that runs parallel to the encased lines.

The entire length of the pipeline is marked with steel fence posts and posted as an Underground Radioactive Materials area. The ground surface above the pipeline is bare in spots, other sections are vegetated with crested wheatgrass, tumbleweeds, and native grass species.

Waste Type: Process Effluent

Waste Description: The pipeline transported liquid effluent from the 241-ER-151 Diversion Box to the tank farms. Some adjacent soil has been contaminated from pipeline leaks.

Site Code: 200-E-112-PL **Classification:** Accepted

Site Names: 200-E-112-PL, B Plant Process Sewer, 2904-E-1, Pipeline from B Plant to 207-B Retention Basin, 24-Inch VP Line (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is the 61 centimeter (24 inch) diameter, underground process sewer from B-Plant to the 207-B Retention Basin. The pipeline is also known as 2904-E-1. The pipelines are marked above ground with steel posts and marked as "Underground Radioactive Material/Pipeline". Access manholes are located at intervals along the length of pipelines. Vegetation over the pipelines consists of grass and tumbleweeds, with several areas of bare soil.

Waste Type: Process Effluent

Waste Description: The process sewer pipelines transferred liquid process effluent and cooling water to the retention basin and the 216-B-2 ditches. The radioactivity levels were normally low and the water was discharged from the retention basin to ditches that connected to the 216-B-3 Pond. However, in 1963 and 1970, Unplanned Releases UPR-200-E-32 and UPR-200-E-138 released

significant amounts of cerium-144 and strontium-90 to the process sewer pipelines.

SubSites:

SubSite Code: 200-E-112-PL:1

SubSite Name: 200-E-112-PL:1, North/South 24-Inch VCP Pipeline to 207-B

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-112-PL:2

SubSite Name: 200-E-112-PL:2, East/West 24-Inch Cast Iron Pipeline from B Plant Facilities Connecting to the North/South 24-Inch VCP Pipeline

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-112-PL:3

SubSite Name: 200-E-112-PL:3, 10-Inch Cast Iron Pipeline from 224-B Connecting to the East/West 24-Inch Cast Iron Pipeline

Classification: Accepted

ReClassification:

Description: A 10 inch pipeline exits the south side of 224-B to connect to the B Plant Process Sewer. A 4 inch line exits the north side of 224-B and also connects to the process sewer.

SubSite Code: 200-E-112-PL:4

SubSite Name: 200-E-112-PL:4, 2-Inch Cast Iron Pipe from 212-B to East/West 24-Inch Cast Iron Pipeline

Classification: Accepted

ReClassification:

Description:

Site Code: 200-E-113-PL

Classification: Accepted

Site Names: 200-E-113-PL, Pipeline from PUREX to 216-A-6 and 216-A-30 Crib, 216-A-42C Valve Box, Line 8824

ReClassification:

Site Type: Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The site is an underground 41 centimeter (16 inch) diameter carbon steel pipeline that extends from the PUREX Plant to a distribution box located on the west side of the 216-A-6 Crib and continues eastward to the 216-A-30 Crib. The pipeline is marked with steel fence posts, posted as "Underground Radioactive Material" (URM) and "Pipeline" over its entire length. The 216-A-42C Valve Box is located on the pipeline, inside a domed cover. It is surrounded by a broken,

wood fence. A small area just west of the 216-A-42C Valve Box has been stabilized with cobbles and separately posted as URM. Most of the pipeline is free of vegetation except for tumbleweeds near the 216-A-30 Crib.

Waste Type: Process Effluent

Waste Description: The waste is the pipeline and adjacent soil contaminated from pipeline leaks.

Site Code: 200-E-116-PL **Classification:** Accepted

Site Names: 200-E-116-PL; Pipelines from 241-B-154 Diversion Box to 241-C-151 and 241-C-152 Diversion Boxes; Direct Buried Pipelines V111/V210/V130, 8902, and V122 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The pipeline is posted as an Underground Radioactive Pipeline that extends from the 241-B-154 Diversion Box to the 241-C-151 and 241-C-152 Diversion Boxes. Vegetation over the pipeline has been crushed due to vehicle traffic. An area located just north of the 241-B-154 Diversion Box was posted as a High Contamination Area in September 2000, but was covered with a bio-barrier and gravel in February 2001. It is now a rectangular posted URM area over a portion of the pipeline. Another area of contamination was found on this pipeline in June 2001. This area was covered with gravel and posted as a URM in August 2001.

Waste Type: Process Effluent

Waste Description: The pipeline transported process effluent from B Plant. Some adjacent soil has been contaminated from pipeline leaks.

Site Code: 200-E-143-PL **Classification:** Accepted

Site Names: 200-E-143-PL; Tank Farm Transfer Lines 4101, 4102, 4103, 4104, 4105, 4106, 4107/V033, 4017, 4018, and 8656; Encased Transfer Line from 241-AX-151 Diversion Box to 241-A Tank Farms and 244-CR Vault in 241-C Tank Farm **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground concrete encased transfer line containing nine, 10 centimeter (4 inch) diameter, stainless steel pipes. Groups of lines divert from the encasement at various points along the route to 244-CR Vault. Lines 4101, 4102 and 4103 divert into the south end of 241-A Tank Farm to feed tanks 241-A-101, 241-A-102 and 241-A-103. Lines 4104, 4105, 4106, 4017 and 4018 divert from the encasement at the north end of 241-A Tank farm to feed tanks 241-A-104, 241-A-105, 241-A-106 and 241-AX-152 Diversion Box. Line 4107 diverts to 241-A-152 Diversion box. North of 241-A Tank Farm, line 8656 continues to the 244-CR Vault, inside 241-C Tank Farm.

Site Code: 200-E-144-PL **Classification:** Accepted

Site Names: 200-E-144-PL; Tank Farm Transfer Line 4012, Transfer Line 4013 (A-4013); Encased Transfer Line from 241-CR-152 and 241-CR-153 to 241-AX-151; Lines 4006 and 4007 from 244-AR Vault to 241-AX-151 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The transfer line is radiologically posted as an Underground Radioactive Material Area. Two, stainless steel pipelines are inside the pipe trench. Lines 4012 and 4013 (A-4013) originate inside the 241-C Farm at the 241-CR-152 and 241-CR-153 Diversion Boxes, passes through the 241-ER-153 Diversion Box, and terminate at the 241-AX-151 Diverter Station. Both lines are 7.6 centimeter (3 inch) in diameter pipes.

Site Code: 200-E-145-PL **Classification:** Accepted

Site Names: 200-E-145-PL; Interplant Transfer Line, Tank Farm Transfer Line V228; Transfer Pipeline from 241-CR-153 to 241-ER-153, 241-ER-152 and 241-ER-151 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The trench that contains lines V228 and PAS-244 is radiologically posted as an Underground Radioactive Material Area. The trench contains two, 3 inch diameter stainless steel pipes.

Waste Type: Process Effluent

Waste Description: Line V228 transported Purex Supernate (PSN). It contained three curies per gallon of cesium-137, one curie per gallon of strontium 89 and 90 and one curie per gallon of cerium.

Site Code: 200-E-147-PL **Classification:** Accepted

Site Names: 200-E-147-PL, Interplant Transfer Line, Tank Farm Transfer Line PAS-244, Transfer Line from 244-CR-TK-003 to 241-ER-153 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: Transfer line PAS-244 is located in the Interplant Transfer pipe trench, per drawing H-2-44501, sheet 92. The pipeline is radiologically posted as an Underground Radioactive Material Area.

Waste Type: Process Effluent

Waste Description: Line 224 transported Purex Acid Sludge (PAS). It contained one curie per gallon of cesium-137, twenty curies per gallon of strontium 89 and 90 and one curie per gallon of cerium.

Site Code: 200-E-148-PL **Classification:** Accepted
Site Names: 200-E-148-PL, Tank Farm Transfer Line V109, Direct Buried Transfer Line from 241-C-151 to 241-A-01A **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Transfer Line V109 is a 5 centimeter (2 inch) diameter, direct buried line, that is radiologically posted as an Underground Radioactive Material Area.

Site Code: 200-E-149-PL **Classification:** Accepted
Site Names: 200-E-149-PL, Tank Farm Transfer Line V175, Direct Buried Transfer Line from 241-C-252 to 201-C Hot Semi Works, Tank Farm Pipeline **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Tank Farm Transfer Line V175 is a 2 inch diameter, direct buried, stainless steel Tank Farm process waste pipe. The site is radiologically posted as an Underground Radioactive Material Area.

Site Code: 200-E-150-PL **Classification:** Accepted
Site Names: 200-E-150-PL, Tank Farm Transfer Line 8900, Direct Buried Transfer Line from 244-CR-TK-003 to 201-C Hot Semi Works Valve Box, Tank Farm Pipeline **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Tank Farm Transfer Line 8900 is a direct buried Tank Farm process waste pipe. The site is radiologically posted as an Underground Radioactive Material Area.

Site Code: 200-E-151-PL **Classification:** Accepted
Site Names: 200-E-151-PL, Tank Farm Transfer Line V050, Direct Buried Transfer Line from 241-C-104 to 241-A-152, Tank Farm Pipeline **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Tank Farm Transfer Line V050 is a 3 inch diameter, schedule 40 steel, Tank Farm process waste pipe. Most of this pipeline is direct buried. 48 meters (160 feet) of the line is encased in concrete. The site is radiologically posted as an Underground Radioactive Material Area.

Site Code: 200-E-152-PL **Classification:** Accepted
Site Names: 200-E-152-PL, Tank Farm Transfer Line V051, Direct Buried Transfer Line from 241-C-104 to 241-A-152, Tank Farm Pipeline **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Tank Farm Transfer Line V051 is a 3 inch diameter, schedule 40 steel, Tank Farm process waste pipe. Most of the line is direct buried. Forty eight meters (160 feet) is encased in concrete. The site is radiologically posted as an Underground Radioactive Material Area.

Site Code: 200-E-153-PL **Classification:** Accepted
Site Names: 200-E-153-PL, Tank Farm Transfer Line V108/812, Direct Buried Transfer Line from 241-C-151 to 244-AR-TK-002, Tank Farm Pipeline **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Tank Farm Transfer Line V108/812 are 3 inch diameter, direct buried, Tank Farm process waste pipes. Line V108 is a stainless steel pipe. Line 812 is a carbon steel pipe. The site is radiologically posted as an Underground Radioactive Material Area.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-E-86
Site Names: UPR-200-E-86, UN-216-E-14, 241-C Tank Farm Line (V812) Break Southwest Corner, UN-200-E-86
Reason: Within Boundary Of Larger Site

Site Code: 200-E-154-PL **Classification:** Accepted
Site Names: 200-E-154-PL, Tank Farm Transfer Line V113, Direct Buried Transfer Line from 241-C-151 to 241-AX-01A, Tank Farm Pipeline **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Tank Farm Transfer Line V113 is a 3 inch diameter, direct buried Tank Farm process waste pipe. The site is radiologically posted as an Underground Radioactive Material Area.

Site Code: 200-E-155-PL **Classification:** Accepted
Site Names: 200-E-155-PL, Pipeline from 241-C Fence to Radioactive Process Sewer Line 2904-CR-1 **ReClassification:**

Site Description: The waste site is an underground, 15 centimeter (6 inch diameter), vitrified clay pipeline from the 270-E-1 neutralization pit to the 216-B-12 crib.

Site Code: 200-E-161-PL **Classification:** Accepted

Site Names: 200-E-161-PL, Pipeline from 221-BB to 216-B-55 Crib, V841 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 15 centimeter (6 inch) diameter, carbon steel pipeline that fed the 216-B-55 crib. This line was later cut and capped and replaced with a 20 centimeter (8 inch diameter) carbon steel pipeline.

Site Code: 200-E-162-PL **Classification:** Accepted

Site Names: 200-E-162-PL, Pipeline from 221-BB to 216-B-62 Crib, V842, Lateral Line to 216-B-12 Crib #2 (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is a 10 centimeter (4 inch), Fiberglass Reinforced Epoxy, underground pipeline that originates in the 221-BB Sample Pit. The site includes the pipeline to the 216-B-62 crib and a lateral line to 216-B-12, crib number 2 (see subsites).

SubSites:

SubSite Code: 200-E-162-PL:1

SubSite Name: 200-E-162-PL:1, Pipeline from 221-B to 216-B-62 Crib

Classification: Accepted

ReClassification:

Description: The pipeline is an underground, 10 centimeter (4 inch) diameter, Fiberglass Reinforced Epoxy pipe.

SubSite Code: 200-E-162-PL:2

SubSite Name: 200-E-162-PL:2, Lateral Pipe to Crib #2 of 216-B-12

Classification: Accepted

ReClassification:

Description: An underground, 10 centimeter (4 inch) diameter, Fiberglass Reinforced Epoxy pipe tees off the 216-B-62 main line to feed the center crib at 216-B-12.

Site Code: 200-E-164-PL **Classification:** Accepted

Site Names: 200-E-164-PL, Pipeline to 216-A-8 Crib, Pipeline Between the 216-A-8 Control Structure and the 216-A-508 Control **ReClassification:**

	Structure		
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The site is a 41 centimeter (16 inch) diameter, schedule 20 steel pipeline.		
Site Code:	200-E-165-PL	Classification:	Accepted
Site Names:	200-E-165-PL, Pipeline to 216-A-24 Crib (See Subsites)	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The site is a 41 centimeter (16 inch) carbon steel pipeline. The pipeline connects the 216-A-508 Control Structure to the 216-A-524 Control Structure. A 5 centimeter (2 inch) diameter Bypass line extends from the 216-A-524 Control Structure to the third lobe of the crib structure (see subsites).		
SubSites:			
SubSite Code:	200-E-165-PL:1		
SubSite Name:	200-E-165-PL:1, Main Pipeline Between 216-A-508 Control Structure and 216-A-524 Control Structure		
Classification:	Accepted		
ReClassification:			
Description:	The main pipeline is a (16 inch) diameter carbon steel line.		
SubSite Code:	200-E-165-PL:2		
SubSite Name:	200-E-165-PL:2, Bypass Line		
Classification:	Accepted		
ReClassification:			
Description:	A 5 centimeter (2 inch) diameter bypass line extends along the north side of the 216-A-24 crib, from the 216-A-524 Control Structure to the third lobe of the crib.		
Site Code:	200-E-166-PL	Classification:	Accepted
Site Names:	200-E-166-PL, Pipeline to 216-A-34 Ditch	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The site is an underground, 38 centimeter (15 inch) diameter, vitrified clay pipe.		
Site Code:	200-E-167-PL	Classification:	Accepted
Site Names:	200-E-167-PL, Underground Pipelines from 244-A Lift Station to 241-A-A and	ReClassification:	

241-A-B Valve Pits, Lines SN-215 and SN-216

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two underground, carbon steel pipelines.

Site Code: 200-E-168-PL **Classification:** Accepted

Site Names: 200-E-168-PL, Underground Pipeline to 216-A-3 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:** 1956

Site Status: Inactive **End Date:** 1967

Site Description: The waste site an underground, 10 centimeter (4-inch) Schedule 10 perforated 304 stainless steel pipe placed horizontally 2.4 meters (8 feet) below grade. Two 6.1 meter (20 foot) lengths of this pipe placed perpendicularly to the first pipe, forming an H pattern inside the crib.

Site Code: 200-E-169-PL **Classification:** Accepted

Site Names: 200-E-169-PL, Pipeline to the 216-C-3 Crib **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground vitrified clay pipeline that fed the 216-C-3 crib. The diameter of the vitrified clay pipe varied from 10 centimeters (4 inch) to 15 centimeters (6inch).

Site Code: 200-E-170-PL **Classification:** Accepted

Site Names: 200-E-170-PL, Pipeline from 276-C to 216-C-4 Crib **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground 5 centimeter (2 inch) diameter, stainless steel pipeline.

Site Code: 200-E-171-PL **Classification:** Accepted

Site Names: 200-E-171-PL, Pipeline to the 216-C-6 Crib **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground 5 centimeter (2 inch) diameter carbon steel pipeline.

Site Code: 200-E-172-PL **Classification:** Accepted

Site Names: 200-E-172-PL, Pipeline from 209-E to the **ReClassification:**

216-C-7 Crib

Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is an underground 5 centimeter (2 inch) stainless steel pipeline.

Site Code: 200-E-173-PL **Classification:** Accepted
Site Names: 200-E-173-PL, Pipeline from 241-CX-71 to 216-C-5 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is an underground 5 centimeter (2 inch) diameter, carbon steel pipeline.

Site Code: 200-E-174-PL **Classification:** Accepted
Site Names: 200-E-174-PL, 216-B-10 (A&B) Pipeline, Pipeline from 221-BC and 222-B to 216-B-10 A&B Cribs (See Subsites) **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 9 centimeter (3.5 inch) diameter, stainless steel pipeline. The pipeline extends north and south from the 221-BC building and east to west from the 222-B building to connect to the 216-B-10 A&B cribs.

SubSites:

SubSite Code: 200-E-174-PL:1
SubSite Name: 200-E-174-PL:1, East/West Pipeline from 222-B
Classification: Accepted
ReClassification:
Description:

SubSite Code: 200-E-174-PL:2
SubSite Name: 200-E-174-PL:2, North/South Pipeline from 221-BD to 216-B-10 A&B Cribs
Classification: Accepted
ReClassification:
Description:

SubSite Code: 200-E-174-PL:3
SubSite Name: 200-E-174-PL:3, Diagonal Pipe from 200-E-179 In-Line Catch Tank to 216-B-10B Crib
Classification: Accepted
ReClassification:

Description: Pipe installed to redirect flow to only the 216-B-10B crib after 216-B-10A was terminated.

SubSite Code: 200-E-174-PL:4

SubSite Name: 200-E-174-PL:4, Pipeline Connecting 216-B-10A to 216-B-10B

Classification: Accepted

ReClassification:

Description:

Site Code: 200-E-175-PL **Classification:** Accepted

Site Names: 200-E-175-PL, Pipeline from 292-B to 216-B-10 A&B **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 9 centimeter (3.5 inch) diameter, stainless steel tubing pipeline.

Site Code: 200-E-177-PL **Classification:** Accepted

Site Names: 200-E-177-PL, Pipeline Rerouting Waste from 216-B-8 Crib Pipeline to 216-B-11A&B Reverse Wells **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter carbon steel pipeline.

Site Code: 200-E-178-PL **Classification:** Accepted

Site Names: 200-E-178-PL, Pipeline from Tank 241-B-110 to 216-B-8 Crib and Tile Field **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground 7.6 centimeter (3 inch) carbon steel pipe encased inside a 15 centimeter (6 inch) pipe.

Site Code: 200-E-179 **Classification:** Accepted

Site Names: 200-E-179, R-13 Catch Tank, Catch Tank in 216-B-10 A&B Pipeline (See Sitecode 200-E-174-PL) **ReClassification:**

Site Type: Catch Tank **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, metal tank attached to the 216-B-10B crib pipeline (see 200-E-174-PL). Two metal risers and a valve handle are visible at the surface. Four posts and a metal

chain surround the surface features.

Site Code: 200-E-180-PL **Classification:** Accepted
Site Names: 200-E-180-PL, 216-B-57 Crib Pipeline **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground 10 centimeter (4inch) diameter carbon steel pipeline.

Site Code: 200-E-182-PL **Classification:** Accepted
Site Names: 200-E-182-PL, 216-A-7 Crib Pipeline **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is an underground, 15 centimeter (6 inch) diameter, vitrified clay pipe.

Site Code: 200-E-188-PL **Classification:** Accepted
Site Names: 200-E-188-PL, B Plant Chemical Sewer Line, 2904-E-2, 15-Inch VP Line, BCE **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is the underground 38 centimeter (15 inch) diameter vitrified clay pipe and a section of 40 centimeter (16 inch) diameter steel piping, from B-Plant to the valve box east of the 207-B Retention Basin. The pipeline is also known as 2904-E-2 and the B Plant Chemical Sewer. The pipelines are marked above ground with steel posts and "Underground Radioactive Material/Pipeline" signs. Access manholes are located at intervals along the length of pipelines. Vegetation over the pipelines consists of grass and tumbleweeds, with several areas of bare soil.

Site Code: 200-E-189 **Classification:** Accepted
Site Names: 200-E-189, 216-A-TK-1 Carbonate Neutralization Tank **ReClassification:**
Site Type: Neutralization Tank **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground neutralization tank.

Site Code: 200-E-190 **Classification:** Accepted
Site Names: 200-E-190, 216-A-TK-2 Catch Tank **ReClassification:**
Site Type: Catch Tank **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The waste site is an underground catch tank.

Site Code: 200-E-193-PL **Classification:** Accepted

Site Names: 200-E-193-PL, 216-A-21 Crib Pipeline, Line X015 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 15 centimeter (6 inch) diameter, vitrified clay pipeline.

Site Code: 200-E-194-PL **Classification:** Accepted

Site Names: 200-E-194-PL, 216-A-32 Crib Pipeline **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 15 centimeter (6 inch) diameter, vitrified clay pipeline that fed the 216-A-32 crib.

Site Code: 200-E-196-PL **Classification:** Accepted

Site Names: 200-E-196-PL; Lines T167 and T022; Stainless Steel Line to 216-A-4, 216-A-21 and 216-A-27 Cribs **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground stainless steel pipeline that fed the 216-A-4, 216-A-21 and 216-A-27 cribs. Portions of the line range in diameter from 5 centimeters (2 inch) to 7.6 centimeter (3 inch) diameter and 10 centimeter (4 inch) diameter.

Site Code: 200-E-198-PL **Classification:** Accepted

Site Names: 200-E-198-PL; Encased Tank Farm Pipeline from 241-BX-154 Diversion to 241-BX-155 Diversion Box; Lines V282, V283, V284, and V285 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground concrete transfer line encasement. Lines V282, V283, V284 and V285 are 9 centimeter (3.5 inch) diameter stainless steel lines. Line V285 diverts from the encasement and connects to transfer line 200-E-199-PL.

Site Code: 200-E-199-PL **Classification:** Accepted

Site Names: 200-E-199-PL; Tank Farm Lines from 241- **ReClassification:**

B-154 Diversion Box to 241-B Tank Farm;
Lines V204, V206, V208, V209, V211,
V213, V215, and V285

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is a group of underground stainless steel transfer lines buried in a common soil trench. All of the pipelines are 9 centimeter (3.5 inch) diameter stainless steel lines.

Site Code: 200-E-201-PL **Classification:** Accepted

Site Names: 200-E-201-PL, Transfer Lines from 241-BX-155 to Diversion Boxes in 241-B Tank Farm, Lines V315 and V319 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two underground, 9 centimeter (3.5 inch) diameter stainless steel pipelines buried in the same soil trench. Lines V315 and V319 divert out of a bundle of lines described in sitecode 200-E-202-PL.

Site Code: 200-E-202-PL **Classification:** Accepted

Site Names: 200-E-202-PL; Transfer Lines from 241-BX-155 Diversion Box to 241-BX-153 Diversion Box; Lines V315, V316, V317, V318, and V319 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is five underground, 9 centimeter (3.5 inch) diameter stainless steel pipelines buried in the same soil trench. Lines V316, V317 and V318 connect to the 241-BX-153 Diversion Box in 241-BX Tank Farm. Lines V315 and V319 divert eastward north of the 241-BX-155 Diversion Box to connect to the 241-B Tank Farm (see sitecode 200-E-201-PL).

Site Code: 200-E-204-PL **Classification:** Accepted

Site Names: 200-E-204-PL, Pipeline to 216-B-2-1 and 216-B-2-2 Ditches (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 76 centimeter (30 inch) diameter vitrified clay pipeline that extends from the valve pit east of 207-B Retention Basin to the head end of the 216-B-2-1 and 216-B-2-2 ditches. The site also includes a short section of 61 centimeter (24 inch) diameter clay pipe from the east retention basin outlet to the valve box.

SubSites:

SubSite Code: 200-E-204-PL:1

SubSite Name: 200-E-204-PL:1, 24-Inch Diameter Pipe
Classification: Accepted
ReClassification:
Description: This subsite is a short section of 61 centimeter (24 inch) diameter vitrified clay pipe from the retention basin outlet to the valve box.

SubSite Code: 200-E-204-PL:2
SubSite Name: 200-E-204-PL:2, 30-Inch Diameter Pipe
Classification: Accepted
ReClassification:

Description: This subsite is the 76 centimeter (30 inch) diameter clay pipe from the valve box to the 216-B-2-1 and 216-B-2-2 ditches.

Site Code: 200-E-205-PL **Classification:** Accepted

Site Names: 200-E-205-PL, 216-B-2-3 Ditch Pipelines **ReClassification:**
(See Subsites)

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two underground pipes that fed the 216-B-2-3 Ditch. One pipe is a 41 centimeter (16 inch) diameter carbon steel line from the 207-B Retention Basin to the head end of the 216-B-2-3 Ditch. The other is a 38 centimeter (15 inch) diameter vitrified clay line from the B Plant Process Sewer line (see sitecode 200-E-188-PL) to the 216-B-2-3 ditch.

SubSites:

SubSite Code: 200-E-205-PL:1
SubSite Name: 200-E-205-PL:1, 16-Inch Diameter Carbon Steel Pipeline from 207-B to 216-B-2-3 Ditch
Classification: Accepted

ReClassification:

Description: Carbon Steel pipe test

SubSite Code: 200-E-205-PL:2

SubSite Name: 200-E-205-PL:2, 15-Inch Diameter Vitrified Clay Pipe from the Process Sewer to the 216-B-2-3 Ditch

Classification: Accepted

ReClassification:

Description: VCP Pipe

Site Code: 200-E-207-PL **Classification:** Accepted

Site Names: 200-E-207-PL; Encased Transfer Line **ReClassification:**
from 241-A-151 Diversion Box to 241-A-152 Diversion Box; Lines V004, V005,

	V006, V007, and V008	
Site Type:	Encased Tank Farm Pipeline	Start Date:
Site Status:	Inactive	End Date:
Site Description:	The waste site is an underground concrete encasement containing five stainless steel pipelines. Each of the five pipelines is a 9 centimeter (3.5 inch) diameter stainless steel line.	

Site Code:	200-E-209-PL	Classification:	Accepted
Site Names:	200-E-209-PL, Pipeline from 272-BB to 200-E-25 Dry Well	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground, 5 centimeter (2 inch) diameter, carbon steel pipeline.		

Site Code:	200-E-213-PL	Classification:	Accepted
Site Names:	200-E-213-PL; Transfer Lines from 221-B to 241-B-154 Diversion Box; Lines V200, V329, V330, V331, V332, V333, and V334	ReClassification:	
Site Type:	Direct Buried Tank Farm Pipeline	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is seven underground stainless steel pipelines buried in the same soil trench. All of the lines are 9 centimeter (3.5 inch) diameter pipes.		

Site Code:	200-E-214-PL	Classification:	Accepted
Site Names:	200-E-214-PL, Pipeline to 200-E-55 French Drain, Pipeline from 291-B Sand Filter to French Drain	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	1945
Site Status:	Inactive	End Date:	1997
Site Description:	The waste site is an underground, 15 centimeter (6 inch) diameter, stainless steel pipe.		

Site Code:	200-E-215-PL	Classification:	Accepted
Site Names:	200-E-215-PL, Transfer Line Between 241-ER-151 Diversion Box and 241-ER-152 Diversion Box, Line V229	ReClassification:	
Site Type:	Direct Buried Tank Farm Pipeline	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is a direct buried underground, 7.6 centimeter (3 inch) diameter stainless steel pipe inside a 15 centimeter (6 inch) carbon steel pipe.		

Site Code: 200-E-217-PL **Classification:** Accepted
Site Names: 200-E-217-PL; Encased Transfer Line from 241-ER-151 Diversion Box to 241-BX Tank Farm; Lines 9808, 9653, 9719, and V225 (See Subsites) **ReClassification:**
Site Type: Encased Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is four underground stainless steel lines inside a concrete encasement. Each line is 9 centimeters (3.5 inches) in diameter. Line V225 diverts out of the encasement and extends to 241-B Tank Farm.

SubSites:

SubSite Code: 200-E-217-PL:1
SubSite Name: 200-E-217-PL:1; Four Lines Encased in Concrete; Lines 9808, 9653, 9719, and V225
Classification: Accepted
ReClassification:
Description: Subsite one is the four lines, encased in concrete, that connects to 241-BX Tank Farm.

SubSite Code: 200-E-217-PL:2
SubSite Name: 200-E-217-PL:2, Line V225 that Diverts from the Concrete Encasement
Classification: Accepted
ReClassification:
Description: Subsite 2 is Line V225 that diverts from the concrete encasement. It extends from the encasement to 241-B Tank farm in a direct buried soil trench.

Site Code: 200-E-218-PL **Classification:** Accepted
Site Names: 200-E-218-PL; Transfer Lines Between 241-A-151 Diversion Box and 241-AW Tank Farm; Lines V021, V022, and V023 **ReClassification:**
Site Type: Direct Buried Tank Farm Pipeline **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is three, 7.6 centimeter (3 inch) diameter, stainless steel pipes buried in the same soil trench. Each pipe is double contained inside a 15 centimeter (6 inch) steel pipe.

Site Code: 200-E-220-PL **Classification:** Accepted
Site Names: 200-E-220-PL, Pipeline from 241-BY Tank Farm to 216-BY-201 Flush Tank and Monitoring Pit (See Subsites) **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter, carbon steel pipeline and a concrete monitoring pit. The pipeline runs through the monitoring pit before connecting to the 216-BY-201 flush tank.

SubSites:

SubSite Code: 200-E-220-PL:1

SubSite Name: 200-E-220-PL:1, Flush Pit Drain Line

Classification: Accepted

ReClassification:

Description: Subsite 1 is the 2 inch drain line from the tank farm to the flush pit.

SubSite Code: 200-E-220-PL:2

SubSite Name: 200-E-220-PL:2, Concrete Monitoring Pit Structure

Classification: Accepted

ReClassification:

Description: Subsite 2 is the 1.8 meter (6 foot) diameter concrete monitoring pit that the pipeline runs through.

Site Code: 200-E-221-PL

Classification: Accepted

Site Names: 200-E-221-PL, Pipeline to 216-B-51 French Drain, BC Crib Pipeline Drain Line

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 2.5 centimeter (1 inch) diameter, carbon steel drain line.

Site Code: 200-E-223

Classification: Accepted

Site Names: 200-E-223, BC Pipeline Valve Pit, 200-E-114-PL Valve Pit

ReClassification:

Site Type: Valve Pit

Start Date:

Site Status: Inactive

End Date:

Site Description: The concrete valve pit. In 2001 it was surrounded with posts and chain and posted with radiological warning signs. In 2010, it was sealed and surface stabilized. It was reposted with Underground Radioactive Material Area signs.

Site Code: 200-E-224-PL

Classification: Accepted

Site Names: 200-E-224-PL, 241-A-151 Diversion Box Drain Line to 241-A-302A Catch Tank, Line V027

ReClassification:

Site Type: Encased Tank Farm Pipeline

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 9 centimeter (3.5 inch) diameter, stainless steel drain line that is encased in concrete.

Site Code: 200-E-226-PL **Classification:** Accepted

Site Names: 200-E-226-PL, Transfer Line from 221-B to 241-C-154, Promethium Transfer Line, V743 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter stainless steel (promethium) transfer line.

Site Code: 200-E-227-PL **Classification:** Accepted

Site Names: 200-E-227-PL; Transfer Lines Between 244-AR Vault Facility and 241-AX-151 Diversion Box; Lines 4005/810, 4015/814, and 4019/817 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground concrete encasement that contains two 7.6 centimeter (3 inch) diameter stainless steel pipes and one 10 centimeter (4 inch) diameter stainless steel pipe.

Site Code: 200-E-228-PL **Classification:** Accepted

Site Names: 200-E-228-PL; Drain Lines from 241-ER-151 Diversion Box to 241-ER-311 and 241-ER-311A Catch Tanks; Lines V224, V226, and V226-1 (See Subsites) **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is three underground drain lines that connect the 241-ER-151 Diversion Box to the 241-ER-311 and 241-ER-311A Catch Tanks. Line V224 is a 7.6 centimeter (3 inch) diameter stainless steel line. Lines V226 and V226-1 are 10 centimeter (4 inch) diameter stainless steel lines.

SubSites:

SubSite Code: 200-E-228-PL:1

SubSite Name: 200-E-228-PL:1, Line V224

Classification: Accepted

ReClassification:

Description: Subsite 1 is line V224 that extends from the west end of the 241-ER-151 diversion box to the west end of the 241-ER-311 catch tank. The 7.6 centimeter (3inch) line is reduced to a 5

centimeter (2 inch) diameter line where it was extended from the original catch tank to the replacement catch tank.

SubSite Code: 200-E-228-PL:2

SubSite Name: 200-E-228-PL:2, Line V226

Classification: Accepted

ReClassification:

Description: Subsite 2 is line V226 that extends from the 241-ER-151 Diversion Box to a point east of the center of the 241-ER-311A and 241-ER-311 Catch Tanks.

SubSite Code: 200-E-228-PL:3

SubSite Name: 200-E-228-PL:3, Line V226-1

Classification: Accepted

ReClassification:

Description: Subsite 3 is line V226-1 that extends from the 241-ER-151 Diversion Box to a point west of the center of the 241-ER-311A and 241-ER-311 Catch Tanks.

Site Code: 200-E-229-PL

Classification: Accepted

Site Names: 200-E-229-PL, Transfer Line Between tank 241-AP-102 and 241-A-B Valve Pit, Line SN-650

ReClassification:

Site Type: Direct Buried Tank Farm Pipeline

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter stainless steel line that is double encased within a 15 centimeter (6 inch) diameter pipe.

Site Code: 200-E-230-PL

Classification: Accepted

Site Names: 200-E-230-PL, Pipeline from 292-B to 216-B-4 Reverse Well

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 15 centimeter (6 inch) diameter, vitrified clay pipe that fed the 216-B-4 Reverse well.

Site Code: 200-E-231-PL

Classification: Accepted

Site Names: 200-E-231-PL, 216-A-45 Crib Pipeline

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter fiberglass pipeline that fed the 216-A-45 crib.

Site Code: 200-E-233-PL **Classification:** Accepted
Site Names: 200-E-233-PL, Pipeline from 216-A-30 Crib Distribution Box to the 216-A-37-2 Crib Distribution Box **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter cast iron pipeline that connected the 216-A-30 crib to the 216-A-37-2 crib distribution box.

Site Code: 200-E-238-PL **Classification:** Accepted
Site Names: 200-E-238-PL, Pipeline from 206-A to 216-A-9 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 30 centimeter (12 inch) diameter, pipeline from 206-A (north side of PUREX) to the 216-A-9 crib. The majority of the pipeline is constructed of carbon steel. A short length of stainless steel pipe extends from the 206-A building edge.

Site Code: 200-E-239-PL **Classification:** Accepted
Site Names: 200-E-239-PL, Pipeline from 216-A-5 Sample Pit #4 to 216-A-5 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter, stainless steel pipeline that fed the 216-A-5 crib.

Site Code: 200-E-240-PL **Classification:** Accepted
Site Names: 200-E-240-PL, Pipeline from Valve Pit West of Sample Pit 4 to the 216-A-38-1 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter, stainless steel pipeline that fed the 216-A-38-1 crib.

Site Code: 200-E-241-PL **Classification:** Accepted
Site Names: 200-E-241-PL, Pipeline from 200-E-58 Neutralization Tank to the 216-A-5 Sample Pit #4, Lines 7717 and 7718 (See Subsites) **ReClassification:**

Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter stainless steel pipeline that fed the 216-B-13 french drain.

Site Code: 200-E-244-PL **Classification:** Accepted

Site Names: 200-E-244-PL, Pipeline from 201-C Valve Pit to 241-CX-70 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter diameter (2 inch) stainless steel pipeline that fed the 241-CX-70 tank. A portion of the pipeline, near the 201-C building, is inside a 46 centimeter (18 inch) diameter corrugated pipe encasement. The pipeline to the 241-CX-72 tank (sitecode 200-E-246-PL, is buried along side of the pipeline to 241-CX-70 tank.

Site Code: 200-E-245-PL **Classification:** Accepted

Site Names: 200-E-245-PL, Pipeline from 201-C Hot Shop to 241-CX-71 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter stainless steel pipeline that fed the 241-CX-71 tank.

Site Code: 200-E-246-PL **Classification:** Accepted

Site Names: 200-E-246-PL, Pipeline from 201-C Valve Pit to 241-CX-72 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter diameter (2 inch) stainless steel pipeline that fed the 241-CX-72 tank. A portion of the pipeline, near the 201-C building, is inside a 46 centimeter (18 inch) diameter corrugated pipe encasement. The pipeline to the 241-CX-70 tank (sitecode 200-E-244-PL, is buried along side of the pipeline to 241-CX-72 tank.

Site Code: 200-E-247-PL **Classification:** Accepted

Site Names: 200-E-247-PL, Pipelines to the 209-E-WS-2 French Drain (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two underground pipelines from the 209-E facility that fed the 209-E-WS-2 french drain. One line is constructed of 2.5 centimeter (1 inch) diameter carbon steel. The other is constructed of 5 centimeter (2 inch) diameter stainless steel.

SubSites:

SubSite Code: 200-E-247-PL:1
SubSite Name: 200-E-247-PL:1, 1-Inch Carbon Steel Pipeline

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-247-PL:2

SubSite Name: 200-E-247-PL:2, 2-Inch Stainless Steel Pipeline

Classification: Accepted

ReClassification:

Description:

Site Code: 200-E-248-PL **Classification:** Accepted

Site Names: 200-E-248-PL, Pipelines to the 209-E-WS-3 Valve Pit (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two underground, 5 centimeter (2 inch) diameter stainless steel pipelines connecting the laboratory building to the valve pit structure.

SubSites:

SubSite Code: 200-E-248-PL:1

SubSite Name: 200-E-248-PL:1, Western Line from 209-E to Valve Pit

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-248-PL:2

SubSite Name: 200-E-248-PL:2, Eastern Line from 209-E to Valve Pit

Classification: Accepted

ReClassification:

Description:

Site Code: 200-E-249-PL **Classification:** Accepted

Site Names: 200-E-249-PL, Pipelines to 200-E-4 French Drain (See Subsites) **ReClassification:**

Site Type: Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 3.8 centimeter (1.5 inch) diameter pipeline that extends from the north side of 209-E to the 200-E-4 dry well. A drain line from a valve box, containing steam condensate and fire water lines, also connects to the 200-E-4 French Drain (subsite 2).

SubSites:

SubSite Code: 200-E-249-PL:1

SubSite Name: 200-E-249-PL:1, Drain Line from 209-E to 200-E-4

Classification: Accepted

ReClassification:

Description: The drain line from 209-E is a 3.8 centimeter (1.5 inch) diameter carbon steel line.

SubSite Code: 200-E-249-PL:2

SubSite Name: 200-E-249-PL:2, Drain Line from Valve Box to 200-E-4 French Drain

Classification: Accepted

ReClassification:

Description: The drain line from the valve box is a 1.9 centimeter (0.75 inch) diameter carbon steel line.

Site Code: 200-E-250-PL

Classification: Accepted

Site Names: 200-E-250-PL, Pipeline from 2704-C to 2704-C-WS-1 Quench Tank

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 2.5 centimeter (1 inch) diameter carbon steel line that extended from the south side of the 2704-C building to the 2704-C quench tank.

Site Code: 200-E-251-PL

Classification: Accepted

Site Names: 200-E-251-PL, Pipeline from 291-C Stack to 216-C-2 Reverse Well

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter carbon steel pipeline that connected the 291-C stack to the 216-C-2 reverse well.

Site Code: 200-E-252-PL

Classification: Accepted

Site Names: 200-E-252-PL, Pipeline from 291-C Air Filter Building to 216-C-2 Reverse Well

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter cast iron pipeline from the 291-C Air Filter building to the 216-C-2 reverse well. Part of this line lies beneath the 200-E-251-PL pipeline.

Site Code: 200-E-254-PL **Classification:** Accepted

Site Names: 200-E-254-PL, Pipeline from 209-E to 216-C-9 Pond **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter pipeline that fed the 216-C-9 Pond. Part of the line is constructed of vitrified clay and part is cast iron.

Site Code: 200-E-255-PL **Classification:** Accepted

Site Names: 200-E-255-PL, Pipeline Connecting 216-C-9 Pond to Pipeline 200-E-169-PL **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 15 centimeter (6 inch) diameter vitrified clay pipe that fed the 216-C-9 Pond.

Site Code: 200-E-256-PL **Classification:** Accepted

Site Names: 200-E-256-PL, Pipelines from 201-C (South Side) to 216-C-9 Pond **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site majority of the waste site is an underground, 15 centimeter (6 inch) diameter vitrified clay pipe from the demolished 201-C building to the 216-C-9 Pond. Two 10 centimeter (4 inch) diameter saran lined steel pipes extend from the south side of 201-C and connect to the 15 centimeter VCP line. A drain line from the 241-CX-71 vault ties into this line with a "Y" connection.

Site Code: 200-E-257-PL **Classification:** Accepted

Site Names: 200-E-257-PL, Pipeline from 201-C (East Side) to 216-C-9 Pond **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter stainless steel pipeline that fed the 216-C-9 Pond.

Site Code: 200-E-258-PL **Classification:** Accepted

Site Names: 200-E-258-PL, 216-C-9 Pond Lobe Distribution Piping **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground carbon steel pipeline that diverted effluent to the various sections of the 216-C-9 Pond. The majority of the piping system is constructed of 15 centimeter (6 inch) diameter carbon steel pipe.

Site Code: 200-E-259-PL **Classification:** Accepted

Site Names: 200-E-259-PL, Pipeline from 291-C Fan House to 216-C-9 Pond **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter carbon steel pipeline that fed the 216-C-9 Pond.

Site Code: 200-E-260-PL **Classification:** Accepted

Site Names: 200-E-260-PL, Steam Condensate By-Pass Line from PUREX to 216-A-30, Line 8824A **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter carbon steel pipeline from PUREX to the 216-A-30 crib.

Site Code: 200-E-261-PL **Classification:** Accepted

Site Names: 200-E-261-PL, Effluent Recycle Line from 216-A-42 Basin to PUREX **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter cast iron pipeline. The pipeline returned contaminated effluent from the 216-A-42 Basin back to the PUREX facility.

Site Code: 200-E-264-PL **Classification:** Accepted

Site Names: 200-E-264-PL, Pipeline from 242-B Evaporator Building to 207-B Retention Basin **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter cast iron pipeline that connected the 242-B Evaporator building to the 207-B Retention Basin.

Site Code: 200-E-265-PL **Classification:** Accepted

Site Names: 200-E-265-PL, 241-BY and 241-BX Tank Farm Cooling Water Pipeline to 207-B Retention Basin (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter carbon steel pipeline that transferred In-Tank Solidification process cooling water to the 207-B Retention Basin. A new pipeline segment was added that by passed the retention basin and connected to the B Ditches.

SubSites:

SubSite Code: 200-E-265-PL:1

SubSite Name: 200-E-265-PL:1, Original Pipeline from 241-BY Tank Farm to the West Side of 207-B Retention Basin

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-265-PL:2

SubSite Name: 200-E-265-PL:2, Relocated Section of 4-Inch Pipe Inside a 6-Inch Pipe Created to Bypass a Broken Section of Pipeline

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-265-PL:3

SubSite Name: 200-E-265-PL:3, 4-Inch Retention Basin Bypass Line (to B Ditches)

Classification: Accepted

ReClassification:

Description:

Site Code: 200-E-266-PL **Classification:** Accepted

Site Names: 200-E-266-PL, Pipeline from PUREX Trap Pit #1 to 216-A-11 French Drain **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter carbon steel pipeline that connected the PUREX Trap Pit #1 to 216-A-11 French Drain.

Site Code: 200-E-267-PL **Classification:** Accepted

Site Names: 200-E-267-PL, Pipeline from PUREX Trap Pit #3 to 216-A-12 French Drain **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter carbon steel pipeline that connected the PUREX Trap Pit #3 to 216-A-12 French Drain.

Site Code: 200-E-268-PL **Classification:** Accepted

Site Names: 200-E-268-PL, Pipeline from PUREX Vacuum Cleaner Filter Box to 216-A-14 French Drain, Line T073 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 6 centimeter (1.5 inch) diameter carbon steel pipeline that connected the PUREX Vacuum Cleaning Filter Box to 216-A-14 French Drain.

Site Code: 200-E-269-PL **Classification:** Accepted

Site Names: 200-E-269-PL, Pipeline from 291-A Fan Building to 216-A-33 French Drain **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter stainless steel pipeline that connected the 291-A Stack Fan House to the 216-A-33 French Drain.

Site Code: 200-E-270-PL **Classification:** Accepted

Site Names: 200-E-270-PL, Pipeline from 291-A Fan Control House to 216-A-26 and 216-A-26A French Drains, Line T022 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter stainless steel pipeline that fed the 216-A-26 and 216-A-26A French Drains.

Site Code: 200-E-271-PL **Classification:** Accepted

Site Names: 200-E-271-PL, PUREX Cooling Water **ReClassification:**

	Header Pipeline, Line 8823	
Site Type:	Radioactive Process Sewer	Start Date:
Site Status:	Inactive	End Date:
Site Description:	The waste site is an underground pipeline that transferred PUREX cooling water waste to the pond and ditch system. The carbon steel pipeline has several diameters that increase from 40 centimeters (16 inch) to 76 centimeters (30 inch).	

Site Code:	200-E-272-PL	Classification:	Accepted
Site Names:	200-E-272-PL, Pipeline to 216-A-35 French Drain	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground, 7.6 centimeter (3 inch) diameter carbons steel pipeline that fed the 216-A-35 french drain.		

Site Code:	200-E-273-PL	Classification:	Accepted
Site Names:	200-E-273-PL, Pipeline to 216-A-13 French Drain (See Subsites)	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground, 7.6 centimeter (3 inch) diameter carbons steel pipeline that fed the 216-A-13 french drain.		

SubSites:

SubSite Code:	200-E-273-PL:1		
SubSite Name:	200-E-273-PL:1, Original 3-Inch Diameter CS Pipeline from PUREX to the Cooling Water Header Pipe (200-E-271-PL)		
Classification:	Accepted		
ReClassification:			
Description:			
SubSite Code:	200-E-273-PL:2		
SubSite Name:	200-E-273-PL:2, 3-Inch Re-Routed Line to 216-A-13 French Drain		
Classification:	Accepted		
ReClassification:			
Description:			

Site Code:	200-E-274-PL	Classification:	Accepted
Site Names:	200-E-274-PL, Pipeline from 244-A Lift Station to 216-A-40 Basin, Line 323	ReClassification:	

Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter carbon steel pipeline that connected the 244-A Lift Station to the 216-A-40 basin.

Site Code: 200-E-275-PL **Classification:** Accepted
Site Names: 200-E-275-PL, Cooling Water Pipeline to 216-A-40 Basin, Line 815 **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 30 centimeter (12 inch) diameter concrete cooling water pipeline that fed the 216-A-40 basin.

Site Code: 200-E-276-PL **Classification:** Accepted
Site Names: 200-E-276-PL, 216-A-41 Crib Pipeline **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter vitrified clay pipeline that connected the 296-A-13 stack to the 216-A-41 crib.

Site Code: 200-E-277-PL **Classification:** Accepted
Site Names: 200-E-277-PL, 216-B-59 and 216-B-59B Pipelines (See Subsites) **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground pipeline that connected 221-B to the 216-B-59 Retention Basin. The majority of the pipeline is constructed of varied diameters of carbon steel pipe. The section of pipe that extends from the 221-BA sampling building to the head end of the basin is constructed of 38 centimeter (15 inch) diameter vitrified clay pipe. The by-pass line that connects to the center of the basin is constructed and the pipeline re-routing basin effluent to 241-B Tank farm are constructed of 5 centimeter (2 inch) diameter carbon steel. (see subsites)

SubSites:

SubSite Code: 200-E-277-PL:1
SubSite Name: 200-E-277-PL:1, Carbon Steel Portion of Pipeline South of 221-B
Classification: Accepted
ReClassification:
Description:

SubSite Code: 200-E-277-PL:2

SubSite Name: 200-E-277-PL:2, 15-Inch VCP Portion of Pipeline

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-E-277-PL:3

SubSite Name: 200-E-277-PL:3, 2-Inch Carbon Steel Bypass Line from a Pump at the Center Section of the Basin and Two 3-Inch CS Lines from the Basin to the Pump

Classification: Accepted

ReClassification:

Description: Located inside the basin structure.

SubSite Code: 200-E-277-PL:4

SubSite Name: 200-E-277-PL:4, 2-Inch Carbon Steel Line Re-Routing 216-B-59 Basin Effluent to the 200-E-199-PL Encased Tank Farm Line

Classification: Accepted

ReClassification:

Description:

Site Code: 200-E-278-PL

Classification: Accepted

Site Names: 200-E-278-PL, Process Sewer Pipeline from 272-E to CTFN 2703E, Pipeline to Chemical Tile Field North of 2703E

ReClassification:

Site Type: Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is various diameters of underground vitrified clay pipe connecting 200 East Area shop facilities to the chemical drain field located north of 2703E.

Site Code: 200-E-279-PL

Classification: Accepted

Site Names: 200-E-279-PL, Pipeline from 241-B-361 Settling Tank to 216-B-5 Reverse Well

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground, 5 centimeter (2 inch) diameter stainless steel pipeline that carried waste from the 241-B-361 Settling Tank to the 216-B-5 Reverse Well.

Site Code: 200-E-281-PL

Classification: Accepted

Site Names: 200-E-281-PL, Pipeline from 241-B Tank Farm to 216-B-7A and 216-B-7B Cribs, Line V306

ReClassification:

Waste Description: The diversion box distributes radioactive waste solutions from between facilities and tank farms. Quantities are variable according to specific plant operations. This diversion box facilitates the transfer of low-level waste for the B Plant to the Double-Shell Tank Farms.

Site Code: 241-ER-311 **Classification:** Accepted

Site Names: 241-ER-311, 241-ER-311 Catch Tank, 241-ER-311A Replacement Tank **ReClassification:**

Site Type: Catch Tank **Start Date:** 1954

Site Status: Inactive **End Date:** 2005

Site Description: The underground tank is located inside the 241-ER-151 locked chain link fence. The fence is posted as a Contamination Area and Underground Radioactive Material Area, and is labeled with IMUST signs. The placement of these structures within the fence is the 241-ER-311 Catch Tank is the furthest south, nearest the chain link fence. The 241-ER-311A Catch Tank is located adjacent to the north side of the 241-ER-311 tank (in the middle of the three structures). The 241-ER-151 Diversion Box is north of the 241-ER-311A Catch Tank.

Waste Type: Process Effluent

Waste Description: The catch tank collected drainage and leaks from the 241-ER-151, 241-ER-152 and 241-ER-153 diversion boxes. Volumes were variable according to specific plant operation, when the tank was active. Decreasing tank volumes were noted in 2005. A tank leak investigation was done in late 2005 and early 2006. The tank is assumed to be leaking.

Site Code: 241-ER-311A **Classification:** Accepted

Site Names: 241-ER-311A, 241-ER-311A Catch Tank, Old 241-ER-311, Original 241-ER-311 Catch Tank, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Catch Tank **Start Date:** 1950

Site Status: Inactive **End Date:** 1954

Site Description: It is located within a chain link fence that is posted as a Contamination Area and Underground Radioactive Material Area, and is labeled with IMUST signs. The 241-ER-151 Diversion Box, the 241-ER-311 Catch Tank and the 241-ER-311A Catch Tank are all located inside this chain link fence. The placement of these structures within the fence is the 241-ER-311 Catch Tank is the furthest south, nearest the chain link fence. The 241-ER-311A Catch Tank is located adjacent to the north side of the 241-ER-311 tank (in the middle of the three structures). The 241-ER-151 Diversion Box is north of the 241-ER-311A Catch Tank.

Waste Type: Process Effluent

Waste Description: The tank received waste from the 241-ER-151 Diversion Box that was caused from leaks and decontamination activities. The tank was abandoned in place in 1954. Although no records have been found identifying its contents of to verify the tank was pumped, it is unlikely any significant amount of was remains in the tank.

Site Code: 216-S-172 **Classification:** Accepted

Site Names: 216-S-172, 216-S-172 Weir Box and Control Structure, 2904-S-172 Weir, 216-S-172 Control Structure **ReClassification:**

Site Type: Control Structure **Start Date:** 1956

Site Status: Inactive **End Date:** 1976

Site Description: This site is an underground concrete structure with interior hand operated sluice gates. Float wells were attached to the outside north and south walls. The structure has been covered with soil and posted with Underground Radioactive Material/Cave-In Potential signs.

Waste Type: Process Effluent

Waste Description: The unit contains unquantified amounts of low-level radioactive solid waste. In 1987, the Hanford Site Waste Management Units Report stated the maximum radiation reading on the structure was 25 millirads per hour.

Site Code: 240-S-151 **Classification:** Accepted

Site Names: 240-S-151, 240-S-151 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1950

Site Status: Inactive **End Date:** 1987

Site Description: This unit is constructed of reinforced concrete and is rectangular in shape. The 240-S-151 Diversion Box has been weather covered.

Waste Type: Process Effluent

Waste Description: This unit was used for transfer of waste solutions from processing and product decontamination operations to the tank farms. Volumes were variable according to specific plant operations.

Waste Type: Equipment

Waste Description: Equipment associated with the diversion box includes transfer piping and nozzles. Waste lead is also stored in the diversion box.

Site Code: 240-S-152 **Classification:** Accepted

Site Names: 240-S-152, 240-S-152 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1977

Site Status: Inactive **End Date:** 1980

Site Description: This unit is constructed of reinforced concrete and is rectangular in shape. The 240-S-152 Diversion Box has been weather covered.

Waste Type: Process Effluent

Waste Description: This unit was used for transfer of waste solutions from 204-S to the 240-S-152 Diversion Box.

Waste Type: Equipment

Waste Description: Equipment associated with the diversion box includes transfer piping and nozzles. Waste lead is also stored in the diversion box.

Site Code: 240-S-302 **Classification:** Accepted

Site Names: 240-S-302, 240-S-302 Catch Tank, IMUST, Inactive Miscellaneous Underground Storage Tank, Line V556 and V557 **ReClassification:**

Site Type: Catch Tank **Start Date:** 1950

Site Status: Inactive **End Date:** 1987

Site Description: This unit is a horizontal, cylindrical, steel tank. The 240-S-302 Catch Tank is buried underground to provide shielding from radiation. The tank is surrounded with posts and chain and posted with radiological and IMUST signs.

Waste Type: Storage Tank

Waste Description: This unit received low-level, dilute laboratory waste and drainage from the 240-S-151 Diversion Box. In 1993, the tank was estimated to contain 8603 liters (2276 gallons) of sludge and liquid. Approximately 378 liters (100 gallons) is suspected to be liquid.

Site Code: 276-S-141 **Classification:** Accepted

Site Names: 276-S-141, 276-S-TK-141, 276-S-306A, 276-S-141 Solvent Storage Tank, Tank 276-141, Hexone Storage Tank, 244-SX-15, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Storage Tank **Start Date:** 1951

Site Status: Inactive **End Date:** 1969

Site Description: The site is a below grade carbon steel tank enclosed in a chain line fenced area. The tank is the southernmost tank in a two tank network connected to the 276-S Solvent Handling Facility. The tank had an 89,000 liter (23,575 gallon) capacity. The tank has been filled with cement.

Waste Type: Chemicals

Waste Description: The unit contained radiologically contaminated liquids made up of normal paraffin hydrocarbons, hexone, and phosphate tar. In 1992, the 276-S-141 and 276-S-142 each contained between 19 to 114 liters (5 to 30 gallons) of 93% normal paraffin hydrocarbons and 7% hexone. They also contained up to 950 liters (250 gallons) of phosphate tar. A nitrogen gas blanket and offgas filtration was implemented in 1990 during the distillation phase. In 2002, the nitrogen suppression system was shut off and the tanks were filled with grout. The remaining 19 to 114 liters (5 to 30 gallons) of liquid is expected to be removed by evaporation over time due to the nitrogen purge process.

Site Code: 276-S-142 **Classification:** Accepted

Site Names: 276-S-142, 276-S-TK-142, 276-S-306B, **ReClassification:**

276-S-142 Solvent Storage Tank, Tank
276-142, Hexone Storage Tank, 244-SX-
15, IMUST, Inactive Miscellaneous
Underground Storage Tank

Site Type: Storage Tank **Start Date:** 1951

Site Status: Inactive **End Date:** 1969

Site Description: The site is a below grade carbon steel tank. The tank is the northernmost tank in a two tank network connected to the 276-S Solvent Handling Facility. The tank has a 89,000 liter (23,575 gallon) capacity.

Waste Type: Chemicals

Waste Description: The unit contained radiologically contaminated liquids made up of normal paraffin hydrocarbons, hexone, and phosphate tar. In 1992, 276-S-141 and 216-S-142 contained between 19 to 114 liters (5 to 30 gallons) of 93% normal paraffin hydrocarbons and 7% hexone. They also contain up to 950 liters (250 gallons) of phosphate tar. A nitrogen blanket was added to the tank. In 2002, the nitrogen suppression system was shut off and the tanks were filled with grout. The remaining 19 to 114 liters (5 to 30 gallons) of liquid is expected to be removed by evaporation over time due to the nitrogen purge process.

Site Code: 2904-S-160 **Classification:** Accepted

Site Names: 2904-S-160, 2904-S-160 Control Structure, 2904-S-160 Weir **ReClassification:**

Site Type: Control Structure **Start Date:** 1954

Site Status: Inactive **End Date:** 1976

Site Description: The unit is an inactive waste management unit consisting of a below grade pentagonal structure with reinforced concrete walls, floor, and roof. Sixty centimeter (24 inch) diameter vitrified clay pipes provided inlet and outlet flow for the structure. The site has been surface stabilized and is posted with Underground Radioactive Material/Cave-in Potential signs.

Waste Type: Process Effluent

Waste Description: The unit contains low-level contaminated concrete and piping. The quantity of contaminated waste has not been determined. There is beta/gamma contamination in the soil and smearable contamination on the surfaces of the box. Contamination originated from effluents traveling through the weir.

Site Code: 2904-S-171 **Classification:** Accepted

Site Names: 2904-S-171, 2904-S-171 Weir Box, 2904-S-171 Control Structure, 216-S-171 **ReClassification:**

Site Type: Control Structure **Start Date:** 1954

Site Status: Inactive **End Date:** 1976

Site Description: The 2904-S-171 Control Structure is a below grade, rectangular concrete weir structure. The inlet piping consisted of 46 centimeter (18 inch) diameter vitrified clay pipe. The outlet piping consisted of 46 centimeter (18 inch) diameter corrugated metal pipe. The site has been backfilled with clean material and is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: This unit contains low-level contaminated concrete and piping. The quantity of contaminated waste has not been determined. There were beta/gamma smearable contamination and recordable radiation readings with a Cutie Pie (hand-held radiation monitor) on the above ground portions of the structure before it was surface stabilized.

Site Code: 241-SX-302 **Classification:** Accepted

Site Names: 241-SX-302, 241-SX-302 Catch Tank, SX-304, IMUST, Inactive Miscellaneous Underground Storage Tank, Line V595 **ReClassification:**

Site Type: Catch Tank **Start Date:** 1954

Site Status: Inactive **End Date:** 1983

Site Description: The 241-SX-302 Catch Tank an underground, horizontal, cylindrical steel tank. Three yellow risers are visible on the surface. It is surrounded with post and chain and marked with radiological and IMUST signs.

Waste Type: Process Effluent

Waste Description: This tank collected excess and leaking waste that transferred through the 241-SX-151 and 241-SX-152 Diversion Boxes. In 1993, the tank was estimated to contain 1152 liters (305 gallons) of liquid supernate and 3969 liters (1050 gallons) of sludge.

Site Code: 241-TX-152 **Classification:** Accepted

Site Names: 241-TX-152, 241-TX-152 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1949

Site Status: Inactive **End Date:**

Site Description: The diversion box is a rectangular reinforced concrete structure. Most of the structure is below ground. A few inches of the structure that extends above ground is covered with a gray weather coating. It is surrounded with light posts and chain and is posted with various radiological postings.

Waste Type: Process Effluent

Waste Description: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operations. It is estimated that approximately 23 kilograms (50 pounds) of lead shielding may be stored in each diversion box.

Site Code: 241-TX-154 **Classification:** Accepted

Site Names: 241-TX-154, 241-TX-154 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1949

Site Status: Inactive **End Date:**

Site Description: The diversion box is a rectangular reinforced concrete structure. Most of the structure is below ground. The diversion box is surrounded with post and chain. It is labeled and radiologically posted. The adjacent area has been covered with shotcrete.

Waste Type: Process Effluent

Waste Description: The unit transports radioactive waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operations. It is estimated that approximately 23 kilograms (50 pounds) of lead shielding may be stored in each diversion box.

Site Code: 241-TX-155 **Classification:** Accepted

Site Names: 241-TX-155, 241-TX-155 Diversion Box **ReClassification:**

Site Type: Diversion Box **Start Date:** 1949

Site Status: Inactive **End Date:** 1980

Site Description: The diversion box is a rectangular reinforced concrete structure. Most of the structure is below ground. A few inches of the structure that extends above ground is covered with a gray weather coating. It is surrounded with light posts and chain and Contamination Area signs.

Waste Type: Process Effluent

Waste Description: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation. Lead shielding may also be contained inside the diversion box.

Waste Type: Equipment

Waste Description: Equipment associated with the diversion box includes transfer piping and nozzles. Waste lead is also stored in the diversion box.

Site Code: 241-TX-302B **Classification:** Accepted

Site Names: 241-TX-302B, 241-TX-302-B Catch Tank, IMUST, Inactive Miscellaneous Underground Storage Tank, Lines V414 and V415 **ReClassification:**

Site Type: Catch Tank **Start Date:** 1949

Site Status: Inactive **End Date:** 1982

Site Description: This unit is an underground, cylindrical tank made of steel. The ground surface around the tank has been covered with gravel. The tank is surround with light posts and chain and posted with Contamination Area and IMUST signs.

Waste Type: Process Effluent

Waste Description: This unit was used for containment of waste solution spills that occurred during transfers from processing and decontamination operations. Volumes collected were variable according to specific plant operations. In 1984, the volume was estimated to be 4989.6 liters (1320 gallons). A sample from this tank was taken on March 6, 1984. It was reported to have a dose rate of 24 millirad per hour with a pH of 9.95.

Site Code: 241-TX-302BR **Classification:** Accepted

Site Names: 241-TX-302BR, 241-TX-302BR Catch Tank, 241-TXR-302BR, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Catch Tank **Start Date:** 1950

Site Status: Inactive **End Date:** 1954

Site Description: This unit is an underground, horizontal, cylindrical tank made of steel. The ground surface around the tank has been covered with gravel. The tank is surrounded with posts and chain and labeled with IMUST signs.

Waste Type: Process Effluent

Waste Description: The unit was used to transfer of waste solutions from processing and decontamination operations. No waste volume was available in 1994.

Site Code: 241-TX-302C **Classification:** Accepted

Site Names: 241-TX-302C, 241-TX-302-C Catch Tank, Lines V741 and V742 **ReClassification:**

Site Type: Catch Tank **Start Date:** 1947

Site Status: Inactive **End Date:** 2005

Site Description: This unit is an underground horizontal, cylindrical tank made of carbon steel. The tank area has been sprayed with shotcrete to control surface contamination.

Waste Type: Process Effluent

Waste Description: This unit is used for transfer of radioactive waste solutions from processing and decontamination operations at T Plant. Volumes are variable according to specific plant operation.

Site Code: 216-TY-201 **Classification:** Accepted

Site Names: 216-TY-201, Supernatant Disposal Flush Tank, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Settling Tank **Start Date:** 1953

Site Status: Inactive **End Date:** 1966

Site Description: The 216-T-26, 216-T-27 and 216-T-28 cribs and the 216-TY-201 Tank are enclosed in a common area with steel post and chain barricade. The area is posted "Underground Radioactive Material". The 216-TY-201 flush tank is located in the northeast corner of the area. It has three risers protruding from a mound of earth. The 216-TY-201 tank is delineated with steel post and chain and marked with Inactive Miscellaneous Underground Storage Tank signs

Waste Type: Process Effluent

Waste Description: In 1955 and 1956, the 216-TY-201 Flush Tank received scavenged first cycle supernate from 221-T after it had cascaded through the 241-TY-101, 241-TY-103, and 241-TY-104 tanks in 241-TY Tank Farm. From 1960 through 1966 the 216-TY-201 Flush Tank received T Plant steam condensate and process decontamination waste via the 241-T-112 tank in the 241-T Tank Farm. In 1963, 2706-T equipment decontamination waste was added to the waste stream. In 1964, 300 Area laboratory waste was trucked to the 216-T-27 and 216-T-28 cribs and released to the cribs through a riser. The Authorization Basis Status Report (1998) assumes the solid and liquid composition to be the same as those found in tank 241-T-112. Solids are assumed to contain 5110 micrograms per gram (ug/g) aluminum, 28800 ug/g bismuth, 16400 ug/g iron, 41000 ug/g sodium, 395 ug/g lead, 313 ug/g strontium, 3100 ug/g uranium, and 36600 ug/g OH. Solid radionuclides are assumed to include 0.184 microcuries per gram (uCi/g) cesium-137, 6.0 uCi/g strontium-90, 5.71 E-04 uCi/g plutonium-138, 0.07 uCi/g plutonium-139 and 1.0 E-04 uCi/g americium-241. The Supernate is expected to contain 9.0 E-06 uCi/g americium-241.

Site Code:	241-U-151	Classification:	Accepted
Site Names:	241-U-151, 241-U-151 Diversion Box	ReClassification:	
Site Type:	Diversion Box	Start Date:	1946
Site Status:	Inactive	End Date:	

Site Description: The diversion box is marked and radiologically posted. This unit is constructed of reinforced concrete with multiple encased liquid waste transfer lines. The diversion box structure is mostly below ground. It has three layers of cover blocks.

Waste Type: Process Effluent

Waste Description: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operations. Lead shielding may also be contained inside the diversion box.

Site Code:	241-U-152	Classification:	Accepted
Site Names:	241-U-152, 241-U-152 Diversion Box	ReClassification:	
Site Type:	Diversion Box	Start Date:	1946
Site Status:	Inactive	End Date:	

Site Description: The diversion box is marked and radiologically posted. The unit is constructed of reinforced concrete with multiple encased liquid waste transfer lines. The diversion box structure is mostly below ground. It has three layers of cover blocks.

Waste Type: Process Effluent

Waste Description: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operations. Lead shielding may also be contained inside the diversion box.

Site Code:	241-UX-154	Classification:	Accepted
Site Names:	241-UX-154, 241-UX-154 Diversion Box	ReClassification:	

Site Type: Diversion Box **Start Date:** 1946
Site Status: Inactive **End Date:**

Site Description: The diversion box is marked and radiologically posted. The unit is mostly below grade, constructed of reinforced concrete. Multiple encased liquid waste transfer lines enter the box through its southeast wall.

Waste Type: Process Effluent

Waste Description: The unit transfers waste solutions from processing and decontamination operations via underground, encased waste lines. Quantities are variable according to specific plant operations. Lead shielding may also be contained within the structure.

Site Code: 241-UX-302A **Classification:** Accepted
Site Names: 241-UX-302A, 241-U-302 Catch Tank, 241-UX-302 Catch Tank, 241-UX-302, Lines V380 and V381 **ReClassification:**

Site Type: Catch Tank **Start Date:** 1947
Site Status: Inactive **End Date:** 2005

Site Description: The catch tank is an underground tank. It is covered with gravel, marked and radiologically posted.

Waste Type: Process Effluent

Waste Description: This unit was used for transfer of waste solution from processing and decontamination operations. Volumes were variable according to specific plant operation when it was active. In August 1995, it contained 4232 liters (1118 gallons) of waste. The tank was pumped down to the pump inlet level in January 2003. In March 2006, the tank was estimated to contain 6551 liters (1724 gallons). In October 2006, the more liquid was pumped out of the tank, leaving a residual of approximately 3.8 liters (one gallon).

Site Code: 200-W-7 **Classification:** Accepted
Site Names: 200-W-7, 246-L, 241-S-TK-1, 243S-TK-1, 243-S-TK1, 200-W Personnel Decontamination Facility Catch Tank, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Catch Tank **Start Date:** 1978
Site Status: Inactive **End Date:** 1988

Site Description: The underground tank is inside a chained area that measures approximately 3 meters by 3 meters (9 feet by 9 feet), with three risers extending to the surface. The tank is posted with Inactive Miscellaneous Underground Storage Tank (IMUST) signs and radiological postings.

Waste Type: Storage Tank

Waste Description: The tank received effluent from the personnel decontamination sink and shower. The tank contents would include soap, water and low levels of radionuclides.

Site Code: 200-W-16 **Classification:** Accepted
Site Names: 200-W-16, 292-T Underground Tanks, IMUST, Inactive Miscellaneous Underground Storage Tank, 292-TK-1, 292-TK-2 **ReClassification:**
Site Type: Storage Tank **Start Date:** 1944
Site Status: Inactive **End Date:** 1970
Site Description: Two metal riser pipes extend about 0.5 meters (1.5 feet) above grade near the southeast corner of the 292-T building addition. Both are capped and one appears to have a pressure relief vent. These pipes extend from two buried tanks (292-TK-1 and 2). There is a chain link fence enclosing the area where the tanks are located. The fence is posted with Access Restricted signs. The site is within a chained area posted "Contamination Area".

Waste Type: Storage Tank

Waste Description: Liquid waste was sent to these underground tanks from the 292-T building. Early waste consisted of solutions from the off gas monitoring scrubbers. Later waste was associated with experiments involving failure analysis of irradiated fuel rods. Irradiated N Reactor fuel rods were heated in an induction furnace until rupture or failure occurred. The slag that remained in the furnace was dissolved in nitric acid. A solution of dissolved irradiated fuel and nitric acid was discharged to 292-T-1 and 2. The solution was then neutralized with sodium hydroxide. Neutralization likely caused the dissolved metals to precipitate and deposit in tank bottoms. Dose rate directly above tanks was 2 millirem per hour in 1995.
Reported Date: October 9, 1995

Site Code: 200-W-58 **Classification:** Accepted
Site Names: 200-W-58, Z-Plant Diversion Box #1 **ReClassification:**
Site Type: Valve Pit **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The Z-Plant fenced exclusion area is covered with gravel. The concrete lid of the diversion box is visible above ground. The unit is buried to a depth of 2.7 meters (9 feet) with its upper surface (a thick concrete lid) being slightly above ground level.

Waste Type: Process Effluent

Waste Description: The structure directed the flow of Z Plant process waste to cribs and tile fields located south of the Z Plant complex.

Site Code: 200-W-59 **Classification:** Accepted
Site Names: 200-W-59, Z-Plant Diversion Box #2 **ReClassification:**
Site Type: Valve Pit **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The structure is buried with its concrete lid slightly above ground level. The Z-Plant fenced exclusion area is covered with gravel.

Waste Type: Process Effluent

Waste Description: This diversion box directed the flow of process waste to the 216-Z-12 crib.

Site Code: 200-W-78-PL **Classification:** Accepted

Site Names: 200-W-78-PL; Pipeline Between 241-TX/TY and 241-T Tank Farms; Lines 6012, 6025, 7624 and 7630 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an encased underground pipeline that runs between the 241-TXR-151 Diversion Box in the 241-TX Tank Farm and the 241-TR-153 Diversion Box in the 241-T Tank Farm. The encasement contains four lines (6012, 6025, 7624 and 7630). Outside the tank farm fence, the line is marked with Radioactive Pipeline signs. There are several stabilized, individually radiologically posted areas on top of (or adjacent to) this pipeline, near the east side of the 241-TY Tank Farm perimeter fence.

Waste Type: Process Effluent

Waste Description: The pipeline transported liquid process effluent between the 241-T and 241-TX/TY tank farms. The contaminated soil and vegetation found above the transfer line was the result of biological intrusion into underground tank farm transfer lines.

Site Code: 200-W-84-PL **Classification:** Accepted

Site Names: 200-W-84-PL, U Plant Chemical Process Sewer to 216-U-14 Ditch, 200-W-84, VCP Process Sewer (See Subsites) **ReClassification:**

Site Type: Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The majority of the waste site is an underground, 30 centimeter (12 inch) diameter and 46 centimeter (18 inch) diameter, vitrified clay pipeline. A 20 centimeter (8 inch) diameter process sewer line from 224-U and 222-U connects to the main process sewer line. It terminated at a timber headwall where the flow entered the 216-U-14 Ditch. The surface of the pipeline is marked with Underground Radioactive Material and Pipeline signs. At intervals along the pipeline, there are 1.2 meter, (4 foot) diameter, yellow manholes. Feed lines are listed as subsites.

Waste Type: Process Effluent

Waste Description: The 216-U-14 Ditch received 221-U chemical sewer effluent (via this vitrified clay pipeline) From January 1952 through July 1984.

SubSites:

SubSite Code: 200-W-84-PL:1

SubSite Name: 200-W-84-PL:1, 12-Inch VCP

Classification: Accepted

ReClassification:

Description: The 12 inch diameter VCP line is located on the northwest side of 221-U. It ties to the 18 inch VCP portion of the process sewer at a manhole north of 16th Street.

SubSite Code: 200-W-84-PL:2

SubSite Name: 200-W-84-PL:2, 18-Inch VCP

Classification: Accepted

ReClassification:

Description: The 18 inch portion of the process sewer begins at a manhole north of 16th Street and extends south and west to terminate in the 216-U-14 ditch.

SubSite Code: 200-W-84-PL:3

SubSite Name: 200-W-84-PL:3, 8-Inch VCP

Classification: Accepted

ReClassification:

Description: The 8 inch VCP line is located on the northwest side of 224-U and 222-U (extending to 291-U). It ties into the main process sewer line at a manhole north of 16th Street.

Site Code: 200-W-88-PL

Classification: Accepted

Site Names: 200-W-88-PL, T Plant Process Sewer Pipeline, 221-T Process Sewer, 24 Inch Process Sewer, 200-W-88 (See Subsites)

ReClassification:

Site Type: Radioactive Process Sewer

Start Date: 1944

Site Status: Inactive

End Date: 1995

Site Description: The main waste site is a vitrified clay process sewer pipeline connecting T Plant buildings to the 207-T Retention Basin. The main line is a 61 centimeter (24 inch) diameter, underground vitrified clay pipeline extending from 221-T and 224-T to the 207-T Retention Basin. Feed lines from various support facilities are listed as subsites. There are multiple 1.2 meter (4 foot) diameter, yellow concrete manholes visible at intervals along the sewer line. This site also includes a radiologically posted area around one of the manholes located northwest of 216-T-6 crib. (see subsites)

Waste Type: Process Effluent

Waste Description: The Process Sewer effluent contained chemicals and low level radiological contaminants from T Plant processes.

SubSites:

SubSite Code: 200-W-88-PL:1

SubSite Name: 200-W-88-PL:1, 24-Inch VCP Pipeline from Manhole South of 221-T to 207-T Retention Basin

Classification: Accepted

ReClassification:

Description:**SubSite Code:** 200-W-88-PL:2**SubSite Name:** 200-W-88-PL:2, 6-Inch VCP Line That Runs North to South (West of 221-T)**Classification:** Accepted**ReClassification:****Description:****SubSite Code:** 200-W-88-PL:3**SubSite Name:** 200-W-88-PL:3, 24-Inch Cast Iron Pipe Extending the Length of the Rear Side of 221-T, Connecting to the 24-Inch VCP Process Sewer**Classification:** Accepted**ReClassification:****Description:****SubSite Code:** 200-W-88-PL:4**SubSite Name:** 200-W-88-PL:4, 10-Inch Cast Iron Pipe from Rear (East Side) of 224-T Connecting to the 24-Inch VCP Process Sewer**Classification:** Accepted**ReClassification:****Description:****SubSite Code:** 200-W-88-PL:5**SubSite Name:** 200-W-88-PL:5, 4-Inch Steel Pipe from West Side of 224-T Connecting to the Process Sewer Manhole**Classification:** Accepted**ReClassification:****Description:****SubSite Code:** 200-W-88-PL:6**SubSite Name:** 200-W-88-PL:6, 6-Inch Vitrified Clay Line from 2706-T to 200-W-88-PL Process Sewer**Classification:** Accepted**ReClassification:****Description:****Site Code:** 200-W-97-PL**Classification:** Accepted**Site Names:** 200-W-97-PL; Encased Pipeline from 240-S-151 Diversion Box to 241-S-151 Diversion Box; Lines V508, V509, V512, V513, V514, V515, V516, V517/3603, and V519/1115**ReClassification:**

Site Status: Inactive **End Date:**

Site Description: The site is a cement encased, underground pipeline. The pipeline is marked with Underground Radioactive Material - Pipeline signs.

Waste Type: Process Effluent

Waste Description: The pipeline transferred U Plant canyon waste to the 241-S/SX Tank Farm via the 241-UX-154 diversion box.

Site Code: 200-W-105-PL **Classification:** Accepted

Site Names: 200-W-105-PL; Encased Transfer Line Between 241-UX-154 Diversion Box and 241-TX-155-Diversion Box; Encased Lines V375, V382, and 4859/4703 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a cement encased, underground pipeline. The pipeline is marked with Underground Radioactive Material - Pipeline signs.

Waste Type: Process Effluent

Waste Description: The pipeline transferred waste to the 241-TX Tank Farm.

Site Code: 200-W-125-PL **Classification:** Accepted

Site Names: 200-W-125-PL, 216-Z-1 Ditch Replacement Pipeline (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an underground buried pipeline. The pipeline is a 0.46 meter (18 inch) diameter vitrified clay pipe. When 216-Z-11 and 216-Z-19 ditches were discontinued, the effluent was diverted to 216-Z-20 via a 38 centimeter (15 inch) diameter polyvinyl chloride pipe.

SubSites:

SubSite Code: 200-W-125-PL:1

SubSite Name: 200-W-125-PL:1, 18-Inch VCP Pipeline from 231-Z to 216-Z-11 and 216-Z-19 Ditches

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-W-125-PL:2

SubSite Name: 200-W-125-PL:2, 15-Inch PVC Pipe from Manhole to 216-Z-20

Classification: Accepted

ReClassification:

Description:

Site Code: 200-W-129-PL **Classification:** Accepted

Site Names: 200-W-129-PL; Encased Pipeline from 241-T-151 and 241-T-152 to 241-TX-155 Diversion Box; Lines V399, V405, and V411 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:** 1950

Site Status: Inactive **End Date:**

Site Description: The site is an underground cement encasement containing three carbon steel pipelines. The encasement is marked and posted with Underground Radioactive Material and Pipeline signs.

Site Code: 200-W-130-PL **Classification:** Accepted

Site Names: 200-W-130-PL; Pipelines from 241-T-151 and 241-T-152 Diversion Boxes to 241-U-151 Diversion Box; Lines V445, V663, V601, and V416 and Spare Lines V662, V663, V682, and V683 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a soil trench that contains multiple stainless steel pipelines exiting the 241-T-151 and 241-T-152 diversion boxes. Each line is 7.6 centimeters (3 inches) in diameter. Three lines (V445, V663, V662) extend south from the 241-T-151 diversion box. Three lines (V601, V682, V683) extend south from 241-T-152 diversion box. One line from each diversion box (V445 and V601) merge together south of 241-T tank farm, south of 23rd Street and continue to 241-U-152 diversion box. The lines are encased in concrete only where they pass under 23rd Street.

Site Code: 200-W-131-PL **Classification:** Accepted

Site Names: 200-W-131-PL, V601, Spur to 241-TX Tank Farm **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:** 1944

Site Status: Inactive **End Date:**

Site Description: The site is a 7.6 centimeter (3 inch) diameter, stainless steel pipeline in a soil trench.

Site Code: 200-W-132-PL **Classification:** Accepted

Site Names: 200-W-132-PL; Pipelines from 221-T to 241-T-151 and 241-T-152; V653, V654, V667, V668, V669, V706, and V707 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:** 1945

Site Status: Inactive **End Date:**

Site Description: Seven, 7.6 centimeter (3 inch) diameter, pipelines are contained in the same soil trench. Three lines - V653, V654 and V706 are 7.6 centimeter (3 inch) diameter stainless steel lines. Four lines - V667, V668, V669 and V707 are 7.6 centimeter (3 inch) diameter carbon steel line. The group of pipelines is marked with Underground Radioactive Material and Pipeline signs.

Site Code: 200-W-140-PL **Classification:** Accepted

Site Names: 200-W-140-PL, Pipeline from 292-T(200-W-40) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is a 8.9 centimeter (3.5 inch) diameter, stainless steel underground pipeline.

Site Code: 200-W-142-PL **Classification:** Accepted

Site Names: 200-W-142-PL, Pipeline from 222-T to 216-T-8 Crib **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an underground, 8.9 centimeter (3.5 inch) diameter, stainless steel pipeline.

Site Code: 200-W-143-PL **Classification:** Accepted

Site Names: 200-W-143-PL; Encased Pipeline from 241-TX-154 Diversion Box to 241-TX-152 and 241-TX-155 Diversion Boxes; Lines V383, V384, V385, V387, V388, V391, V392, and V393 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, concrete encased pipeline. The pipelines inside the encasement are 9 centimeter (3.5 inch) diameter stainless steel lines. The majority of the encasement contains seven stainless steel pipelines (V383, V384, V385, V387, V388, V391, V392). There is a section of nine stainless steel lines near the 241-TX-154 Diversion Box. This section contains the seven lines (mentioned above) and two, short stub lines - V728 and V729. The section of pipeline near the 241-TX-155 Diversion Box contains ten lines. This section contains the seven main lines (mentioned above), an extra line from the 241-TX-302B catch tank (V393) and two short stub lines (V390 and V386).

Site Code: 200-W-146-PL **Classification:** Accepted

Site Names: 200-W-146-PL, 216-S-22 Crib Pipeline **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:** 1957

Site Status: Inactive **End Date:** 1967

Site Description: The pipeline is a 10 centimeter (4 inch) diameter, vitrified clay pipe.

Site Code: 200-W-149-PL **Classification:** Accepted

Site Names: 200-W-149-PL, Pipelines Related to 216-S-20 Crib (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: There are three source facilities that fed the 216-S-20 crib. Each source had separate pipelines to the crib. Two, side by side, 9 centimeter (3.5 inch) diameter stainless steel lines extends from 219-S to the 216-S-20 Crib. One 20 centimeter (8 inch) diameter, carbon steel line extends from the 207-SL Retention Basin valve pit to the 216-S-20 Crib. Another 15 centimeter (6 inch) diameter carbon steel pipeline extends from the truck unloading station to the 216-S-20 crib. (see subsites)

SubSites:

SubSite Code: 200-W-149-PL:1

SubSite Name: 200-W-149-PL:1, Two Stainless Steel Lines from 219-S to 216-S-20 Crib

Classification: Accepted

ReClassification:

Description: Two, side by side, 9 centimeter (3.5 inch) diameter stainless steel lines extends from 219-S to the 216-S-20 Crib.

SubSite Code: 200-W-149-PL:2

SubSite Name: 200-W-149-PL:2, 8-Inch Diameter Carbon Steel Line from 207-SL Retention Basin to 216-S-20 Crib

Classification: Accepted

ReClassification:

Description: One 20 centimeter (8 inch) diameter, carbon steel line extends from the 207-SL Retention Basin valve pit to the 216-S-20 Crib.

SubSite Code: 200-W-149-PL:3

SubSite Name: 200-W-149-PL:3, 8-Inch Diameter Carbon Steel Line from Lab Waste Truck Unloading Station to the 216-S-20 Crib

Classification: Accepted

ReClassification:

Description: One 15 centimeter (6 inch) diameter carbon steel pipeline extends from the truck unloading station to the 216-S-20 crib.

Site Code: 200-W-150-PL **Classification:** Accepted

Site Names: 200-W-150-PL, Pipelines Associated with 216-S-13 Crib (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**
Site Description: The waste site is a series of pipelines extending from the 205-S, 204-S, 203-S and 267-S facilities to the 216-S-13 Crib.

SubSites:

SubSite Code: 200-W-150-PL:1
SubSite Name: 200-W-150-PL:1, Pipeline from 276-S to the 216-S-13 Crib
Classification: Accepted
ReClassification:
Description: The pipeline extends from the 276-S building to the 216-S-13 crib. It is constructed of 15 centimeter (6 inch) diameter vitrified clay pipe, wrapped in concrete.

SubSite Code: 200-W-150-PL:2
SubSite Name: 200-W-150-PL:2, Pipeline from 203-S Connecting to the 276-S Crib Line
Classification: Accepted
ReClassification:
Description: The pipeline is constructed of 10 centimeter (4 inch) diameter vitrified clay pipe wrapped in concrete. It extends southward from the 203-S building and connects to the 15 centimeter (6" inch) line going to the 216-S-13 crib. (see subsite 1)

SubSite Code: 200-W-150-PL:3
SubSite Name: 200-W-150-PL:3, Pipeline from 204-S Connecting to the 203-S Line
Classification: Accepted
ReClassification:
Description: The pipeline extends from the 204-S building It is constructed of 15 centimeter (6 inch) diameter vitrified clay pipe, wrapped in concrete. It connects to the pipeline coming out of 203-S (See subsite 2).

SubSite Code: 200-W-150-PL:4
SubSite Name: 200-W-150-PL:4, Pipeline from the 205-S Vault Connecting to the 204-S Line
Classification: Accepted
ReClassification:
Description: The pipeline is constructed of 10 centimeter (4 inch) diameter vitrified clay pipe wrapped in concrete. It extends southeast from the 205-S building and connects to the 15 centimeter (6" inch) line coming out of the 204-S facility. (see subsite 3).

Site Code: 200-W-151-PL **Classification:** Accepted
Site Names: 200-W-151-PL, 200-W-42 Pipe Remaining **ReClassification:**
Under 16th Street
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The piece of pipeline remaining under 16th Street is not visible.

Waste Type: Process Effluent

Waste Description: From 1952 to 1960, the line transferred waste from 221-U, 224-U and 291-U to the 216-U-8 crib. The 216-U-12 crib replaced the 216-U-8 crib in 1960. The pipeline was extended further south to the 216-U-12 location. From April 1960 to May 1967, the pipeline received waste from the 291-U-1 Stack drainage, 241-WR Vault waste, and 224-U process condensate via C-5 Tank. Disposal of contaminated water from 241-WR Vault was accomplished in October 1965 and included 3.14 kilograms (6.9 pounds) of thorium. From May 1967 to September 1972, the site received the above wastes excluding the 241-WR Vault waste and occasional waste via the C-7 Tank in the 244-U Building. From September 1972 to November 1981, the site was taken out of service. After November 1981, the pipeline received process condensate (corrosive: typical pH range is 0.5-1.5) from the 224-U Building. In the past, this facility also received miscellaneous storm drain wastes from 224-U. A Limited Field Investigation was done in 1994 to characterize selected waste sites in the 200-UP-2 Operable Unit. Fourteen surface and subsurface soil samples along with four vegetation samples were collected to characterize the vitrified clay pipeline (VCP) leading to the 216-U-8 Crib. An attempt was made to determine if the contamination had spread laterally from the pipeline by digging holes with an auger rig where subsurface contamination had been identified. An increase in activity was noted at approximately 3 meters (10 feet). At a depth of 3.3 meters (11 feet) the auger was stopped by large cobbles. The samples were analyzed for cesium-137, strontium-90, gross alpha and gross beta. Specific sample data is documented in BHI-00033.

Site Code: 200-W-152-PL

Classification: Accepted

Site Names: 200-W-152-PL, Pipeline from 202-S to 2904-S-170, 207-S Retention Basin and 216-S-17 Pond, REDOX Process Sewer

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The site is an underground, 61 centimeter (24 inch) diameter vitrified clay pipe that begins at the 202-S (REDOX) building. The pipeline is not visible, but a metal sample shack is located over the western end, above the 2904-S-170 control structure. Seven manholes are visible on the surface along the pipeline.

Site Code: 200-W-153-PL

Classification: Accepted

Site Names: 200-W-153-PL, Steel Pipeline from 240-S-151 Diversion Box to the 2904-S-172 and 2904-S-171 Control Structures (See Subsite)

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground a 25 centimeter (10 inch) diameter steel pipeline to the 2904-S-172 Control Structure and a short 30 centimeter (12 inch) diameter pipeline that exits the south side of the Control Structure and connects to the 61 centimeter VCP line (sitecode 200-W-152-PL). See subsites 1 and 2.

SubSites

SUBSITES

SubSite Code: 200-W-153-PL:1
SubSite Name: 200-W-153-PL:1, Pipeline from 240-S-151 to 2904-S-172
Classification: Accepted
ReClassification:
Description: A 25 centimeter (10 inch) diameter underground steel pipeline from the 240-S-151 Diversion Box to the 2904-S-172 Control Structure and continues to the 2904-S-171 Control Structure.

SubSite Code: 200-W-153-PL:2
SubSite Name: 200-W-153-PL:2, Pipeline from 2904-S-172 to 216-S-17 Pond
Classification: Accepted
ReClassification:
Description: A 30 centimeter (12 inch) diameter steel pipeline that exits the south side of the Control Structure and connects to the 61 centimeter (24 inch) VCP line (sitecode 200-W-152-PL).

Site Code:	200-W-154-PL	Classification:	Accepted
Site Names:	200-W-154-PL, Pipeline from 200-W-152-PL to 216-S-5 Crib	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground 61 centimeter (24 inch) diameter vitrified clay pipeline that feeds the 216-S-5 crib. The pipeline connects to the 200-W-152-PL.		

Site Code:	200-W-156-PL	Classification:	Accepted
Site Names:	200-W-156-PL, 216-S-6 Crib Pipeline, Pipeline from 200-W-155-PL to the 2904-S-171 Control Structure	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground 46 centimeter (18 inch) diameter vitrified clay pipeline extending from Manhole 8 on the 200-W-155-PL pipeline to the 2904-S-171 Control Structure and the 216-S-6 crib.		

Site Code:	200-W-157-PL	Classification:	Accepted
Site Names:	200-W-157-PL, REDOX Chemical Sewer, Pipeline from 202-S to 200-W-152-PL, Pipeline from 205-S to REDOX Chemical Sewer (See Subsites)	ReClassification:	
Site Type:	Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: The site is an underground vitrified clay pipeline with diameters of 20 centimeters (8 inch) and 30 centimeters (12 inch). A 10 centimeter (4 inch) diameter vitrified clay pipe extends from the 205-S building to the main chemical sewer line.

SubSites:

SubSite Code: 200-W-157-PL:1

SubSite Name: 200-W-157-PL:1, REDOX Chemical Sewer Line from 202-S to REDOX Process Sewer (Sitecode 200-W-152-PL)

Classification: Accepted

ReClassification:

Description: An underground vitrified clay pipeline with diameters of 20 centimeters (8 inch) and 30 centimeters (12 inch).

SubSite Code: 200-W-157-PL:2

SubSite Name: 200-W-157-PL:2, 10-Centimeter (4-Inch) VCP Chemical Sewer Line from 205-S

Classification: Accepted

ReClassification:

Description: A 10 centimeter (4 inch) diameter vitrified clay pipe extends from the 205-S building to the main chemical sewer line.

Site Code: 200-W-158-PL

Classification: Accepted

Site Names: 200-W-158-PL, Pipeline from 293-S to 200-W-152-PL

ReClassification:

Site Type: Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is an underground 20 centimeter (8 inch diameter) vitrified clay pipeline from the 293-S building to the 200-W-152-PL pipeline. It connects to the REDOX Process Sewer (200-W-152-PL) on the south side of 202-S at Manhole number 4.

Site Code: 200-W-159-PL

Classification: Accepted

Site Names: 200-W-159-PL, Cooling Water Lines from 241-SX-401 and 241-SX-402 to 216-U-10 Pond

ReClassification:

Site Type: Radioactive Process Sewer

Start Date:

Site Status: Inactive

End Date:

Site Description: The waste site is two 20 centimeter (8 inch) diameter, underground carbon steel pipelines that carried cooling water from the 241-SX-401 and 241-SX-402 Condenser Shielding buildings to the 216-U-10 Pond.

Site Code: 200-W-160-PL

Classification: Accepted

Site Names: 200-W-160-PL, Pipeline from 241-SX-401

ReClassification:

and 241-SX-402 to 216-S-21 Crib

Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is an underground, 20 centimeter (8 inch) diameter, carbon steel pipeline.

Site Code: 200-W-161-PL **Classification:** Accepted
Site Names: 200-W-161-PL, Pipeline from 242-S to 216-S-25 Crib, Line 557 **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter, carbon steel pipeline.

Site Code: 200-W-162-PL **Classification:** Accepted
Site Names: 200-W-162-PL, Pipeline from 241-SX-701 to 216-SX-2 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is an underground, 15 centimeter (6 inch) diameter, vitrified clay pipe.

Site Code: 200-W-163-PL **Classification:** Accepted
Site Names: 200-W-163-PL, T Plant Process Sewer, 18-Inch 221-T Process Sewer Pipeline (See Subsites) **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 46 centimeter (18 inch) diameter vitrified clay pipeline. Several manholes are visible at the surface. Feed lines are listed as subsites.

SubSites:

SubSite Code: 200-W-163-PL:1
SubSite Name: 200-W-163-PL:1, 18-Inch and 12-Inch Vitrified Clay Pipeline from 221-T to 216-T-4 Ditch
Classification: Accepted
ReClassification:
Description: The pipeline is constructed of 18 inch VCP from the manhole westward to the 216-T-4 ditch. The pipeline is constructed of 12 inch VCP along the edge of 221-T.

SubSite Code: 200-W-163-PL:2
SubSite Name: 200-W-163-PL:2, 8-Inch Carbon Steel Line from 271-T to Main 18-Inch VCP Process Sewer Pipeline

Classification: Accepted

ReClassification:

Description:

SubSite Code: 200-W-163-PL:3

SubSite Name: 200-W-163-PL:3; Carbon Steel Pipeline from 291-T, 222-T and 224-T Connecting to Main 18-Inch VCP Process Sewer Line

Classification: Accepted

ReClassification:

Description:

Site Code: 200-W-164-PL **Classification:** Accepted

Site Names: 200-W-164-PL, Pipeline from 207-T Retention Basin to the 216-T-4 Ditch **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground 61 centimeter (24 inch) diameter vitrified clay pipe.

Site Code: 200-W-165-PL **Classification:** Accepted

Site Names: 200-W-165-PL, Pipeline from Tank 241-TX-112 to 207-T Retention Basin **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground 15 centimeter (6 inch) diameter pipe.

Site Code: 200-W-166-PL **Classification:** Accepted

Site Names: 200-W-166-PL, Pipeline from 242-T Evaporator Building to the 207-T Retention Basin **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground 10 centimeter (4 inch) diameter cast iron pipeline. The pipeline is marked with signs. It passes beneath several surface stabilized areas that are posted as Underground Radioactive Material Areas.

Site Code: 200-W-168-PL **Classification:** Accepted

Site Names: 200-W-168-PL, 216-U-3 Crib and 216-U-14 Ditch Pipelines (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two parallel underground, 5 centimeter (2 inch) diameter carbon steel pipelines buried in the same soil trench. Both lines originate at the 241-U-110 tank. One line extends to the 216-U-3 crib. The other line diverts to the 216-U-14 ditch.

SubSites:

SubSite Code: 200-W-168-PL:1
SubSite Name: 200-W-168-PL:1, Pipeline from 241-U-110 to 216-U-3 Crib
Classification: Accepted
ReClassification:

Description:

SubSite Code: 200-W-168-PL:2
SubSite Name: 200-W-168-PL:2, Pipeline from 241-U-110 to the 216-U-14 Ditch
Classification: Accepted
ReClassification:

Description:

Site Code: 200-W-169-PL **Classification:** Accepted
Site Names: 200-W-169-PL, Pipeline Between 216-U-10 Pond and 216-U-11 Overflow **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 46 centimeter (18 inch) diameter, corrugated metal pipe.

Site Code: 200-W-173-PL **Classification:** Accepted
Site Names: 200-W-173-PL, 216-T-33 Crib Pipeline, Pipeline from 2706-T to 216-T-33 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The majority of the waste site is an underground, 20 centimeter (8 inch) diameter, vitrified clay pipeline that fed the 216-T-33 crib. A portion of the pipeline from 2706-T to the weir pit is an underground 15 centimeter (6 inch diameter) vitrified clay pipe.

Site Code: 200-W-175-PL **Classification:** Accepted
Site Names: 200-W-175-PL; Pipeline to Route Waste from 241-T-112 to 216-TY-201 Flush Tank and 216-T-26, 216-T-27, and 216-T-28 Cribs; Line V681 **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an underground, 8.9 centimeter (3.5 inch) diameter, carbon steel pipeline extending from the 241-T-112 tank to the 216-TY-201 Flush Tank.

Site Code: 200-W-176-PL **Classification:** Accepted

Site Names: 200-W-176-PL; Encased Transfer Lines Between 241-TX-153 Diversion Box and 241-TX-155 Diversion Box; Lines V396, V397, V401, V403, V407, V409, and V413 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground concrete transfer line encasement. All of the lines inside the encasement are 9 centimeter (3.5 inch) diameter stainless steel lines.

Site Code: 200-W-177-PL **Classification:** Accepted

Site Names: 200-W-177-PL, Direct Buried Tank Farm Lines Between 241-TXR-151 and 241-TX-155 Diversion Boxes, Lines V7616 and V7653 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two 9 centimeter (3.5 inch) stainless steel lines buried in a common soil trench. Line V7616 extends between the 241-TXR-151 Diversion Box (inside the 241-TX tank farm) to the 241-TX-155 Diversion Box (outside the tank farm). Line V7653 extends from the 244 TXR Vault (inside the 241-TX tank farm) to the 241-TX-155 Diversion Box (outside the tank farm).

Site Code: 200-W-178-PL **Classification:** Accepted

Site Names: 200-W-178-PL, Pipeline from 241-Z to 244-TX DCRT, Lines HSW-202 and HSW-203 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two, underground, 5 centimeter (2 inch) stainless steel pipelines buried in the same soil trench. The stainless steel lines are double (pipe in pipe) pipe construction.

Site Code: 200-W-179-PL **Classification:** Accepted

Site Names: 200-W-179-PL; Pipelines Between 241-S-152 Diversion Box and 241-U Tank Farm; Lines SL100, SL101, SN216/281, and DR327 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is four carbon steel lines buried in the same soil trench. Two lines (SL100 and SL101) are 5 centimeter diameter pipes double contained inside 10 centimeter (4 inch) diameter pipes. Two lines (SN216/281 and DR327) are 7.6 centimeter (3 inch) diameter pipes double contained within 15 centimeter (6 inch) diameter pipes.

Site Code: 200-W-180-PL **Classification:** Accepted

Site Names: 200-W-180-PL, Pipelines from 221-T to 216-T-1 Ditch (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter, vitrified clay pipe that fed the 216-T-1 ditch. The vitrified clay pipes extending out of the 221-T building are smaller diameter (10 centimeter (4 inch) and 15 centimeter (6 inch). A 10 centimeter (4 inch) diameter cast iron pipe from the 277-T building connects to the main vitrified clay line (see subsite).

SubSites:

SubSite Code: 200-W-180-PL:1

SubSite Name: 200-W-180-PL:1, VCP Pipeline

Classification: Accepted

ReClassification:

Description: Subsite 1 is the main 8 inch VCP pipeline that fed the 216-T-1 ditch and the two smaller diameter VCP pipes (6 inch and 4 inch) that exit the 221-T building.

SubSite Code: 200-W-180-PL:2

SubSite Name: 200-W-180-PL:2, Cast Iron Pipe

Classification: Accepted

ReClassification:

Description: Subsite 2 is the 4 inch diameter cast iron pipe from 277-T to the main VCP ditch pipeline.

Site Code: 200-W-181-PL **Classification:** Accepted

Site Names: 200-W-181-PL; Transfer Lines Between 241-U-152 and 241-U-153 Diversion Boxes; Lines V426, V427, and V428/V461 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is three, 9 centimeter (3.5 inch) diameter, stainless steel lines buried in the same soil trench.

Site Code: 200-W-182-PL **Classification:** Accepted

Site Names: 200-W-182-PL; Encased Transfer Lines Between 241-U-152 Diversion Box and 241-TX-152 and 241-TX-155 Diversion Boxes; Lines V398, V404, and V410 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is three underground, 7.6 centimeter (3 inch) diameter, stainless steel lines in the same concrete encasement.

Site Code: 200-W-183-PL **Classification:** Accepted

Site Names: 200-W-183-PL, Transfer Lines Between 241-U-151 and 241-U-152 Diversion Boxes, Lines V422/V452 and V421/V453 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two, 7.6 centimeter (3 inch) diameter, carbon steel lines buried in the same soil trench. Each line is double contained inside a 15 centimeter (6 inch) diameter pipe.

Site Code: 200-W-184-PL **Classification:** Accepted

Site Names: 200-W-184-PL; Drain Lines from 241-U-151, 241-U-152 and 241-U-153 Diversion Boxes to 241-U-301 Catch Tank; Line V478 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 10 centimeter (4 inch) diameter, carbon steel pipeline that connects the 241-U-151, 241-U-152 and 241-U 153 Diversion Boxes to the 241-U-301 Catch Tank. Individual 10 centimeter (4 inch) diameter drain lines from the three diversion boxes connect to the same 10 centimeter (4 inch) diameter pipeline to the catch tank.

Site Code: 200-W-185-PL **Classification:** Accepted

Site Names: 200-W-185-PL; Transfer Lines Between 241-U-151 and 241-U-153 Diversion Boxes; Lines V450 and V451 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two underground, 9 centimeter (3.5 inch) diameter, stainless steel lines buried in the same soil trench.

Site Code: 200-W-186-PL **Classification:** Accepted

Site Names: 200-W-186-PL, Transfer Lines from 240-S- **ReClassification:**

152 Diversion Box to 204-S and 205-S,
Lines 1006 and 1045

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground concrete encasement that contains two 9 centimeter (3.5 inch) diameter stainless steel pipelines.

Site Code: 200-W-187-PL **Classification:** Accepted

Site Names: 200-W-187-PL; Transfer Lines Between 240-S-151 and 240-S-152 Diversion Boxes; Lines V552, V553, and V555 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is a concrete encasement containing three 9 centimeter (3.5 inch) diameter stainless steel pipelines.

Site Code: 200-W-190-PL **Classification:** Accepted

Site Names: 200-W-190-PL, Discharge Line from 240-S-151 Diversion Box to 240-S-302 Catch Tank, Line V554 **ReClassification:**

Site Type: Direct Buried Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 7.6 centimeter diameter (3 inch), stainless steel line connecting the 240-S-151 Diversion Box to the 240-S-302 Catch Tank.

Site Code: 200-W-191-PL **Classification:** Accepted

Site Names: 200-W-191-PL; Encased Transfer Line Between 241-TX-155 and 241-TY-153 Diversion Boxes; Lines V402, V406, V408, and V412 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is a concrete encasement that contains three 7.6 centimeter (3 inch) diameter stainless steel lines and one 7.6 centimeter (3 inch) diameter carbon steel line.

Site Code: 200-W-192-PL **Classification:** Accepted

Site Names: 200-W-192-PL; U Plant Process Sewer; Pipeline from 221-U, 222-U and 224-U to the 207-U Retention Basin (See Subsites) **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The majority of the waste site is an underground, 61 centimeter (24 inch) diameter, vitrified clay pipe that carried waste from U Plant operations to the 207-U Retention Basin. A 61 centimeter (24 inch) cast iron line from 221-U, two 25 centimeter (10 inch) cast iron lines and a 10 centimeter (4 inch) diameter steel line from 224-U feed the main VCP process sewer.

SubSites:

SubSite Code: 200-W-192-PL:1
SubSite Name: 200-W-192-PL:1, 24-Inch VCP Process Sewer Pipeline
Classification: Accepted

ReClassification:**Description:**

SubSite Code: 200-W-192-PL:2
SubSite Name: 200-W-192-PL:2, Two 10-Inch Cast Iron Lines from 224-U to the U Plant Process Sewer
Classification: Accepted

ReClassification:**Description:**

SubSite Code: 200-W-192-PL:3
SubSite Name: 200-W-192-PL:3, 4-Inch Schedule 40 Steel Pipeline from 224-U to U Plant Process Sewer
Classification: Accepted

ReClassification:**Description:**

SubSite Code: 200-W-192-PL:4
SubSite Name: 200-W-192-PL:4, 24-Inch Cast Iron Pipeline from 221-U to U Plant Process Sewer
Classification: Accepted

ReClassification:

Description: This pipeline extends along the back side to 221-U and is connected to the corresponding cells in the canyon building.

Site Code: 200-W-196-PL **Classification:** Accepted

Site Names: 200-W-196-PL, Pipelines from Railcar Unloading Stations to 216-T-34 Crib **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is two parallel underground pipelines that extend from railcar Unloading Stations 1 and 2 to the 216-T-34 crib. The two lines are buried in the same soil trench. One of the pipelines is constructed of 20 centimeter (8 inch) diameter vitrified clay. The other pipeline is constructed of 15 centimeter (6 inch) diameter polyvinyl chloride. The railcar unloading stations

are WIDS sitecode 200-W-21.

Site Code:	200-W-197-PL	Classification:	Accepted
Site Names:	200-W-197-PL, Pipelines from Railcar Unloading Stations to 216-T-35 Crib	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is two parallel underground polyvinyl chloride pipelines that extend from the 216-T-34 crib pipeline to the 216-T-35 crib. The two lines are buried in the same soil trench. One of the pipelines is constructed of 20 centimeter (8 inch) diameter polyvinyl chloride. The other pipeline is constructed of 15 centimeter (6 inch) diameter polyvinyl chloride.		

Site Code:	200-W-198-PL	Classification:	Accepted
Site Names:	200-W-198-PL, Pipelines from Truck Unloading Station to 216-T-34 and 216-T-35 Cribs	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground, 15 centimeter (6 inch diameter), polyvinyl chloride pipeline from the truck unloading station to the lines that fed the 216-T-34 and 216-T-35 cribs.		

Site Code:	200-W-199-PL	Classification:	Accepted
Site Names:	200-W-199-PL, Pipelines from Building 231-Z to 231-W-151 Vault	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is three underground, 7.6 centimeter (3 inch) diameter, stainless steel pipelines that fed the 231-W-151 vault. The three lines are direct buried in the same soil trench.		

Site Code:	200-W-200-PL	Classification:	Accepted
Site Names:	200-W-200-PL, 216-Z-16 Crib Pipeline	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The waste site is an underground, polyvinyl chloride pipeline that transferred waste from the 231-Z building to the 216-Z-16 crib. The majority of the pipeline is 10 centimeters (4 inches) in diameter. A short length of pipe is 7.6 centimeters (3 inches) in diameter.		

Site Code:	200-W-201-PL	Classification:	Accepted
Site Names:	200-W-201-PL, 216-Z-17 Crib Pipeline	ReClassification:	

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter stainless steel line connecting the 231-W-151 vault to the 216-Z-10 reverse well.

Site Code: 200-W-212-PL **Classification:** Accepted

Site Names: 200-W-212-PL; Encased Transfer Line from 240-S-151 Diversion Box to Pipeline 200-W-153-PL; Lines V550, V551, V544, V546, V548, and V549 **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is a six line, concrete encasement from the 240-S-151 Diversion Box. Three lines (V546, V549, V551) are stubbed off and were never used. The other three lines (V544, V548 and V550) connect to a reducer, where the three lines become one line. The three lines carried REDOX steam condensate waste. They exit the encasement and feed into 200-W-153-PL.

Site Code: 200-W-218-PL **Classification:** Accepted

Site Names: 200-W-218-PL, Pipeline from 216-U-10 Pond to 216-U-9 Ditch **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 0.8 meter (30 inch) corrugated metal pipe that transferred waste from the 216-U-10 pond to the 216-U-9 ditch.

Site Code: 200-W-221-PL **Classification:** Accepted

Site Names: 200-W-221-PL, Laundry Waste Crib (LWC) Pipeline **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 20 centimeter (8 inch) diameter vitrified clay pipe that fed the Laundry Waste Crib (216-W-LWC). It also include the drain line from the Mask Cleaning Station (MO-412).

Site Code: 200-W-222-PL **Classification:** Accepted

Site Names: 200-W-222-PL, 207-U Retention Basin Outlet Pipeline to the 216-U-14 Ditch **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is an underground, 0.61 meter (2 foot) diameter vitrified clay pipe. The pipe carried effluent out of the 207-U Retention Basin to the 216-U-14 Ditch.

Site Code: 200-W-223-PL **Classification:** Accepted
Site Names: 200-W-223-PL, Pipeline from 242-S Evaporator to 216-U-14 Ditch **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 0.61 meter (2 foot) diameter corrugated metal pipe that transferred effluent from the 242-S Evaporator building to the 216-U-14 ditch.

Site Code: 200-W-226-PL **Classification:** Accepted
Site Names: 200-W-226-PL; Pipeline from 224-T Plutonium Concentration Facility to 241-T-361 Settling Tank and 216-T-3 Reverse Well; Lines V326, V671, and V706 **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter stainless steel pipeline that carried waste from the 224-T Plutonium Concentration Facility to the 216-T-361 Settling Tank and the 216-T-3 Reverse Well.

Site Code: 200-W-227-PL **Classification:** Accepted
Site Names: 200-W-227-PL, Pipeline from 221-T Separations Facility to 216-T-6 Crib **ReClassification:**
Site Type: Radioactive Process Sewer **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is an underground, 7.6 centimeter (3 inch) diameter stainless steel pipeline that fed the 216-T-6 cribs.

Site Code: 241-WR VAULT **Classification:** Accepted
Site Names: 241-WR VAULT, 241-WR Vault (Tanks - 001 Through -009), 241-WR-01 Thru 09, 241-WR Diversion Station Vault, 241WR, 244-WR Vault, 296-U-6 Stack, IMUST, Inactive Miscellaneous Underground Storage Tank (See Subsites) **ReClassification:**
Site Type: Receiving Vault **Start Date:** 1952
Site Status: Inactive **End Date:** 1976
Site Description: The vault is a below grade, reinforced concrete structure. There are nine compartments arranged in two rows with a 189,000 liter (50,000 gallon) tank in each compartment. A concrete wall separates the two rows of tanks. In addition to the tanks, the vault contains miscellaneous agitators, pumps, and valves. It is marked and posted with Underground Radioactive Material area signs. The exhaust stack and dry well are included in this site. See sub-site descriptions.

Waste Type: Process Effluent

Waste Description: The site waste contains nitric acid, tributyl phosphate, uranyl nitrate hexahydrate from the TBP process, and thorium nitrate storage. The unit also contains radioactively contaminated equipment and structures. Approximately 60 curies of beta contamination remains inside the vault structure.

SubSites:

SubSite Code: 241-WR VAULT:1

SubSite Name: 241-WR VAULT:1, 296-U-6 Stack

Classification: Accepted

ReClassification:

Description: The surface features of the stack were removed. The remaining below grade structure includes a 1.04 meter (3 foot 8 inch) octagonal concrete foundation extending 1.23 meters (4 feet) below grade, which encases a portion of the 45.72 centimeter (18 inch) stack that extends 0.31 meters below grade. Above grade, a 5.08 centimeter (2 inch) drain pipe exits northwest side of the stack, under the duct, and enters the ground there. A 1.9 centimeter (0.75 inch) drain pipe exits the duct just before meeting the stack, and flows straight down meeting the 5.08 centimeter (2 inch) drain below grade. A 2.54 centimeter (1 inch) fan drain pipe exits the concrete foundation below the fan, above grade. This pipe enters the ground there and joins the 5.08 centimeter pipe to a 60.96 centimeter (24 inch) dry well.

The 3.81 centimeter (18 inch), carbon-steel, 296-U-6 vault exhaust stack was mounted on a 1.04 meter (3 foot 8 inch) octagonal concrete foundation. The stack reached 14.63 meters (48 feet) above grade level. The stack was used to discharge unfiltered ventilation air from the storage of UNH for feed to 221-U, then from HNO₃ storage, and lastly from thorium storage.

SubSite Code: 241-WR VAULT:2

SubSite Name: 241-WR VAULT:2, 296-U-6 Dry Well

Classification: Accepted

ReClassification:

Description: A 5.08 centimeter (2 inch) drain pipe runs from the north side of the concrete stack foundation, southeast to a 60.96 centimeter (24inch) dry well. The exact location of the dry well is not known. The dry well is located southeast of where the stack once stood.

Site Code: 241-Z

Classification: Accepted

Site Names: 241-Z, 241-Z Treatment and Storage Tanks, 241-Z Tank Farm, 241-Z Treatment and Storage System, 241-Z-D-4, 241-Z-D-5, 241-Z-D-7, 241-Z-D-8, 241-Z Sump, 241-Z Tank Pit

ReClassification:

Site Type: Neutralization Tank

Start Date: 1948

Site Status: Inactive

End Date:

Site Description: Site currently consists the below grade concrete vault containing four storage and treatment tanks. The above ground features have been removed. The site was activated on November 24,

1948. The RCRA TSD portion of this facility consists of the tanks (excluding D-6), the internal piping, the concrete vaults, ancillary equipment and the soil directly below the tanks. The external pipelines leading from buildings in 234-5Z to the 241-Z facility are not considered part of this site.

Waste Type: Process Effluent

Waste Description: The unit received waste from 234-5Z. Before treatment, the waste was corrosive (less than pH 2.0) containing predominately nitric acid. Additional constituents known to be present include chromium, lead, aluminum nitrate, aluminum fluoride, and lower concentrations of potassium hydroxide, potassium fluoride, magnesium nitrate, ferric nitrate, calcium nitrate, and other trace metal ions. Treatment occurred in a batch process consisting of the addition of sodium hydroxide, ferric nitrate and sodium nitrate. Batch discharges averaged 125 gallons per week from 1991 to 1994. No discharges were made during 1995.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-79

Site Names: UPR-200-W-79, Contamination Spread at 241-Z, UN-200-W-79

Reason: Within Boundary Of Larger Site

Site Code: 600-284-PL **Classification:** Accepted

Site Names: 600-284-PL; Old Cross Site Transfer Line; Original Cross Site Transfer Pipeline; Piping Associated with UPR-600-20, Cross Site Transfer Line; Lines V360, V361, V362, V363, V364, and V366; Cross Site Transfer Pipeline **ReClassification:**

Site Type: Encased Tank Farm Pipeline **Start Date:** 1952

Site Status: Inactive **End Date:** 1995

Site Description: The waste site is the underground pipeline that is located beneath the surface stabilized UPR-600-20 soil contamination site. It is posted with Underground Radioactive Material signs.

Site Code: HSVP **Classification:** Accepted

Site Names: HSVP, Hot Semiworks Valve Pit, 201-C Diversion Box, Semiworks Valve Pit, 201-C Valve Box **ReClassification:**

Site Type: Valve Pit **Start Date:** 1951

Site Status: Inactive **End Date:** 1986

Site Description: The site is a sealed, concrete-filled, vertically configured, stainless-steel cylinder that is buried beneath the ash barrier which was placed over the decommissioned 201-C Process Building (see 200-E-41). The surface stabilized area is posted with Underground Radioactive Material signs. The valve pit is not separately marked or posted.

Waste Type: Process Effluent

Waste Description: This site has been decommissioned. During operation, this valve pit routed pilot REDOX wastes, pilot PUREX wastes, and wastes from strontium recovery efforts to tank farm facilities. It is estimated that approximately 23 kilograms (50 pounds) of lead shielding may be stored in each diversion box.

Site Code: UPR-200-E-3 **Classification:** Accepted

Site Names: UPR-200-E-3, Line Leak from 221-B to 241-BX-154, UN-200-E-3 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1951

Site Status: Inactive **End Date:**

Site Description: The release is not separately marked or posted.

Waste Type: Process Effluent

Waste Description: The release consisted of B Plant first cycle waste with dose rates up to 120 rad per hour at a distance of 0.4 meters (1.5 feet).

Site Code: UPR-200-E-7 **Classification:** Accepted

Site Names: UPR-200-E-7, UN-200-E-7, Cave-In Near 216-B-9 (241-B-361 Crib), Pipeline Leak **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1954

Site Status: Inactive **End Date:**

Site Description: The site is an unplanned release to the soil from a waste line break. A single metal post with a WIDS sign marks an estimated release location near the 216-B-9 crib.

Waste Type: Process Effluent

Waste Description: The release consisted of 18,925 liters (5000 gallons) of B Plant cell wash water from the 5-9 tank. The maximum dose rate was 1.7 rads/hour. Approximately, 2.8 square meters (30 square feet) of soil was contaminated by this release.

Site Code: UPR-200-E-42 **Classification:** Accepted

Site Names: UPR-200-E-42, 241-AX-151 Release, UN-200-E-42 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1972

Site Status: Inactive **End Date:**

Site Description: A WIDS sign has been placed near the diversion box structure to document the release. The release area is surrounded with posts and chain. It is posted with multiple radiological postings including Radiation Area, Underground Radioactive Material Area and Contamination Area.

Waste Type: Soil

Waste Description: The contamination spread consisted of specks with beta/gamma levels ranging 300 millirad per hour at the diversion box and from 300 to 3,000 counts per minute found on asphalt and soil

surfaces in the vicinity of the 241-AX-151 diversion box.. The 241-AX-151 diversion box routed waste from PUREX to the 244-AR Vault and to the 241-AY and 241-AZ Tank Farms.

Site Code: UPR-200-E-45 **Classification:** Accepted

Site Names: UPR-200-E-45, UN-200-E-45, Contamination Spread from the 241-B-154 Diversion Box **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1974

Site Status: Inactive **End Date:** 1974

Site Description: A large area on the northeast corner of 7th Street and Baltimore Avenue is surrounded with post and chain and marked as an Underground Radioactive Material (URM) area. The URM surrounds the 241-B-154 Diversion Box, that has been covered with a coating of gray grout. The original Unplanned Release is not separately marked or posted.

Waste Type: Process Effluent

Waste Description: Loose, dried, contamination particles (specks) were spread from the inside of the diversion box to the ground in the vicinity of 7th and Baltimore. The contamination spread included beta/gamma readings up to 50,000 counts per minute on the soil surface.

Site Code: UPR-200-E-67 **Classification:** Accepted

Site Names: UPR-200-E-67, UN-216-E-67, Excavation of Radioactively Contaminated Pipe Encasement (V004, V005, V006, V007, V008) UN-200-E-67 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1984

Site Status: Inactive **End Date:** 1984

Site Description: The 1984 excavation has been backfilled. A WIDS sign has been placed at the approximate location of the excavation.

Waste Type: Misc. Trash and Debris

Waste Description: The contamination levels consisted of beta/gamma readings ranging from 1,000 to 1,500 milliard per hour on the excavated pipe.

Site Code: UPR-200-E-77 **Classification:** Accepted

Site Names: UPR-200-E-77, UN-216-E-5, 241-B-154 Diversion Box Ground Contamination, UN-200-E-77 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1946

Site Status: Inactive **End Date:**

Site Description: A large graveled area on the northeast corner of 7th Street and Baltimore Avenue is surrounded with post and chain and marked as an Underground Radioactive Material (URM) area. The URM surrounding the 241-B-154 Diversion Box has been covered with a coating of gray grout

(shotcrete). The area appears to have been posted in stages. A large posted oval area (URM) extends north and east from the diversion box. Another posted area (URM) extends west to Baltimore Ave. and turns northward. In January 2000, a separate Contamination Area was posted around a power pole (adjacent to a manhole) within the larger URM. In 2002, the posting around the power pole was removed and a Fixed Contamination Area sign was attached to the pole.

Waste Type: Process Effluent

Waste Description: The original release involved metal waste solution from 221-B with fission products measuring approximately 1 curie. A radiological survey of the area done in October 1975 found surface contamination up to 80,000 counts per minute.

Site Code: UPR-200-E-78 **Classification:** Accepted

Site Names: UPR-200-E-78, UN-216-E-6, 241-BX-155 **ReClassification:**
Diversion Box Ground Contamination, UN-200-E-78

Site Type: Unplanned Release **Start Date:** 1955

Site Status: Inactive **End Date:**

Site Description: The diversion box has been isolated and covered with gray grout. The area around the diversion box and the surface area above the 241-B-302-C tank have been surface stabilized with gravel and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The release included salt waste from B Plant containing approximately 10 curies of mixed fission product. The maximum dose rate was 22.6 rad per hour at the surface of the spill site (241-BX-155 Diversion Box) in 1955.

Site Code: UPR-200-E-84 **Classification:** Accepted

Site Names: UPR-200-E-84, 241-ER-151 Catch Tank **ReClassification:**
Leak (241-ER-311A), UN-200-E-84, UN-216-E-12

Site Type: Unplanned Release **Start Date:** 1953

Site Status: Inactive **End Date:** 1953

Site Description: The 241-ER-151 Diversion Box and the 241-ER-311 and 241-ER-311A Catch Tanks are located inside a chain link fence that is radiologically posted. A WIDS sign has been placed at the approximate location of the release.

Waste Type: Process Effluent

Waste Description: The release consisted of contaminated acid with approximately 10 curies of fission products from the 241-ER-311(A) Catch Tank.

Site Code: UPR-200-E-145 **Classification:** Accepted

Site Names: UPR-200-E-145, W049H Green Soil, VCP Pipeline Leak **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1993

Site Status: Inactive **End Date:**

Site Description: The site currently is a flat, disturbed area, with no vegetation. The area is covered with sandy soil and some rocks and gravel. The release was identified in a pipeline excavation that was oriented north to south. The north end of the excavation was located at a power pole with a blue air sample cabinet. In December 2003, growing contaminated tumbleweeds were found on the surface of this underground pipeline. The weeds were removed and the surface was stabilized. An area measuring approximately 3 meters by 6 meters (10 feet by 20 feet) is posted with Underground Radioactive Material signs.

Waste Type: Soil

Waste Description: Contaminated soil reading 300,000 disintegrations per minute of beta/gamma was found in an excavation, above a buried vitrified clay pipeline. The pipeline carried waste from the 216-A-8 Proportional Sample Pit #2 to the 216-A-34 crib. The contaminated soil read 300,000 disintegrations per minute with a GM/P-11 probe instrument. Sample results indicate the contamination was primarily due to uranium oxide from past practices on the Hanford site.

Site Code: UPR-200-W-2 **Classification:** Accepted

Site Names: UPR-200-W-2, UN-200-W-2, Underground Waste Line Leak **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1947

Site Status: Inactive **End Date:**

Site Description: The area around stairwell R-19 at the 221-T facility is currently paved with asphalt. A long, narrow Underground Radioactive Material area is posted around the R-19 area.

Waste Type: Process Effluent

Waste Description: Hydrostatic tests showed that the 9-1 "metal waste line" had failed and discharged liquid waste to ground. No quantity or physical description of waste in references.

Site Code: UPR-200-W-5 **Classification:** Accepted

Site Names: UPR-200-W-5, Overflow at 241-TX-155, UN-200-W-5 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1950

Site Status: Inactive **End Date:** 1950

Site Description: The release is marked with a single WIDS sign. In 2000 and 2001 multiple areas of soil and vegetation contamination were identified and all were posted. For consolidation purposes, all of the new Contamination Areas were recorded and mapped as UPR-200-W-113. A WIDS sign has been placed at the approximate location of the release.

Waste Type: Process Effluent

Waste Description: The diversion box contained tank farm waste. No volume was recorded for the overflow.

Site Code: UPR-200-W-6 **Classification:** Accepted

Site Names: UPR-200-W-6, UN-200-W-6, Contamination Spread from 241-U-151 and 241-U-152 Diversion Boxes **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1950

Site Status: Inactive **End Date:**

Site Description: The ground around the 241-U-151 and the 241-U-152 Diversion Boxes has been covered with gravel. The diversion boxes are marked and posted. A WIDS sign has been placed at the approximate location of the release.

Waste Type: Process Effluent

Waste Description: While working in the 241-U-151 and 241-U-152 Diversion Boxes, loose particulate beta/gamma contamination, with a maximum dose rate of 20 millirads per hour, spread to the soil surrounding the diversion boxes.

Site Code: UPR-200-W-20 **Classification:** Accepted

Site Names: UPR-200-W-20, UN-200-W-20, Spread of Contamination from a Diversion Box **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1953

Site Status: Inactive **End Date:**

Site Description: A WIDS sign has been placed at the approximate location of the release.

Waste Type: Process Effluent

Waste Description: Specks from the open diversion box caused an area around the diversion box to be contaminated.

Site Code: UPR-200-W-28 **Classification:** Accepted

Site Names: UPR-200-W-28, Release from 241-TX-155 Diversion Box, UN-200-W-28 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1954

Site Status: Inactive **End Date:**

Site Description: The release is marked with a single WIDS sign. The documented contaminated area occurred west of the 241-TX-155 diversion box. There is a large posted Underground Radioactive Material area west of the diversion box (UPR-200-W-113) and several smaller radiologically posted areas in this vicinity (see UPR-200-W-135). A WIDS sign has been placed at the approximate location of the release.

Waste Type: Process Effluent

Waste Description: Multiple releases from the 241-TX-155 Diversion Box and its associated underground pipelines has resulted in contamination being found in the soil in this vicinity. The contaminated area reference in HW-60807 was given an Unplanned Release number. However, the reference is describing an area where several release events occurred and not a particular event.

Site Code: UPR-200-W-29 **Classification:** Accepted

Site Names: UPR-200-W-29, Transfer Line Leak, UN-200-W-29, UPR-200-W-27, UN-200-W-27, UN-216-W-5, 23rd and Camden Line Break **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1954

Site Status: Inactive **End Date:**

Site Description: The area is currently surrounded with steel posts, covered with gravel and posted as an Underground Radioactive Material Area.

Waste Type: Process Effluent

Waste Description: The release consisted of first-cycle supernatant containing rare earth metals plus yttrium, cesium, antimony, cerium, ruthenium, niobium, and tellurium. Dose rates up to 11.5 rad per hour at 5 centimeters (2 inches), including 3.5 rad per hour, was measured over the run-off and fields up to 4.5 rad per hour at a distance of 0.9 meters (3 feet) near the cave-in was found. Less than 3,800 liters (1,000 gallons) of waste were estimated to have escaped from the line.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-27

Site Names: UPR-200-W-27, Transfer Line Leak at 23rd and Camden, UN-200-W-27, UN-216-W-5, Duplicate of UPR-200-W-29

Reason: Duplicate Site

Site Code: UPR-200-W-32 **Classification:** Accepted

Site Names: UPR-200-W-32, UNH Transfer Line Break, UN-200-W-32 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1954

Site Status: Inactive **End Date:**

Site Description: The release site is not currently marked or posted. The above ground pipeline has been removed.

Waste Type: Chemicals

Waste Description: Soil contamination occurred when an unknown amount of uranyl nitrate hexahydrate (UNH) solution leaked from a leak in an above ground pipeline.

Site Code: UPR-200-W-35 **Classification:** Accepted

Site Names: UPR-200-W-35, Ground Contamination Near UNH Process Line, UN-200-W-35, **ReClassification:**

REDOX to 224-U UNH Line Leak

Site Type: Unplanned Release **Start Date:** 1955

Site Status: Inactive **End Date:**

Site Description: Much of the area north of REDOX has been surface stabilized. The unplanned release site is not marked or posted.

Waste Type: Chemicals

Waste Description: The waste is described as an unknown amount and concentration/activity of uranyl nitrate hexahydrate (UNH) solution being routed from the Reduction Oxidation (REDOX) facility to the U Plant.

Site Code: UPR-200-W-38 **Classification:** Accepted

Site Names: UPR-200-W-38, Line Break at 241-TX-302C, UPR-200-W-160, UPR-200-W-40, UN-200-W-38, 216-T-30 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1955

Site Status: Inactive **End Date:** 1955

Site Description: The area around the 241-TX-154 diversion box and the catch tank has been stabilized with sprayed concrete (shotcrete). The area is posted with Underground Radioactive Material signs. A WIDS sign has been placed at this location.

Waste Type: Process Effluent

Waste Description: The 1955 release of liquid metal waste produced beta/gamma with a dose rate of 100 rad per hour at a distance of 1 foot (0.3 meters) above the contamination pool. Several thousand gallons of waste was lost to the ground. HW-60807 estimated the release to be 7520 liters (2000 gallons) RHO-CD-673 estimated 19,000 liters (5026 gallons). The waste was high in salt and is neutral to basic. The initial surface pool of liquid was estimated to be 9 meters (30 feet) by 4.5 meters (15 feet).

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-21

Site Names: UPR-200-W-21, UN-200-W-21, UN-216-W-36, Process Line Cave-in at 241-TX-154 Diversion Box

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-W-40

Site Names: UPR-200-W-40, Line Break Near 241-TX-154, UPR-200-W-38, UPR-200-W-160, 216-T-30, UN-200-W-40

Reason: Duplicate Site

Site Code: UPR-200-W-160

Site Names: UPR-200-W-160, Line Break at 241-TX-302C, UPR-200-W-38, UPR-200-W-40, 216-T-30

Reason: Duplicate Site

Site Code: UPR-200-W-64 **Classification:** Accepted

Site Names: UPR-200-W-64, Road Contamination at 23rd and Camden, UN-200-W-64 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1969

Site Status: Inactive **End Date:**

Site Description: The corner of 23rd and Camden has been stabilized with clean gravel due to two waste line leak events. The stabilized area is surrounded with chain and posted with Underground Radioactive Material signs. The road shoulders are not posted. A WIDS sign has been placed at the approximate location of the release.

Waste Type: Process Effluent

Waste Description: Mud samples collected in 1969 contained mostly cesium-137, with readings up to 600 counts per minute. No volume estimate was provide. The contamination source appears to be rain water run off from the adjacent area where two process line leaks occurred (see UPR-200-W-29 and UPR-200-W-97). The line leaks included first-cycle supernatant containing rare earth metals plus yttrium, cesium, antimony, cerium, ruthenium, niobium, and tellurium.

Site Code: UPR-200-W-76 **Classification:** Accepted

Site Names: UPR-200-W-76, UN-200-W-76, Contamination Found at 241-TX-155 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1977

Site Status: Inactive **End Date:**

Site Description: In 2008, the area surrounding 241-TX-152 Diversion Box, 241-TX-155 Diversion Box and 241-TX-302B catch tank has been covered with a layer of clean gravel. It is posted with Bio-Barrier and Underground Radioactive Material signs. A single white sign with black letters reading "WIDS UPR-200-W-76" is hanging on the chain on the near the south side of the 241-TX-152 Diversion Box.

Waste Type: Animal Waste

Waste Description: Radioisotopic analyses on two individual rabbit pellets revealed: 18.6 microCuries cesium-137 per gram of sample, 0.044 microCuries cesium-134 per gram of sample, 0.093 microCuries europium-155 per gram of sample, 0.026 microCuries europium-154 per gram of sample, and 2.63 microCuries strontium-90 per gram of sample. Beta-gamma readings up to 100 millirads/hour were found.

Site Code: UPR-200-W-97 **Classification:** Accepted

Site Names: UPR-200-W-97, Transfer Line Leak, UN-216-W-5, UN-200-W-97 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1966

Site Status: Inactive **End Date:** 1966

Site Description: The site is located at the corner of 23rd Street and Camden Ave. It is marked and posted as "Underground Radioactive Material". The release site was stabilized with clean soil, sand, ureabore herbicide, and crushed rock.

Waste Type: Process Effluent

Waste Description: The waste released to the soil consisted of a high salt, neutral to basic liquid tank waste solution containing approximately 10 curies of fission products. The waste consisted of second cycle bismuth phosphate waste from the 241-T-107 tank. The maximum surface dose rate was 5 rad per hour beta/gamma with 3 rad per hour being gamma radiation.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-62

Site Names: UPR-200-W-62, UN-200-W-62, Line Leak at 23rd and Camden, UN-216-W-5, Duplicate of UPR-200-W-97

Reason: Duplicate Site

Site Code: UPR-200-W-98

Classification: Accepted

Site Names: UPR-200-W-98, UN-216-W-6, 221-T Waste Line Break at R-19, UN-200-W-98

ReClassification:

Site Type: Unplanned Release

Start Date: 1945

Site Status: Inactive

End Date: 1945

Site Description: The area around door R-19 is paved with asphalt and posted as an Underground Radioactive Material area. There is not a sign that specifically marks the area as an unplanned release site.

Waste Type: Process Effluent

Waste Description: A broken underground process transfer line caused contaminated liquid to surface near R-19 at 221-T. The "metal waste" line contained approximately 10 curies of high salt, neutral to basic fission products with a maximum dose rate of 20 rad per hour at 2 inches (5 centimeters).

Site Code: UPR-200-W-102

Classification: Accepted

Site Names: UPR-200-W-102, UN-216-W-12, UN-200-W-102, 224-T Underground Line Leak

ReClassification:

Site Type: Unplanned Release

Start Date: 1972

Site Status: Inactive

End Date: 1972

Site Description: The east and south sides of the 224-T Building are covered with gravel. The area along the east side of the 224-T building is posted as an Underground Radioactive Material area.

Waste Type: Process Effluent

Waste Description: The release consisted of alpha-laden moisture from process tank lines that contaminated the soil around the pipeline. An estimated 72 grams of plutonium was contained in the contaminated soil that was removed when the leak was discovered.

Site Code: UPR-200-W-108 **Classification:** Accepted
Site Names: UPR-200-W-108, Line Leak at 216-S-9 **ReClassification:**
 Crib, UN-216-W-18, UN-200-W-108
Site Type: Unplanned Release **Start Date:** 1969
Site Status: Inactive **End Date:** 1969
Site Description: The release site is posted as a "Surface Contamination Area". The excavation was filled after the work was completed.
Waste Type: Process Effluent
Waste Description: The waste was REDOX process condensate from the D-2 Receiver Tank in the 202-S Building with beta and gamma contamination and dose rate readings of 40 rads/hour at the bottom of the waste line.

Site Code: UPR-200-W-109 **Classification:** Accepted
Site Names: UPR-200-W-109, Waste Line Leak Near **ReClassification:**
 218-W-9, UN-216-W-19, UN-200-W-109
Site Type: Unplanned Release **Start Date:** 1969
Site Status: Inactive **End Date:** 1969
Site Description: The release was a transfer line break that occurred within the east chain barricade of the 218-W-9 Burial Ground. The 218-W-9 Area was interim stabilized in 1991 with 46 to 61 centimeters (18 to 24 inches) of uncontaminated backfill. The release site was covered with soil and revegetated along with 218-W-9.
Waste Type: Process Effluent
Waste Description: The waste was process condensate containing acidic unknown beta and gamma contamination. It came from the D-2 Receiver Tank in the 202-S Building. Dose rates of the liquid were 450 millirads/hour at the surface. As the water sank back into the ground, surface dose rates dropped to 20 millirads/hour.

Site Code: UPR-200-W-113 **Classification:** Accepted
Site Names: UPR-200-W-113, Soil Contamination East **ReClassification:**
 of 241-TX, UN-216-W-23, Contamination
 Areas Around 241-TX-155 Diversion Box,
 UN-200-W-113
Site Type: Unplanned Release **Start Date:** 1977
Site Status: Inactive **End Date:**
Site Description: The original contaminated area was surface stabilized in 1990. It is currently surrounded with concrete marker posts and posted as an Underground Radioactive Material area. In 1998, 1999 and 2000 additional surface contamination was identified in the vicinity of the original surface stabilized area. Smaller contamination areas on the north, south, east and west sides of the 241-TX-152 and 241-TX-155 diversion boxes. At that time, the additional contamination areas were considered extensions of UPR-200-W-113. Many of the contamination areas were found above underground transfer lines going into and out of the 241-TX-155 Diversion Box. They were originally labeled with UPR-200-W-113 signs. Some of the "UPR-200-W-113" signs are being

replaced as more information is documented that ties posted contamination areas with other documented Unplanned Releases and pipeline sites that were added to WIDS in 2007.

Waste Type: Animal Waste

Waste Description: Contaminated animal feces and growing contaminated vegetation have been found in this area. The biological uptake is the result of multiple releases in this area associated with the 241-TX-155 Diversion Box and its underground pipelines.

Site Code: UPR-200-W-114 **Classification:** Accepted

Site Names: UPR-200-W-114, UN-216-W-24, Ground Contamination East of 241-SX Tank Farm, UN-200-W-114 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: This site is no longer marked or posted. The release site, for many years, had been a large area posted with a light chain and Surface Contamination Area signs. The 216-S-8, the 216-S-1, and the 216-S-2 cribs were located within the larger contamination zone. The surface contamination was scraped up and consolidated into other nearby waste sites. The cribs were individually surface stabilized and reposted with Underground Radioactive Material signs.

Waste Type: Soil

Waste Description: The waste consisted of radioactive particulate matter from operational activities in the adjacent 241-S/SX Tank Farms.

Site Code: UPR-200-W-115 **Classification:** Accepted

Site Names: UPR-200-W-115, UN-216-W-25, Ground Contamination Above Transfer Line Along Cooper Street **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site had been delineated with light chain barricade and Surface Contamination warning signs. A waste site inspection, done in February 1998, found the area has been covered with gravel and posted as an Underground Radioactive Material area.

Waste Type: Soil

Waste Description: The soil was contaminated with material from the transfer line Clean Out Boxes.

Site Code: UPR-200-W-130 **Classification:** Accepted

Site Names: UPR-200-W-130, Line Leak at 231-W-151 Sump, UN-200-W-130 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1967

Site Status: Inactive **End Date:** 1967
Site Description: A WIDS sign has been placed at the approximate location of the release.
Waste Type: Process Effluent
Waste Description: The soil had alpha readings up to 40,000 disintegrations per minute, with dose rates of 100 millirem/hour of beta and 50 millirem/hour of gamma.

Site Code: UPR-200-W-131 **Classification:** Accepted
Site Names: UPR-200-W-131, Release from 241-TX-155 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1953
Site Status: Inactive **End Date:** 1953
Site Description: The 241-TX-155 Diversion Box and 241-TX-302B Catch Tank are surrounded with post and chain. Clean gravel has been placed around the diversion box with Underground Radioactive Material and Bio Barrier signs. A single, UPR-200-W-131 WIDS sign is attached to the chain boundary.
Waste Type: Process Effluent
Waste Description: The release consisted of a dilute acidic waste solution. Ground contamination up to 25 rad per hour at 0.6 meters (2 feet) was observed.

Site Code: UPR-200-W-135 **Classification:** Accepted
Site Names: UPR-200-W-135, Release from 241-TX-155, UN-200-W-135 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1954
Site Status: Inactive **End Date:** 1954
Site Description: There are three major encased transfer lines associated with the 241-TX-155 Diversion Box. There have been many areas of contamination identified on these transfer lines during 1999, 2000 and 2001. UPR-200-W-135 is located on transfer line 200-W-191-PL, directly west of the 241-TX-155 Diversion Box. It is surrounded with concrete marker posts and Underground Radioactive Material signs. A single metal post, labeled UPR-200-W-135, has been placed adjacent to the Contamination Area. Other signs surrounding the area are labeled UPR-200-W-113.
Waste Type: Process Effluent
Waste Description: The leaking connector (U-15) associated with this release was transferring blended metal waste supernatant from the 244-UR vault to the 241-WR vault when the leak occurred. The amount of liquid released is estimated, since the cave-in was discovered 10 days after the last transfer was made.

Site Code: UPR-200-W-161 **Classification:** Accepted
Site Names: UPR-200-W-161, UN-216-W-35, UN-200- **ReClassification:**

W-161, Large Area East of 241-U Tank Farm

Site Type: Unplanned Release **Start Date:** 1990

Site Status: Inactive **End Date:**

Site Description: The site is a large radiologically controlled area posted with Underground Radioactive Material signs. A WIDS number sign has been posted at this location.

Waste Type: Soil

Waste Description: Windblown contaminated particles effected the area east of 241-U tank farm. Soil sample results from 1990 indicate that the main radionuclide is strontium (2.93 E3 picocuries per gram). Other contaminants included 6.26 picocuries per gram of cesium-137, 3.27 picocuries per gram of plutonium and 2.6 E-07 grams per gram of uranium. Because this site is associated with the 241-U Tank Farm, the waste is assumed to be mixed waste.

Site Code: UPR-200-W-164 **Classification:** Accepted

Site Names: UPR-200-W-164, Overhead UNH Line Leak, UN-216-W-29 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The above ground UNH line has been removed. The Radiation Area signs that surrounded the pipeline were also removed. A portion of the site was interim stabilized in 1993. An area of contaminated soil found under the steam line, adjacent to the 216-S-9 crib, was covered with clean soil and posted with "Underground Radioactive Material" warning signs.

Waste Type: Soil

Waste Description: The original Unplanned Release was described as the gamma field (dose rate) emanating from the above ground uranyl nitrate hexahydrate (UNH) transfer line. Later, a small area of soil contamination was found under the steam line that the above ground line had been attached. Liquid UNH apparently had dripped onto the soil on an area located adjacent to the 216-S-9 crib.

Site Code: UPR-200-W-167 **Classification:** Accepted

Site Names: UPR-200-W-167, Contamination Migration from 241-TY, UN-216-W-32 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1985

Site Status: Inactive **End Date:**

Site Description: The original release site, identified in 1985, was a soil contamination area located adjacent to the east side of the 241-TY Tank Farm. After the contamination was scraped and removed in 1986, the site was no longer marked or posted. Later, in 2000, three areas on the east and northeast sides of the 241-TY Tank Farm (within the original boundaries of this Unplanned Release) were reposted as Contamination Areas (CA). Contaminated ant hills and growing contaminated vegetation was found on top of a tank farm transfer line located outside the eastern tank farm fence (also see WIDS sitecode 200-W-78). In November 2000, the CA's were covered with bio-barrier material and gravel. These areas were reposted with Underground Radioactive Material

signs. The underground radioactive pipeline is marked with posts and "Radioactive Pipeline" signs. The pipeline runs through the recently stabilized areas.

Waste Type: Soil

Waste The waste consisted of radioactive contamination (specks) that migrated from the 241-TY Tank

Description: Farm. Later, contaminated ant hills and contaminated vegetation were also found in this area.

200-OA-1

Site Code: 200 CP **Classification:** Accepted

Site Names: 200 CP, 200 Area Construction Pit, 200 Area Construction Waste Site, Hanford Site Gravel Pit 29 **ReClassification:**

Site Type: Depression/Pit (nonspecific) **Start Date:** 1945

Site Status: Inactive **End Date:** 1955

Site Description: The site is a large, open gravel area. The pit is no longer being used as a source of gravel. The 2704HV parking lot was placed over a portion of the original pit.

Waste Type: Construction Debris

Waste Description: Several truck loads of broken blocks of concrete foundations and other structures have been dumped into this gravel pit during the past several years. There have been no known chemicals dumped into this unit.

Site Code: 216-B-3-1 **Classification:** Accepted

Site Names: 216-B-3-1, B Swamp Ditch, 216-B-2, 216-B-3 Ditch, 216-B-2E **ReClassification:**

Site Type: Ditch **Start Date:** 1945

Site Status: Inactive **End Date:** 1964

Site Description: The head end is located outside the 200 East perimeter fence, east of 218-E12A Burial Ground. The ditch continue due east to the 216-B-3 Pond. It widened into a swamp before entering the 216-B-3 Pond. The site is currently backfilled and surface stabilized. It is located within a large posted Underground Radioactive Material area that also includes the 216-B-3-2 and 216-B-3-3 backfilled ditches.

Waste Type: Process Effluent

Waste Description: Until March 1962, the site percolated and transported 221-B Plant steam condensate, process cooling water, chemical sewer waste, and 284-E Powerhouse waste. From March 1952 to November 1955, the site percolated and transported the above-listed streams plus 241-CR Vault cooling water. From November 1955 to December 1957, the site percolated and transported the above-listed streams plus effluent from 216-A-29 Ditch. Wastes include 202-A process cooling water and chemical sewer waste. From December 1957 to February 1958, the site percolated and transported the above-listed streams minus 202-A process cooling water. From February 1958 to December 1962, the site percolated and transported the above-listed streams plus 202-A Acid Fractionator condensate. From December 1962 to December 1963, the site percolated and transported the above-listed streams plus 202-A seal cooling water from air sampler vacuum pumps. After December 1963, the site percolated and transported the above-listed streams minus 202-A seal cooling water.

Site Code: 216-B-3-2 **Classification:** Accepted

Site Names: 216-B-3-2, 216-B Ditch, 216-B-1 Ditch, B Swamp Ditch, 216-B-2-2E **ReClassification:**

Site Type: Ditch **Start Date:** 1964
Site Status: Inactive **End Date:** 1970

Site Description: The ditch has been backfilled and surface stabilized. It is located within a large Underground Radioactive Material Area that includes the 216-B-3-1, 216-B-3-2 and 216-B-3-3 covered ditches. The unit was open from the diverter station to the 216-B-3 Pond and was approximately 1.2 to 2.4 meters (4 to 8 feet) deep. It was backfilled in July 1970 after a release of strontium-90 from 221-B Plant.

Waste Type: Process Effluent

Waste Description: Until January 1965, the site transported 221-B Plant process cooling water, steam condensate, and chemical sewer; 241-CR Vault cooling water; 284-E Powerhouse water; and received and transported 202-A chemical sewer waste and fractionator condensate from 216-A-29 Ditch. From January 1965 to January 1966, the site transported the above mentioned streams plus 241-TY Tank Farm ITS Unit 1 condenser cooling water. From January 1966 to November 1967, the site transported the above mentioned streams plus condenser cooling water and air sampler vacuum pump seal cooling water from 202-A Building. From November 1967 to February 1968, the site transported the above mentioned streams minus 284-E Powerhouse wastewater. After February 1968, the site transported the above mentioned streams plus 241-BY Tank Farm ITS Unit 2 condenser cooling water.

Site Code: 216-B-3-3 **Classification:** Accepted
Site Names: 216-B-3-3, B Swamp Ditch, 216-B-3-3 **ReClassification:**
Ditch

Site Type: Ditch **Start Date:** 1970
Site Status: Inactive **End Date:** 1994

Site Description: The ditch has been backfilled and surface stabilized. It is posted as an Underground Radioactive Material area.

Waste Type: Process Effluent

Waste Description: Until July 1973, the site transported and percolated 221-B cooling water, 202-A chemical sewer from the 216-A-29 Ditch, 241-BY Tank Farm ITS Units 1 and 2 cooling water, and 244-CR Vault cooling water. From July 1973 to May 1978, the site received the same as above minus ITS Units 1 and 2 cooling water. From May 1978, the site received 221-B cooling water and 202-A chemical sewer from the 216-A-29 Ditch.

Site Code: 200-E-1 **Classification:** Accepted
Site Names: 200-E-1, 284-E Landfill **ReClassification:**

Site Type: Dumping Area **Start Date:**
Site Status: Inactive **End Date:**

Site Description: There is no visible evidence of a landfill at this location. A covered concrete pad has been built over the area where the landfill was supposed to be located.

Waste Type: Asbestos (friable)

Waste Description: The waste at this unit consists of asbestos.

Site Code: 200-E-2 **Classification:** Accepted

Site Names: 200-E-2, Soil Stains at the 2101-M SW Parking Lot, MO-234 Parking Lot **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was originally described as a gravel covered parking lot that contained discolored soil. Two large dark circular stains were visible in front of the access ramp at the south end of MO-234.

Waste Type: Oil

Waste Description: The unit waste includes used oil for dust abatement. BHI Regulatory Support (B. Vedder) had two concerns about the site. Polychlorinated biphenyls (PCBs) were the biggest concern and heavy metals of lesser concern. PCBs were common in high heat grade hydraulic fluids. Unless there is some strong evidence that only used vehicle motor oil was applied, this site will need to be sampled to verify that there is no PCB contamination. On August 24, 2006, sample number B1KH90 was collected and analyzed at WSCF lab.

Site Code: 200-E-7 **Classification:** Accepted

Site Names: 200-E-7, 2607-EO Septic Tank & Tile Field **ReClassification:**

Site Type: Septic Tank **Start Date:** 1994

Site Status: Active **End Date:**

Site Description: The tank is part of the 2607-EP System. Current and proposed additions to this system bring its design daily flow to 20,440 liters (5400 gallons). The tank was pre-fabricated with a 1500 gallon first chamber and a 1000 gallon second chamber. The associated septic field has been abandoned.

Waste Type: Sanitary Sewage

Waste Description:

Site Code: 200-E-46 **Classification:** Accepted

Site Names: 200-E-46, RCRA Permit General Inspection #200EFY96 Item #3, Debris Southeast of 282-E **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site appears to be an old lay down area. Scattered debris is visible over a large area.

Waste Type: Misc. Trash and Debris

Waste Description: Materials observed at the site include wire rope, a steel railroad rail, a metal bar, wood, fiberglass insulation, aluminum cans, coal, pipe, aluminum wire, copper wire, concrete, and glass. Most of the debris is in relatively small pieces. Large debris include the steel railroad rail, iron bar, wire rope, and concrete.

Site Code:	200-E-101	Classification:	Accepted
Site Names:	200-E-101, 200 East Deep Lysimeter Site	ReClassification:	Rejected (9/16/2010)
Site Type:	Experiment/Test Site	Start Date:	1971
Site Status:	Inactive	End Date:	2009

Site Description: The site consisted of three features, one open bottom pit, one closed bottom pit and an underground equipment storage room. The pits were located 34.6 meters (114 feet) apart. Both pits were constructed from corrugated steel cylinders that were buried and backfilled with soil. In February 2001, the underground, equipment storage room access hatch and vents were found inside a chained area, just west of the dirt access road. The closed bottom pit was found to the north of the equipment room, enclosed in a triangular shaped chained area. Lysimeter access pipes were protruding up through the soil and the rim of the closed bottom lysimeter caisson were visible.

Waste Type: Equipment

Waste Description: In 1999, PNNL said the neutron probe has been left inside the closed bottom pit, but in 2008 PNNL said the probe had been removed. The cables were weighted with 500-gram (1.1 pound) lead bricks that were backfilled in place, inside the pits. This equipment could be considered hazardous.

Site Code:	200-E-110	Classification:	Accepted
Site Names:	200-E-110, Contaminated Tumbleweed Dump Site	ReClassification:	
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: In October 2003, the area was down posted to a non-controlled area. The radiological posting signs were removed. The site had been surrounded with light duty steel chain and posts and posted as a Contamination Area. The Contamination Area was surrounded with light duty steel chain and posts and is posted as a Radiological Buffer Area. The area was also posted as a Radiologically Controlled Area. The ground is sandy soil with rocks and chunks of concrete. The area is free of growing vegetation and the tumbleweeds have been removed. Only tumbleweed fragments remained.

Waste Type: Vegetation

Waste Description: The waste consisted of dried, compacted tumbleweeds.

Site Code:	200-E-126-PL-A	Classification:	Accepted
Site Names:	200-E-126-PL-A, Segments of 200-E-126-PL Pipeline Located in the Outer Area	ReClassification:	

Site Code: 216-S-10D **Classification:** Accepted

Site Names: 216-S-10D, 216-S-10D Ditch, 202 Chemical Sump #1 and Ditch, Chemical Sewer Trench, Open Ditch to the Chemical Sewer Trench, 216-S-10 Ditch **ReClassification:**

Site Type: Ditch **Start Date:** 1951

Site Status: Inactive **End Date:** 1991

Site Description: The portion of the ditch nearest the 200 West Area perimeter fence is an open, unlined open ditch. Two thirds of the original ditch has been backfilled. The covered portion is posted with Underground Radioactive Material signs. The open portion is marked, but not radiologically posted.

Waste Type: Process Effluent

Waste Description: In the past, 420 liters (110 gallons) of hazardous waste salts including sodium nitrite (NaNO₂) and sodium hydroxide (NaOH) were discharged to the unit. Until 1965, the site received chemical sewer waste from 202-S and overflow from the high water tower. Since October 1991, the site no longer acted as a ditch because the 216-S-10 Pond was stabilized. No dangerous wastes have been discharged to this unit since February 1987. NOTE: The 216-S-11 Pond was credited with all the liquid effluent inventory for the 216-S-10 Pond and Ditch system for many years.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-34

Site Names: UPR-200-W-34, Overflow of the 216-S-10 Ditch, UN-200-W-34

Reason: The release was an overflow of the 216-S-10 Ditch and will be remediated with that site.

Site Code: 216-S-10P **Classification:** Accepted

Site Names: 216-S-10P, 216-S-10P Pond, 202-S Chemical Sump #1 and Ditch, Chemical Sewer Trench **ReClassification:**

Site Type: Pond **Start Date:** 1952

Site Status: Inactive **End Date:** 1984

Site Description: The pond was an irregular shape with four trenches known as fingers. The unit has been backfilled and stabilized and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: Until 1965, the site received the chemical sewer waste from 202-S and overflow from the high water tower via the 216-S-10 Ditch. From 1960's, the site received the bearing cooling water from 202-S. RHO-CD-673 documents two releases of radioactive liquid into the S-10 Disposal System. NOTE: The 216-S-11 Pond was credited with all the liquid effluent inventory for the 216-S-10 Pond and Ditch system for many years.

Site Code: 216-S-11 **Classification:** Accepted

Site Names: 216-S-11, 202-S Chemical Sump #2, Chemical Sewer Trenches, 216-S-11 Swamp

ReClassification:

Site Type: Pond **Start Date:** 1954

Site Status: Inactive **End Date:** 1965

Site Description: A 1999 site visit found the area to be flat and covered with bunch grass. Neither of the 216-S-11 pond lobes are marked or posted.

Waste Type: Process Effluent

Waste Description: The site received the waste from air conditioning and drains in 202-S Building and the chemical sewer waste from the 202-S Building. NOTE: The 216-S-11 Pond was credited with all the liquid effluent inventory for the 216-S-10 Pond and Ditch system for many years.

Site Code: 216-S-16D **Classification:** Accepted

Site Names: 216-S-16D, 202-S Swamp (New) and Ditch, 202-S Swamp #1, REDOX Pond #2, 216-S-24 Ditch **ReClassification:**

Site Type: Ditch **Start Date:** 1957

Site Status: Inactive **End Date:** 1975

Site Description: The site is a ditch that connected the 202-S Building to the 216-S-16 Pond. The side slope of the open ditch was 2:1. The ditch has been backfilled and surface stabilized. It is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: January 1957 is considered the most accurate start date for this waste unit. The site received process cooling water and steam condensate from 202-S Building until June 1967. After the 202-S Building (REDOX) was put on standby in July 1967, the site received condenser and vessel cooling water from concentrator boil-down operations in the 202-S Building. In 1973, the 216-U-9 ditch was connected to the 216-S-16 ditch to allow the 216-U-10 pond overflow to reach the 216-S-16 pond.

Site Code: 216-S-19 **Classification:** Accepted

Site Names: 216-S-19, 222-S Lab Swamp, 216-SL-1, REDOX Lab Swamp, 216-S-19 Pond **ReClassification:**

Site Type: Pond **Start Date:** 1952

Site Status: Inactive **End Date:** 1984

Site Description: This unit consists of a dried pond.

Waste Type: Process Effluent

Waste Description: The site received ventilation cooling water, lab hood waste, and decontamination sink waste.

Site Code:	216-S-26	Classification:	Accepted
Site Names:	216-S-26, 216-S-19 Replacement Facility, 216-S-26 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1984
Site Status:	Inactive	End Date:	1995
Site Description:	The crib is surrounded with metal posts and chain and is posted with Underground Radioactive Material signs. A 15 centimeter (6 inch) vitrified clay, perforated distribution pipe runs the length of the unit, 46 centimeters (18 inches) above the bottom of the crib. Eight centimeters (4 inches) of gravel covers a membrane barrier. The crib is filled with 2.9 meters (9.5 feet) of soil. One gage well with a liquid level indicator is located 100 ft (30 m) from the west end, and a vent riser is located at the east end.		
Waste Type:	Steam Condensate		
Waste Description:	The site received steam condensate and sink wastes, which are byproduct radioactive wastes, from the 222-S Laboratory via the 207-SL Retention Basin. The wastes contain a variety of chemicals, including acetone, nitric acid, and lesser amounts of sulfuric and hydrofluoric acids.		

Site Code:	216-T-1	Classification:	Accepted
Site Names:	216-T-1, 221-T Ditch, 221-T Trench, 216-T-1 Trench	ReClassification:	
Site Type:	Ditch	Start Date:	1944
Site Status:	Inactive	End Date:	1995
Site Description:	The ditch has been backfilled. It is currently marked and posted with Underground Radioactive Material signs.		
Waste Type:	Steam Condensate		
Waste Description:	From 1944 until 6/56, the site received miscellaneous waste from pilot plant experimental work, intermittent decontamination waste, and waste from the head end of the 221-T Building. From 6/56 to 1/64 the ditch was inactive due to the production operations at T Plant being shut down. From 1/64 to 6/70, the site received cooling water from the blowdown vessel in the 271-T Building and miscellaneous waste from PNL head end operations in the 221-T Building. After 6/70, the site received condensate from steam-heated radiators at the head end of 221-T Building. During standdown of PNL operations, the discharge of 271-T and other 221-T head end waste was discontinued. The site also received sodium hydroxide wash water waste solution (less than 1,000 gal/month [3,800 L/month]) from the Sodium-Air-Water Reaction Emergency Air Cleaning Development-HEDL. This waste water was nonradioactive and generally wet only the bottom of the unit to approximately 150 ft (46 m) from the outfall.		

Site Code:	200-W ADB	Classification:	Accepted
Site Names:	200-W ADB, 200-W Ash Disposal Basin	ReClassification:	
Site Type:	Coal Ash Pit	Start Date:	1944
Site Status:	Inactive	End Date:	2000

Site Description: The site is an area of dark soil with cheatgrass growing on the surface. A small depression can be seen in the middle of the site.

Waste Type: Ash

Waste Description: The site mainly received coal ash from the 200 West Area Powerhouse operation. However, the open pit was sometimes used for other purposes. The open ash disposal basin was sometimes used as a location for burning tumbleweeds that had collected along area fences during the 1980's. A Tiger Team finding for disposing of steam plant ash without a permit prompted sampling of wet flyash and bottom ash from the 200 Area power houses. Sample results determined the ash to be non-dangerous and non-corrosive and not regulated under Washington Administrative Codes.

Site Code: 200-W BP **Classification:** Accepted

Site Names: 200-W BP, 200-W Burning Pit, Pit 34, Gravel Pit 34 **ReClassification:**

Site Type: Burn Pit **Start Date:** 1950

Site Status: Active **End Date:**

Site Description: The site is a large open pit.

Waste Type: Demolition and Inert Waste

Waste Description: The unit is used to burn nonradioactive material and tumbleweeds. PNL-6456 states the site received construction and office waste (15,000 cubic meters [19,600 cubic yards]), paint waste, and chemical solvents (1,000 liters [260 gallons]).

Site Code: 200-W-3 **Classification:** Accepted

Site Names: 200-W-3, 2713-W North Parking Lot, 220-W-1 **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The waste site is the gravel parking lot, containing an area where discolored soil was identified in an excavation between 10 to 15 centimeters (4 to 6 inches) below the surface.

Waste Type: Oil

Waste Description: The waste at the unit includes waste oil that was used for dust abatement. Two soil samples taken at the unit indicate that PCBs (maximum 3 parts per million), lead (maximum 2.1 milligrams per liter EP-TOX), xylene (maximum 1640 parts per billion), and total petroleum hydrocarbons (maximum 620 milligrams per kilograms) were present.

Site Code: 200-W-33 **Classification:** Accepted

Site Names: 200-W-33, Solid Waste Dumping Area, Debris Near 609 Gate **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site originally consisted of an area of debris covering approximately one acre in a stand of open sagebrush. A grass fire burned the area in 2007. Many more cans and drums became visible after the fire.

Waste Type: Misc. Trash and Debris

Waste Description: Numerous empty, rust cans and barrels were found. One five gallon can was found that contained an oil substance. Other types of miscellaneous debris included tires, bottles and oil cans. There is evidence of burning in the area.

Site Code: 200-W-64 **Classification:** Accepted

Site Names: 200-W-64, 2724-W Contaminated Laundry Facility Building Foundation **ReClassification:**

Site Type: Foundation **Start Date:** 1950

Site Status: Inactive **End Date:** 1994

Site Description: The building foundation is posted with "Underground Radioactive Material" signs. There is also an area approximately 3 meters (10 feet) by 4.5 meters (15 feet) on the north side of the foundation that is posted as "Fixed Contamination". Several drains and pipes were observed on the concrete pad. All drains and pipes were either capped or grouted. There are three radiologically posted manholes adjacent to the northwest corner of the foundation. The manholes are likely to be a portion of the process sewer. Six connex storage units and several equipment items such as pipe, valves, flanges, fence posts were observed on the southeastern portion of the pad.

Waste Type: Construction Debris

Waste Description: The site is the cement foundation of the contaminated laundry facility.

Site Code: 200-W-102-PL **Classification:** Accepted

Site Names: 200-W-102-PL, Pipeline from Laundry, Powerhouse and Shops to 216-U-14 Ditch, 200-W-102 **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:** 1944

Site Status: Inactive **End Date:** 1981

Site Description: The waste site is various diameters of vitrified clay and concrete pipes that transferred waste to the 216-U-14 ditch. The underground pipeline is not separately marked or posted. Several manholes are visible along the line that have Confined Space and Radiation Area postings.

Waste Type: Process Effluent

Waste Description: Detergents and radioactive contamination from laundry worn in radiation areas are included in the laundry effluent discharge. A 1945 letter indicates the detergent used at the original laundry facility was named Igepal CA. 3% acetic acid was added to remove beta contamination and 3% citric acid was added to remove alpha contamination. Non-radioactive effluent from the 277-W fabrication shop, the powerhouse and the 283-W filter building.

Site Code:	216-W-LWC	Classification:	Accepted
Site Names:	216-W-LWC, 216-W-LC, Laundry Waste Crib, 216-W-LWC Crib, 216-W-1	ReClassification:	
Site Type:	Crib	Start Date:	1981
Site Status:	Inactive	End Date:	1994
Site Description:	<p>The crib is marked and posted with Underground Radioactive Material signs.</p> <p>The unit consists of two independent crib structures (drain fields) and associated underground pipelines connecting to the 200-W-64 laundry facilities. Each crib bottom dimension is 150 ft (47 meters) by 133 ft (40.5 meters). Each structure consists of an 8-in (20 centimeters) P.V.C. central distribution pipe running east-west, 14 ft (4.3 m) below grade, from which six 4-in (10 cm) P.V.C. perforated drain lines extend the length of the unit of both sides (150 ft [47 m]). The drain lines run parallel to each other, 23 ft (7.0 m) apart. Beneath each lies a 5-ft (1.5 m) deep rock-filled trench, giving the bottom a serrated appearance. A 7-ft (2.1 m) layer of gravel fill (5,546 yd³ [4,243 m³]) was backfilled over to grade. The side slope is 1.5:1.</p>		
Waste Type:	Water		
Waste Description:	<p>The site received all the process wastewater (averaging 2,615,435 liters per month) from the contaminated laundry facility (2724-W/WA) and mask cleaning station (MO-412). The waste included radioactive residue from the contaminated laundry and detergents. Bleach and flame retardant chemicals were added to some of the wash and rinse cycles. From 1981 to 1983, some waste oils, from a nearby fabrication shop, entered the waste stream through manhole B. The site became inactive in January 1994 when operations were initiated at an offsite contracted laundry facility. TPA M-17-34 required elimination of all discharge to the Crib by January 1995.</p>		

Site Code:	218-W-6	Classification:	Accepted
Site Names:	218-W-6 Burial Ground	ReClassification:	
Site Type:	Burial Ground	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	<p>The site is delineated with light posts and chain. It is marked with signs that say "Danger - Keep Out - Authorized Personnel Only".</p>		

Site Code:	2607-W1	Classification:	Accepted
Site Names:	2607-W1	ReClassification:	
Site Type:	Septic Tank	Start Date:	1944
Site Status:	Active	End Date:	
Site Description:	<p>The 2607-W1 Septic Tank is constructed of reinforced concrete and receives sanitary wastewater and sewage. There is a drain field associated with the system. This system was reconstructed in 1994.</p>		
Waste Type:	Sanitary Sewage		

Waste Description: The 2607-W1 septic system received sanitary sewer effluent at an estimated rate of 646 cubic feet (18.3 cubic meters) per day in 1987.

Site Code: 2607-WL **Classification:** Accepted

Site Names: 2607-WL, 2607-WL Septic System **ReClassification:**

Site Type: Septic Tank **Start Date:** 1962

Site Status: Inactive **End Date:** 1999

Site Description: The 2607-WL Septic System is constructed of reinforced concrete. The septic system includes a trench-type drainfield. The septic tank and drainfield are surrounded by a chain barricade with a sign stating "Septic Tank" posted.

Waste Type: Sanitary Sewage

Waste Description: The current flow rates for the 2607-WL septic system indicate that the drain field is substantially overloaded. In 1995, this unit received effluent from the associated structure at an estimated rate of 2,760 gallons (10,450 liters) per day. The drain field has a capacity of 628 gallons (2,380 liters) per day.

Site Code: 600 OCL **Classification:** Accepted

Site Names: 600 OCL, 600 Area Original Central Landfill, Original CLF **ReClassification:**

Site Type: Sanitary Landfill **Start Date:** 1973

Site Status: Inactive **End Date:** 1973

Site Description: This site is a backfilled trench that is posted "Underground Radioactive Material".

Waste Type: Misc. Trash and Debris

Waste Description: This site contains general office wastes, some glass, electrical wastes, and minimal metal wastes. Radioactive contamination was found at this site in 1988 during investigative (test pit) activities.

Site Code: 600-36 **Classification:** Accepted

Site Names: 600-36, Ethel Railroad Siding (Burn Pit) **ReClassification:**

Site Type: Burn Pit **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an area of scattered debris and some evidence of burning, adjacent to the Ethel railroad siding.

Waste Type: Demolition and Inert Waste

Waste Description: The waste at the unit appears to be from burning activities.

Waste Type: Oil

Waste Description: There is evidence of oil spills.

Site Code: 600-37 **Classification:** Accepted
Site Names: 600-37, Browns Wells, Johnson's Wells **ReClassification:**
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The unit consists of four steel tanks and wells. Three of the tanks are approximately 3 meters (10 feet) long by 1.5 meters (5 feet) in diameter, and the fourth tank is 6.7 meters (22 feet) long by 1.5 meters (5 feet) in diameter. The tanks had been resting on railroad ties approximately 1.2 meters (4 feet) above ground. A range fire burned through the area in June 2000. The southern-most tank was untouched by the fire and the tank supports remain intact. The wooden support structures under the other three tanks were burned and the tanks are now sitting on the ground. The dry wells are double encased with pipe used to center the inner casing within the outer casing. Three of the dry wells have a inside diameter of 38 centimeters (15 inches) and are approximately 4.9 meters (16 feet) deep. The fourth dry well has a much larger diameter. The dry wells were unaffected by the fire in June 2000. There is a dirt road that runs through the unit that appears to be surfaced with used oil.

Waste Type: Water

Waste Description: Raw water was assumed to have been disposed of in the dry wells, however sample testing should be conducted in the unit.

Site Code: 600-38 **Classification:** Accepted
Site Names: 600-38, Railroad Siding Susie, 600-25, Susie Junction **ReClassification:**
Site Type: Dumping Area **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The site is at the "Susie" railroad junction. The northeast corner of the junction has an excavated area that may have contained a siding for decontamination of railroad cars.

In 1996 Ray Johnson, in an interview said that the site had been "picked up" by unknown parties, but most of the railroad maintenance equipment was left at the site.

Waste Type: Asbestos (friable)

Waste Description: The site waste potentially included asbestos.

Waste Type: Barrels/Drums/Buckets/Cans

Waste Description: The site waste included drums.

Waste Type: Equipment

Waste Description: The site contains railroad maintenance equipment.

Waste Type: Misc. Trash and Debris
Waste Description: The site contained miscellaneous trash.

The Following Sites Were Consolidated With This Site:

Site Code: 600-25
Site Names: 600-25, Susie Junction
Reason: Duplicate Site

Site Code: 600-40 **Classification:** Accepted
Site Names: 600-40, West of West Lake Dumping Area **ReClassification:**
Site Type: Dumping Area **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The unit is an old dumping area. The debris is mostly consolidated in one of two locations, either along the road or on the hillside. The site along the road is approximately 364 square meters (3918 square feet) in area. The site on the hillside is 123 square meters (1324 square feet) in area. The area listed in the dimensions represents the total area of both dumping areas. Additionally, a few pieces of scattered debris can be found on the hillside.

Waste Type: Misc. Trash and Debris
Waste Description: The waste along the dirt road includes chunks and slabs of concrete, lumber, miscellaneous metal debris, rusted cans approximately 30.5 centimeters in diameter and 40.6 centimeters tall (12 inches in diameter and 16 inches tall), and what appears to be roofing (black, tarry sheets with gravel) materials. On the hillside are 2 small wooden structures approximately 1.8 meters by 1.8 meters by 1.2 meters (6 feet by 6 feet by 4 feet), a pile of wooden posts with each post approximately 20.3 centimeters in diameter and 1.8 meters long (8 inches in diameter and 6 feet long), other wood debris, what appears to be a wheelbarrow, and 2 large rusted metal cans approximately 20.3 centimeters by 20.3 centimeters by 35.6 centimeters tall (8 inches by 8 inches by 14 inches tall) and 30.5 centimeters in diameter by 35.6 centimeters tall (12 inches in diameter by 14 inches tall).

Site Code: 600-49 **Classification:** Accepted
Site Names: 600-49, H-42 Gun Site Building **ReClassification:**
Foundations and Ammunition Storage
Site Type: Foundation **Start Date:**
Site Status: Inactive **End Date:** 1958

Site Description: The site has six concrete foundations, concrete footings and miscellaneous concrete and gravel walkways. Four ammunition storage berms measuring about 25 meters (80 feet) in diameter are located in the eastern portion of the site. The wood and part of the sandbags were consumed in the July 2000 fire. The concrete foundations were measured as follows:
#1. kitchen/mess hall with four floor drains, 12.4 meters by 10 meters (40.5 feet by 32.5 feet)
#2. toilet/showers with five floor drains, ten toilet drains, 15.4 meters by 6.3 meters (50.5 feet by 20.5 feet)
#3. concrete pad, 6.6 meters by 15.4 meters (21.5 feet by 50.5 feet)
#4. concrete pad, 4 meters by 6 meters (13 feet by 20 feet)

#5. concrete pad, 2.4 meters by 2.4 meters (8 feet by 8 feet)
#6. concrete pad, 6 meters by 7.3 meters (20 feet by 24 feet).

Waste Type: Demolition and Inert Waste

Waste Description: Concrete building foundations, pads and walkways, pipe, sandbags and sheetmetal remain.

Site Code: 600-51 **Classification:** Accepted

Site Names: 600-51, Chemical Dump, Pile of White Powder **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an elliptical area with little or no vegetation.

Waste Type: Chemicals

Waste Description: A sample of this material was analyzed with the HAZCAT field analysis kit. The bulk of this material appears to be a sodium compound.

Site Code: 600-65 **Classification:** Accepted

Site Names: 600-65, 607 Batch Plant Drum Site **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: In 1995, the site had two crushed and flattened 55-gal drums, one oil filter housing (approximately 2 quarts [1.9 liters]), a metal cable, one large concrete block (0.5 cubic yards [0.4 cubic meters]), and indications of possible petroleum disposal. In 2001, the items noted above could not be located, and the area is possibly being used for fill material.

Waste Type: Oil

Waste Description: Two crushed and flattened 55-gal drums, one oil filter housing (not 1-gal can), one large concrete block, and indications of possible petroleum disposal. Reported Date: April 17, 1995.

In October 2001 these items were not located at the site.

Site Code: 600-66 **Classification:** Accepted

Site Names: 600-66, 607 Batch Plant Orphan Drums **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site consists of one rusted 55-gallon (208 L) drum laying on the ground surface on its side. No label or hazardous substance are evident.

Waste Type: Barrels/Drums/Buckets/Cans

Waste Description: Two rusted drums, contents unknown.
Reported Date: August 1, 1995

Site Code: 600-71 **Classification:** Accepted

Site Names: 600-71, 607 Batch Plant Burn Pit **ReClassification:**

Site Type: Burn Pit **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site consists of an area of charred ground, a piece of rusted sheet metal and small pieces of debris. In June 2004, the expansion of Gravel Pit 30 pushed soil over the northern portion of the 600-71 Burn Pit.

Waste Type: Misc. Trash and Debris

Waste Description: Metal, wood, glass, and rubber debris. Charred remains of burned material.
Reported Date: August 1, 1995. This material was still present on the 2002 site visit.

Site Code: 600-218 **Classification:** Accepted

Site Names: 600-218, H-61-H Anti-Aircraft Artillery Site Dumping Area **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The dumping area consists of demolition debris consisting of wood, pipe, barbed wire, metal fence posts, empty oil cans, empty paint cans, food cans, and sheet metal. The dumping area measures 20 meters by 74 meters (67 feet by 243 feet).

Waste Type: Barrels/Drums/Buckets/Cans

Waste Description: Empty oil cans, paint cans with dried paint.

Waste Type: Demolition and Inert Waste

Waste Description: Wood waste from former buildings, concrete footings, pipe, sheet metal, barbed wire, steel fence posts.

Site Code: 600-220 **Classification:** Accepted

Site Names: 600-220, H-51 Anti-Aircraft Artillery Site Dumping Area **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:** 1958

Site Description: The site consists of three dumping areas, one with T-posts around it. The dump with the T-posts contains metal, transite, fluorescent light bulbs, metal ducting, fiberglass insulation, an unknown white granular substance, pipe, and wire.

Waste Type: Misc. Trash and Debris

Waste Type: Misc. Trash and Debris

Waste Description: Wood, metal, transite, fiberglass, piping, glass, fluorescent light tubes, a white granular substance, empty cans, buckets, and bottles, fence posts, barbed wire, and concrete

Waste Type: Asbestos (non-friable)

Waste Description: Transite siding

Site Code: 600-222 **Classification:** Accepted

Site Names: 600-222, H-60 Gun Site **ReClassification:**

Site Type: Military Compound **Start Date:**

Site Status: Inactive **End Date:**

Site Description: There is very little evidence of the former military gun site. A few trees, walkways, roads and an old "Underground Telephone -Contact Signal Officer before excavating" warning sign is present (a second "underground telephone" sign burned in the July 2000 fire).

After the July 2000 fire, other material left at the site has become visible, including pieces of ceramic pipe, a dumpsite with two oil filters, coat hangers, and a few small pieces of transite siding.

South of the access road are several small piles of decayed batteries or fuses.

Waste Type: Batteries

Waste Description: South of the main area and access road are several small piles of decayed batteries or fuses. In another pile are two oil filters, one whole and the other in parts.

Site Code: 600-226 **Classification:** Accepted

Site Names: 600-226, Gun Site H-42 Dumping Area **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:** 1958

Site Description: The site is an old dumping area for an anti-aircraft site. The surface of the site has scattered and decaying debris including pipe, glass, empty buckets, slightly rusted (not corroded) 55-gallon drum, dried paint, cans, transite, broken concrete, and dry cell batteries. Wood had formerly been present, but was burned in the July 2000 fire.

Site Code: 600-227 **Classification:** Accepted

Site Names: 600-227, H-40 Gun Site Building Foundations **ReClassification:**

Site Type: Foundation **Start Date:**

Site Status: Inactive **End Date:** 1958

Site Description: The site has eight building foundations, four ammunition storage structures and a valve pit remaining. The foundations are:
#1. Kitchen/mess hall foundation with four floor drains: 12.4 meters by 9.8 meters (40.5 feet by

- 32 feet)
 #2. Shower/toilet foundation with five floor drains and ten toilet drains: 6 meters by 16.5 meters (20 feet by 54 feet)
 #3. Concrete pad: 4 meters by 3.2 meters (13.5 feet by 10.5 feet)
 #4. Concrete pad: 15 meters by 7.3 meters (49.5 feet by 24 feet)
 #5. Concrete pad: 3.7 meters by 5.5 meters (12 feet by 18 feet)
 #6. Concrete pad: 1.8 meters by 2.4 meters (6 feet by 8 feet)
 #7. Concrete pad: 5.5 meters by 6.7 meters (18 feet by 22 feet)
 #8. Concrete pad: 3.7 meters by 6.4 meters (12 feet by 21 feet).

The valve pit is a vertical steel culvert, 1.2 meters (4 feet) in diameter by 1.5 meters (5 feet) deep. The water main to the site is visible in the bottom of the pit, with a valve and pipes branching off toward to individual buildings.

The four ammunition storage structures on top of the hill are constructed of rock, soil, sandbags, wood, metal and tar paper. The ammunition storage bunkers are approximately 23 meters (75 feet) in diameter.

On the south side of the site is a concrete-transite pipe 35 centimeters (14 inches) high, and 10 centimeters (5 inches) in outside diameter. At the base of the pipe are pebbles averaging 4 centimeters (1.5 inches) in diameter. Neither the pipe nor the pebbles are stained. An area surrounding the pebbles is evidence of boards that have burned away, about 1.8 meters (72 inches) by 2 meters.

Waste Type: Demolition and Inert Waste

Waste Description: Concrete foundations, pipe, wood and sandbags remain at the site.

Site Code:	600-228	Classification:	Accepted
Site Names:	600-228, H-40 Gun Site Dumping Area	ReClassification:	
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	1958

Site Description: The dumping areas are located in pits in the southern portion of the site. The pit located west of the main site measures about 12 meters (40 feet) in diameter and contains sheetrock, metal, transite, glass and empty paint cans. Two small pits located in the south of the site are each about 4 meters (15 feet) in diameter. One pit is empty and the other contains steel fence posts and barbed wire. The largest pit is to the south-southeast, and on the topographic slope facing to the south. It contains a large quantity of metal objects, as well as some transite and glass. The July 2000 fire burned much of the wood debris in this pit and the western pit.

Site Code:	600-262	Classification:	Accepted
Site Names:	600-262, West Lake Test Crib, Lysimeter Test Site	ReClassification:	
Site Type:	Crib	Start Date:	1959
Site Status:	Inactive	End Date:	1962

Site Description: The site includes a test crib and twenty one monitoring wells. The entire test site area is surrounded by metal fence posts. In 1999, no warning signs or postings are visible at the site. The test crib has a wooden frame and a wooden lid, which has been set aside. Two

approximately 2.5 centimeter (1 inch) diameter pipes are visible entering the crib and appear to enter the soil. Although only 7 wells are mentioned in HW-61476, 12 others are identified in HW-71573. Twenty one 5.1 centimeter (2 inch) diameter metal pipes or monitoring wells are currently visible surrounding the crib. Some of the wells are approximately 0.9 meters (3 feet) tall and are galvanized while others are only approximately 0.3 meters (1 foot) tall and are not galvanized. In three out of the four wells examined, water was visible. Also visible at the site were wood debris, metal debris, wire, empty glass bottles, a wooden box and excess 5.1 centimeter (2 inch) pipe. The ground surface is gently rolling. Northeast of the test crib is a depressed area approximately the same size as the crib. The soil is sandy and no discoloration is apparent. Vegetation at the site is composed primarily of grasses but includes a few small shrubs.

Waste Type: Water

Waste Description: A concentrated solution of calcium nitrate and strontium-85 was prepared in the laboratory. 900 milliliters of the concentrated solution was added to a 55 gallon drum containing sanitary water. The resulting solution contained 600 parts per million of calcium and 0.00013 microcuries per milliliter. During the month of May, 1959, 34,200 liters (9000 gallons) of this solution was discharged to the ground through the wooden crib box. In 1961, another test was done at this site. A total of 61,560 liters (16,200 gallons) of water spiked with calcium nitrate and strontium-85 was injected into the crib.

Site Code:	600-275	Classification:	Accepted
Site Names:	600-275, 218-W-14, Igloo Site, Army Ammo Site, Regulated Storage Area	ReClassification:	
Site Type:	Foundation	Start Date:	1964
Site Status:	Inactive	End Date:	
Site Description:	The bunkers, guard house and fence have been removed. Currently the access roads are visible with bladed areas where the seven bunkers had been located. Rectangular mounds of soil, each approximately one meter (3 feet) high, remain where the igloo structures had been located.		

Site Code:	600-281	Classification:	Accepted
Site Names:	600-281, Scattered Debris South of Army Loop Road	ReClassification:	
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	After the range fire in June 2000, additional areas of debris were visible. Five areas of concentrated debris were identified. The debris includes material suspected to be asbestos, charred wood, glass, metal pipes, gauges and green metal containers.		

Waste Type: Demolition and Inert Waste

Waste Description: Five areas of concentrated debris were identified. The debris includes material suspected to be asbestos, charred wood, glass, metal pipes, gauges and green metal containers. Three compressed gas cylinders were found adjacent to well 699-16-51.

Site Code:	600-282	Classification:	Accepted
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Site Names: 600-282, Wood and Coal Debris Piles **ReClassification:**
Site Type: Dumping Area **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site consists of scattered wood debris and a pile of coal.
Waste Type: Misc. Trash and Debris
Waste Description: Coal and wood debris were identified on a site walkdown in 2004.

Site Code: 616-WS-1 **Classification:** Accepted
Site Names: 616-WS-1, 616 NRDWSF French Drain **ReClassification:** Closed Out (10/24/2001)
Site Type: French Drain **Start Date:** 1986
Site Status: Inactive **End Date:** 2001
Site Description: This site consists of a perforated concrete pipe set vertically into the ground. The ground surface is flush with the top of the pipe. The pipe has a layer of gravel at its bottom and a concrete cover over its top. The lid is 10.2 centimeters (4 inches) thick and 1.2 meters (3 feet 10 inches) in diameter. Two railroad ties lie on opposite sides of the lid.
Waste Type: Stormwater Runoff
Waste Description: The unit received liquid from loading pad collection troughs. The water was sampled to ensure it met release criteria before being released to the drain.

Site Code: CTFN 2703-E **Classification:** Accepted
Site Names: CTFN 2703-E, 200-E Chemical Drain Field, Chemical Tile Field North of 2703-E **ReClassification:**
Site Type: Drain/Tile Field **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site consists of a trench and seepage basin. As of 1994, this unit had no free standing liquids nor any sign of natural vegetative growth. The seepage basin is referred to as the 200-E Chemical Drain Field. It has not been backfilled or filled with any materials that would facilitate drainage.
Waste Type: Process Effluent
Waste Description: The Chemical Tile Field North of 2703-E is currently inactive. The wastewater from the 272-E Building was hydrotesting wastewater which was not treated before being discharged to the floor drain. The wastewater discharged from the two sumps in the 2703-E Building included: floor wash, rinse water, cooling water, sinks, and steam condensate.

Site Code: OCSA **Classification:** Accepted
Site Names: OCSA, Old Central Shop Area, Central Shop Area **ReClassification:**

Site Type:	Foundation	Start Date:	1945
Site Status:	Inactive	End Date:	
Site Description:	The site consists of building foundations and scattered debris. A site visit on 12/4/97 observed pieces of lumber, corrugated metal, bricks, shingles, buckets, a barrel, office furniture, and wooden tables. There are two pits containing debris and nails.		
Waste Type:	Demolition and Inert Waste		
Waste Description:	The site contains miscellaneous demolition debris and several foundations can be seen. There is also evidence of burning.		
Waste Type:	Sanitary Sewage		
Waste Description:	The site contained a sanitary sewer system consisting of a tank(s), open trench, and settling ponds.		

Site Code:	UPR-200-E-11	Classification:	Accepted
Site Names:	UPR-200-E-11, Railroad Track Contamination Spread, UN-200-E-11	ReClassification:	
Site Type:	Unplanned Release	Start Date:	1957
Site Status:	Inactive	End Date:	
Site Description:	This unplanned release is no longer marked or posted. Portions of the TC-4 Spur (a.k.a. UPR-200-E-88) and a section of track south of the 218-E-5 Burial Ground (UPR-200-E-95) have been covered with dirt and posted with Underground Radioactive Material signs.		
Waste Type:	Water		
Waste Description:	The release consisted of fission products dripping from a railroad car transporting material from PUREX to the burial ground.		

Site Code:	UPR-200-E-83	Classification:	Accepted
Site Names:	UPR-200-E-83, UN-216-E-11, BC Cribs Controlled Area, BC Controlled Area, UN-200-E-83, Zone A, Zone B, Zone C, See Subsites	ReClassification:	
Site Type:	Contamination Migration	Start Date:	1958
Site Status:	Inactive	End Date:	
Site Description:	Periodic radiological surveys conducted between 1958 and 1998 have identified radiological contamination outside the boundaries of the engineered crib and trench structures. Each survey effort redefined the soil contamination boundaries. The size and shape of the posted area varied with each survey. Radiological surveys (1996-1998) identified contamination extending south from Route 4 South to Army Loop Road and extending east to the Central Landfill area. For remediation purposes, the BC Controlled Area has been divided into two subsites; the Northern Area, that includes cleanup areas A and B, and the Southern Area that includes cleanup area C.		
Waste Type:	Soil		

Waste Description: The contamination spread consists of radioactive feces (and urine) from coyotes and rabbits. Strontium-90 (81 curies) and cesium-137 (14 curies) are the major contaminants in the feces. Specks of contamination found in the soil may be wind blown particulates from filling the open trenches with waste (1952-1958) and major contamination events in 200 East Area. In 1999, the cryptogamic layer and underlying soils were analyzed for a selected number of radionuclides based on the contaminant of concern list. Analysis included plutonium-239, americium-241, cesium-37 and strontium-90.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-E-63

Site Names: UPR-200-E-63, Radioactively Contaminated Tumbleweeds, UN-216-E-63, UN-200-E-63

Reason: Within Boundary Of Larger Site

SubSites:

SubSite Code: UPR-200-E-83:1

SubSite Name: UPR-200-E-83:1, Northern Area, Northern Portion of BC Controlled Area, Zone A and Zone B

Classification: Accepted

ReClassification:

Description: The northern portion of the UPR-200-E-83 waste site includes the soil remediation area known as Zone A and Zone B. Zone A is approximately 140 acres of densely contaminated soil, south of the BC trenches. Zone B be is the remaining (approximately 4000 acres) of spotty contaminated soil.

SubSite Code: UPR-200-E-83:2

SubSite Name: UPR-200-E-83:2, Southern Area, Southern portion of UPR-200-E-83, Zone C

Classification: Accepted

ReClassification:

Description: The southern portion of UPR-200-E-83 extends south of the boundary that separates the northern and southern areas to the Army loop road. The southern area includes the sand dunes and Zone C.

Site Code: UPR-200-W-8

Classification: Accepted

Site Names: UPR-200-W-8, UN-200-W-8, 200-W-5, Old Burial/Burning Pit, U-Plant Burning Pit/Burial Ground

ReClassification:

Site Type: Unplanned Release

Start Date: 1950

Site Status: Inactive

End Date:

Site Description: The site is posted as an Underground Radioactive Material area.

Waste Type: Misc. Trash and Debris

Waste Description: Fission products were discovered at the site with approximately 1 curie and a maximum dose rate of 45 rads/hour at the surface.

The Following Sites Were Consolidated With This Site:

Site Code: 200-W-5
Site Names: 200-W-5, Burial Ground/Burning Pit, U Plant Burning Pit, UPR-200-W-8
Reason: Duplicate Site

Site Code: UPR-200-W-58 **Classification:** Accepted
Site Names: UPR-200-W-58, Railroad Track Contamination, UN-200-W-58 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1965
Site Status: Inactive **End Date:**
Site Description: The Unplanned Release is not separately marked or posted from other postings on the railroad track.
Waste Type: Chemicals
Waste Description: The release consisted of beta/gamma contamination with levels ranging from 100,000 counts/minute to a maximum of 5 rads/hour.

Site Code: UPR-200-W-70 **Classification:** Accepted
Site Names: UPR-200-W-70, Contamination Found at the 200 West Burning Ground East of Beloit Ave. **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1973
Site Status: Inactive **End Date:**
Site Description: The release site is not marked or posted. A mapping data point (dot) estimates the location, placing it adjacent to the northwest access road into the 200-W ADB (ash disposal basin). The area is currently covered with several feet of ash.
Waste Type: Ash
Waste Description: Beta/gamma contamination measuring 5,000 to 50,000 counts/minute was found along the bumper rails at the edge of the combustible trench. Other area of contamination ranging from 20,000 counts/minute to 30 millirads/hour beta/gamma was identified inside the combustible trench. An area on the south side of the combustible trench was found to have contamination ranging from 5,000 to 200,000 disintegrations/minute alpha. A sample from the trench (a chunk of rusty debris) showed americium-plutonium contamination.

Site Code: UPR-600-12 **Classification:** Accepted
Site Names: UPR-600-12, UN-600-12, UNH Spill to Route 4S **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1954
Site Status: Inactive **End Date:** 1954

Site Description: A radiologically posted area (Underground Radiological Material Area and Soil Contamination Area) is located on the south shoulder of Route 4S, near the top of the hill, southeast of 200 East Area.

Waste Type: Chemicals

Waste Description: The waste consisted of uranium nitrate hexahydrate solution spilled to the road and the soil. The soil was found to have less than 10 nanocuries/gram of contamination, and a maximum dose rate at the surface of 60 millirads/hour.

Site Code: UPR-600-20 **Classification:** Accepted

Site Names: UPR-600-20, UN-216-E-41, Old Cross Site **ReClassification:**
Transfer Line Surface Contamination

Site Type: Contamination Migration **Start Date:** 1988

Site Status: Inactive **End Date:** 1995

Site Description: The underground transfer line extends from the 241-UX-154 diversion box, adjacent to U Plant in 200 West Area, to the 241-ER-151 Diversion Box in 200 East Area. The site includes the contaminated soil and vegetation located on the surface of the cross site transfer line, as well as the pipeline itself. The surface of the underground line has been stabilized and is currently posted with "Underground Radioactive Materials" signs. There is also a large mound of soil, located south of the 241-EW-151 Vent Station, that is associated with the original transfer line surface stabilization activities. The soil mound is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The surface of the buried waste transfer line became contaminated through biological transport of radioactive materials that leaked in the pipeline encasement and windblown particulates from the vent station. The contaminated soil contained cesium-137, plutonium-239/240, strontium-90, and uranium from tank farm waste transferred between 200 East Area and 200 West Area through the underground line.

Site Code: UPR-600-21 **Classification:** Accepted

Site Names: UPR-600-21, Contamination Found **ReClassification:**
Northeast of 200 East Area, UN-216-E-31

Site Type: Unplanned Release **Start Date:** 1985

Site Status: Inactive **End Date:** 1991

Site Description: The site had been a large radiologically posted area located northeast of 200 East Area. The area is no longer marked or posted. The site was originally posted with Radiological Controlled Area warning signs. In 1990, the Health Physics group changed the posting to Surface Contamination. In 1991, all radiological postings were removed.

200-PW-1

Site Code: 216-Z-1&2 **Classification:** Accepted

Site Names: 216-Z-1&2, 234-5 No. 1 Crib, 216-Z-7, 234-5 No. 2 Crib, 216-Z-1 & 2TF, 216-Z-1 and 216-Z-2 Cribs **ReClassification:**

Site Type: Crib **Start Date:** 1949

Site Status: Inactive **End Date:** 1969

Site Description: The 216-Z-1&2 Cribs consist of two wooden timber boxes connected by a central pipe. The 216-Z-2 crib overflowed into the 216-Z-1 crib which overflowed into the 216-Z-1A tile field. Each unit is set and backfilled in a deep, square excavation. Two risers are visible from the surface of each crib.

Waste Type: Process Effluent

Waste Description: The 216-Z-1 and 2 Cribs received liquid process waste from the 234-5Z Building. The cribs received aqueous and organic wastes from the Plutonium Reclamation Facility, Americium Recovery Line wastes from the 236-Z and 242-Z Buildings, and uranium wastes from the 236-Z Building.

Site Code: 216-Z-1A **Classification:** Accepted

Site Names: 216-Z-1A, 216-Z-1A Tile Field, 216-Z-7, 234-5 Tile Field, 216-Z-1AA, 216-Z-1AB, 216-Z-1AC **ReClassification:**

Site Type: Drain/Tile Field **Start Date:** 1949

Site Status: Inactive **End Date:** 1969

Site Description: The tile field is located inside a chain link fence. It is a below grade trunk line orientated north to south with seven pairs of lateral pipes spaced in a herring bone pattern. The vitrified clay pipe lies on a gravel bed. The length of the tile field was expanded twice. The original section is known as 216-Z-1AA. The expanded sections are known as 216-Z-1AB, and 216-Z-1AC. The excavation was backfilled to grade. The fence is radiologically posted.

Waste Type: Process Effluent

Waste Description: The 216-Z-1A Tile Field originally received overflow from the 216-Z-1 and the 216-Z-2 Cribs. The cribs received aqueous and organic wastes from the Plutonium Reclamation Facility, americium recovery line wastes from the 236-Z and the 242-Z Buildings, and uranium wastes from the 236-Z Building.

Site Code: 216-Z-3 **Classification:** Accepted

Site Names: 216-Z-3, 216-Z-3 Culvert, 216-Z-8, 234-5 No. 3 & 4 Cribs **ReClassification:**

Site Type: Crib **Start Date:** 1952

Site Status: Inactive **End Date:** 1959

Site Description: The crib is posted with identification signs. It is inside the locked and posted chain link fence surrounding the 216-Z-1A tile field. The 216-Z-3 Crib was constructed of three 1.2 meter (4 foot) long, perforated corrugated metal culverts that were laid horizontally, end to end, on a gravel filled excavation. Wire screens were welded on the ends of the pipes to prevent gravel from intruding into the pipe. 2.5 centimeter (1 inch) holes were drilled every 15 centimeters (6 inches) around the circumference of the pipe at 30 centimeter (1 foot) intervals. The culvert rests on a 5 meter (17 foot) bed of gravel, 2.4 meters (8 feet) below grade. Two layers of asphalt roofing paper were laid over the crib construction and the site was backfilled to grade.

Waste Type: Process Effluent

Waste Description: The site received process waste, analytical and development laboratory wastes from the 234-5Z Building via the 241-Z Settling Tank. The waste was neutral to basic.

Site Code: 216-Z-9 **Classification:** Accepted

Site Names: 216-Z-9, 216-Z-9 Crib and Support Structures, 216-Z-9 Cavern, 234-5 Recuplex Cavern, 216-Z-9 Covered Trench, 216-Z-9A, 216-Z-9B, 216-Z-9C **ReClassification:**

Site Type: Trench **Start Date:** 1955

Site Status: Inactive **End Date:** 1962

Site Description: The 216-Z-9 trench is marked and posted with Underground Radioactive Material signs. In 1999, a gravel bio-barrier, measuring 6.1 meter (20 feet) by 4 meters (13 feet), was placed over an area of surface contamination. This area is also posted as Underground Radioactive Material.

The 216-Z-9 Crib is an inactive, below grade waste management unit. It is a rectangular structure, with a concrete cover supported by six concrete columns with a concrete cover. The trench walls and support columns are covered in an acid resistant brick. Two stainless steel pipes discharge effluent above the trench bottom. Three above grade structures (216-Z-9A, 216-Z-9B and 216-Z-9C) were constructed to support the crib soil mining operations.

Waste Type: Process Effluent

Waste Description: The trench received aqueous process waste, and organic process waste. The aqueous process waste is characterized as an acidic, high salt, low level radioactive waste, and the organic process is considered slightly acidic, low salt, high organic, radioactive liquid waste with intermediate levels of plutonium and other transuranic components. Fabrication oil used as a cutting and milling lubricant was estimated to be 50% carbon tetrachloride and 50% lard oil. The site received an estimated 270,000 to 460,000 liters of carbon tetrachloride as waste.

Site Code: 216-Z-12 **Classification:** Accepted

Site Names: 216-Z-12, 241-Z-12 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1959

Site Status: Inactive **End Date:** 1973

Site Description: The site is an inactive, below-grade waste management unit. The site consists of a deep rectangular excavation with a vitrified, perforated, clay pipe running the length of the crib. A second six inch diameter steel pipe (bypass pipeline) was installed in 1968 and runs the length of

the crib to the west of the original pipe. The bottom 1.5 meters (5 feet) of the excavation was backfilled with gravel and covered with a polyethylene barrier. The remaining excavation was backfilled to grade. It is marked and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received process waste and analytical and development laboratory waste from the 234-5Z Building via the 241-Z-361 Settling Tank. The waste is slightly acidic. Low salt waste was adjusted to a pH of 8 to 10 before disposal. The waste disposed of at the crib included plutonium.

Site Code:	216-Z-18	Classification:	Accepted
Site Names:	216-Z-18, 216-Z-18 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1969
Site Status:	Inactive	End Date:	1973

Site Description: The 216-Z-18 Crib is a below grade inactive management unit. The crib consists of five parallel, north-south running trenches bisected by a steel distribution pipe. Near the center of each trench two perforated, fiberglass reinforced epoxy pipes exit each side of the distribution line. The distribution and trench piping lie on a 0.3-meter (1-foot) thick bed of gravel. The pipes were buried under an additional 0.3 meters (1 foot) of gravel, a membrane, and sand cover. The trenches were then backfilled to grade. The site is marked and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The crib received solvent and acidic aqueous waste from the Plutonium Reclamation Facility in the 236-Z Building. The crib received high salt, acidic, and organic liquid waste. Wastes disposed of at the site include carbon tetrachloride, tributyl phosphate, and plutonium.

Site Code:	241-Z-361	Classification:	Accepted
Site Names:	241-Z-361, 241-Z-361 Settling Tank, IMUST, Inactive Miscellaneous Underground Storage Tank	ReClassification:	
Site Type:	Settling Tank	Start Date:	1949
Site Status:	Inactive	End Date:	1976

Site Description: The unit is an underground reinforced concrete structure with a 0.95 centimeter (3/8 inch) steel liner. The tank has inside dimensions of 7.9 by 4.0 meters (26 by 13 feet) with 0.3 meter (1 foot) thick walls. The bottom slopes, resulting in a internal height variation between 5.2 and 5.5 meters (17 and 18 feet). The top is 0.6 meters (2 feet) below grade. A 15 centimeter (6 inch) stainless steel inlet pipe from the 241-Z Tank Pit (WIDS SiteCode 241-Z) enters the tank from the north. A single 20 centimeter (8 inch) stainless steel pipe exits the tanks from the south. There are two manhole covers and frames and several risers visible above grade.

Waste Type: Process Effluent

Waste Description: The unit received radioactively contaminated liquid. The tank is estimated to contain a residual 30 to 75 kilograms (66 to 165 pounds) plutonium in the sludge. (See HNF-8735 for detailed

sludge sample analysis)

200-PW-3

Site Code: 216-A-7 **Classification:** Accepted
Site Names: 216-A-7, 216-A-7 Cavern **ReClassification:**
Site Type: Crib **Start Date:** 1956
Site Status: Inactive **End Date:** 1966
Site Description: The crib is marked and posted with Underground Radioactive Material (URM) signs. Both the 216-A-7 and 216-A-1 cribs are inside this URM area.

Waste Type: Process Effluent

Waste Description: From January 1956 through July 1959, the site received the catch tank overflow waste, the sump waste, and the pump pit drainage from the 241-A-152 Diversion Box. From July 1959 to November 1966, the site received the catch tank overflow waste and the pump pit drainage from the 241-A-152 Diversion Box. In November 1966, the site received the tri-butyl phosphate soltrol organic inventory from the 202-A Building. The waste is low in salt and is neutral to basic.

Site Code: 216-A-8 **Classification:** Accepted
Site Names: 216-A-8, 216-A-8 Crib and Overflow Pond **ReClassification:**
Site Type: Crib **Start Date:** 1955
Site Status: Inactive **End Date:** 1991
Site Description: The crib and overflow area are surrounded by chain and concrete AC-540 markers. They are posted with Underground Radioactive Material signs. Crib overflow was accomplished through a 40.6 centimeter (16 inch) diameter pipe exiting to the north at the east end of the crib (see H-2-56157). The pipe emptied into a narrow ditch that flowed northward. A small overflow pond was excavated at the northeast end of the ditch to receive the excess waste water from the crib.

A 61 centimeter (24 inch) diameter, schedule 20, perforated distribution pipe is located 2.1 meters (7 feet) below grade along the length of the crib. The site contains approximately 5830 cubic meters (206,000 cubic feet) of gravel fill. The crib excavation side slope is 1:2. Four test risers extended above grade. A 20 centimeter (8 inch) diameter vent riser extended from the distribution pipe had been located at the west end of the crib. The vent riser was removed in 1995. Two layers of sisalkraft paper separate the gravel fill from the backfill. The 216-A-508 control structure is located west of the crib (See drawing H-2-56157).

Waste Type: Process Effluent

Waste Description: From 11/55 to 12/57, the site received condensate from the waste storage tanks in the 241-A and -AX farms. From 12/57 to 5/58, the site received the above effluents and cooling water from the contact condenser in the 241-A-431 Building. The site was inactive except for the following periods: 1/66-4/76, received condensate from 241-A and -AX farms; 1/78-4/78, received 241-A, -AX, & -AY farm condensate; 10/83, received 241-AY and -AZ farm condensate; 3/84, same as 10/83. In early 1985, flow was again diverted from the crib to double-shell tanks.

Document RPP-7494 reports a total discharge of 1.18E+09 liters differing slightly from the WIDS total. Condensate has not been discharged to the crib since early 1985. The distribution

box was filled with concrete in 1995 to permanently isolate the crib.

Site Code:	216-A-24	Classification:	Accepted
Site Names:	216-A-24, 216-A-24 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1958
Site Status:	Inactive	End Date:	1966
Site Description:	The site is surrounded with concrete AC-540 markers and posted with Underground Radioactive Material signs.		

The crib was built with four sections, each 107 meters (350 feet) long, separated by soil berms. The sections were installed at increasingly lower elevations, to allow the effluent to cascade from one section to the next. The crib was constructed with a 38 centimeter (15 inch) diameter (perforated bottom half), galvanized, corrugated pipe, placed horizontally 3 meters (10 feet) below grade. The crib excavation has 4100 cubic meters (1.46E+03 cubic feet) of gravel fill. There is 46,200 square feet of polyethylene barrier laid between the gravel and the soil backfill. The side slope is 1.5:1. Eight 20 centimeter (8 inch) diameter wells on concrete pads are located on this crib. The wells extend from the bottom of the crib to 0.9 meters (3 feet) above grade. Four 38 centimeter (15 inch) corrugated risers extend from the distributor pipe to grade with filter box assemblies on top of the risers.

Waste Type: Process Effluent

Waste Description: The site received condensed vapors from the waste storage tanks in the 241-A and 241-AX Tank Farms via the 241-E-411 and 241-E-412 Contact Condensers from 1958 through the early 1960's and until 1966, via the 241-A-401 and A-417 Tank. This crib was constructed to receive the condensate after the 216-A-8 Crib reached its radionuclide capacity. The waste is low in salt, neutral to basic and has a record of organic content. The crib was believed to have been valved out in January 1966. However, it was found to still be receiving liquid in 1979 (Occurrence Report #79-113). The valve has since been closed. Because of this inadvertent use, the radionuclide exact inventory and waste volume are unknown for 1967 through 1979.

Document RPP-7494 reports a total discharge of 7.94E+08 liters differing slightly from the WIDS total.

Site Code:	216-A-31	Classification:	Accepted
Site Names:	216-A-31, 216-A-31 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1964
Site Status:	Inactive	End Date:	1966
Site Description:	The crib is located inside a large Underground Radioactive Material area that has a WIDS sitecode of 200-E-103. The crib is marked with cement posts on four corners.		

Waste Type: Process Effluent

Waste Description: The site received organic waste from 202-A Building (L Cell - Pu concentration waste). The waste was low in salt and is neutral to basic. Most documents state that 10,000 liters (3000 gallons) of organics were discharged to the unit since startup. However, ARH-231 states that a total of 30,545 liters (8070 gallons) were discharged to the crib from the date it was put into

service (January 1963).

Site Code: UPR-200-E-56 **Classification:** Accepted

Site Names: UPR-200-E-56, 216-A-24 Crib Excavation, Excavated Contamination Adjacent to 216-A-24 Crib, UN-200-E-56, UN-216-E-33 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1979

Site Status: Inactive **End Date:**

Site Description: The site is currently a surface stabilized area located north of the west end of the 216-A-24 Crib. It is posted and marked as an "Underground Radioactive Material" area.

Waste Type: Process Effluent

Waste Description: The contamination found in the moist excavation included beta/gamma readings up to 8,000 counts per minute. When the mistakenly excavated soil was returned to the excavation area from 241-AN Tank Farm, there was not sufficient volume to fill the hole. It was decided to place contaminated soil and vegetation from several areas along the perimeter and tank farm fences to help fill the void before covering with a layer of clean dirt. Additional contaminated soil from around the 244-A Lift Station was also disposed in this location in 1985.

200-PW-6

Site Code: 216-Z-5 **Classification:** Accepted**Site Names:** 216-Z-5, 231-W Sumps, 231-W-1 & 2
Cribs **ReClassification:****Site Type:** Crib **Start Date:** 1945**Site Status:** Inactive **End Date:** 1947**Site Description:** The 216-Z-5 Crib is an inactive waste management unit located below grade. The crib is oriented in a north-south configuration with a transfer pipe connecting to two wooden sump boxes. Each box was placed at the bottom of a rectangular excavation. The two excavations were the backfilled to grade.**Waste Type:** Process Effluent**Waste Description:** The site received process waste from the 231-Z Building via the 231-W-151 Vault. An estimated 3,000 grams of plutonium was discharged from 231-Z to these cribs. The cribs were plugged with sludge and abandoned. It is believed the plutonium is in the sludge or directly beneath the crib area.

Site Code: 216-Z-8 **Classification:** Accepted**Site Names:** 216-Z-8, 234-5 Recuplex French Drain,
216-Z-9, 216-Z-8 Crib **ReClassification:****Site Type:** French Drain **Start Date:** 1955**Site Status:** Inactive **End Date:** 1962**Site Description:** The french drain is constructed of two sections of 0.9-meter (3-foot) high standard clay tile culverts, stacked vertically underground. The culverts are filled with gravel and rest on a 1.5-meter (5-foot) diameter by 0.9-meter (3-foot) deep bed of gravel with a slope of 2.5:1. There is a 10-centimeter (4-inch) thick concrete top that is 2.4 meter (8 feet) below grade. The bottom of the french drain is 5.57 meters (17 feet) below grade.**Waste Type:** Process Effluent**Waste Description:** The site received overflow from the Recuplex Silica Tank (neutral to basic Recuplex waste). As of June 30 1978 the calculated radionuclide content included 48.4 grams (0.1 pounds) of plutonium. The adjacent well (#299-W15-202) shows a maximum of 4,400 picocuries/gram of plutonium-239 and 440 picocuries/gram of americium-241 near the bottom of the french drain structure.

Site Code: 216-Z-10 **Classification:** Accepted**Site Names:** 216-Z-10, 216-Z-2, 231-W Reverse Well,
231-W-151 Dry Well or Reverse Well, 231-
Z Well, 299-W15-51, 231-W-150 **ReClassification:****Site Type:** Injection/Reverse Well **Start Date:** 1945**Site Status:** Inactive **End Date:** 1945

Site Description: This site is a reverse well that protruded approximately 0.31 meters (1 foot) above grade. The protruding end is capped with a flange. The well casing is constructed of steel pipe. The site was interim stabilized in 1990.

Waste Type: Process Effluent

Waste Description: The site received process and laboratory waste from the 231-Z Building, via the 231-W-151 Sump. The transuranic contaminated process waste was discharged at a rate of 76 liters (20 gallons) per minute. HW-28471 states that the small diameter well became plugged with sludge in June 1945. Approximately 988,000 liters (260,000 gallons) of liquid containing approximately 50 grams of plutonium was discharged to this unit.

Site Code: 241-Z-8 **Classification:** Accepted

Site Names: 241-Z-8, 241-Z-TK-8, Silica Slurry Tank, 216-Z-8, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Settling Tank **Start Date:** 1955

Site Status: Inactive **End Date:** 1962

Site Description: The tank is a horizontal cylindrical vessel located 1.8 meters (6 feet) below grade. The area above the tank is surrounded by a light weight chain barricade marked "Caution Underground Radioactive Material" and IMUST signs. Inside the barricade on the north end are two capped 10 centimeters (4 inches) steel vent pipes.

Waste Type: Sludge

Waste Description: The tank was used as a solids settling tank for backflushes of the feed filter in the Recuplex. Silica gel was used as a settling agent on the dissolved solids. The solids and the silica gel were then flushed to this unit with nitric acid. In July 1959, records indicate the tank was filled to capacity 58,428 liters (15,435 gallons). No records were found to indicate the tank was pumped between 1959 and 1962. In 1974, a total waste volume of 30,850 liters (8,150 gallons) was reported. A total of 27,580 liters (7,285 gallons) has not been accounted for in historical records. The tank measures 2.4 meters (8 feet) diameter, by 12.2 meters (40 feet) length, constructed of 0.79 centimeters (5/16 inch) steel or wrought iron plate, buried horizontally about 1.8 meters (6 feet) below grade. There are two blanked inlet pipes on the west end and on overflow pipe on the east end of the tank, all three are 15 centimeters (6 inches) below tank top. In the east half of the top centerline of the tank, there are two 10 centimeters (4 inches) vent risers that extend above grade, a 0.3 meters (1 foot) diameter pump access opening, and a 0.6 meter (2 feet) diameter manhole; both bolted over.

200-SW-1

Site Code: 600 CL **Classification:** Accepted**Site Names:** 600 CL, 600 Area Central Landfill, Central Landfill, Central Waste Landfill, CWL, Solid Waste Landfill, SWL, 671 Facility **ReClassification:****Site Type:** Sanitary Landfill **Start Date:** 1973**Site Status:** Inactive **End Date:** 1996**Site Description:** The landfill is approximately 15.4 hectares (38 acres) consisting of 39 unlined solid waste trenches and 5 unlined liquid disposal trenches. All trenches have been backfilled. The landfill had been enclosed by a 2.4 meter (8 foot) tall fence with lockable gates. Only the southern portion of the fence still remains, due to the 2000 range fire.

The Nonradioactive Dangerous Waste Landfill (NRDWL) is located adjacent to the Phase I trenches, on the north end of the landfill.

Waste Type: Asbestos (friable)**Waste Description:** Prior to 1982, detailed log books were not maintained. It is estimated that Phase I received approximately 179,000 cubic meters, (234,000 cubic yards) and Phase II received approximately 417,000 cubic meters (546,000 cubic yards) of solid waste. Forty percent of the solid waste is assumed to be office waste consisting mostly of paper products. Construction and demolition debris consists mostly of wood and wooden pallets. Asbestos waste accounts for approximately 10% (by volume) of the inventory. Trenches 36, 37, 38 and 40 contain asbestos. Miscellaneous wastes include empty containers, medical waste from the first-aid stations and inert materials. Large bulky items such as appliances and office furniture were also placed in the solid waste trenches. An estimated 3,800,000 to 5,700,000 liters (1,000,000 to 1,500,000 gallons) of sewage and 380,000 liters (100,000 gallons) of 1100 Area catch basin wastes were placed in the liquid trenches. Spot checks of items in the landfill found occasional low level radioactive material on SWP (special work permit) clothing.

Site Code: 600 NRDWL **Classification:** Accepted**Site Names:** 600 NRDWL, 600 Area Nonradioactive Dangerous Waste Landfill, NRDW Landfill, Nonradioactive Dangerous Waste Landfill (Central Landfill), NRDWL **ReClassification:****Site Type:** Sanitary Landfill **Start Date:** 1975**Site Status:** Inactive **End Date:** 1988**Site Description:** This Nonradiological Dangerous Waste Landfill (NRDWL) consists of nineteen unlined trenches. The nineteen trenches are located adjacent to the Phase I trenches, on the north end of the Central Waste Landfill (CWL) (WIDS sitecode 600 CL). The Phase I trenches and the Phase II (CWL) trenches are separated by a wire fence. Both the CWL trenches and the NRDWL trenches have been backfilled and covered with 1.8 to 3 meters (6 to 10 feet) of soil.**Waste Type:** Abandoned Chemicals**Waste Description:** This waste consisted of small quantity laboratory chemicals, bulk organic waste, solvent waste, battery acid, paints, paint thinners, waste oils and empty containers. Some small containers of

liquid wastes were included. Trenches 2N, 20, 21, 22, 23, 25, 27,29 and 30 were used for disposal of asbestos waste from 1975 through 1988. Trenches 19N, 26, 28, 31, 33, and 34 were used for the above described chemicals.

Waste Type: Asbestos (friable)

Waste Description: The bulk of the waste asbestos material came from building demolition or renovation activities. This material was disposed of in Trenches 2N, 20, 21, 22, 23, 25, 27, 29, and 30. The asbestos waste was generally not containerized before disposal. It is probably a mix of friable and non-friable material.

Waste Type: Misc. Trash and Debris

Waste Description: This waste consisted largely of office and lunchroom waste and construction/demolition debris. Trench 1N received this waste.

Waste Type: Sludge

Waste Description: One instance occurred where Trench 34 received approximately 5,300 liters (1,400 gallons) of septic tank sludge.

200-SW-2

Site Code: 216-C-9 **Classification:** Accepted

Site Names: 216-C-9, 216-C-9 Pond, 216-C-7 Swamp, Former 221-C Canyon Excavation, 216-C-9 Swamp, Semi-Works Swamp, 216-C-9 C Canyon Excavation Semiworks Swamp **ReClassification:**

Site Type: Pond **Start Date:** 1953

Site Status: Inactive **End Date:** 1985

Site Description: The entire site is currently backfilled and surface stabilized. It is posted as an Underground Radioactive Material area. The solid waste burial portion of the site is not separately marked or posted from the liquid waste portion of the site.

Waste Type: Water

Waste Description: Until August 1960, the site received process cooling water from the 201-C Building; 201-C, 215-C, 271-C, and 276-C Building floor drains; and miscellaneous water from the 209-E Building and the Hot Semiworks facilities. From August 1960 to October 1969, the site received the same effluents as above plus miscellaneous wastewater from the 209-E Building. From October 1969 to December 1985, the site received miscellaneous wastewater from the Hot Semiworks facilities and the 209-E Building.

Site Code: 218-C-9 **Classification:** Accepted

Site Names: 218-C-9, Dry Waste No.0C9, 218-C-9 Burial Ground, 218EC9 **ReClassification:**

Site Type: Burial Ground **Start Date:** 1985

Site Status: Inactive **End Date:** 1989

Site Description: The entire site has been backfilled and surface stabilized. It is posted as an Underground Radioactive Material area. The solid waste burial portion of this waste site is not separately marked or posted from the liquid waste portion of the site.

Waste Type: Demolition and Inert Waste

Waste Description: The waste consists of radiologically contaminated concrete rubble, large equipment (pulsers), roofing material, metal scrap and other demolition debris from the decommissioning of the 201-C and other Hot Semiworks facilities. Contaminated soil from adjacent areas located east and southeast of 201-C (known as UN-216-E-37 and UN-216-E-39) was also placed into the pit.

Waste Type: Chemicals

Waste Description: Asbestos has been disposed to this burial ground, but the report does not specify if it was friable or non-friable.

Site Code: 218-E-1 **Classification:** Accepted

Site Names: 218-E-1, 200 East Dry Waste No. 001 **ReClassification:**

Site Names: 218-E-4, 200 East Minor Construction No. 4, Equipment Burial Ground #4 **ReClassification:**

Site Type: Burial Ground **Start Date:** 1955

Site Status: Inactive **End Date:** 1956

Site Description: It is marked and posted with "Underground Radioactive Material" signs.

Waste Type: Construction Debris

Waste Description: This site received repair and construction wastes from the 221-B Building modifications.

Site Code: 218-E-5 **Classification:** Accepted

Site Names: 218-E-5, 200 East Industrial Waste No. 05, Equipment Burial Ground #5 **ReClassification:**

Site Type: Burial Ground **Start Date:** 1954

Site Status: Inactive **End Date:** 1956

Site Description: The site contains 2 trenches areas. One area is 104 meters (340.5 feet) long by 40 meters (131 feet) wide, containing multiple narrow trenches. The second area is a single trench 102 meters (334.5 feet) long by 19.5 meters (64 feet) wide. The trench is orientated in a north-south direction.

Waste Type: Equipment

Waste Description: The large area with multiple narrow trenches received industrial dry waste and small boxes. The north end of the long single trench contains railroad boxcars contaminated with uranyl nitrate hexahydrate (UNH).

Site Code: 218-E-5A **Classification:** Accepted

Site Names: 218-E-5A, 200 East Industrial Waste No. 005A, Equipment Burial Ground #5A **ReClassification:**

Site Type: Burial Ground **Start Date:** 1956

Site Status: Inactive **End Date:** 1959

Site Description: The 1980 Burial Ground Characterization Report indicates the site to be a single, large excavation measuring 30.5 by 36.6 meters (100 by 120 feet).

Waste Type: Equipment

Waste Description: The site received waste from PUREX L Cell, referred to as the 202-A Burial Package, in the form of 4 large boxes containing failed equipment and industrial wastes. One of the boxes was damaged during unloading. The contents were pushed into the trench. The D-2 Column from PUREX K Cell and a J-2 Pulse column were also buried in this site.

Site Code: 218-E-8 **Classification:** Accepted

Site Names: 218-E-8, 200 East Construction Burial Grounds **ReClassification:**

Site Code: UPR-200-E-23
Site Names: UPR-200-E-23, Burial Box Collapse at 218-E-10, UPR-200-W-158
Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-24
Site Names: UPR-200-E-24, Contamination Plume from the 218-E-10 Burial Ground, UN-200-E-24
Reason: Within Boundary Of Larger Site

Site Code: UPR-200-E-30
Site Names: UPR-200-E-30, Contamination Within 218-E-10, UN-200-E-30
Reason: Within Boundary Of Larger Site

Site Code: 218-E-12A **Classification:** Accepted
Site Names: 218-E-12A, 200 East Dry Waste No. 12A **ReClassification:**
Site Type: Burial Ground **Start Date:** 1953
Site Status: Inactive **End Date:** 1967

Site Description: The site contains 28 burial trenches that have been backfilled and surface stabilized. The site is marked with concrete AC-540 markers and posted "Underground Radioactive Material." The area of the burial ground is 10.5 hectares (26 acres).

Waste Type: Misc. Trash and Debris

Waste Description: Trenches 1 through 3, 12 through 14, and 17 through 25 contain predominately dry waste packaged in cardboard boxes and plastic bags. Trenches 4 through 11, 15 through 16, and 26 through 28 contain predominantly acid-soaked material. Specific contents of Trench 28 are unlisted. A waste inventory logbook dated March 24, 1960 to February 16, 1961 documents burials of tank farm dip tubes, an impact wrench, contaminated cable, jumpers, animal carcasses from 108-F and an offsite shipment of depleted uranium

Site Code: 218-E-12B **Classification:** Accepted
Site Names: 218-E-12B, 200 East Dry Waste No. 12B, 218-E-12B Burial Ground - Trench 94 **ReClassification:**
Site Type: Burial Ground **Start Date:** 1967
Site Status: Active **End Date:**

Site Description: The original burial ground was designed to have 29 trenches. The expansion to the north and west enlarged the burial ground to include the potential for a total of 138 trenches running north and south. Sixty-one of the proposed trenches were designed to be 370 meters (1,212 feet) long, thirty-one of the trenches were designed to be 293 meters (960 feet) long, and the remaining trenches would vary in length from 94 meters (307 feet) to 580 meters (1,901 feet). The first, original six trenches were 0.9 meters (3 feet) wide and 1.2 meters (4 feet) deep. The rest of the trenches were designed to be 4.8 meters (16 feet) deep. Only 38 of the proposed trenches received waste. Trench 94 was designated to receive U.S. Navy defueled vessel nuclear reactor compartments. The burial ground is marked and radiologically posted.

Waste Type: Equipment

Waste Description: All trenches are orientated in a north-south direction, except for Trench 94, which is orientated in an east-west direction. This burial ground has been used primarily for low-level waste generated mostly from facilities located in the 200 East Area. A special burial of Mixed Fission Product (MFP) was placed in Trench 28. Two trenches (trenches 17 and 27) contain 55 gallon drums, 30 gallon drums, fiberboard boxes, metal boxes, HEPA filters and equipment suspected of containing TRU waste. Coordinates for these drums were documented to allow them to be retrieved. Some waste included plutonium contaminated process piping, pumps and other equipment. As of 1995, the site had received 78,740 cubic meters of waste. Thirty six trenches were filled, two were partially filled and 56 designated trenches had not been used. Trenches 38, 43, 48 and 53 was used for low-level mixed waste that included asbestos and copper. Trench 94 is used for the disposal of U.S. Navy vessel defueled reactor compartments. They are composed of various types of steel and approximately 392 tons of lead shielding.

Waste Type: Chemicals

Waste Description: From 1987 to 1990, asbestos and copper were disposed of at this site.

Site Code: 216-T-4-2 **Classification:** Accepted

Site Names: 216-T-4-2, 216-T-4-2 Ditch **ReClassification:**

Site Type: Ditch **Start Date:** 1972

Site Status: Inactive **End Date:** 1995

Site Description: The ditch has been backfilled and surface stabilized. It is currently marked and posted with Underground Radioactive Material signs. It has a grass cover.

Waste Type: Steam Condensate

Waste Description: The site received steam condensate and condenser cooling water from the 242-T Evaporator and nonradioactive wastewater from 221-T air conditioning filter units and floor drains. Total Pu is 1.41 g (3.1E-3 lb) for this unit according to the Hanford Defense Waste Environmental Impact Statement data.

Site Code: 216-T-4A **Classification:** Accepted

Site Names: 216-T-4A, 216-T-4 Swamp, 216-T-4-1 (P), 216-T-4-1 Pond **ReClassification:**

Site Type: Pond **Start Date:** 1944

Site Status: Inactive **End Date:** 1972

Site Description: The pond was located in a natural surface depression forming an L-shaped shallow pond covering approximately 6.5 hectares (16 acres). The pond is no longer visible. It was exhumed in 1972 to make room for the expansion of the 216-W-2A Burial Ground.

Waste Type: Steam Condensate

Waste Description: Until September 1951, the site received process cooling water from 221-T and 224-T Buildings via 207-T Retention Basin and steam condensate from 221-T Building. From September 1951 to July 1955, the site received same as above plus condenser cooling water and steam condensate from the 242-T Evaporator. From July 1955 to August 1956, same as November

1944 to September 1951. From August 1956 to June 1957, the site received steam condensate from 221-T Building. From June 1957 to July 1964, the site was on standby. From July 1964 to December 1965, the site received decontamination waste from 2706-T Building. From December 1965 to November 1970, same as above plus condenser cooling water from 242-T Building. After November 1970, the site received condenser cooling water from 242-T Building.

Site Code: 216-T-4B **Classification:** Accepted
Site Names: 216-T-4B, 216-T-4 New Pond, 216-T-4-2 (P), 216-T-4-2 Pond **ReClassification:**
Site Type: Pond **Start Date:** 1972
Site Status: Inactive **End Date:** 1995
Site Description: The pond is no longer visible. The a portion of the pond is located within the area designated as the 218-W-3AE burial ground. It is not separately marked or posted from the burial ground postings.
Waste Type: Steam Condensate
Waste Description: The site received steam condensate and condenser cooling water from the 242-T Evaporator and nonradioactive wastewater from 221-T air conditioning filter units and floor drains.

Site Code: 218-W-1 **Classification:** Accepted
Site Names: 218-W-1, 200-W Area Dry Waste No. 001, Solid Waste Burial Ground #1 **ReClassification:**
Site Type: Burial Ground **Start Date:** 1944
Site Status: Inactive **End Date:** 1953
Site Description: The burial ground has been backfilled and surface stabilized. It is inside a 1.83 meter (6 foot) fence that encompasses this burial ground and also 218-W-4A, 218-W-11 and 218-W-2. The site contains 15 trenches that run east and west. Twelve of the trenches are "V" shaped 2.4 meters (8 feet) deep and 4.9 meters (16 feet) wide at ground level. The other 3 trenches are flat-bottom trenches 2.7 meters (9 feet) deep and 7.3 meters (24 feet) wide at the surface.
Waste Type: Misc. Trash and Debris
Waste Description: This site received unsegregated, pre-1970 transuranic (TRU) and miscellaneous dry waste. The radionuclide inventory is estimated to be 7E+05 grams of uranium, 9.4E+04 grams of plutonium, 3.9 curies of Sr-90 and 4.2 curies of Cs-137. The contaminated soil volume is approximately 1.6E+04 cubic meters.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-11
Site Names: UPR-200-W-11, 218-W-1 Burial Ground Fire, UN-200-W-11, UPR-200-W-16
Reason: The release was contained with the 218-W-1 Burial Ground.
Site Code: UPR-200-W-16

Site Names: UPR-200-W-16, Fire at 218-W-1 Burial Ground
Reason: UPR-200-W-11 is a duplicate of UPR-200-W-16. See Site Comment.

Site Code: 218-W-1A **Classification:** Accepted
Site Names: 218-W-1A, 200-W Area Industrial Waste Burial Ground #1, Equipment Burial Ground #1 **ReClassification:**
Site Type: Burial Ground **Start Date:** 1944
Site Status: Inactive **End Date:** 1960
Site Description: The burial ground has been backfilled and surface stabilized. It is surrounded with cement marker posts and Underground Radioactive Material signs.

Waste Type: Equipment
Waste Description: The burial ground received failed contaminated equipment and industrial waste (per RHO-CD-673).

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-26
Site Names: UPR-200-W-26, Contamination Spread During Burial Operation
Reason: Within Boundary Of Larger Site

Site Code: 218-W-2 **Classification:** Accepted
Site Names: 218-W-2, 200-W Area Dry Waste No. 002, Dry Waste Burial Ground No. 2 **ReClassification:**
Site Type: Burial Ground **Start Date:** 1953
Site Status: Inactive **End Date:** 1956
Site Description: The site is a burial ground that contains 20 miscellaneous dry waste trenches, running east-west. The site had been backfilled and stabilized. It is posted as Underground Radioactive Material.

Waste Type: Misc. Trash and Debris
Waste Description: This site received pre-1970 transuranic (TRU) and miscellaneous contaminated dry waste.

Site Code: 218-W-2A **Classification:** Accepted
Site Names: 218-W-2A, Industrial Waste No. 02A, Equipment Burial Ground #2 **ReClassification:**
Site Type: Burial Ground **Start Date:** 1954
Site Status: Inactive **End Date:** 1985
Site Description: The site has been backfilled and stabilized. It is posted as Underground Radioactive Material.
Waste Type: Equipment

Waste Type: Soil

Waste Description: Trench #8 contains non-TRU and TRU waste. Trenches #17 and #5 contain TRU waste. Trench #40 contains industrial waste. Trench #14 contains 10 large concrete burial boxes of radioactive soil from the 241-S Tank Farm following a salt waste spill from the 102-S Tank transfer piping in 1973. Dose rates at the site of the spill before removal of the ground ranged to a maximum of 9 mR/h. Trench #17 contains fiberglass reinforced polyester (FRP) plywood boxes in various sizes. Trench #7 contains waste from the cleanup efforts at Three Mile Island Nuclear Plant (TMI-2). All remaining filled trenches contain dry and industrial waste.

Additional waste information is available in the WIDS hardcopy file for 218-W-3A.

Waste Type: Chemicals

Waste Description: Wastes disposed to this burial ground since 1987 include: 1,2,4-trimethylbenzene, acetonitrile, aliquat 336, alloy with mercury, asbestos, barium, beryllium, butyl acetate, cadmium, chromium, cyclohexanone, dibutyl-n/n-diethylcarbomyl phosphate, dioxane, ethanol, ethanolamine, isopropyl alcohol, lead, mercury, methanol, naphthalene, normal paraffins, oil, silver, toluene, tri-butyl phosphate, trioctylphosphine oxide, and xylene.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-84

Site Names: UPR-200-W-84, Ground Contamination During Burial Operation at 218-W-3A

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-W-134

Site Names: UPR-200-W-134, Improper Drum Burial at 218-W-3A

Reason: Within Boundary Of Larger Site

Site Code: 218-W-3AE **Classification:** Accepted

Site Names: 218-W-3AE, Industrial Waste No. 3AE, Dry Waste No. 3AE **ReClassification:**

Site Type: Burial Ground **Start Date:** 1981

Site Status: Active **End Date:**

Site Description: The site was originally designed to consist of 24 trenches. To make the best use of available space, the site was redesigned to contain 12 trenches with deeper depths.

Waste Type: Misc. Trash and Debris

Waste Description: The site has been receiving miscellaneous wastes such as rags, paper, rubber gloves, disposable supplies, broken tools, etc. and industrial waste such as failed equipment, tanks, pumps, ovens, agitators, heaters, hoods, jumpers, and accessories. Trenches 2 and 3 have received remote-handled low-level waste. Trenches 5 and 10 are wide bottom stacking trenches. 218-W-3AE Trench 8 contains waste that has been encased in concrete monoliths. The monoliths are approximately 25 ft long by 10 ft wide and 13 feet tall. Most of the monoliths are placed together with only a cold joint separating them. Waste in the monoliths is typically category 3 waste and/or waste that requires stabilization because of mobile radionuclides. Trench 26 was

designed for disposal of contaminated railroad cars and large tanks.

Waste Type: Chemicals

Waste Description: Wastes disposed of to this site include: aluminum, asbestos, beryllium, bis(2-ethylhexyl)phthalate (DOP), calcium carbonate, cement, charcoal, clay, silicas, talc, copolymer of styrene, copper, di-n-octyl phthalate, graphite, hydrotreated heavy naphtha isopropyl alcohol, lead, mixed esters, phthalate, nylon, peroxydisulfuric acid, disodium salt, resin, sodium chloride, sodium nitrate, sodium phosphate dibasic, steel, tantalum, uranium, and yttrium oxide.

Site Code:	218-W-4A	Classification:	Accepted
Site Names:	218-W-4A, Dry Waste No. 04A	ReClassification:	
Site Type:	Burial Ground	Start Date:	1961
Site Status:	Inactive	End Date:	1968

Site Description: The site is a burial ground that has been backfilled and stabilized. It is inside a chain link fence and is posted as Underground Radioactive Material. The unit contains 21 miscellaneous dry waste trenches and six vertical storage units (dry wells). The trenches are oriented in an east to west direction with Trench #1 on the southern end of the site and Trench #21 on the northern end. The six 4.6 meter (15-foot) deep dry wells were installed near the east end of Trench #16. The wells were made by welding together 210 liter (55-gallon) steel drums with the ends cut out. The units were buried vertically and used for remote disposal of small, highly radioactive items. The site may also contain two larger caissons located at the extreme east end of the burial ground, between Trenches #17 and #18 and between Trenches #18 and #19. A Hanford drawing (H-2-32487) describes them 12 gage, 66 centimeter (26 inch) diameter well casings that extend 14.6 meters (48 feet) below grade.

Waste Type: Equipment

Waste Description: This site received miscellaneous dry, unsegregated mixed transuranic (TRU) and non-TRU waste. Specific trench contents are mentioned on Drawing H-2-32487 and in the Burial Ground logbook. These sources document the burial of approximately 500 drums of depleted uranium from offsite contractors, pumps and equipment, laboratory hoods from 234-5 Z, 231-Z, 222-U and REDOX, and plutonium contaminated 300 Area laboratory waste. On 5-7-65, ten concrete barrels of high level plutonium were placed in Trench 16. On February 2, 1966 a Special Burial of waste from 234-5Z was made in Trench 20. Drawing H-2-32487 indicates the east end of Trench 19 contains Recuplex waste. (additional information available in the WIDS library)

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-72
Site Names: UPR-200-W-72, Contamination at 218-W-4A
Reason: Within Boundary Of Larger Site

Site Code:	218-W-4B	Classification:	Accepted
Site Names:	218-W-4B, Dry Waste No. 04B	ReClassification:	
Site Type:	Burial Ground	Start Date:	1967
Site Status:	Active	End Date:	1990

Site Description: The site contains 13 trenches and one row of 12 caissons. Trenches 7 and 11 contain retrievable TRU waste. The other trenches contain unsegregated TRU and non TRU radioactive waste. The row of caissons include 5 alpha caissons, 6 mixed fission product (MFP) caissons and one silo type caisson used for high activity N-Reactor waste. The alpha caissons and 2 of the MFP caissons are 2.7-meter (8.75-foot) diameter, 3-meter (10-foot) high concrete containers with steel lifting lugs and a 91-centimeter (36-inch) diameter access chute. Two of the MFP caissons are constructed of corrugated steel instead of concrete. The silo type caisson is a 3-meter (10-foot) diameter, 9-meter (30-foot) tall container placed on a concrete foundation with a top concrete shielding slab. It has a 107-centimeter (42-inch) diameter access chute. All three caisson types are equipped with air filter systems.

Waste Type: Misc. Trash and Debris

Waste Description: The site received miscellaneous radioactive solid waste from 100, 200 and 300 Areas as well as offsite shipments. Solid waste consists of rags, paper, cardboard, plastic, pumps, tanks, process equipment, and other miscellaneous high dose rate and TRU dry waste. The site contains 114,300 cubic feet of segregated (post-1970) TRU waste. Trenches 7 and 11 contain retrievable TRU waste. The other trenches contain unsegregated TRU and radioactive waste. There are twelve caissons that received remote handled high dose rate and TRU wastes. Five caissons were designated as alpha caissons, but only four were used. They were used from 1970 to 1979. Seven caissons were designated as beta/gamma caissons and were used from 1968 to 1979. The last shipment of waste was deposited into MFP caisson #6 in 1990. No additional waste is planned to be placed in the caissons. As of August 1995, the burial ground had received a total of 10,466 cubic meters of waste. (The WIDS Library has an original logbook for this burial ground)

Site Code:	218-W-4C	Classification:	Accepted
Site Names:	218-W-4C, Dry Waste No. 004C	ReClassification:	
Site Type:	Burial Ground	Start Date:	1978
Site Status:	Active	End Date:	

Site Description: The burial ground is located on the east side of Dayton Ave. The trenches are marked with Radiation Area, Radioactive Material Area and Underground Radioactive Material Area signs.

Waste Type: Equipment

Waste Description: Trenches #1, 4, 7, 20, 24 and 29 contain retrievably stored, suspect TRU waste. Trench #19 contains one drum of CH-TRU that is mixed with LLW. Trench 19 is being evaluated for redefinition as a Low Level Waste trench. Trench #1 contains drums with plutonium-contaminated soil from the 216-Z-9 trench and noncombustible TRU waste. Trench #4 contains drums of assorted combustible TRU waste and one module of noncombustible TRU waste. The remaining trenches are proposed.

Additional waste information is available in the WIDS hardcopy file for 218-W-4C.

Waste Type: Chemicals

Waste Description: Wastes disposed of to this site include: copper, bis(2-ethylhexyl)phthalate (DOP), lead, and nitrogen.

The Following Sites Were Consolidated With This Site:

200-WA-1

Site Code: 200-E-127-PL-A **Classification:** Accepted

Site Names: 200-E-127-PL-A, Segments of Gable Mountain Pond Pipeline Located in the Outer Area **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: Due to the restructuring of Operable Units, as described in the Agreement for Central Plateau Cleanup, the original pipeline site (200-E-127-PL) has been split into segments. 200-E-127-PL-A is the segments of pipeline located in the Outer Area. The pipeline is marked with steel posts and Underground Radioactive Material - Pipeline signs.

The majority of the pipeline is constructed of large diameter corrugated metal pipe. The 36 inch diameter corrugated metal pipe enlarges to 42 inch diameter corrugated metal pipe at Manhole #8 (north of the 600-118 diverter station). The pipeline divides into two sections (a Y shape) near where it crosses Route 11A. Two sections of pipe fed the pond.

Near the 810 gate, an area of contaminated vegetation growing on and adjacent to the pipeline was stabilized with biobarrier and posted with Underground Radioactive Material Area signs.

A portion of the pipeline is under the Liquid Effluent Retention Facility (LERF) berm and extends into the LERF/ETF facility boundary.

Site Code: 207-S **Classification:** Accepted

Site Names: 207-S, REDOX Retention Basin, 207-S Retention Basin **ReClassification:**

Site Type: Retention Basin **Start Date:** 1951

Site Status: Inactive **End Date:** 1954

Site Description: The basin has been backfilled to grade with dirt. It is surrounded with concrete marker posts and is currently posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received process cooling water and steam condensate from the 202-S Building. The water was then discharged to the 216-S-17 Pond or the 216-S-16 Pond. Coil leaks inside the 202-S facility often caused contaminated effluent to be discharged to the retention basin.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-13

Site Names: UPR-200-W-13, Liquid Release from REDOX to 207-S and 216-S-17 Pond, UN-200-W-13

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-W-15

Site Names: UPR-200-W-15, Liquid Release from REDOX to 207-S and 216-S-17 Pond, UN-200-W-15

Reason: Within Boundary Of Larger Site

Site Code: UPR-200-W-95

Site Names: UPR-200-W-95, UN-216-W-2, 207-S Retention Basin

Reason: Within Boundary Of Larger Site

Site Code: 216-S-1&2 **Classification:** Accepted

Site Names: 216-S-1&2, 216-S-5 Crib, 216-S-1 & 2 **ReClassification:**

Site Type: Crib **Start Date:** 1952

Site Status: Inactive **End Date:** 1956

Site Description: The cribs are located within a common radiologically posted area. The surface is free of vegetation. The area is marked and posted with Underground Radioactive Material and Cave-in Potential signs. There is an additional, small posted Underground Radioactive Material area adjacent to the south side of the cribs and the 299-W22-11 well. The Dyncorp Integrated Soil, Vegetation and Animal Control group has stated that growing, contaminated weeds were found inside this area in September 2000. The contaminated weeds were removed and disposed of properly.

The site consists of two open-bottomed crib boxes made of timbers. The cribs are connected in series where overflow from the crib box S1 flows into crib box S2 via an underground pipe. The boxes were set in a gravel lined trench and backfilled.

Waste Type: Process Effluent

Waste Description: The site received cell drainage from the D-1 Receiver Tank and process condensate from the D-2 Receiver Tank in the 202-S Building. The inorganics disposed of at the site were nitrate, aluminum nitrate, nitric acid, and sodium.

Site Code: 216-S-4 **Classification:** Accepted

Site Names: 216-S-4, 216-S-7, 216-S-4 Sump or Crib, UN-216-W-1 **ReClassification:**

Site Type: French Drain **Start Date:** 1953

Site Status: Inactive **End Date:** 1956

Site Description: The site is marked and posted with Underground Radioactive Materials signs. The site is constructed of two vertically buried metal culvert pipes.

Waste Type: Process Effluent

Waste Description: During August and September 1953, the site received condensate and cooling water from condensers on the 241-S-101 and 241-S-104 Tanks in the 241-S Tank Farm. After September 1953, the site received the cooling water but the condensate waste was routed to the 216-S-3 Crib. The chemical component of this waste was nitrate.

Site Code: 216-S-5 **Classification:** Accepted

Site Names: 216-S-5, 216-S-5 Cavern #1, 216-S-6 Crib, **ReClassification:**

216-S-9 (See Subsites)

Site Type: Crib **Start Date:** 1954**Site Status:** Inactive **End Date:** 1957

Site Description: The site consists of a gravel-filled crib and an overflow trench. The crib was constructed of two lengths of perforated, corrugated metal pipe that form a cross. The crib has been surface stabilized. It is marked and posted with Underground Radioactive Material signs. The overflow trench is located south of the crib structure (see subsites).

Waste Type: Process Effluent

Waste Description: The site received process vessel cooling water and steam condensate from 202-S Building via the 207-S Retention Basin. The waste was acidic and contained nitrates.

Subsites:**SubSite Code:** 216-S-5:1**SubSite Name:** 216-S-5:1, 216-S-5 Crib**Classification:** Accepted**ReClassification:**

Description: The site consists of a gravel-filled crib containing two lengths of perforated, corrugated metal pipe that form a cross. The crib has been surface stabilized.

SubSite Code: 216-S-5:2**SubSite Name:** 216-S-5:2, 216-S-5 Overflow Pond, 216-S-5 Overflow Trench**Classification:** Accepted**ReClassification:**

Description: In 1956, the large cooling water discharge volumes made it necessary to cut a hole along the top edge of the crib to discharge overflow cooling water to a trench immediately southwest of the crib structure rather than allowing the crib to flood (see drawing H-6-466). The overflow of 50 to 100 gallons per minute represented approximately 5% of the total flow to the 216-S-5 crib. The emergency overflow continued throughout the summer of 1956. In September 1956, the REDOX A-2 dissolver and H-4 coils failed. The dose rates along the edge of the crib overflow area increased from 100 millirad per hour to 350 millirad per hour with some spots reading up to 17 rad per hour. The emergency crib overflow pond was used until the 216-S-16 Pond was completed in September 1957.

Site Code: 216-S-6 **Classification:** Accepted**Site Names:** 216-S-6, 216-S-6 Cavern #2, 216-S-5 Crib, 216-S-13 Crib **ReClassification:****Site Type:** Crib **Start Date:** 1954**Site Status:** Inactive **End Date:** 1972

Site Description: This unit consists of a square pit filled with gravel with corrugated metal perforated pipe running down the center, and six pipes branching off perpendicular to the main pipe. The site is backfilled and marked with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Type: PROCESS EFFLUENT

Waste Description: From November 1954 until June 1967, the site received the process vessel cooling water and steam condensate from the 202-S Building. From June 1967 to July 1967, production operations were shut down and the 202-S Building was put on standby. After July 1967, the site received the steam condensate from the D-12 and D-14 Waste Concentrators in the 202-S Building. The waste is low in salt, neutral to basic, and contains nitrates.

Site Code: 216-S-7 **Classification:** Accepted

Site Names: 216-S-7, 216-S-7 Crib, 216-S-15 **ReClassification:**

Site Type: Crib **Start Date:** 1956

Site Status: Inactive **End Date:** 1965

Site Description: The crib is marked and posted with Underground Radioactive Material and Cave-In Potential signs.

Waste Type: Process Effluent

Waste Description: From January 12, 1956 to April 12, 1959, the unit received REDOX cell drainage from the D-1 Receiver Tank, process condensate from the D-2 Receiver Tank, and condensate from the H-6 Condenser in 202-S Building. A buildup of beta activity in this crib prompted the rerouting of H-6 waste material. On April 12, 1959, jumper changes were completed that routed the H-6 liquid waste to the underground waste storage tanks. The crib continued to receive waste from D-1 and D-2 Vessels until July 1965. The chemicals disposed at the site included nitrate, aluminum nitrate, nitric acid, and sodium.

Site Code: 216-S-8 **Classification:** Accepted

Site Names: 216-S-8, Cold Aqueous Trench, Cold Aqueous Crib, 216-S-3, Unirradiated Uranium Waste Trench, Cold Aqueous Grave **ReClassification:**

Site Type: Trench **Start Date:** 1951

Site Status: Inactive **End Date:** 1952

Site Description: The site consists of one trench that has been backfilled to grade. It is marked and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received unirradiated start-up waste from the 202-S Building. The Monthly Report for October 1951 stated approval had been given for the excavation of a trench to receive uranium test run waste. Waste concentrations were estimated to be 0.2 grams of uranium per liter. The estimated total volume was expected to be only 152,000 liters (40,000 gallons). HW-28471 states that the trench was used between October 1951 through January 1952. This document states that a total of 309,700 liters (81,500 gallons) containing 193 kilograms (430 pounds) of unirradiated uranium was discharged to this trench.

Site Code: 216-S-12 **Classification:** Accepted

Site Names: 216-S-12, UPR-200-W-30, 291-S Stack Wash Sump, REDOX Stack Flush Trench **ReClassification:**

Site Type: Trench **Start Date:** 1954

Site Status: Inactive **End Date:** 1954

Site Description: This site consists of one, single-use liquid waste disposal trench. The site is surrounded with cement marker posts and chain, posted with "Underground Radioactive Material" signs. It labeled 216-S-12.

Waste Type: Water

Waste Description: The site received 68,100 liters (18,000 gallons) of flush water from the 291-S (REDOX) Stack. The water contained ammonium nitrate (600 kilograms). The material contained an estimated five curies of beta particle emitters and two to three curies of gamma particle emitters that were predominantly ruthenium and zirconium-niobium. Potential contaminants of concern include cobalt-60, cesium-137, strontium-90, plutonium-239/240, and uranium-238.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-30

Site Names: UPR-200-W-30, 216-S-12, UN-200-W-30

Reason: Duplicate Site

Site Code: 216-S-18 **Classification:** Accepted

Site Names: 216-S-18, 241-SX Steam Cleaning Pit, 216-S-14 Steam Cleaning Pit **ReClassification:**

Site Type: Trench **Start Date:** 1954

Site Status: Inactive **End Date:** 1954

Site Description: The site consists of one backfilled trench. The area has been surface stabilized. It is posted with light weight chain and Underground Radioactive Material signs.

Waste Type: Water

Waste Description: The site was originally a vehicle decontamination pit. The pit was excavated in 1972. The contaminated material was taken to a 200 West Area burial ground. In 1995 and 1997, the open trench was used to consolidate nearby surface soil contamination. The contaminated soil was covered with 1.8 meters (6 feet) of clean dirt to bring the site up to grade. The area was posted as an "Underground Radioactive Material" area.

Site Code: 216-S-20 **Classification:** Accepted

Site Names: 216-S-20, 216-SL-1&2 Crib, 216-SL-2 **ReClassification:**

Site Type: Crib **Start Date:** 1952

Site Status: Inactive **End Date:** 1972

Site Description: The site is posted with Underground Radioactive Material (URM) signs at each corner. Two areas above the crib structures, inside the URM, are marked with post and chain and Cave-In Potential signs. An abandoned waste unloading station is located approximately 7.6 meters (25

feet) south of the posted crib. The unloading station was posted with Contamination Area signs, but later backfilled and changed to Underground Radioactive Material Area.

Waste Type: Process Effluent

Waste Description: From January 1952 to July 1953, the site received miscellaneous waste from lab hoods and decontamination sinks in the 222-S Building via the 219-S Retention Building. From July 1953 to September 1963, the site received the above effluent via the 207-SL Retention Basin, the 219-S Retention Building and 300 Area laboratory waste via truck, unloaded into the manhole. From September 1963 to January 1969, the site received miscellaneous waste from lab hoods and decontamination sinks in 222-S via the 219-S Retention Building. From January 1969 to November 1972, the crib was inactive due to surface subsidence on this unit. The 300 Area lab waste was rerouted to the 216-T-28 Crib.

Site Code: 216-S-22 **Classification:** Accepted

Site Names: 216-S-22, 216-S-22 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1957

Site Status: Inactive **End Date:** 1967

Site Description: The crib is marked and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received liquid waste from the acid recovery facility in the 293-S Building. The chemicals disposed at the site were nitrate and sodium.

Site Code: 216-S-23 **Classification:** Accepted

Site Names: 216-S-23, 216-S-23 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1969

Site Status: Inactive **End Date:** 1972

Site Description: The crib is marked with concrete AC-540 markers and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received REDOX process condensate from D-2 Receiver Tank in the 202-S Building. The waste is low in salt and is neutral to basic.

Site Code: 216-S-25 **Classification:** Accepted

Site Names: 216-S-25, 216-S-25 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1973

Site Status: Inactive **End Date:** 1992

Site Description: The site is marked with AC-540 markers and posted with Underground Radioactive Material signs. A distribution pipe is located 2.1 meters (7 feet) below grade. The site contains

approximately 1160 cubic meters (41,000 cubic feet) of gravel. Three gage wells and vent systems made of 20 centimeter (8 inch) SCH 40 PVC with a 15 centimeter (6 inch) SCH 40 PVC perforated distribution pipe.

Waste Type: Steam Condensate

Waste Description: Until 11/80, the site received the 242-S Evaporator process steam condensate. Since 11/80, the 242-S Evaporator has been in standby mode. In 1985, this crib received the effluent from the 216-U-1 & 2 groundwater pump and treat effort. The 241-SX Sludge Cooler Steam Heater was shut off in 1992 due to leaking tubes. A new steam heater unit was installed in 1993 and scheduled to start up in 1995. It was to operate for five months (through winter and early spring) producing approximately 15 to 30 liters (4-8 gallons) of condensate per hour that would be discharged to the 216-S-25 crib.

Site Code: 207-SL **Classification:** Accepted

Site Names: 207-SL, 222-S Retention Basin, REDOX Lab Retention Basin, 207-SL Retention Basin **ReClassification:**

Site Type: Retention Basin **Start Date:** 1952

Site Status: Active **End Date:**

Site Description: The site consists of a large below ground basin that is divided into two 94,625 liter (25,000 gallon) holding basins. The below ground basins are constructed of reinforced concrete walls 30 to 41 centimeters (12 to 16 inches) thick, and the floor is 38 centimeters (15 inches) thick. The unit also consists of three above ground 75,700 liter (20,000 gallon) holding tanks, added in 1994 to support the TEFD system.

Waste Type: Process Effluent

Waste Description: From 2/52 until 12/54, the site received low-level waste, including ventilation cooling water and miscellaneous wastes from laboratory hoods and sinks in the 222-S Laboratory. These were then discharged to the 216-S-19 Pond. From 12/54 to 10/55, the site was inactive (radioactivity levels of waste exceeded set limits). After 10/55, the site received nondangerous/nonradioactive waste. This unit discharged to the 216-S-19 Pond until 11/94, then was routed to the 216-S-26 Crib until 7/94, and since 7/94 discharges to the 200 Area TEDF.

Site Code: 216-SX-2 **Classification:** Accepted

Site Names: 216-SX-2, 216-SX-2 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1952

Site Status: Inactive **End Date:** 1965

Site Description: The crib is currently surrounded by light post and chain and posted with Underground Radioactive Material signs. It is labeled "216-SX-2" on three sides with old style black and white signs. It is a gravel filled crib topped with a subsurface layer of Sisalkraft paper.

Waste Type: Steam Condensate

Waste Description: The crib received waste from the 241-SX-701 Compressor House.

Site Code: 207-T **Classification:** Accepted

Site Names: 207-T, T Plant Retention Basin, 207-T Retention Basin **ReClassification:**

Site Type: Retention Basin **Start Date:** 1944

Site Status: Inactive **End Date:** 1995

Site Description: The retention basin has been backfilled to grade. T Posts mark the corners of the basin. It is posted as an Underground Radioactive Material area.

Waste Type: Steam Condensate

Waste Description: The unit received potentially low-level radioactive waste from T Plant process cooling and ventilation steam condensate, which was discharged to the 216-T-4-1 and 214-T-4-2 Ditches. From 11/44 to the 1950's, the site received process cooling water from process equipment jackets in 221-T and 224-T buildings. From early 1950's to 1955, the site received the same, plus 242-T Evaporator cooling water. From 1955 to 1965, the site received the same minus 242-T Evaporator cooling water. From 1965 to late 1960's, the site received the same plus 242-T Evaporator cooling water. From late 1960's to 1973, the site received the same minus 242-T Evaporator cooling water. From 1973 to 1976, the site received the same plus 242-T Evaporator cooling water. After 1976, the site received intermittent flow from 221-T, 221-TA, and 224-T 224-T buildings. The effluent discharge was rerouted to the 200 Area TEDF in 1995. The unit was backfilled with dirt in 1996.

Site Code: 216-T-2 **Classification:** Accepted

Site Names: 216-T-2, 222-T-110 Dry Well, 222-T Reverse Well **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:** 1945

Site Status: Inactive **End Date:** 1950

Site Description: The reverse well is a below grade 15.2 centimeter well casing with a 7.6-centimeter (3-inch) diameter vent pipe extending approximately 1.2 meters (4 feet) above grade. It has been capped and is surrounded with light post and chain. A single cement AC-540 marker identifies the site. It is posted as an Underground Radioactive Material Area.

Waste Type: Process Effluent

Waste Description: The site received decontamination sink waste and sample slurper waste from the 222-T Building. HW-4850, written in 1945, states that the 222-T laboratory was discharging approximately 2.6 curies of fission products and 600 milligrams of plutonium to the dry well per month. The waste is acidic.

Site Code: 216-T-4-1D **Classification:** Accepted

Site Names: 216-T-4-1D, 216-T-4 Ditch, 216-T-4 Swamp **ReClassification:**

Site Type: Ditch **Start Date:** 1944

possibility of hazardous chemical contamination exists.

Site Code: 216-T-10 **Classification:** Accepted

Site Names: 216-T-10, Decontamination Trenches, Equipment Decontamination Area **ReClassification:**

Site Type: Trench **Start Date:** 1951

Site Status: Inactive **End Date:** 1954

Site Description: This site consists of a backfilled trench. The site is no longer marked or posted.

Waste Type: Water

Waste Description: The site received heavy equipment and vehicle decontamination waste. No radionuclide or chemical contamination has been documented for this site according to DOE/RL-91-61. However, ARH-2757 states that all contamination (maximum 3000 counts per minute) was buried in the 200 West Dry Waste Burial Ground. Although no cleaning agents are listed, the possibility of hazardous chemical contamination exists.

Site Code: 216-T-11 **Classification:** Accepted

Site Names: 216-T-11, Decontamination Trenches, Equipment Decontamination Area **ReClassification:**

Site Type: Trench **Start Date:** 1951

Site Status: Inactive **End Date:** 1954

Site Description: This site consists of a backfilled trench. The site is no longer marked or posted.

Waste Type: Water

Waste Description: The site received heavy equipment and vehicle decontamination waste. No radionuclide or chemical contamination has been documented for this site according to DOE/RL-91-61. However, ARH-2757 states that all contamination (maximum 3000 counts per minute) was buried in the 200 West Dry Waste Burial Ground. Although no cleaning agents are listed, the possibility of hazardous chemical contamination exists.

Site Code: 216-T-12 **Classification:** Accepted

Site Names: 216-T-12, 207-T Sludge Grave, 207-T Sludge Pit, 216-T-11 **ReClassification:**

Site Type: Trench **Start Date:** 1954

Site Status: Inactive **End Date:** 1954

Site Description: There is no visible evidence of this waste site. The area around the 207-T Retention Basin, including the northeast corner where this pit was located, has been stabilized with clean backfill material and posted with Underground Radioactive Material signs. The sludge pit is not separately marked.

Waste Type: Sludge

Waste Description: The site received contaminated sludge from the 207-T Retention Basin. The waste is low in salt and is neutral to basic.

Site Code: 216-T-13 **Classification:** Accepted

Site Names: 216-T-13, 269-W Regulated Garage, 269-W Decontamination Pit or Trench, 216-T-12, 269-W Regulated Garage Decontamination Pit **ReClassification:**

Site Type: Trench **Start Date:** 1954

Site Status: Inactive **End Date:** 1964

Site Description: The site consisted of a single open trench located west of the 269-W Regulated Garage. The garage has been demolished. Currently, there is a concrete ramp covered with 0.6 meters (2 feet) of gravel that is visible near the site of the garage. The trench is no longer marked or posted.

Waste Type: Water

Waste Description: The site received vehicle decontamination liquid waste. The inventory prior to the removal of 3.06 cubic meters (4 cubic yards) of soil was estimated through 1972 as follows. ARH-2757, part 3 states the volume was 0.98E+05 liters; <0.100E+00 grams - plutonium; 0.840E+02 curies - beta; 0.100E00 curies - strontium-90; 0.400E+02 curies - ruthenium-106; 0.100E+00 curies - cesium-137; < 0.100E+00 curies - cobalt-60; <0.500E-01 kilograms - uranium. ARH-1608 states the volume was 0.026E+06 liters; <0.100E+00 grams - plutonium; 60 curies - beta; 1.00E+00 curies - strontium-90; 40 curies - ruthenium-106; 1.00E+00 curies - cesium-137; < 0.100E+00 curies - cobalt-60; <.1 pounds of uranium Readings up to 1,500 counts per minute were measured in the excavated soil. Although no cleaning agents are listed, the possibility of hazardous chemical contamination exists.

Site Code: 216-T-20 **Classification:** Accepted

Site Names: 216-T-20, 216-TX-2, 216-T-20 Crib, 241-TX-155 Contaminated Acid Grave **ReClassification:**

Site Type: Trench **Start Date:** 1952

Site Status: Inactive **End Date:** 1952

Site Description: The site has a small concrete block structure on the surface with a metal lid labeled Confined Space and Potential Internal Contamination. There is a single concrete marker with an Underground Radioactive Material sign on it. The concrete block structure is surrounded with the same type of cobbles that surround the powerhouse pond.

Waste Type: Process Effluent

Waste Description: The site received contaminated nitric acid from 241-TX-155 Diversion Box Catch Tank.

Site Code: 216-T-27 **Classification:** Accepted

Site Names: 216-T-27, 216-TY-2 Cavern, 216-TY-2 Crib, 216-TX-2 Cavern, 216-TX-2 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1965

Site Status: Inactive **End Date:** 1965
Site Description: The 216-T-26, 216-T-27 and 216-T-28 cribs are enclosed within a common steel post and chain barricade that is posted "Underground Radioactive Material". The 216-TY-201 flush tank is located in the northeast corner of the area.

Waste Type: Process Effluent

Waste Description: The site received 300 Area lab waste containing nitrates, 221-T steam condensate and process decontamination waste and equipment decontamination waste from 2706-T. A page of typed, unsigned notes was found that documents the transport of "round the clock" trucking of waste from the PRTR rupture incident in September 1965. The notes indicate that the waste would be discharged into the 216-T-27 crib. A different page of notes, also unsigned, states that more than 100 truck loads of liquid waste from the PRTR incident was discharged into the 216-T-28 crib during September and October 1965. Since the same truck unloading station would have been used for either crib, it is difficult to be sure how much waste was discharged to the 216-T-27 and how much was discharged to the 216-T-28 crib.

Site Code: 216-T-28 **Classification:** Accepted
Site Names: 216-T-28, 216-TY-3 Cavern, 216-TY-3 Crib, 216-TX-3 Cavern, 216-TX-3 Crib **ReClassification:**
Site Type: Crib **Start Date:** 1960
Site Status: Inactive **End Date:** 1966
Site Description: The 216-T-26, 216-T-27 and 216-T-28 cribs are enclosed within a common steel post and chain barricade that is posted "Underground Radioactive Material". The 216-TY-201 flush tank is located in the northeast corner of the area.

Waste Type: Process Effluent

Waste Description: From February 1960 through February 1963, the crib received steam condensate and process decontamination waste via the 241-T-112 tank in the 241-T Tank Farm. In 1963, 2706-T equipment decontamination waste was added to the waste stream. In 1964, 300 Area laboratory waste was sent to this crib via tanker trucks from the 340 Waste Transfer Facility. A page of typed, unsigned notes dated October 26, 1965 indicated that 189 truck loads of liquid waste from 300 Area were discharged into the 216-T-28 crib between September 13, 1965 and October 25, 1965. The total volume during that time was 945,000 gallons. Most of the waste was from the PRTR rupture incident. The crib was deactivated in December 1966 when the prescribed radionuclide disposal limit was reached.

Site Code: 216-T-29 **Classification:** Accepted
Site Names: 216-T-29, 291-T Sand Filter Sewer, 216-T-29 French Drain **ReClassification:**
Site Type: French Drain **Start Date:** 1949
Site Status: Inactive **End Date:** 1964
Site Description: The 291-T Sand Filter is located northeast of the 221-T building. The 216-T-29 French Drain is part of the sand filter construction. The sand filter is marked and posted as a Contamination Area. There is a vent riser protruding through the roof of the northwest corner of the sand filter. This is assumed to be the location of the drain.

Waste Type: Steam Condensate

Waste Description: The site waste was moisture condensed from canyon air and included 8000 kilograms of nitric acid. In the 1950's, silver reactor filters were added to the stack ducts. They were made of fiberglass soaked in silver nitrate. The filters reacted with the radioiodine to form silver iodide.

Site Code: 216-T-31 **Classification:** Accepted

Site Names: 216-T-31, 216-T-31 French Drain **ReClassification:**

Site Type: French Drain **Start Date:** 1954

Site Status: Inactive **End Date:** 1962

Site Description: The site consisted of a 0.9 meter (3 foot) diameter french drain. The drain was exhumed and left unmarked. A post with the WIDS Sitecode 216-T-31 now marks the approximate location of where the french drain had been.

Waste Type: Steam Condensate

Waste Description: The drain was accidentally contaminated by contaminated steam condensate from a blowout through the steam line during efforts to unplug a waste line in October 1959.

Site Code: 216-T-33 **Classification:** Accepted

Site Names: 216-T-33, 216-T-33 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1963

Site Status: Inactive **End Date:** 1963

Site Description: The site is surrounded with light metal posts and chain. It is posted with Underground Radioactive Material signs. The site consists of a rectangular crib with perforated vitreous clay inlet pipe set into a gravel layer. A layer of plastic sheeting, clean sand, and backfill are above the pipe.

Waste Type: Water

Waste Description: The site received equipment decontamination waste from the 2706-T Building. The waste is low in salt, neutral to basic, and contains sodium hydroxide. There total effluent discharged to the crib is questionable, due to the fact that the discharge line plugged shortly after the crib became active.

Site Code: 216-T-34 **Classification:** Accepted

Site Names: 216-T-34, 216-T-34 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1966

Site Status: Inactive **End Date:** 1967

Site Description: The site is a crib posted with "Underground Radioactive Material" signs.

The crib's piping consists of perforated vitrified clay pipe rectangular loop, and a vitreous clay pipe extending into the center of the crib. The piping rests on a layer of gravel. Two gage well

risers and one filter riser are visible from the surface.

Waste Type: Process Effluent

Waste Description: The site received liquid 300 Area laboratory waste from the 340 Facility. The waste was low in salt, neutral to basic, and contained nitrate.

Site Code: 216-T-35 **Classification:** Accepted

Site Names: 216-T-35, 216-T-35 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1967

Site Status: Inactive **End Date:** 1968

Site Description: The site is a surface stabilized crib that is marked and posted with Underground Radioactive Material signs. The crib was constructed with one perforated drain line, and one perforated crib waste distribution line, in parallel. Both lines were placed horizontally below grade and covered by gravel. The crib has two gage well risers and one vent riser visible from the surface.

Waste Type: Process Effluent

Waste Description: The crib received waste from the 300 Area laboratory facilities via railroad tank cars and tank trucks. The site waste contained nitrate.

Site Code: 216-T-36 **Classification:** Accepted

Site Names: 216-T-36 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1967

Site Status: Inactive **End Date:** 1973

Site Description: The site consists of a interim stabilized crib posted as "Underground Radioactive Material". The site consists of a single vitreous clay distribution pipe resting in a gravel layer that is in a rectangular trench. Backfill covers the pipe and gravel. The crib also has a gage well riser and a filter riser.

Waste Type: Process Effluent

Waste Description: The site received steam condensate, equipment decontamination waste, and miscellaneous waste from the 221-T, 221-U and the 2706-T buildings. Some waste contained sodium hydroxide.

Site Code: 241-T-361 **Classification:** Accepted

Site Names: 241-T-361, 241-T-361 Settling Tank, 361-T-TANK, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Settling Tank **Start Date:** 1944

Site Status: Inactive **End Date:** 1951

Site Description: The 241-T-361 Tank is enclosed with light post and chain and concrete AC-540 markers. The underground tank is posted with Inactive Miscellaneous Underground Storage Tank and

 Underground Radioactive Material signs

Waste Type: Storage Tank

Waste Description: The tank received waste from 221-T and 224-T. Sludge samples taken in 1976 contained 23 micrograms of plutonium, 12 microcuries per gram of strontium-90 and 67.6 microcuries per gram of cesium-137. The liquid supernate contained 3.71 microcuries per gallon of cesium-137 and 14.5 milligrams per gallon of plutonium.

Site Code: 207-U **Classification:** Accepted

Site Names: 207-U, 207-U Retention Basin **ReClassification:**

Site Type: Retention Basin **Start Date:** 1952

Site Status: Active **End Date:**

Site Description: The unit is a plastic lined concrete basin divided into two equal halves, with a capacity of 3.785E+06 liters (1E+06 gallons). The basin structure is posted as a Contamination Area. The bottom dimensions for each basin are 32 by 32 meters (106 by 106 feet). The total overall dimensions at the top ledge 75 by 38 meters (246 by 123 feet), 2 meters deep (6.5 feet). There is an inlet structure on the east and an outlet structure on the west side, on the outside of the basins. Each basin has a 0.9 by 0.9-meter (3 by 3-foot) sump. There is also a sampler cabinet and a sample vault on the east side of the basins near the inlet structure.

There are two unplanned release sites (UPR-200-W-111 and UPR-200-W-112) adjacent to the basin where sludge was removed and buried. These burial sites are located within 3.1 meters (10 feet) of the basin on the north side and on the south side, near the western corners.

An unused sampler cabinet is located on the east side of the basin, as well as a sample vault that is a confined space.

Waste Type: Steam Condensate

Waste Description: Until 1972, the unit received steam condensate and cooling water from 224-U Building and chemical sewer waste from the 221-U Building. After 1972, the unit has received only cooling water from 224-U Building. The basin was temporarily replaced by 216-U-16 Crib (1984 through 1986) but was reactivated when 216-U-16 Crib was taken out of service. The effluent from the basin was discharged to the 216-U-10 Pond via the 216-U-14 Ditch until the basin outlet was plugged in 1994. Presently, the basin is receiving storm water run off from the 224-U building. The water is allowed to evaporate in the basin.

Site Code: 216-U-1&2 **Classification:** Accepted

Site Names: 216-U-1&2, 361-WR (Crib 2), 216-U-3, 216-UR #1&2 Cribs, 216-U-1 & 2, 216-U-1, 216-U-2 **ReClassification:**

Site Type: Crib **Start Date:** 1951

Site Status: Inactive **End Date:** 1967

Site Description: The crib area has been surface stabilized with clean dirt. The wood timber cribs are co-located in a common Underground Radioactive Material area. Each crib is delineated with posts and chain with Cave-In Potential signs.

Waste Type: Process Effluent

Waste Description: From March 1952 to June 1957, the site received cell drainage from Tank 5-6 (221-U Building) and waste from the 224-U Building via the overflow from the 241-U-361 Settling Tank. From June 1957 to July 1957, the site received waste from the 224-U Building via the overflow from the 241-U-361 Settling Tank and contaminated solvent from the 276-U Settling Tank Solvent Storage area. The discharge of 221-U waste was discontinued during shutdown of production operations. From July 1957 to May 1967, the site received waste from the 224-U Building and equipment decontamination and reclamation wastes from Chemical Processing Division (CPD) Services Operations in the 221-U Building canyon. Crib 2 was deactivated in May 1967. The waste is low in salt and is neutral to basic.

Site Code: 216-U-3 **Classification:** Accepted

Site Names: 216-U-3, 216-U-11, 216-U-3 French Drain **ReClassification:**

Site Type: French Drain **Start Date:** 1954

Site Status: Inactive **End Date:** 1955

Site Description: This site consists of a french drain with light steel posts and chain with "Underground Radioactive Material" signs. The drain is a 3.6 meter (12 foot) deep, 1.8 meter (6 foot) diameter, rock-filled excavation with sloping sides and a 10 centimeter (4 inch) diameter vent riser.

Waste Type: Steam Condensate

Waste Description: This 216-U-3 crib received condensate from the steam condensers on the 241-U-104 and 241-U-110 tanks. The 241-U-104 and 241-U-110 tanks held REDOX boiling waste. The site waste contains nitrate. The closed loop cooling water for the condensers was discharged to the 216-U-14 ditch.

Site Code: 216-U-4 **Classification:** Accepted

Site Names: 216-U-4, 222-U Dry Well, 222-U-110 Dry Well, 216-U-2, 216-U-4 Dry Well **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:** 1947

Site Status: Inactive **End Date:** 1955

Site Description: This site consists of a deactivated reverse well. The well consists of pipe sunk into the ground with the bottom 8 meters (25 feet) of pipe perforated. The end of the pipe is nearly closed by flattening. The site is marked with a small cement cover and a bronze medallion. It is posted as "Underground Radioactive Material".

Waste Type: Process Effluent

Waste Description: RHO-CD-673 states that both plutonium and fission products were discharged to the site from laboratory hoods and sinks. The site waste contains nitrate. A limited field investigation of high-priority waste units was conducted from August 1993 through August 1994. This site was included in that investigation. DOE/RL-95-13 includes information related to characterization borehole 299-W19-98 that was drilled between 216-U-4 and 216-U-4A. Cesium-137, cobalt-60 and europium-154 were identified.

Site Code: 216-U-4A **Classification:** Accepted
Site Names: 216-U-4A, 216-U-4 Reverse Well **ReClassification:**
 Replacement French Drain, 216-U-4 Dry Well
Site Type: French Drain **Start Date:** 1955
Site Status: Inactive **End Date:** 1970
Site Description: This site is a french drain that is posted "Underground Radioactive Material". The drain consists of a vertically set concrete pipe. The drain rests on undisturbed soil and is not gravel filled. The top of the drain is painted yellow and has a removable lid.

Waste Type: Process Effluent

Waste Description: The site waste contains nitrate, phosphate, and sodium. RHO-CD-673 states that both plutonium and fission products were discharged to the site from laboratory hoods and sinks. A limited field investigation of high-priority waste units was conducted from August 1993 through August 1994. DOE/RL-95-13 includes information related to characterization borehole 299-W19-98 that was drilled between 216-U-4 and 216-U-4A. Cesium-137, cobalt-60 and europium-154 were identified.

Site Code: 216-U-4B **Classification:** Accepted
Site Names: 216-U-4B, 216-U-4B Dry Well, 216-U-4B **ReClassification:**
 French Drain
Site Type: French Drain **Start Date:** 1960
Site Status: Inactive **End Date:** 1970
Site Description: The site consists of a french drain that is under a cement pad. A one inch diameter stainless steel vent riser extends approximately 1.2 meters (4 feet) above the surface. It is posted with "Underground Radioactive Material" signs.

Waste Type: Process Effluent

Waste Description: From January 1960 to July 1970 the site received waste from a hot cell and hood in the 222-U Building. From January 1965 to July 1970 the site received hot cell and hood waste from Pacific Northwest Laboratory experiments conducted in 222-U. The site waste contains nitrate.

Site Code: 216-U-5 **Classification:** Accepted
Site Names: 216-U-5, 216-U-4, 221-U Cold U Trench **ReClassification:**
 #2
Site Type: Trench **Start Date:** 1952
Site Status: Inactive **End Date:** 1952
Site Description: This site consists of a backfilled trench that is posted "Underground Radioactive Material".

Waste Type: Process Effluent

Waste Description: This site received liquid unirradiated uranium waste from the cold start-up run at 221-U. The waste contained 200 kilograms of nitrate.

Site Code: 216-U-6 **Classification:** Accepted

Site Names: 216-U-6, U Facility Unirradiated Uranium Waste Trench, 221-U Cold U Trench, 216-U Cold U Trench #1, 216-U-5, 221-U Cold U Grave #1 **ReClassification:**

Site Type: Trench **Start Date:** 1952

Site Status: Inactive **End Date:** 1952

Site Description: This site consists of a backfilled trench that is posted "Underground Radioactive Material".

Waste Type: Process Effluent

Waste Description: In March 1952, the site received liquid, unirradiated uranium waste from the cold start-up run at 221-U. The waste included 200 kilograms of nitrate.

Site Code: 216-U-7 **Classification:** Accepted

Site Names: 216-U-7, 221-U Counting Box French Drain, 221-U Vessel Vent Blower Pit French Drain **ReClassification:**

Site Type: French Drain **Start Date:** 1952

Site Status: Inactive **End Date:** 1957

Site Description: The french drain is within a larger area that has been stabilized and posted with Underground Radioactive Material signs. This drain is constructed of a concrete pipe set vertically into the ground. Gravel fills 1.1 meters (3.5 feet) of the pipe.

Waste Type: Process Effluent

Waste Description: The site received liquid wastes from a counting box floor drain during the metal recovery program. The site waste contains nitrate. Due to UPR-200-W-138, it is assumed that 13 kilograms (30 pounds) of uranium in uranyl nitrate hexahydrate (UNH) solution were also introduced to the soil through the 216-U-7 French Drain. However, the release associated with UPR-200-W-138 may be associated with a different french drain. The release information is vague. It is possible the event effected the 216-U-7 French Drain if sufficient liquid volume was released to the surface to flow southward and reach the 216-U-7 French Drain location.

Site Code: 216-U-8 **Classification:** Accepted

Site Names: 216-U-8, 216-WR-1,2,3 Cribs, 216-U-9 **ReClassification:**

Site Type: Crib **Start Date:** 1952

Site Status: Inactive **End Date:** 1960

Site Description: The site is marked and posted with Underground Radioactive Material signs.

The site consists of three wood timber cribs set in series. Each crib is 4.9 by 4.9 by 3.0 meters deep (16 by 16 by 10 feet deep). The cribs were filled with 1.3-centimeter (0.5-inch) crushed stone to the tops of the wooden structures. There is roughly 2,070 cubic meters (73,000 cubic feet) of gravel fill in the cribs. The cribs were fed by a vitrified clay pipeline.

Waste Type: Process Effluent

Waste Description: The site received process condensate from 221-U and 224-U Buildings and the 291-U Stack drainage. The waste is acidic.

Site Code: 216-U-12 **Classification:** Accepted

Site Names: 216-U-12, 216-U-12 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1960

Site Status: Inactive **End Date:** 1988

Site Description: The site is marked and posted with Underground Radioactive Material.

The bottom of the crib was filled with approximately 264 cubic meters (9,320 cubic feet) of gravel. A perforated 30-centimeter (12-inch) vitrified clay pipe runs horizontally the length of the unit below grade.

Waste Type: Process Effluent

Waste Description: From April 1960 to May 1967, the site received 291-U-1 Stack drainage, 241-WR Vault waste (aka 244-WR vault), and 224-U process condensate via the C-5 Tank. Contaminated water from the 241-WR Vault was discharged to the crib in October 1965 that included 3.14 kilograms (6.9 pounds) of thorium. From May 1967 to September 1972, the site received the above wastes (excluding the 241-WR Vault waste) and occasional waste via the C-7 Tank in the 224-U building. From September 1972 to November 1981, the site was taken out of service. From November 1981 to January 1987, the site received corrosive process condensate (corrosive: [D002] typical pH range is 0.5-1.5) from the 224-U building. The crib also received miscellaneous storm drain wastes from 224-U building. Between April 1960 and September 1972, 6.7 E5 kilograms of nitrate was released to the crib from the Uranium Tri-Oxide process.

Site Code: 216-U-13 **Classification:** Accepted

Site Names: 216-U-13, 216-U-13 Cribs, 216-U-13, Vehicle Steam Cleaning Pit **ReClassification:**

Site Type: Trench **Start Date:** 1952

Site Status: Inactive **End Date:** 1956

Site Description: This site consisted of two trenches of equal dimensions. The trenches were sloped so that vehicles could be driven down to the decontamination station at the bottom. The two trenches are no longer marked or posted. Some debris is visible in the area. The area is not level. Many deep gullies are located in the area west of the 241-U Tank Farm.

Waste Type: Water

Waste Description: The site used steam and water hoses to remove radioactive contaminants from vehicles, equipment and pumps from the Uranium Recovery operation. The site waste may include traces of detergent and nitric acid.

Site Code: 216-U-14 **Classification:** Accepted

Site Names: 216-U-14, 216-U-14 Ditch, Laundry Ditch **ReClassification:**
Site Type: Ditch **Start Date:** 1944
Site Status: Inactive **End Date:** 1995
Site Description: The entire ditch has been backfilled and surface stabilized. It is posted as Underground Radioactive Material.

Waste Type: Process Effluent

Waste Description: From 7/44 to 9/44, the site received wastewater from the 284-W Powerhouse. From 9/44 to 1/50, the same plus waste from 2723-W (original laundry and mask cleaning station). From 1/50 to 3/52, received wastewater from 284-W and 2724-W Laundry Building (new laundry facility). From 3/52 to 5/54, the same plus chemical sewer waste from 221-U and cooling water from 224-U. From 5/54 to 8/55, the same plus cooling water from 241-U-110 condenser tank. From 8/55 to 11/73, the same plus 271-U cooling water. From 11/73 to 4/80, the same plus 242-S Evaporator condensate and cooling water. From 4/80 to 9/81, the same minus 242-S condensate, 2723-W and 2724-W waste. From 9/81 to 7/84, the same minus 221-U, 224-U, and 271-U waste. The 221-U and 224-U effluent entered the ditch after passing through the 207-U Retention Basin. The 216-U-16 crib was built in 1984 to accept 224-U effluent that had previously been discharged to the ditch. However, the 216-U-16 crib failed in 1985. Some 224-U effluent was diverted back to the 216-U-14 Ditch until November 1994, when the outlet pipe to the 207-U Retention Basin was permanently isolated and filled with concrete. The portion of the ditch, located west of Cooper Ave., received effluent from the 242-S Evaporator and remained active until April 1995. Discharge from the 242-S Evaporator was eliminated in 1995 ending all discharges to this unit.

The Following Sites Were Consolidated With This Site:

Site Code: 200-W PP
Site Names: 200-W PP, 200-W Powerhouse Pond, 200 West Powerhouse Ponds, 284-W-B
Reason: Within Boundary Of Larger Site

Site Code: 216-U-15 **Classification:** Accepted
Site Names: 216-U-15, UN-216-W-10, 388-U Tank **ReClassification:**
Dumping, UPR-200-W-125, UN-200-W-158, U-152 Interface Crud Burial
Site Type: Trench **Start Date:** 1957
Site Status: Inactive **End Date:** 1957
Site Description: The site is the result of a deliberate discharge of liquid waste into a hole in the ground. No surface markers exist to identify the exact location of this waste unit. Originally, the site was delimited by a wooden fence and posted with Underground Contamination signs. The perimeter fence and all identification markings of this site were removed in 1971.
Waste Type: Chemicals
Waste Description: This site received 26,500 liters (7,000 gallons) of waste from the 388-U Tank in the 276-U Solvent Building. The waste consisted of interface crud, activated charcoal, and diatomaceous earth containing approximately 1 curie of fission products.
HW-50584 indicates conflicting information. The May 1957 monthly report states that 79,494 liters (21,000 gallons) of organic solution (RAX) was originally scheduled to be transferred to

the PUREX plant, but was buried because it was found to be incompatible with the PUREX process.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-125

Site Names: UPR-200-W-125, 216-U-15, UN-200-W-125, UN-216-W-10

Reason: Duplicate Site

Site Code: 216-U-16 **Classification:** Accepted

Site Names: 216-U-16, UO3 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1984

Site Status: Inactive **End Date:** 1987

Site Description: The crib is identified with concrete AC-540 markers and is posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The site received 224-U steam condensate, 224-U chemical sewer waste, 271-U compressor cooling water, 221-U chemical sewer waste, and 224-U process condensate.

Site Code: 216-U-17 **Classification:** Accepted

Site Names: 216-U-17, 216-U-17 Crib **ReClassification:**

Site Type: Crib **Start Date:** 1988

Site Status: Inactive **End Date:** 1994

Site Description: The crib is marked and posted with Underground Radioactive Material signs.

Waste Type: Process Effluent

Waste Description: The unit received 224-U process condensate. A neutralization system was placed into operation before startup of this crib to preclude the discharge of process condensate outside the range of 2.0 to 12.5 pH.

Site Code: 241-U-361 **Classification:** Accepted

Site Names: 241-U-361, 241-U-361 Settling Tank, 361-U-TANK, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Settling Tank **Start Date:** 1951

Site Status: Inactive **End Date:** 1967

Site Description: The 241-U-361 Tank is an underground settling tank constructed of reinforced concrete. The 216-U-1&2 Cribs and the 241-U-361 Settling Tank are co-located within a common radiologically controlled area. It is posted with Underground Radioactive Material (URM). Due to the 1953 release, the surface surrounding the settling tank has been covered with shotcrete.

The tank is posted with Inactive Miscellaneous Underground Storage Tank (IMUST) signs.

Waste Type: Process Effluent

Waste Description: The tank received radioactively contaminated liquid from U Plant. It is presently estimated to contain 104,100 liters (27,500 gallons) of sludge with an unknown plutonium content. Sample data collected in 1976 estimated the tank contained 760 curies of strontium-90, 1365 curies of cesium-137, 69,000 kilograms of uranium and less than one gram of plutonium.

Site Code: 200-W-1

Classification: Accepted

Site Names: 200-W-1, REDOX Mud Pit West

ReClassification:

Site Type: Mud Pit

Start Date:

Site Status: Inactive

End Date:

Site Description: The site was originally described as a pit that is approximately 15.3 meters (50 feet) by 31 meters (100 feet). The surface of the area has the appearance of drilling mud, and has the typical surface that is left from evaporated or percolated liquid. Vegetation is absent from the area.

The following observations were made during a field visit in August 1999. The site is in a shallow depression. It is difficult to discern the precise boundaries of the site because the general area appears to have been disturbed by heavy equipment. One section of the site is devoid of vegetation and appears to have some soil discoloration. West of this section is an area where the ground surface is broken up and sparsely vegetated. These two distinctive areas are surrounded by sparse to moderate vegetation cover, composed primarily of cheatgrass and tumbleweeds. An approximately 2.5 centimeter (1 inch) diameter rubber hose was seen near the west edge of the site and some lumber and a wooden stake were found at the unvegetated spot.

Waste Type: Chemicals

Waste Description: Site characterization is required for this site.

Site Code: 200-W-2

Classification: Accepted

Site Names: 200-W-2, REDOX Berms West

ReClassification:

Site Type: Spoils Pile/Berm

Start Date:

Site Status: Inactive

End Date:

Site Description: The majority of the area is level, with evidence of soil disturbance over several acres. The site consists of two bermed areas. One berm is approximately 1.5 meters (5 feet) high by 9.2 meters (30 feet) wide. The other berm is approximately 3.1 meters (10 feet) high and 15.3 meters (50 feet) wide. The berms are not marked or posted.

Waste Type: Soil

Waste Description: The wastes at this unit are unknown. Characterization studies need to be performed.

Site Code: 200-W-6

Classification: Accepted

Site Names: 200-W-6, 200-W Painter Shop Paint

ReClassification:

	Solvent Disposal Area	
Site Type:	Dumping Area	Start Date:
Site Status:	Inactive	End Date:
Site Description:	The site consists of contaminated soil. The soil was identified in 1993, while performing building modifications at the paint shop.	
Waste Type:	Chemicals	
Waste Description:	Paint solvents were routinely disposed of to the soil in this area prior to 1984, according to conversations with "old timers".	

Site Code:	200-W-9	Classification:	Accepted
Site Names:	200-W-9, Project W291 Excavation VCP Contamination	ReClassification:	
Site Type:	Unplanned Release	Start Date:	1994
Site Status:	Inactive	End Date:	
Site Description:	The site is currently a gravel area with two metal caissons. The area is not marked or posted. The tops of the caissons are labeled MH T-1 and MH T-2.		
Waste Type:	Demolition and Inert Waste		
Waste Description:	Chemical sewer, 3000 dpm beta/gamma on 100 cm ² (15.5 in ²) smear on the 10-in (25 cm) vitrified clay pipe. 5500 dpm direct reading.		

Site Code:	200-W-11	Classification:	Accepted
Site Names:	200-W-11, Concrete Foundation South of 241-S, S-Farm Foundation and Dump Site	ReClassification:	
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	A concrete foundation, small burn areas, bare areas and scattered debris are located south of 241-S Tank Farm.		
Waste Type:	Misc. Trash and Debris		
Waste Description:	concrete foundation, small burn areas, bare areas, scattered debris (wire, weld rod, paint cans, oil cans, solvent cans, vehicle parts, cable, melted roofing material, glass, wood, pipe, rubber brick, metal, concrete) Reported Date: April 4, 1995		

Site Code:	200-W-12	Classification:	Accepted
Site Names:	200-W-12, 201-W Soil Mound and Plastic Pipe	ReClassification:	
Site Type:	Dumping Area	Start Date:	

Site Status: Inactive **End Date:**

Site Description: The site consists of a soil mound with one 0.76-meter (2.5-foot) above-ground plastic pipe and one 20-centimeter (8-inch) above-ground plastic pipe topped with tees and elbows. There are also insulated electrical wires and an electrical heat controller.

Waste Type: Equipment

Waste Description: The site consists of a soil mound (about 0.3-meter [1-foot] above grade) with one 0.76-meter (2.5-foot) above ground poly pipe and one 20-centimeter (8-inch) above ground poly pipe topped with tees and elbows. The site includes insulated wire and a heat controller. A below ground tank is suspected but unverified.

Site Code: 200-W-14 **Classification:** Accepted

Site Names: 200-W-14, 200 West Heavy Equipment Storage Area **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1995

Site Status: Inactive **End Date:**

Site Description: The site appears as a gravel parking lot. Several large, discolored areas were noted.

Waste Type: Oil

Waste Description: The soil at the site contains petroleum (oil, fuel, etc.) from leaky and overflowing (especially during hot weather) equipment (cranes, generators, front end loaders, forklifts, etc.).
Reported Date: May 7, 1995

Site Code: 200-W-21 **Classification:** Accepted

Site Names: 200-W-21, 204-T Unloading Station, T-Plant Waste Railcar Unloading Facility, Unloading Station 1 and Unloading Station 2 **ReClassification:**

Site Type: Pump Station **Start Date:** 1966

Site Status: Inactive **End Date:** 1968

Site Description: The unloading station consisted of two unloading platforms, Unloading Station 1 and Unloading Station 2. The platforms and piping from both stations were removed in 1996. The area has a short railroad siding extending from the main rail line into T-Plant. The concrete structure foundations remain and are posted with Underground Radioactive Material signs.

Waste Type: Equipment

Waste Description: The platform structures and equipment supported the unloading of liquid waste from the 300 Area into the 216-T-34 and 216-T-35 cribs.

Site Code: 200-W-22 **Classification:** Accepted

Site Names: 200-W-22, 203-S/204-S/205-S Stabilized Area **ReClassification:**

Site Status: Inactive **End Date:** 1988

Site Description: The site is marked with steel posts and Pipeline signs along the entire length. A portion of pipeline located north of 16th Street had been posted as a Soil Contamination Area until it was stabilized in October 2001. The section of pipeline located south of 16th Street to the 216-U-8 Crib was interim stabilized with 61 centimeters (2 feet) of soil and posted with AC-540 concrete posts in 1995. It is posted as an Underground Radioactive Material area. The contamination area south of 16th Street also described in sitecode UPR-200-W-163. The contamination area over the pipeline on the north side of 16th Street is considered a part of this pipeline site.

Waste Type: Process Effluent

Waste Description: From 1952 to 1960, the line transferred waste from 221-U, 224-U and 291-U to the 216-U-8 crib. The 216-U-12 crib replaced the 216-U-8 crib in 1960. The pipeline was extended further south to the 216-U-12 location. From April 1960 to May 1967, the pipeline received waste from the 291-U-1 Stack drainage, 241-WR Vault waste, and 224-U process condensate via C-5 Tank. Disposal of contaminated water from 241-WR Vault was accomplished in October 1965 and included 3.14 kilograms (6.9 pounds) of thorium. From May 1967 to September 1972, the site received the above wastes excluding the 241-WR Vault waste and occasional waste via the C-7 Tank in the 244-U Building. From September 1972 to November 1981, the site was taken out of service. After November 1981, the pipeline received process condensate (corrosive: typical pH range is 0.5-1.5) from the 224-U Building. In the past, this facility also received miscellaneous storm drain wastes from 224-U. A Limited Field Investigation was done in 1994 to characterize selected waste sites in the 200-UP-2 Operable Unit. Fourteen surface and subsurface soil samples along with four vegetation samples were collected to characterize the vitrified clay pipeline (VCP) leading to the 216-U-8 Crib. An attempt was made to determine if the contamination had spread laterally from the pipeline by digging holes with an auger rig where subsurface contamination had been identified. An increase in activity was noted at approximately 3 meters (10 feet). At a depth of 3.3 meters (11 feet) the auger was stopped by large cobbles. The samples were analyzed for cesium-137, strontium-90, gross alpha and gross beta. Specific sample data is documented in BHI-00033.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-163

Site Names: UPR-200-W-163, Contaminated Vegetation at the 216-U-8 Pipeline (200-W-42-PL), UN-216-W-33

Reason: Within Remediation Layback Area

Site Code: 200-W-51 **Classification:** Accepted

Site Names: 200-W-51, Septic Tank (Abandoned) **ReClassification:**

Site Type: Septic Tank **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an abandoned septic tank that has been filled and covered. The septic tank was discovered during excavations (for exhaustor upgrades) outside 241-SY Tank Farm. The tank is not marked or posted.

Waste Type: Sanitary Sewage

Waste Description: The waste is the heel remaining in an abandoned septic tank.

Site Code: 200-W-53 **Classification:** Accepted

Site Names: 200-W-53, UPR-200-W-166, UN-216-W-31 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: This site was an area of surface soil contamination located east of the 207-T Retention Basins. It was identified in 1994 resulting in approximately 155,706 square feet of land being marked and posted as a Soil Contamination Area (SCA). The contaminated soil was scraped and placed inside the 207-T Retention Basin. The scraped area is currently posted as an Underground Radioactive Material Area (URM).

Waste Type: Soil

Waste Description: Contaminated soil specks were identified.

Site Code: 200-W-54 **Classification:** Accepted

Site Names: 200-W-54, Contamination Migration from 241-SX Tank Farm **ReClassification:**

Site Type: Contamination Migration **Start Date:**

Site Status: Inactive **End Date:**

Site Description: This site is an expanding area of contamination migration. The original unplanned release was defined in 1997. It was a large, irregular shaped Soil Contamination Area (SCA) located on the east side of 241-S/SX Tank Farms. In 1997, it measured approximately 175 meters (575 feet) by 100 meters (330 feet). Another Global Positioning Survey was done in 1998. The posted Soil Contamination Area had been extended approximately 50 meters (165 feet) to the west (up to the tank farm fence) and approximately 200 meters (660 feet) in the north-south direction. A site visit in August 2000 found multiple additional radiologically chained and posted areas in this vicinity. There is also one separately posted Contamination Area located north of 241-SY Tank Farm, across a gravel road. In 2009, contaminated rabbit feces were found outside the posted areas. Some areas of rabbit feces and specks were delineated and posted as a Contamination Area. The posted area size and shape varies with additional radiological surveys.

Waste Type: Soil

Waste Description: The posted soil contamination areas are the result of contamination migration out of the tank farms.

Site Code: 200-W-55 **Classification:** Accepted

Site Names: 200-W-55, Dumping Area North of 231-Z **ReClassification:**

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site consists of scattered debris approximately 10 feet in diameter inside the north end of a large depression. The site is not marked or radiologically posted.

Waste Type: Misc. Trash and Debris

Waste Type: MISC. TRASH AND DEBRIS

Waste Description: The debris at the site included concrete rubble, wood, cans, pipes and rusted sheet metal.

Site Code: 200-W-63 **Classification:** Accepted

Site Names: 200-W-63, Contaminated Concrete Pad **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was a "T" shaped concrete pad that had been posted with Surface Contamination Area signs. A site visit in September 1999 found the pad had been covered with gravel and reposted as Underground Radioactive Material.

Waste Type: Equipment

Waste Description:

Site Code: 200-W-67 **Classification:** Accepted

Site Names: 200-W-67, Contaminated Soil at the Corner of Cooper and 16th Street **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1998

Site Status: Inactive **End Date:**

Site Description: The site is currently posted as an Underground Radioactive Material area.

Waste Type: Soil

Waste Description:

Site Code: 200-W-71 **Classification:** Accepted

Site Names: 200-W-71, Undocumented Trench, Undocumented Burn Pit **ReClassification:**

Site Type: Trench **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The open trench was visible on a 1948 aerial photograph of 200 West Area. The trench is also visible on photograph number 3757, taken in May 1956. Smoke is emitting from the trench, indicating it was used as a burn pit. The trench has been backfilled. The area where the trench had been located is not marked or posted. The area seems somewhat disturbed and is covered with cheatgrass and some rabbitbrush.

Waste Type: Misc. Trash and Debris

Waste Description: Drawing H-2-1495 labels the trench as the Maintenance Disposal Ground. Historical photographs show smoke emitting from the trench, indicating it was used as a burn pit.

Site Code: 200-W-75 **Classification:** Accepted

Site Names: 200-W-75, Radiological Logging System (RLS) Calibration Silos **ReClassification:**

Site Type: Experiment/Test Site **Start Date:** 1978

Site Status: Unknown **End Date:**

Site Description: The site consists of four underground Radiological Logging System (RLS) equipment calibration silos. The silos are galvanized steel containers with metal lids bolted on top. The silos have somewhat different design constructions, for calibrating different types of equipment. One type consisted of a 25 centimeter (6 inch) capped well casing is inserted through the centers of the silos. There are two risers with bolted lids adjacent to the well casing. The silos are posted with Underground Radioactive Material signs.

Waste Type: Equipment

Waste Description: The calibration silos contained radioactive sources consisting of known quantities of cobalt-60, strontium-90, ruthenium-106 and cerium-144 in sealed capsules. Since the silo covers are posted with Underground Radioactive Material signs, it is assumed the sources are still inside the silos.

Site Code: 200-W-77 **Classification:** Accepted

Site Names: 200-W-77, Posted Contamination Area East of 216-U-14 Ditch **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was a small area marked with posts and chain, posted with Contamination Area signs. After being backfilled with gravel, the area was downposted to Underground Radioactive Material.

Waste Type: Vegetation

Waste Description:

Site Code: 200-W-80 **Classification:** Accepted

Site Names: 200-W-80, Stabilized Contaminated Soil Area Southwest of T Plant, Mound of Contaminated Soil Southwest of T Plant **ReClassification:**

Site Type: Spoils Pile/Berm **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a gravel area surrounded with post and chain and Underground Radioactive Material Area signs. The site had been a mound of soil surrounded with radiation rope and posted with Contamination Area signs. The mound was approximately 1.5 meters (5 feet) high, 8.2 meters (27 feet) long, and 3 meters (10 feet) wide.

The mound of soil and the surrounding area contained many pieces of asphalt, similar to that in the adjacent parking lot of T Plant. The mound and surrounding area is covered by a thin growth of cheatgrass and tumbleweeds.

About 3 meters (10 feet) east of the site is a small posted URM, with one capped well inside the posted area and one just outside. The capped well outside is locked and has a warning of potential contamination.

Across the northern part of the contamination area are fence posts marking an underground pipeline, traveling east-west, posted as a URM. Another posted underground pipeline goes under the mound of soil, in a north-south direction, and is also posted as a URM.

Waste Type: Soil

Waste Description: The site consists of a mound of soil surrounded with radiation rope and Contamination Area signs. A survey of the mound surface did not detect any contamination. It is not known if there is contamination inside the mound.

Site Code: 200-W-81 **Classification:** Accepted

Site Names: 200-W-81, Contaminated Tumbleweed Fragments Along Railroad Track East of 218-W-3AE **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was three posted Contamination Areas on the railroad track east of the burial ground, south of the 610 Gate of the 200 West Area fence. In 2009, each Contamination Area was radiologically surveyed and downposted to Soil Contamination Areas. Later, six inches of clean gravel was placed on the areas and the postings were changed Underground Radioactive Material Areas.

Waste Type: Soil

Waste Description:

Site Code: 200-W-82 **Classification:** Accepted

Site Names: 200-W-82; Risers East of 216-TY-201 and 216-T-26, 216-T-27, and 216-T-28 Cribs; Crib Unloading Station **ReClassification:**

Site Type: Product Piping **Start Date:** 1960

Site Status: Inactive **End Date:** 1966

Site Description: The site consists of two concrete pads with flanged risers, surrounded by Contamination Area postings.

Waste Type: Equipment

Waste Description: The 216-T-27 and 216-T-28 received liquid waste from the 300 Area via trucks. The waste at the unloading station is the underground transfer piping, risers and pads and adjacent soil contaminated from leaks.

Site Names: 200-W-87, Unplanned Release on Chemical Spur Railroad Track Northwest of 221-U Plant **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was originally a posted Contamination Area on a portion of the railroad spur. The spur is no longer active. In December 2001, the area was covered with clean backfill material and downposted to an Underground Radioactive Material Area.

Waste Type: Soil

Waste Description:

Site Code: 200-W-89 **Classification:** Accepted

Site Names: 200-W-89, 252-U, U Plant Electrical Substation, C8S17 Substation, U-Cat Substation **ReClassification:**

Site Type: Foundation **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a posted, gravel Underground Radioactive Material (URM) area where the 252-U Electrical Substation had been located.

Waste Type: Soil

Waste Description: The waste in this area is residual radioactive contamination in soil. After the electrical substation was decommissioned, a posted Underground Radioactive Material area remains. Laboratory analysis of metal, ceramic pieces and asbestos fibers (August 1998) identified cesium 134 and cesium 137. Some barium, cadmium, chrome and lead was also noted. No PCB's were identified. The radioactive contamination is assumed to have been deposited on the substation from U Plant and 224-U stack emissions.

Site Code: 200-W-90 **Classification:** Accepted

Site Names: 200-W-90, Underground Radioactive Material Areas Posted Along 23rd Street in 200 West Area **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is comprised of three posted Underground Radioactive Material areas. Two are located on the south side of 23rd Street, across from the 218-W-2A Burial Ground. One is located further east, on the south side of 23rd Street, across from the 241-T Tank Farm.

Waste Type: Soil

Waste Description:

Site Code: 200-W-92 **Classification:** Accepted
Site Names: 200-W-92, Contaminated Mound of Soil and Debris, Soil Mound West of 241-TY Tank Farm **ReClassification:**
Site Type: Dumping Area **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The waste site is a mound of soil is approximately 1.5 meters (5 feet) high. It had been surrounded with chain and posted with Contamination Area signs. Several radiation flags were placed in the mound to identify significant contamination. Rocks, asphalt and chunks of cement were visible. Some vegetation, including rabbitbrush, had been growing on the mound. In April 2007, clean gravel was placed on top of the contamination and the site was down posted to Underground Radioactive Material.
Waste Type: Misc. Trash and Debris
Waste Description: Maximum contamination levels of 1,600,000 disintegrations per minute per 100 square centimeters of beta gamma and 14,000 disintegrations per minute per 100 square centimeters of alpha were found on the soil and debris.

Site Code: 200-W-101 **Classification:** Accepted
Site Names: 200-W-101, Contaminated Material West of 216-S-12 Crib **ReClassification:**
Site Type: Dumping Area **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site consists of two large boxes and a rusted metal shaft surrounded with light post and chain. The area had been posted with Contamination Area and Radiation Area signs. The metal shaft is approximately 18 meters (60 feet) long and extends beyond (outside) the posted area chain. The radiological posting was changed to Contamination Area in April 2002.
Waste Type: Equipment
Waste Description: The material inside the posted area consists of two large boxes and a long metal pipe (shaft).

Site Code: 200-W-106 **Classification:** Accepted
Site Names: 200-W-106, Soil Contamination Area Adjacent to 200-W-55 **ReClassification:**
Site Type: Unplanned Release **Start Date:**
Site Status: Inactive **End Date:**
Site Description: Soil contamination was found and posted on February 13, 2003. In March 2010, the area was surface stabilized and downposted to Underground Radioactive Material.

Site Code: 200-W-107 **Classification:** Not Accepted (Proposed)
Site Names: 200-W-107, Miscellaneous Stream #685, 222-U Building Stormwater Runoff **ReClassification:**

cover was removed, the drain structure was found to be filled with sand.

Waste Type: Stormwater Runoff

Waste Description: Documentation states that the site received stormwater runoff from the east side or backside of the 222-U Building. During the site walkdown, however, it was unclear how the drain could have received stormwater because no pipes were observed extending from the building into the drain.

Site Code: 200-W-111 **Classification:** Not Accepted (Proposed)

Site Names: 200-W-111, Miscellaneous Stream #394, 222-U Building Stormwater Runoff **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: This french drain structure has been covered with gravel and is no longer visible. It is part of the posted Underground Radioactive Material remediation stabilization area that was created when the 222-U building was demolished in 2005 (see sitecode 200-W-136). The site was a covered french drain. The yellow metal cover has a slot on one side and was level with the surrounding gravel covered ground. It was posted "Not a Confined Space". The cover had been placed over a 0.61meter (2 feet) diameter vitrified clay pipe drain structure that was 0.91 meter (3 feet) deep. No underground piping was observed in the drain, nor aboveground pipes extending to the drain, however a steel drain pipe was observed extending downward on the 222-U building. The pipe had been cutoff approximately 0.61 meters (2 feet) above the ground.

Waste Type: Stormwater Runoff

Waste Description: Documentation states that the site received stormwater runoff from the east side or backside of the 222-U Building. During the site walkdown, however, it was unclear how the drain received stormwater because no pipes were observed extending from the building into the drain.

Site Code: 200-W-118 **Classification:** Accepted

Site Names: 200-W-118, Miscellaneous Stream #141, Steam Condensate MSS-TRP-006 **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a 0.025 meter (one inch) diameter insulated pipe extending into a 1.22 meter (4 foot) diameter french drain structure.

Waste Type: Steam Condensate

Waste Description: The drain received non-contaminated steam condensate.

Site Code: 200-W-148-PL **Classification:** Accepted

Site Names: 200-W-148-PL, 216-S-26 Crib Pipeline **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:** 1984

Site Status: Inactive **End Date:** 1995

Site Description: The site is a 15.2 centimeter (6 inch) diameter vitrified clay pipe that connects the west end of the 216-S-26 crib to pipeline 200-W-147-PL (the original 20 centimeter (8 inch) diameter vitrified clay pipe that extends from the 207-SL Retention Basin to 216-S-19 Pond). The 216-S-26 crib was built to replace the 216-S-19 Pond.

Site Code: 200-W-147-PL-A **Classification:** Accepted

Site Names: 200-W-147-PL-A; Portion of 200-W-147-PL Pipeline in the Central Plateau Outer Area **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:**

Site Status: Inactive **End Date:**

Site Description: Due to the restructuring of Operable Units, as described in the Agreement for Central Plateau Cleanup, the original site (200-W-147-PL) has been split into separate WIDS sites. It was an underground 20 centimeter (8 inch) diameter vitrified clay pipe, extending from the 207-SL retention basin to the 216-S-19 pond. 200-W-147-PL-A is the portion of pipeline that extends south of 200 West Area, in the Outer Area, terminating at the 216-S-19 pond.

Site Code: 218-W-8 **Classification:** Accepted

Site Names: 218-W-8, 222-T Vault **ReClassification:**

Site Type: Burial Vault **Start Date:** 1945

Site Status: Inactive **End Date:** 1952

Site Description: Three underground vaults are contained in this site. The two original vaults are 3 by 3 by 3.7 meters (10 by 10 by 12 feet) deep, made of 5.1 by 30.5-centimeter (2 by 12-inch) wooden planking, with the tops 1.5 meters (5 feet) below grade. The third replacement vault is a concrete culvert pipe encasement 2.4 meters (8 feet) in diameter and 7.6 meters (25 feet) long and 1 meter (3.2 feet) below grade. The top of the encasement is a 23-centimeter (9-inch) precast concrete cover and the bottom is a 30.5-centimeter (12-inch) thick concrete floor. The disposal chutes for the wooden vault were removed.

Waste Type: Misc. Trash and Debris

Waste Description: This site contains laboratory process sample waste from the 222-T Building.

Site Code: 218-W-9 **Classification:** Accepted

Site Names: 218-W-9, Dry Waste Burial Ground No. 9, Non-TRU Dry Waste No. 009 **ReClassification:**

Site Type: Burial Ground **Start Date:** 1954

Site Status: Inactive **End Date:** 1954

Site Description: The burial area is 42.7 meters (140 feet) by 29.8 meters (98 feet). The location is designated by four corner posts and chain. No data is available regarding depth, slope, or actual area used inside the posted area.

Waste Type: Misc. Trash and Debris

Waste Type: *Waste Type: Process Effluent*

Waste Description: The unit contains an unknown amount of sheet metal scrap, including the 211-S Tank taken from the REDOX Facility. The waste contains less than 0.1 curie total beta activity. ARH-2015 part 4 says the REDOX scrap metal was contaminated with ruthenium-106.

Site Code: 231-W-151 **Classification:** Accepted

Site Names: 231-W-151, 231-W-151 Vault, 231-W-151-001 (Tank), 231-W-151-002 (Tank), 231-W-151 Sump, 231-Z-151 Sump, IMUST, Inactive Miscellaneous Underground Storage Tank (See Subsites) **ReClassification:**

Site Type: Receiving Vault **Start Date:** 1948

Site Status: Inactive **End Date:** 1974

Site Description: The unit is a concrete vault partially underground with 3 steel risers and one vent structure protruding from holes in the top. The vault contains two tanks. It is posted with Contamination Area/Radiation Area signs and Restricted Access Unsafe Structure, Confined Space and IMUST signs.

Waste Type: Process Effluent

Waste Description: The unit consists of a vault containing the two tanks, 231-W-151-001 and 231-W-151-002, installed to receive drainage from 75 floor drains in Building 231-Z. Floor drainage solids settled, leaving sludge and sediment in the tanks. Plutonium finishing wastes or chemicals from building 231-Z may have been introduced to the two tanks. A water sample taken from 231-W-151-001 May 9, 1974 showed Cs137, Sr89, Sr90, and Uranium. 231-W-151-001 was reported to contain only ~0.001grams of plutonium then, and little or no ferrocyanides. A water sample taken from 231-W-151-002 May 9, 1974 showed cesium-137, strontium-89/strontium-90, uranium, plutonium-238, plutonium-239, plutonium-240, and americium-241. In summary, these results indicate a content of 228 grams of plutonium in the sludge in 231-W-151-002, and less than 0.001grams in the supernatant.

SubSites:

SubSite Code: 231-W-151:1

SubSite Name: 231-W-151:1, 231-W-151-001

Classification: Accepted

ReClassification:

Description: Tank 231-W-151-001 is located within the 231-W-151 Vault. It is a 15,140 liter (4000 gallon) stainless steel tank that received drainage from the 231-Z building floor drains. The drainage was routed to 231-W-151-002, which when filled, overflowed into 231-W-151-001. The solids would settle out into the tanks and the supernate was discharged to the 216-Z-7 crib.

Tank operations began in 1948 and were discontinued in 1974. The inlet lines to the tank have been blanked off. In 1974, a sample was taken that indicated 231-W-151-001 contained only 0.001 grams of plutonium. The tank contents were reported to be 5,413 liters (1430 gallons) of supernate and no sludge.

SubSite Code: 231-W-151:2

SubSite Name: 231-W-151:2, 231-W-151-002

Classification: Accepted

ReClassification:

Description: Tank 231-W-151-002 is located within the 231-W-151 Vault. It is a 3,596 liter (950 gallon) stainless steel tank that received drainage from the 231-Z building floor drains. The solids would settle out into the tanks and the supernate was discharged to the 216-Z-7 crib.

Tank operations began in 1948 and were discontinued in 1974. The inlet lines to the tank have been blanked off. In 1974, a sample was taken that indicated 231-W-151-002 contained 228 grams of plutonium in the sludge and less than 0.001 grams of plutonium in the supernate. The tank contents were reported to be 3,615 liters (955 gallons) of supernate and 45 liters (12 gallons) of sludge.

Site Code: 270-W **Classification:** Accepted

Site Names: 270-W, 270-W Tank, 270-W Neutralization Tank, IMUST, Inactive
Miscellaneous Underground Storage Tank **ReClassification:**

Site Type: Neutralization Tank **Start Date:** 1952

Site Status: Inactive **End Date:** 1960

Site Description: There is no visual evidence for this tank. The tank is located beneath the cement foundation of the 2715-UA building. The 2715-UA building was removed in August 2005, leaving the foundation slab in place. The 270-W tank risers are protected with a cement block. A review of drawings indicated the 2715 UA building was placed over the 270-W tank. The 270-W consists of an underground, stainless steel tank that is 2.7 meters (9 feet) tall and 2.7 meters (9 feet) in diameter. The nominal capacity of the tank is 14,300 liters (3780 gallons).

Waste Type: Process Effluent

Waste Description: The unit was filled with limestone and used to neutralize acidic 224-U process condensate from the UO₃ plant operation. Contributors to the process condensate included feed UNH concentrator offgas, calciner offgas, phosphoric acid, and potassium hydroxide. Analyses of process condensate samples have revealed trace amounts of hydrogen fluoride, mercury, acetone, 1-butanol, 2-butanone, and n-nitrosodimethylamine. Analysis of the last liquid to flow through the tank revealed beta emitters, uranium, and plutonium. (Harlow Internal Memo states : 2.64 E-9 curies per gallon of beta emitters, 9.69 E-5 grams per gallon of uranium and 1 E-9 grams per gallon of plutonium - unit conversion = 6.97 E-10 curies per liter of beta emitters, 2.56 E-5 grams per liter of uranium, and 2.64 E-9 grams per liter of plutonium).

Site Code: 2607-W3 **Classification:** Accepted

Site Names: 2607-W3 **ReClassification:**

Site Type: Septic Tank **Start Date:** 1944

Site Status: Inactive **End Date:** 1996

Site Description: The 2607-W3 Septic Tank has been pumped, sampled, filled with sand and abandoned in place. The 2607-W3 Septic Tank was constructed of reinforced concrete. At one time, the eastern access was posted with a Radioactive Material warning sign. This system includes a drain field that was expanded in the 1950's.

Waste Type: Sanitary Sewage

Waste Description: The 2607-W3 septic system has been abandoned in place. This system has been redirected to the 2607-W1 system. Prior to this, the 2607-W3 septic system received sanitary sewer effluent at an estimated rate of 501 cubic feet (14.2 cubic meters) per day.

Site Code: 2607-W4 **Classification:** Accepted

Site Names: 2607-W4, T Plant Septic Tank and Drain Field **ReClassification:**

Site Type: Septic Tank **Start Date:** 1944

Site Status: Inactive **End Date:** 1998

Site Description: The 2607-W4 Septic Tank is a single compartment tank constructed of reinforced concrete. The drain field measures 3.1 by 9.2 meters (10 feet by 30 feet). The site is surrounded by a light chain barricade. At one time the area was marked with surface contamination warning signs. A site visit in October of 1998 indicates the area is no longer a Radiation Area. This system includes a drain field and receives sanitary wastewater and sewage from the 221-T Canyon Building.

Waste Type: Sanitary Sewage

Waste Description: The 2607-W4 septic system received sanitary sewer effluent at an estimated rate of 1,330 gallons (5,000 liters) per day in 1995. This system received sanitary sewer effluent at an estimated rate of 374 cubic feet (10.6 cubic meters) per day in 1987.

Site Code: 2607-W5 **Classification:** Accepted

Site Names: 2607-W5, Septic Tank and Drain Field **ReClassification:**

Site Type: Septic Tank **Start Date:** 1944

Site Status: Active **End Date:**

Site Description: The 2607-W5 Septic Tank is a single-compartment tank constructed of concrete and has three entry openings on the top, each protected by a wooden cover. A pipe connects the septic tank to a concrete diversion box, and then to a second concrete diversion box before entering the drainfield. The septic tank and diversion box are currently located within an Underground Radioactive Material (URM) area related to the 216-U-1, 216-U-2 cribs and the 241-U-361 stabilization.

The septic system has two drain fields. The original drain field is located west and north of the septic tank, outside the URM area boundary. The replacement tile field is located north and east of the septic tank.

Waste Type: Sanitary Sewage

Waste Description: The 2607-W5 Septic System received sanitary sewer effluent at an estimated rate of 1,741 liters (460 gallons) per day in 1995. This unit received sanitary sewer effluent at an estimated rate of 12.2 cubic meters (431 cubic feet) per day in 1987.

Site Code: 2607-W6 **Classification:** Accepted

Site Names: 2607-W6 **ReClassification:**

Site Type: Septic Tank **Start Date:** 1951

Site Status: Active **End Date:**

Site Description: The 2607-W6 system was reconstructed in 1995. The unit has a sign correctly labeling it. A concrete structure with three metal manhole covers lies on the surface. The 2607-W6 Septic Tank is constructed of reinforced concrete and receives sanitary wastewater and sewage.

Waste Type: Sanitary Sewage

Waste Description: The current daily flow rate for the 2607-W6 septic system is 9,300 gallons (15,100 liters). This unit received sanitary sewer effluent at an estimated rate of 603 gallons (2,285 liters) per day in 1995. This system received sanitary wastewater and sewage at an estimated rate of 1,230 cubic feet (34.8 cubic meters) per day in 1987.

Site Code: 2607-W7 **Classification:** Accepted

Site Names: 2607-W7, Septic Tank **ReClassification:**

Site Type: Septic Tank **Start Date:** 1954

Site Status: Inactive **End Date:**

Site Description: The 2607-W7 Septic Tank was a small, 950 liter (350 gallon] tank constructed of reinforced concrete. Previous documentation stated the 2607-W7 Septic System includes a septic tank and drain field that lie within a radiation zone. A site visit done in 1999 found the septic tank to be located between two Underground Radioactive Material areas. The location of the drain field was visually not apparent. HNF-SD-LL-SP-001 shows the drain field west of the septic tank.

Waste Type: Sanitary Sewage

Waste Description: No radionuclides or hazardous chemicals are associated with this system. The current flow rate to the 2607-W7 Septic System is unknown. However, this system received sanitary sewer effluent at an estimated rate of 1.02 cubic meters (36 cubic feet) per day in 1987.

Site Code: 2607-W8 **Classification:** Accepted

Site Names: 2607-W8 **ReClassification:**

Site Type: Septic Tank **Start Date:** 1944

Site Status: Inactive **End Date:** 1998

Site Description: This system is located adjacent to posted radiation zone containing the 216-Z-5 and 216-Z-4 cribs. The 2607-W8 Septic Tank is constructed of reinforced concrete and has three manhole covers visible on the surface. It is a single compartment tank with an attached dosing siphon. This unit includes a tile field. The site is marked with a sign that read "Septic Tank - 2607-W8".

Waste Type: Sanitary Sewage

Waste Description: Although the site is located within a posted radiological area and is associated with the 231-Z Building, DOE/RL-91-58 states that no radionuclides or hazardous chemicals have been associated with this system. The 2607-W8 septic system received sanitary sewer effluent at an estimated rate of 5,015 liters (1,325 gallons) per day in 1992. The estimated rate was 5.45 cubic meters (192 cubic feet) per day in 1987.

Site Code: 2607-W9 **Classification:** Accepted
Site Names: 2607-W9, 2707-SX Septic Tank **ReClassification:**
Site Type: Septic Tank **Start Date:** 1950
Site Status: Inactive **End Date:**
Site Description: A gravel surface covers the 2607-W9 Septic Tank and Tile Field. Two posts with a sun bleached sign mark the location of the tile field.
Waste Type: Sanitary Sewage
Waste Description: The current flow rate to the 2607-W9 septic system is unknown. However, this unit received sanitary sewer effluent at an estimated rate of 36 cubic feet (1.02 cubic meters) per day in 1987.

Site Code: 2607-WC **Classification:** Accepted
Site Names: 2607-WC, 2607-WC Septic System **ReClassification:**
Site Type: Septic Tank **Start Date:** 1971
Site Status: Active **End Date:**
Site Description: The 2607-WC Septic System consists of two tanks and a trench type drain field.
Waste Type: Sanitary Sewage
Waste Description: The current flow rate to septic system 2607-WC is unknown. The 2607-WC system received sanitary waste at an estimated rate of 1,260 gallons (4,770 liters) per day in 1995.

Site Code: 2607-WZ **Classification:** Accepted
Site Names: 2607-WZ **ReClassification:**
Site Type: Septic Tank **Start Date:** 1944
Site Status: Inactive **End Date:**
Site Description: The 2607-WZ Septic System includes a drain field. A WIDS sitecode sign on a post marks the assumed location.
Waste Type: Sanitary Sewage
Waste Description: The current flow rates for the 2607-WZ Septic System are unknown. The system received sanitary sewer effluent at an estimated rate of 22.6 cubic meters (798 cubic feet) per day in 1987.

Site Code: 207-Z **Classification:** Accepted
Site Names: 207-Z, 207-Z Retention Basin, 241-Z Retention Basin, 241-ZRB, 241-Z-RB **ReClassification:**
Site Type: Retention Basin **Start Date:** 1949

Site Status: Inactive **End Date:** 1959

Site Description: The basins have been filled with high density grout. The site had been a concrete basin structure divided into two halves. The two sides were separated by a 0.3 meter (1 foot) thick concrete wall. Each basin contained a sump with a sump pump. A 1.8 meter (6 feet) high chain link fence surrounded the basin.

Waste Type: Steam Condensate

Waste Description: The site received potentially contaminated waste. Steam condensate and cooling water, via the D-3 piping system, was sent to this holding facility then released to the 216-Z-1 and 216-Z-11 Ditches.

Site Code: 216-Z-4 **Classification:** Accepted

Site Names: 216-Z-4, 231-W-3 Pit, 231-W-3 Sump, 231-W-3 Crib, 216-Z-3, 216-Z-4 Crib **ReClassification:**

Site Type: Trench **Start Date:** 1945

Site Status: Inactive **End Date:** 1945

Site Description: The 216-Z-4 Trench is an inactive waste management unit. The unit was backfilled and deactivated in 1945. The original configuration was a large unlined excavation.

Waste Type: Process Effluent

Waste Description: The site received the process and laboratory waste from the 231-Z Building. The waste was neutral to basic.

Site Code: 216-Z-6 **Classification:** Accepted

Site Names: 216-Z-6, 231-W-4 Crib, 231-Z-6, 216-W-4, 231-W Crib, 216-Z-4, 216-Z-6 & 6A Crib **ReClassification:**

Site Type: Crib **Start Date:** 1945

Site Status: Inactive **End Date:** 1945

Site Description: The 216-Z-6 is a below grade, inactive waste management unit. The site consists of a rectangular wooden box set in the base of an excavation. The trench was fed by an above ground pipeline.

Waste Type: Process Effluent

Waste Description: The site received process waste from the 231-Z Building via an above ground line from the 231-W-151 Sump Tank.

Site Code: 216-Z-7 **Classification:** Accepted

Site Names: 216-Z-7, 231-W Crib, 231-W Trench, 216-Z-6 **ReClassification:**

Site Type: Crib **Start Date:** 1947

Site Status: Inactive **End Date:** 1967

Site Description: The 216-Z-7 Crib is an inactive below grade waste management unit. The crib trench was backfilled upon retirement in 1967. The crib consists of two parallel wooden structures placed in two shallow parallel trenches within a single terraced excavation. Each wooden box consists of three timber tiers, with a perforated distribution box running the length of the second tier. The interior trenches are backfilled and covered with wood planks.

Waste Type: Process Effluent

Waste Description: From 1947 to 1953 this crib received process waste from the 231-Z Building via the 231-Z-151 Sump. Beginning in 1953, the site received Hanford laboratory waste from the 231-Z Building, until 1965. From 1965 to 1967, the site received laboratory waste generated by Pacific Northwest Laboratory operations inside the 231-Z Building, and waste delivered in tanker trucks from the 340 Building.

Site Code: 216-Z-13 **Classification:** Accepted

Site Names: 216-Z-13, 234-5 Dry Well #1, 216-Z-13 Dry Well, Miscellaneous Stream #261, 216-Z-13 A and B **ReClassification:**

Site Type: French Drain **Start Date:** 1949

Site Status: Active **End Date:** 1999

Site Description: The site consists of a two part drain system. The covered top of the upper french drain is visible on the surface, adjacent to a single cement marker post with a metal plate labeled 216-Z-13 (see 1985 photograph 122440-250cn).

Waste Type: Steam Condensate

Waste Description: This french drain received emergency condensate from the turbine of the ET-8 exhaust fan, and 291-Z building steam condensate and floor drainage. Due to the french drain's location, low levels of vadose zone contamination are assumed.

Site Code: 216-Z-14 **Classification:** Accepted

Site Names: 216-Z-14, 234-5 Dry Well #2, 216-Z-14 Dry Well, Miscellaneous Stream #262, 216-Z-14 A and B **ReClassification:**

Site Type: French Drain **Start Date:** 1949

Site Status: Active **End Date:**

Site Description: The site consists of two drain systems. The upper drain is marked with a single cement marker post, but the top of the drain has been paved over. The lower drain system is not visible from the surface. It is located approximately 6 meters (20 feet) southeast of the cement marker post. The lower french drain is constructed of two tile culverts placed end to end, and backfilled beneath 9 feet (2.7 meters) of gravel. Two pipes discharge to the french drain. The culvert is filled with cobble.

Waste Type: Steam Condensate

Waste Description: The french drain receives emergency condensate and steam condensate from the turbine of the ET-9 exhaust fan along with 291-Z building steam condensate and floor drainage. Due to the

french drain's location, low levels of vadose zone contamination are assumed. The site is addressed in the Miscellaneous Streams Best Management Practices Report, as a b stream (a stream discharging in a surface contaminated area). Based on process history, the drain receives non contaminated effluent.

Site Code:	216-Z-15	Classification:	Accepted
Site Names:	216-Z-15, 234-5 Dry Well #3, 216-Z-15 Dry Well, Miscellaneous Stream #263	ReClassification:	
Site Type:	French Drain	Start Date:	1949
Site Status:	Inactive	End Date:	1997
Site Description:	The 216-Z-15 Dry Well is an inactive, below grade french drain. The site is marked with a single concrete marker post that reads "Buried Radioactivity - Do Not Excavate." The marker post is believed to be located directly above the drain structure. The unit is composed of two sections of vitrified clay pipe in a vertical configuration. There is one inlet pipe. The pipe is filled with cobbles and the upper end is covered with a wood plank.		
Waste Type:	Process Effluent		
Waste Description:	The site used to receive the drainage from the 291-Z building S-12 Evaporator Cooler. That source was eliminated in May 1997. Low levels of contamination are assumed, due to the possibility of accidents or unusual events in nearby areas.		

Site Code:	216-Z-16	Classification:	Accepted
Site Names:	216-Z-16 Crib	ReClassification:	
Site Type:	Crib	Start Date:	1968
Site Status:	Inactive	End Date:	1977
Site Description:	The site is a rectangular excavation with gravel filling the bottom third. A perforated pipe runs the length of the excavation. The gravel is covered with a polyethylene barrier. The excavation is backfilled to grade.		
Waste Type:	Process Effluent		
Waste Description:	The site received waste from Pacific Northwest Laboratory operations in the 231-Z Building. The waste was neutral to basic, and included approximately 0.08 kilograms (0.16 pounds) of plutonium.		

Site Code:	216-Z-17	Classification:	Accepted
Site Names:	216-Z-17, 216-Z-17 Ditch	ReClassification:	
Site Type:	Trench	Start Date:	1967
Site Status:	Inactive	End Date:	1968
Site Description:	The 216-Z-17 is an inactive waste management unit that has been deactivated and backfilled. During operation this unit was configured as a long excavation that had sloped sides. The carbon steel effluent discharge pipe fed into a metering box that in turn discharged to the open trench.		

Waste Type: Process Effluent

Waste Description: The site received waste from Pacific Northwest Laboratory operations in the 231-Z Building. The waste is neutral to basic, and contained approximately 0.05 kilograms (0.11 pounds) of plutonium.

Site Code: 216-Z-21

Classification: Accepted

Site Names: 216-Z-21, 216-Z-21 Seepage Basin, PFP Cold Waste Pond

ReClassification: No Action (9/15/2005)

Site Type: Pond

Start Date: 1980

Site Status: Inactive

End Date: 1995

Site Description: The site is a large, unlined soil bermed depression. The basin is currently dry and is not radiologically posted.

Waste Type: Steam Condensate

Waste Description: The 216-Z-21 basin received effluent from various sources within the Plutonium Finishing Plant, including High Tank overflow, storm drain run off, ventilation steam condensate, dry air compressor cooling water and ventilation air wash spray pans. These sources do not contain any radionuclides, organics or other waste. The storm drains carried some silt and sand.

Site Code: 2607-Z

Classification: Accepted

Site Names: 2607-Z

ReClassification:

Site Type: Septic Tank

Start Date: 1949

Site Status: Inactive

End Date: 1999

Site Description: The 2607-Z Septic Tank and drain field lie in a fenced area. The septic tank is constructed of concrete and is a two chamber tank. Three manholes are provided for personnel entry. The drain field measures approximately 86 meters (282 feet) in length and 47 meters (154 feet) in width. The tile field is located inside a fenced area.

Waste Type: Sanitary Sewage

Waste Description: No radionuclides or hazardous chemicals have been associated with this waste unit. Current flow rates indicate that the drain field is not providing adequate effluent treatment. This unit received sanitary sewer effluent at an estimated rate of 6,000 gallons (23,000 liters) per day in 1992.

Site Code: 2607-Z1

Classification: Accepted

Site Names: 2607-Z1, Septic Tank and Drainfield

ReClassification:

Site Type: Septic Tank

Start Date: 1958

Site Status: Inactive

End Date: 1999

Site Description: The system (septic tank and drainfield) was constructed in 1958 and was pumped once a week. The drainfield location has been used as a laydown area in the past and the underground laterals may have been damaged.

Waste Type: Sanitary Sewage
Waste Description: The waste is sanitary sewage.

Site Code: 600-70 **Classification:** Accepted
Site Names: 600-70, Solid Waste Management Unit (SWMU) #2 - Miscellaneous Solid Waste **ReClassification:**
Site Type: Dumping Area **Start Date:** 1950
Site Status: Inactive **End Date:**
Site Description: The site is located on relatively flat terrain except for natural depressions and evidence that trenches may have been dug. Large amounts of construction materials such as concrete, wood, metal, cans, barrels and transite are visible. Numerous areas of burned materials were also observed

Waste Type: Barrels/Drums/Buckets/Cans
Waste Description: Large piles of debris that includes concrete cover blocks, concrete chunks, wood, scrap metal, cans, buckets, barrels, glass and transite are spread over a large area.

Waste Type: Construction Debris
Waste Description: Concrete, rebar.

Waste Type: Asbestos (friable)
Waste Description: Suspected friable asbestos.

Waste Type: Asbestos (non-friable)
Waste Description: Transite

Waste Type: Misc. Trash and Debris
Waste Description: Metal lathe turnings, glass, lumber and tar.

Site Code: UPR-200-W-3 **Classification:** Accepted
Site Names: UPR-200-W-3, Railroad Contamination, UN-200-W-3 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1949
Site Status: Inactive **End Date:**
Site Description: The T-Plant Railroad Cut is a posted Contamination Area from the tunnel door westward to a chain link gate. A 1.8 meter by 1.8 meter (6 foot by 6 foot) posted Contamination Area is located approximately 6 meters (20 feet) west of the T-Plant chain link fence that crosses the railroad cut track and encloses the T-Plant facility.

Waste Type: Chemicals

Waste Description: The release was undefined radioactive contamination.

Site Code: UPR-200-W-4 **Classification:** Accepted

Site Names: UPR-200-W-4, Railroad Contamination, UN-200-W-4 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1949

Site Status: Inactive **End Date:**

Site Description: The release is not physically marked or posted.

Waste Type: Soil

Waste Description: Contamination specks were found along the RR track with readings averaging 7 millirem/hour.

Site Code: UPR-200-W-14 **Classification:** Accepted

Site Names: UPR-200-W-14, Waste Line Leak at 242-T Evaporator, UN-200-W-14 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1952

Site Status: Inactive **End Date:** 1952

Site Description: The site is described as the surface above the waste line between the 242-T Evaporator and the 207-T Retention Basin. Since the exact location of this 1952 Unplanned Release is not documented, it was considered possible that one of the areas stabilized in 2001 is in the same location as the 1952 line leak. The mapping coordinates for the 1952 have been estimated from the limited information provided. A WIDS sign has been placed at the approximate location of the release.

Waste Type: Steam Condensate

Waste Description: Cooling water and steam condensate from the 242-T waste evaporator that was routed to the 207-T retention basin through an underground cast iron pipeline. The contaminants were not identified, but since 242-T was the source of the stream, the material probably has a similar composition to the liquid discharged to the cribs.

Site Code: UPR-200-W-19 **Classification:** Accepted

Site Names: UPR-200-W-19, 241-U-361 Overflow, UN-200-W-19 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1953

Site Status: Inactive **End Date:**

Site Description: The site is an unplanned release. The area where the release occurred is covered with shotcrete and currently marked as a "Underground Radioactive Material" (URM) area that also contains the 216-U-1 Crib, 216-U-2 Crib, the 241-U-361 Settling Tank. A portion of the 2607-W5 tile field is also included in the URM area.

Waste Type: Chemicals

Waste Description: The release contained an unknown quantity of organic wastes and cell drainage from the Tributyl Phosphate (TBP) and Uranium Trioxide (UO₃) plants with readings to 11.5 rads/hour at 7.6 centimeters (3 inches).

Site Code: UPR-200-W-23 **Classification:** Accepted

Site Names: UPR-200-W-23, Waste Box Fire at 234-5Z, UN-200-W-23 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1953

Site Status: Inactive **End Date:** 1953

Site Description: A 1999 facility walkdown could not locate this unplanned release site. The approximate area is marked with a WIDS sign painted on the asphalt.

Waste Type: Ash

Waste Description: Plutonium contamination up to 10,000 disintegrations was spread by a fire in a waste box in June 1953.

Site Code: UPR-200-W-33 **Classification:** Accepted

Site Names: UPR-200-W-33, Ground Contamination at 224-U, UN-200-W-33 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1955

Site Status: Inactive **End Date:**

Site Description: The release site occurred inside the fenced 224-U facility boundary. The site is no longer marked or posted.

Waste Type: Process Effluent

Waste Description: A leaking flange in the C-5 condensate line at the 224-U building caused an area of ground contamination measuring approximately 0.9 meters by 0.9 meters (3 foot by 3 foot).

Site Code: UPR-200-W-36 **Classification:** Accepted

Site Names: UPR-200-W-36, Groundwater Contamination at 216-S-1 and 216-S-2 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1955

Site Status: Inactive **End Date:** 1955

Site Description: The 216-S-1 & 2 cribs are currently bare ground, marked by concrete posts and a light chain, posted with "Underground Radiation Material" area and "Cave- in Potential" signs. The well is painted yellow and marked 299-W22-3.

Waste Type: Process Effluent

Waste Description: The 216-S-1 and 216-S-2 Cribs received cell drainage from the D-1 Receiver Tank and redistilled condensate from the D-2 Receiver Tank in the 202-S Canyon Building. The inorganics found at the site include: aluminum, nitrate, nitric acid, and sodium. The

radionuclides found at this site are: cobalt-60, americium-241, cesium-137, uranium, and plutonium. An unknown volume of this waste entered the groundwater beneath the crib through a rupture in the well casing.

During the time between the last normal reading from the well (June 1955) and the time the incident was discovered, about 7,500,000 liters (2,000,000 gallons) of liquid waste, with an estimated gross beta activity of 7,500 curies had passed into the crib. Also, within this span of time about 40 grams (1.4 ounces) of plutonium had entered the crib.

Site Code: UPR-200-W-39 **Classification:** Accepted
Site Names: UPR-200-W-39, UN-200-W-39, 224-U **ReClassification:**
 Buried Contamination Trench
Site Type: Unplanned Release **Start Date:** 1954
Site Status: Inactive **End Date:** 1954
Site Description: The release site is not marked because the 224-UA Building was built over the release location.
Waste Type: Process Effluent
Waste Description: The release was described as a leak from 224-U. The effected soil was placed in a nearby trench. A later reference described the contamination as uranium, less than 10 nanocuries/gram. No volume estimate is provided.

Site Code: UPR-200-W-41 **Classification:** Accepted
Site Names: UPR-200-W-41, Railroad Contamination, **ReClassification:**
 UN-200-W-41, REDOX Railroad Cut Contamination
Site Type: Unplanned Release **Start Date:** 1956
Site Status: Inactive **End Date:**
Site Description: The railroad track from the 202-S Tunnel to the first gravel road intersection has been covered with clean backfill material. The berms on the sides of railroad cut have been pushed in and posted as an "Underground Radioactive Material" area.
Waste Type: Chemicals
Waste Description: The waste was contaminated with beta/gamma with readings to 1,000 millirads/hour.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-42
Site Names: UPR-200-W-42, Contamination found at 2706-S, UN-200-W-42
Reason: Within Boundary Of Larger Site

Site Code: UPR-200-W-44 **Classification:** Accepted
Site Names: UPR-200-W-44, Railroad Track **ReClassification:**
 Contamination, UN-200-W-44

Site Status: Inactive **End Date:**

Site Description: The release site is not currently marked or posted. The area where this release had been located (in 1958) is near an area that was surface stabilized in 1992 (UPR-200-W-165).

Waste Type: Process Effluent

Waste Description: Beta/gamma particulates with readings up to 50 millirads/hour within 100 feet (30.48 meters) of the diversion box and readings on Tenth Street to about 4,000 counts/minute and 5,000 counts per minute outside the fence were documented. Beta/gamma readings of up to 1 rad/hour were identified immediately around the 241-S-151 Diversion Box. Specific contaminants were not identified.

The Following Sites Were Consolidated With This Site:

Site Code: UPR-200-W-52

Site Names: UPR-200-W-52, Release from 241-S Diversion Box, UN-200-W-52

Reason: Duplicate Site

Site Code: UPR-200-W-55 **Classification:** Accepted

Site Names: UPR-200-W-55, Uranium Powder Spill at 224-U, UN-200-W-55 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1960

Site Status: Inactive **End Date:**

Site Description: The site is no longer marked or posted.

Waste Type: Chemicals

Waste Description: On April 12, 1960, 1.36 metric tons (1.5 tons) of uranium powder that had been separated from fission products spilled on the ground. Most of the powder was picked up and drummed.

Site Code: UPR-200-W-60 **Classification:** Accepted

Site Names: UPR-200-W-60, Railroad Contamination, UN-200-W-60 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1966

Site Status: Inactive **End Date:**

Site Description: The U Plant Railroad had been surrounded with soil berms on the north and south sides of the track and posted with Contamination Area signs. The area was surface stabilized in 2001. The stabilization included the UPR-200-W-60 area. The entire area, including the railroad tracks, is now covered clean dirt and posted with Underground Radioactive Material Area signs.

Waste Type: Chemicals

Waste Description: PUREX equipment was being transferred to U Plant in a rail car filled with water (for shielding). Beta/gamma contamination was found on the railroad tracks with readings ranging from a few thousand counts per minute to a maximum of 1 rad/hour.

Site Code: UPR-200-W-63 **Classification:** Accepted
Site Names: UPR-200-W-63, Road Contamination Along the South Shoulder of 23rd Street, UN-200-W-63 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1966
Site Status: Inactive **End Date:**
Site Description: The release site is not currently marked.
Waste Type: Chemicals
Waste Description: The contamination was in the form of strontium-90 with an activity of about 1 curie. Spots of contamination up to 500 millirads/hour were removed from the road.

Site Code: UPR-200-W-65 **Classification:** Accepted
Site Names: UPR-200-W-65, Contamination in the T-Plant Railroad Cut, UN-200-W-65 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1969
Site Status: Inactive **End Date:**
Site Description: The railroad cut is currently posted as a Contamination Area, extending from the tunnel door westward to a chain link gate and fence.
Waste Type: Chemicals
Waste Description: Beta/gamma with readings from 5,000 counts/minute to 150 millirads/hour.

Site Code: UPR-200-W-67 **Classification:** Accepted
Site Names: UPR-200-W-67, Contamination Near 2706-T, UN-200-W-67 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1970
Site Status: Inactive **End Date:**
Site Description: The unplanned release site is marked with a single post with a WIDS site number sign. The sign is adjacent to the MO433 trailer.
Waste Type: Equipment
Waste Description: Beta/gamma with readings of 20,000 counts/minute on the ground. The contaminated electric lift read as high as 500 millirads/hour.

Site Code: UPR-200-W-71 **Classification:** Accepted
Site Names: UPR-200-W-71, UN-200-W-71, Contamination Spread from 16th Street to Dayton Ave. **ReClassification:**

Waste Type: Process Effluent

Waste Description: Airborne particulates containing approximately 1 curie of strontium-90, with maximum readings of up to 700 millirads/hour, contaminated a large area around the diversion box.

Site Code: UPR-200-W-101 **Classification:** Accepted

Site Names: UPR-200-W-101, UN-216-W-9, 221-U
Acid Spill R-1 Through R-9, UN-200-W-101 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1957

Site Status: Inactive **End Date:** 1957

Site Description: The release site was posted with "Surface Contamination" warning signs. The contaminated ground was covered with sand and gravel. A larger contaminated area on the east side of 221-U was surface stabilized in 1998 (UPR-200-W-162). This unplanned release area was located within the UPR-200-W-162 posted area. After being covered with clean material, the posting was changed to Underground Radioactive material. UPR-200-W-101 is not separately marked or posted within the area.

Waste Type: Chemicals

Waste Description: At the time of discharge, the reclaimed acid contained approximately one curie of strontium-90.

Site Code: UPR-200-W-103 **Classification:** Accepted

Site Names: UPR-200-W-103, 216-Z-18 Line Break,
UN-216-W-13, UN-200-W-103, Pipe Line
Leak **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1971

Site Status: Inactive **End Date:** 1971

Site Description: The release site is posted with Underground Radioactive Material (URM) warning signs. Contamination still remains under the clean soil. A WIDS number sign has been placed inside the URM to mark the approximate release location.

Waste Type: Process Effluent

Waste Description: The release contained approximately 10 grams of plutonium with gross alpha contamination greater than 6,000,000 disintegrations per minute.

Site Code: UPR-200-W-111 **Classification:** Accepted

Site Names: UPR-200-W-111, Sludge Trench at 207-U,
UN-216-W-21 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1960

Site Status: Inactive **End Date:**

Site Description: The site is a trench near the south wall of the 207-U South Retention Basin. The site had been posted with "Surface Contamination" signs. In 1997, contaminated soil in the vicinity of the 207-

U Retention Basin was scraped and consolidated around the basin perimeter. The contaminated soil was covered with clean backfill. The radiological posting was changed to "Underground Radioactive Material."

Waste Type: Sludge

Waste Description: Approximately 21 cubic meters (27 cubic yards) of sludge from the 207-U South Retention Basin was buried adjacent to the Retention Basin. Until 1972, the retention basins received steam condensate and cooling water from the 224-U Building and chemical sewer waste from the 221-U Building.

Site Code: UPR-200-W-112 **Classification:** Accepted

Site Names: UPR-200-W-112, Sludge Trench at 207-U, UN-216-W-22 **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site had been posted with "Surface Contamination" warning signs. In 1997, the contaminated area in the vicinity of the 207-U Retention Basin was scraped and consolidated. The area was covered with clean soil and the radiological posting was changed to "Underground Radioactive Material."

Waste Type: Sludge

Waste Description: Approximately 21 cubic meters (27 cubic yards) of sludge from the 207-U North Retention Basin was buried adjacent to the north side of the Retention Basin. Until 1972, the retention basins received steam condensate and cooling water from the 224-U Building and chemical sewer waste from the 221-U Building.

Site Code: UPR-200-W-116 **Classification:** Accepted

Site Names: UPR-200-W-116, UN-216-W-26, Ground Contamination North of 202-S, UN-200-W-116 **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1968

Site Status: Inactive **End Date:** 1981

Site Description: The site has a light chain barricade and is posted with Underground Radioactive Material signs.

Waste Type: Chemicals

Waste Description: The release contaminated 0.81 hectares (2 acres) of land with radioactive specks from the 204-S area.

Site Code: UPR-200-W-117 **Classification:** Accepted

Site Names: UPR-200-W-117, Railroad Track Contamination, 221-U Railroad Cut Contamination, UN-216-W-27, UN-200-W-

117

Site Type: Unplanned Release**Start Date:****Site Status:** Inactive**End Date:**

Site Description: In November 2000, a posted Soil Contamination Area was located on the railroad spur leading into the 221-U railroad cut and tunnel. Most of the posted area is the railroad track on a bed of gravel. There is an unusual patch of asphalt across a portion of the railroad track, inside the posted Soil Contamination Area. In December 2001, the area was covered with clean backfill material and downposted to an Underground Radioactive Material Area.

Waste Type: Chemicals

Waste Description: The contamination was primarily fission products and uranium from chemical processing operations.

Site Code: UPR-200-W-118 **Classification:** Accepted**Site Names:** UPR-200-W-118, Contamination at 211-U, UN-216-W-28, UN-200-W-118 **ReClassification:****Site Type:** Unplanned Release **Start Date:** 1960**Site Status:** Inactive **End Date:** 1972

Site Description: The release site consisted of the ground outside the concrete unloading station at the 211-U Tank Farm. The unplanned release site is no longer marked or posted. The area around the 211-U tanks and railroad spur has been stabilized with gravel and is posted as an Underground Radioactive Material area.

Waste Type: Chemicals

Waste Description: The waste consisted of radioactive reclaimed nitric acid that spilled to the soil.

Site Code: UPR-200-W-138 **Classification:** Accepted**Site Names:** UPR-200-W-138, 221-U Vessel Vent Blower Pit French Drain, UN-216-W-11, UN-200-W-138, UN-200-W-22, UPR-200-W-22 **ReClassification:****Site Type:** Unplanned Release **Start Date:** 1953**Site Status:** Inactive **End Date:** 1953

Site Description: The site was described as the ground near the R-3 entrance to the 221-U Building. The area has been surface stabilized and posted with Underground Radioactive Material signs. The Unplanned Release is not separately marked or posted.

Waste Type: Process Effluent

Waste Description: An estimated 140 kilograms (300 pounds) of uranium nitrate hexahydrate (UNH) solution, containing 14 kilograms (30 pounds) of uranium, was released to the ground through the French Drain. The information for this release is vague. Some documentation indicates the french drain involved was the 216-U-7, but drawing reviews indicate the blower pit is located north of 216-U-7. The blower pit drained to the 241-WR vault. If the event involved surface liquid

being released, it is possible it flowed southward and could have effected the 216-U-7 drain.

Site Code: UPR-200-W-162 **Classification:** Accepted
Site Names: UPR-200-W-162, Contaminated Area on East Side of 221-U, UN-216-W-37 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1991
Site Status: Inactive **End Date:**
Site Description: The site was posted with "Surface Contamination" warning signs. The area has been backfilled with clean material from the 200 Area Ash Pit. The radiological posting was changed to "Underground Radioactive Material."
Waste Type: Chemicals
Waste Description: The site consists of surface speck contamination.

Site Code: UPR-200-W-165 **Classification:** Accepted
Site Names: UPR-200-W-165, Contamination Area East of 241-S, UN-216-W-30 **ReClassification:**
Site Type: Unplanned Release **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The originally posted area was scraped and the contaminated soil combined with other waste sites. The site had been a large area of posted Surface Contamination, located east of the 241-S Tank Farm, north of the steam line. The 216-S-23 and 216-S-9 cribs and the 216-S-18 excavation were inside the Surface Contamination Area posting. Some of the contaminated soil was placed on top of the 216-S-9 crib. Some was used to backfill the 216-S-18 depression. After collecting soil samples of the scraped area, the site was removed from radiological control.
Waste Type: Chemicals
Waste Description: The waste consisted of contamination specks that migrated from the 241-S, 241-SX, and 241-SY Tank Farms.

Site Code: UPR-200-W-166 **Classification:** Accepted
Site Names: UPR-200-W-166, Contamination Migration from 241-T Tank Farm, UN-216-W-31 **ReClassification:**
Site Type: Unplanned Release **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site was originally defined as a large, irregularly shaped area of surface soil contamination located north and east of the 241-T Tank Farm. The areas of soil contamination have been scraped and consolidated onto the west slope of the 216-T-14 through 216-T-17 Trenches and also into the 207-T Retention Basin. The unplanned release is no longer separately marked or posted.

Waste Type: Soil

Waste Description: The waste consisted of spotty contamination which is suspected to have originated from the 241-T Tank Farm.

300-FF-1

Site Code: 300 ASH PITS **Classification:** Accepted

Site Names: 300 ASH PITS, 300 Ash Pits, 300 Area Ash Pits **ReClassification:** Closed Out (12/17/1997)

Site Type: Coal Ash Pit **Start Date:** 1944

Site Status: Inactive **End Date:** 1994

Site Description: The unit consists of two separate excavations that are 4.6 to 6.1 meters (15 to 20 feet) deep and 7,400 square meters (80,000 square feet) in area.

Waste Type: Ash

Waste Description: Coal fly ash was periodically sluiced from the 384 Powerhouse to the pits with water at the rate of 57 million liters/year (15 million gallons/year). Analysis of the fly ash according to 173-303 WAC indicated it was non-Extraction Procedure toxic. Filter backwash water was diverted to the east ash pit from 1992 to June 1995 to allow for the construction of a liner in the filter backwash pond and resolve permitting is

Site Code: 300 FBP **Classification:** Accepted

Site Names: 300 FBP, 300 Area Filter Backwash Pond (See Subsites) **ReClassification:** No Action (11/7/2000)

Site Type: Surface Impoundment **Start Date:** 1987

Site Status: Inactive **End Date:** 1998

Site Description: This site has been reclassified as "no Action."
The unit consists of two subsites; one is a single, rubber lined basin measuring 97.5 meters (320 feet) by 65 meters (213 feet, 7.6 meters (25 feet) deep. From 1987 to 1992, the basin operated as an unlined percolation pond, which is the second subsite. In 1992, the basin was lined with a synthetic liner on a concrete foundation.

Waste Type: Water

Waste Description: The unit receives 76 million liters/year (20 million gallons/year) of water and alum backwashed from filters. Analysis of the backwash has shown it to be nonhazardous.

SubSites:

SubSite Code: 300 FBP:1

SubSite Name: 300 FBP:1, 300 FBP (Unlined)

Classification: Accepted

ReClassification: No Action

Description: The subsite represents the unlined pond that operated from 1987 to 1992. This component of the 300 FBP is included as a "no action" site within the 300-FF-1/300-FF-5 Record of Decision.

SubSite Code: 300 FBP:2

SubSite Name: 300 FBP:2, 300 FBP (Lined)
Classification: Accepted
ReClassification: No Action
Description: This subsite is the lined filter backwash pond. This site is not addressed within the 300-FF-1/300-FF-5 Record of Decision.

Site Code: 300 RFBP **Classification:** Accepted
Site Names: 300 RFBP, 300 Area Retired Filter Backwash Pond, Pond 5, East Bay of South Process Pond **ReClassification:** Closed Out (7/23/2003)
Site Type: Pond **Start Date:** 1975
Site Status: Inactive **End Date:** 1987
Site Description: The site has been remediated and closed out.
 When the South Process Pond became inactive in 1975, the east lobe started to be used by the 300 Area Water Treatment Facility as a filter backwash pond.
Waste Type: Process Effluent
Waste Description: The unit received 3.8E+07 to 7.6E+07 liters/year (1E+07 to 2E+07 gallons/year) of water and nonhazardous alum from backwashing filters. Analysis of the backwash has shown it to be nonhazardous.

Site Code: 300-3 **Classification:** Accepted
Site Names: 300-3, 300-FF-1 Aluminum Hydroxide **ReClassification:** No Action (7/9/1997)
Site Type: Burial Ground **Start Date:**
Site Status: Inactive **End Date:**
Site Description: NE 1/4 of NW 1/4 of Section 11, T10N, R28E. The site is a wooden structure consisting of several horizontal 1 to 1.5 ft (0.30 to 0.46 m) diameter cedar logs forming a vertical wall approximately 10 ft (3.0 m) high running in a north/south direction. The top part of the wall slopes downward to the west and the bottom part is vertical. The structure appears to be resting on a concrete slab at a depth of 10 to 15 ft (3.0 to 4.6 m).
Waste Type: Chemicals
Waste Description: Sample analysis of the white, chalky material was consistent with aluminum hydroxide, or hydrous aluminum oxide, but the uranium levels were very small. Uranium content for one sample was 58 picocuries/gram and another was 30 picocuries/gram. Uranium concentrations in pond scrapings are usually higher.

Site Code: 300-44 **Classification:** Accepted
Site Names: 300-44, R-32, UPR-300-FF-1, UN-300-FF-1 **ReClassification:** Closed Out (12/17/1997)
Site Type: Unplanned Release **Start Date:**

Site Status:	Inactive	End Date:	
Site Description:	This site is southwest of 618-4 Burial ground, and has been remediated and closed out.		
Waste Type:	Soil		
Waste Description:	The soil contamination appears to be the result of shallow buried materials.		

Site Code:	300-49	Classification:	Accepted
Site Names:	300-49, Landfill 1a, UPR-300-FF-1, UN-300-FF-1	ReClassification:	Closed Out (5/28/2003)
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The site has been remediated and closed out. The site was a large rectangular area with visible debris on the surface and areas of subsidence. After excavation and closure activities the area will be re-graded.		
Waste Type:	Misc. Trash and Debris		
Waste Description:	Material visible on the surface included empty acid and mercury bottles, ceramics, and other glassware that appeared to be of laboratory origin, metal, and a partially buried 208-liter (55-gallon) drum. Materials that are radiologically contaminated include soil, tumbleweeds, pipes, ceramics, glass, and a small amount of yellow material that resembles "yellow cake" (a complex uranium compound, the product of chemically refining natural uranium).		

Site Code:	300-50	Classification:	Accepted
Site Names:	300-50, Landfill 1b, UPR-300-FF-1, UN-300-FF-1	ReClassification:	Closed Out (5/29/2003)
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The site has been remediated and closed out. The site was an area of surface disturbance. After excavation and closure activities were completed the area was included in the 2004, 300-FF-1 Regrading Plan.		
Waste Type:	Misc. Trash and Debris		
Waste Description:	A large number of discrete objects were detected by ground penetrating radar.		

Site Code:	300-51	Classification:	Accepted
Site Names:	300-51, Landfill 1c, UPR-300-FF-1, UN-300-FF-1	ReClassification:	No Action (7/9/1997)
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: The debris has been removed. The site is no longer marked or posted.

Waste Type: Misc. Trash and Debris

Waste Description: The site contained radiologically contaminated surface debris.

Site Code: 300-52

Classification: Accepted

Site Names: 300-52, 300 Area Sanitary Trenches

ReClassification: No Action (7/9/1997)

Site Type: Trench

Start Date: 1948

Site Status: Inactive

End Date: 1996

Site Description: The 300 Area Sanitary Trenches site includes two septic tanks and unlined trenches that were connected to the 300 Area Sanitary Sewer System.

Waste Type: Sanitary Sewage

Waste Description: The trenches received sanitary waste from 300 Area facilities.

Waste Type: Chemicals

Waste Description: Prior to 1985, discharges from the 3713 Sign Shop included an estimated 1 gallon (3.8 liters) per week of miscellaneous photochemicals used in the process. The trench has also received trace nonhazardous concentrations of carry over fixers, developers, inks, thinners, and solvents from sign developing operations and silkscreen cleaning.

Site Code: 300-275

Classification: Accepted

Site Names: 300-275, Potential Landfill on River Edge

ReClassification: Interim Closed Out (8/13/2009)

Site Type: Sanitary Landfill

Start Date:

Site Status: Inactive

End Date:

Site Description: Before remediation the site consisted of seven areas of debris in two regions, a northern and southern one. There were three surface debris areas and four subsurface debris areas.

Waste Type: Misc. Trash and Debris

Waste Description: Contaminants of Potential Concern: Asbestos

The two surface debris areas in the northern region contain sparsely scattered surface debris, including small fragments of potential asbestos containing shingles and concrete. Other sparse, but visible debris includes rusted cans, metal fragments of unknown origin, pieces of insulated electrical cable, and a few pieces of broken glass. The underground debris is of unknown type.

The surface debris area in the southern region includes small fragments of potential asbestos containing shingles, metal fragments, a few small pieces of concrete debris, glass fragments, and porcelain jar fragments. There is also a small segment of stainless steel pipe and a broken graduated cylinder, both likely related to the Hanford laboratory work in the 300 Area. The underground debris is of unknown type. (Logbook EL-1583-5, pp.20-21)

Site Code: 316-1 **Classification:** Accepted

Site Names: 316-1, South (Old) Pond, 300 Area South Process Pond **ReClassification:** Closed Out (7/23/2003)

Site Type: Pond **Start Date:** 1943

Site Status: Inactive **End Date:** 1975

Site Description: The site has been remediated and closed out.

The site is no longer marked or posted. The pond was a 32,000 square meter (8-acre), unlined infiltration pond containing five separate pond sections. Ponds 1, 2, and 3 were separated by two 9.1-meter (30-foot) dikes. Pond 4, the largest pond, was separated from Ponds 1, 2, and 3 to the west by a 4.9-meter (16-foot) dike and from Pond 5 to the east by 3.1 meters (10 feet) of land. The dikes were bulldozed into three sections, and the fill was used to cover loose material.

Waste Type: Process Effluent

Waste Description: The site originally received cooling water and low-level liquid wastes from the fuel fabrication facilities and early laboratories (313, 314, 3706 and 321 Buildings). Contaminants from these facilities included uranium, copper cobalt and small amounts of plutonium. Later, laboratory facility wastes went first to the 307 Retention Basins. Waste above discharge limits was diverted to holding tanks for disposal in the 200 Areas. The process ponds received waste via the 307 Retention Basins from 1963 to 1975.

Due to remedial activities, the uranium inventory at this site has been reduced. According to Mike Schwab (2000), an estimated 40,000 kilograms of uranium contained in soil was scraped from the pond and transported to the Environmental Restoration Disposal Facility (ERDF), near 200 West Area.

Site Code: 316-2 **Classification:** Accepted

Site Names: 316-2, North (New) Pond, 300 Area North Process Pond **ReClassification:** Closed Out (8/24/1999)

Site Type: Pond **Start Date:** 1948

Site Status: Inactive **End Date:** 1974

Site Description: This site consisted of seven separate sections separated by 3.7-meter (12-foot) wide dikes, with the entire 40,000-square meter (10-acre) area surrounded by a dike 4.6 meters (15 feet) wide and approximately 3.0 meters (10 feet) high.

The site has been remediated and closed out. The radiological posted was removed. The pond is no longer marked or posted.

Waste Type: Process Effluent

Waste Description: The site originally received cooling water and low-level liquid process wastes from the fuel fabrication facilities and the early laboratories (313, 314, 3706 and 321 Buildings). Later, laboratory facility wastes went first to the 307 Retention Basins. Waste above discharge limits was diverted to holding tanks for disposal in the 200 Areas. The process ponds received laboratory waste via the 307 Retention Basins from 1963 to 1975.

Due to remedial activities, the uranium inventory at this site has been removed. According to Mike Schwab (2000), an estimated 30,000 kilograms of uranium contained in soil was scraped

from the pond and transported to the Environmental Restoration Disposal Facility (ERDF), near 200 West Area.

Site Code:	316-5	Classification:	Accepted
Site Names:	316-5, 3904 Process Waste Trenches, 300 Area Process Trenches, 300 APT	ReClassification:	Closed Out (8/13/1998)
Site Type:	Trench	Start Date:	1975
Site Status:	Inactive	End Date:	1994
Site Description:	The site has been remediated and is no longer marked or posted. The site consisted of two trenches running north-south, 18 meters (60 feet) apart (between centerlines). Each trench was 468 meters (1,535 feet) long, 3.0 meters (10 feet) wide and 3.7 meters (12 feet) deep, with a side slope of 1:1.5. Separating the trenches is an earth dike, 15 meters (50 feet) wide at the bottom (top width varies) and 3.7 meters (12 feet) high. The site was partly remediated through an expedited response action (ERA) in 1991. Remediation was completed in 1997 and the site was clean closed through RCRA and closed out under CERCLA regulations.		
Waste Type:	Process Effluent		
Waste Description:	This unit served as the discharge site for the 300 Area Process Sewer system. The site received approximately 9.8E+06 liters (2.6E+06 gallons) of water per day. This water was chlorinated by the water filter plant for the 300 Area and contained minerals added to the water during use. Water discharged to the process sewer is used primarily for cooling purposes and is not modified. Other sources of discharge include steam condensates, janitorial solutions from washing and waxing floors, water treatment (primarily salt), laboratories, process water from fuel fabrication and other aqueous solutions not designated as dangerous wastes by WAC-173-303. The annual waste quantity is 4.5E+08 kilograms (1E+09 pounds) per year and reflects the total flow to the unit, not a volume of dangerous waste discharged to the unit. No dangerous wastes have been discharged to the unit since November 1985. All discharge to the trenches was discontinued on December 29, 1995. Discharges after that date are sent to the 300 Area Treated Effluent Disposal Facility.		

Site Code:	332 SF	Classification:	Accepted
Site Names:	332 SF, 332 Storage Facility, 332 Hazardous Waste Storage Area, 332 Interim Holding Facility, 332 Packaging Test Facility	ReClassification:	Closed Out (4/21/1997)
Site Type:	Storage	Start Date:	1984
Site Status:	Inactive	End Date:	1997
Site Description:	The 332 Storage Facility was constructed as a less than 90 day storage facility. The building is a prefabricated, insulated metal structure erected on concrete footings. It is outfitted with explosion proof lighting, heating, and electrical outlets, as required for Uniform Building Code class H buildings, to permit the unrestricted storage of flammable and explosive materials. The floor is sloped toward an exterior wall sump fitted with a sump pump. Fireproof storage cabinets, a hood, and shelving were installed for dangerous waste storage. The building also includes a heater, fire alarm system, and alarm transmitter. The structure's outer dimensions are		

6.1 meters (20 feet) by 6.1 meters (20 feet). A concrete slab extends 4.6 meters (15 feet) from the west side of the building. The slab is edged with a 15 centimeter (6 inch) curb to provide secondary containment and is surrounded by a 1.8 meter (6 foot) fence to prevent unauthorized access. The facility's storage design capacity was less than 6,800 liters (1,800 gallons) of material.

Waste Type: Chemicals

Waste Description: The facility was used for the temporary storage (<90 day) of flammable and explosive materials.

Site Code:	618-4	Classification:	Accepted
Site Names:	618-4, Burial Ground No. 4, 318-4	ReClassification:	Closed Out (7/12/2004)
Site Type:	Burial Ground	Start Date:	1955
Site Status:	Inactive	End Date:	1961

Site Description: The site has been remediated and closed out.

The waste unit was a single disposal pit.

Waste Type: Misc. Trash and Debris

Waste Description: The site contains an unknown quantity of uranium-contaminated miscellaneous materials.

During remedial activities, drums of depleted uranium packed in oil were uncovered. The presence of these drums was not previously known, therefore, the documented uranium inventory for this burial ground did not include these (estimated to be up to 1500) barrels of depleted uranium. The inventory contained in the drums has been estimated to be 110,600 kilograms (243,800 pounds) (Schwab 2000).

Waste Type: Barrels/Drums/Buckets/Cans

Waste Description: In 1998, drums of unknown material were uncovered during remedial action activities. It is suspected the drums contain depleted uranium filings and mineral oil

Site Code:	618-12	Classification:	Accepted
Site Names:	618-12, North Process Pond Scraping Disposal Area	ReClassification:	Closed Out (8/29/1999)
Site Type:	Burial Ground	Start Date:	1949
Site Status:	Inactive	End Date:	1964

Site Description: The pond had been backfilled with ashes. The backfilled area measured approximately 248 by 141 meters (814 by 462 feet).

The site was closed out in conjunction with the North Process Ponds in 1999. Contaminated material was excavated and transported to ERDF. The site is not marked or posted.

Waste Type: Soil

Site Code: UPR-300-9 **Classification:** Accepted
Site Names: UPR-300-9, Nitric Acid Leak from 306-W to the Process Sewer **ReClassification:** Closed Out (5/14/1998)
Site Type: Unplanned Release **Start Date:** 1976
Site Status: Inactive **End Date:** 1976
Site Description: This release originated in Room 120 of the 306-W Building and drained into the 300 Area process drainage system.
Waste Type: Chemicals
Waste Description: The release consisted of nitric acid solution containing 267.9 pounds (121.5 kilograms) of depleted uranium.

Site Code: UPR-300-15 **Classification:** Accepted
Site Names: UPR-300-15, Uranium Bearing Acid Release from 313 to the Process Sewer **ReClassification:** Closed Out (5/14/1998)
Site Type: Unplanned Release **Start Date:** 1980
Site Status: Inactive **End Date:** 1980
Site Description: The site was a release that flowed into the 313 Process Sewer leading to the 316-5 Trench.
Waste Type: Process Effluent
Waste Description: The waste contained uranium-bearing acid.

Site Code: UPR-300-19 **Classification:** Accepted
Site Names: UPR-300-19, Chemical Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)
Site Type: Unplanned Release **Start Date:** 1980
Site Status: Inactive **End Date:** 1980
Site Description: The release originated at the 313 Building floor trenches and was confined to the 300 Area Process Trench.
Waste Type: Chemicals
Waste Description: The waste contained nitric, sulfuric and chromic acid, followed by an ammonium bifluoride and sodium hydroxide discharge with incoming acid used in copper component deoxidizing.

Site Code: UPR-300-20 **Classification:** Accepted
Site Names: UPR-300-20, Acid Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)
Site Type: Unplanned Release **Start Date:** 1980
Site Status: Inactive **End Date:**

Site Description: The release originated at the 313 Building Uranium Recovery Area and confined to the 300 Area Process Trenches.

Waste Type: Chemicals

Waste Description: Nitric and sulfuric acids with uranium in solution, quantity unknown.

Site Code: UPR-300-21 **Classification:** Accepted

Site Names: UPR-300-21, Nitric Acid Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:** 1980

Site Description: The release originated in the 333 Building and was confined to the 300 Area Process Trench.

Waste Type: Chemicals

Waste Description: The waste contained a small quantity of nitric acid.

Site Code: UPR-300-22 **Classification:** Accepted

Site Names: UPR-300-22, Acid Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:** 1980

Site Description: The release site originated in the 333 Building and was confined to the 300 Area Process Trench.

Waste Type: Chemicals

Waste Description: The waste consisted of a small quantity of etch acids (nitric and hydrofluoric acids).

Site Code: UPR-300-23 **Classification:** Accepted

Site Names: UPR-300-23, Acid Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:** 1980

Site Description: The release site was confined to the 300 Area Process Trench and originated at the 333 Building.

Waste Type: Chemicals

Waste Description: The waste consisted of a small quantity of incoming etch acids (nitric and sulfuric acid).

Site Code: UPR-300-24 **Classification:** Accepted

Site Names: UPR-300-24, Acid Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:** 1980

Site Description: The release originated at the 333 Building Waste Acid System and was confined to the 300 Area Process Trench.

Waste Type: Chemicals

Waste Description: The waste consisted of a small quantity of waste etch acids (nitric and hydrofluoric acid).

Site Code: UPR-300-25 **Classification:** Accepted

Site Names: UPR-300-25, Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:** 1980

Site Description: The release originated at the 333 Building Uranium Mill Tank and was confined to the 300 Area Process Trench.

Waste Type: Chemicals

Waste Description: The waste consisted of a small quantity of uranium etch acids (nitric and sulfuric acid) in uranium solution.

Site Code: UPR-300-26 **Classification:** Accepted

Site Names: UPR-300-26, Caustic Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:** 1980

Site Description: The release originated in the 311 Tank Farm and was confined to the 300 Area Process Trench.

Waste Type: Chemicals

Waste Description: The waste consisted of a very small quantity of 50% sodium hydroxide consisting of less than 0.1 pound (0.05 kilograms) of sodium hydroxide.

Site Code: UPR-300-27 **Classification:** Accepted

Site Names: UPR-300-27, Acid Release to the Process Sewer **ReClassification:** Closed Out (5/14/1998)

Site Type: Unplanned Release **Start Date:** 1979

Site Status: Inactive **End Date:** 1979

Site Description: The release originated in the Uranium Bearing Acid Storage Tank in the 333 Building and was confined to the 300 Area Process Trench.

Site Code:	UPR-300-32	Classification:	Accepted
Site Names:	UPR-300-32, Acid Leaks at the 333 Building	ReClassification:	Closed Out (7/23/2003)
Site Type:	Unplanned Release	Start Date:	1974
Site Status:	Inactive	End Date:	1974
Site Description:	The site has been remediated and closed out.		
Waste Type:	Chemicals		
Waste Description:	The waste consisted of an unknown quantity of uranium etch acids containing nitric and sulfuric acid with uranium in solution.		

Site Code:	UPR-300-33	Classification:	Accepted
Site Names:	UPR-300-33, Waste Leak at the 333 Building	ReClassification:	Closed Out (7/23/2003)
Site Type:	Unplanned Release	Start Date:	1974
Site Status:	Inactive	End Date:	1974
Site Description:	The site has been remediated and closed out.		
Waste Type:	Chemicals		
Waste Description:	The waste consisted of an unknown quantity of waste etch acids containing hydrofluoric, nitric, and chromic acids with copper, uranium, and zirconium in solution.		

Site Code:	UPR-300-34	Classification:	Accepted
Site Names:	UPR-300-34, Release to the Process Pond	ReClassification:	Closed Out (7/23/2003)
Site Type:	Unplanned Release	Start Date:	1973
Site Status:	Inactive	End Date:	1975
Site Description:	The site has been remediated and closed out.		
Waste Type:	Chemicals		
Waste Description:	An unknown quantity of waste etch acids were discharged to the soil. The waste etch acids contained hydrofluoric, nitric, and chromic acids with copper, uranium, and zirconium in solution.		

Site Code:	UPR-300-35	Classification:	Accepted
Site Names:	UPR-300-35, Leak at the 333 Building	ReClassification:	Closed Out (7/23/2003)
Site Type:	Unplanned Release	Start Date:	1973
Site Status:	Inactive	End Date:	1973

Site Description: The site has been remediated and closed out.

Waste Type: Chemicals

Waste Description: The waste consisted of an unknown quantity of uranium-bearing etch acids containing nitric and sulfuric acids with uranium in solution.

Site Code:	UPR-300-36	Classification:	Accepted
Site Names:	UPR-300-36, Acid Leak at the 333 Building	ReClassification:	Closed Out (7/23/2003)
Site Type:	Unplanned Release	Start Date:	1973
Site Status:	Inactive	End Date:	1973

Site Description: The site has been remediated and closed out.

Waste Type: Chemicals

Waste Description: The waste consisted of an unknown quantity of waste etch acids containing hydrofluoric, nitric, and chromic acids with copper, uranium, and zirconium in solution.

Site Code:	UPR-300-37	Classification:	Accepted
Site Names:	UPR-300-37, 333 Building Leaks	ReClassification:	Closed Out (7/23/2003)
Site Type:	Unplanned Release	Start Date:	1972
Site Status:	Inactive	End Date:	1972

Site Description: The site has been remediated and closed out.

Waste Type: Chemicals

Waste Description: The waste consisted of an unknown quantity of waste etch acids containing hydrofluoric, nitric and chromic acids with copper, uranium, and zirconium in solution.

Site Code:	UPR-300-47	Classification:	Accepted
Site Names:	UPR-300-47, 309 Building, Ethylene Glycol Release, Glycol Spill from the 309, Chiller System	ReClassification:	Closed Out (5/14/1998)
Site Type:	Unplanned Release	Start Date:	1993
Site Status:	Inactive	End Date:	1993

Site Description: The release site was the sump in the machinery room at the 309 Building. The release site was cleaned up and waste generated during the cleanup was disposed of properly on May 7, 1993.

Waste Type: Chemicals

Waste Description: The waste consisted of 38 percent ethylene glycol solution.

Site Code:	UPR-600-15	Classification:	Accepted
Site Names:	UPR-600-15, UN-600-15, Contaminated Material found at 618-4	ReClassification:	No Action (7/12/2004)
Site Type:	Unplanned Release	Start Date:	1979
Site Status:	Inactive	End Date:	1979
Site Description:	The area is posted as "Underground Radioactive Materials". The release site was an area of soil outside the entrance to the 618-4 Burial Ground. The new fence was built in 1974; however, it was installed in a new location which left the release site outside of the burial ground boundaries. The previous fenced area included the release site.		
Waste Type:	Chemicals		
Waste Description:	The contamination came from buried fuel elements containing 0.15 percent uranium-235. A dose rate of 4,000 millirads/hour was detected on the soil surface.		

300-FF-2

Site Code: 300 IFBD **Classification:** Accepted

Site Names: 300 IFBD, 300 Area Interim Filter Backwash Disposal **ReClassification:** Rejected (1/27/1999)

Site Type: Depression/Pit (nonspecific) **Start Date:** 1987

Site Status: Inactive **End Date:** 1987

Site Description: This site was a temporary disposal area for filter backwash from the 300 Area Filter Water Plant. There is a large, depressed area on the east side of the Gravel Pit 6 property that forms a natural basin. There is a moderate amount of rabbit brush and grasses growing on it. There are no definite, visible signs that the area was used for backwash disposal. However, there are some truck tire tracks and evidence of some grayish, silty sand on the surface in some areas of the natural basin.

Waste Type: Water

Waste Description: The unit received approximately 2,460,000 liters (650,000 gallons) of effluent from backwashing filters at the 300 Area Filter Water Plant (315 Building). The backwash was 90% river water. The sediment in the backwash contained alum which is used as a coagulating agent prior to filtration. Analysis of the backwash has shown it to be nonhazardous.

Site Code: 300 PHWSA **Classification:** Accepted

Site Names: 300 PHWSA, 300 Area Powerhouse HWSA, 300 Area Powerhouse Hazardous Waste Storage Area **ReClassification:** Rejected (1/27/1999)

Site Type: Satellite Accumulation Area **Start Date:** 1991

Site Status: Inactive **End Date:** 1995

Site Description: The site was a hazardous waste storage area used to store nonradioactive solid waste. Currently, the site is an empty chain link fenced area.

Waste Type: Barrels/Drums/Buckets/Cans

Waste Description: When active, the unit staged nonregulated waste oil and water treatment chemicals. Other small quantities of hazardous waste were also stored.

Site Code: 300 RLWS **Classification:** Accepted

Site Names: 300 RLWS, 300 Area RLWS, 300 Area Radioactive Liquid Waste Sewer **ReClassification:**

Site Type: Radioactive Process Sewer **Start Date:** 1979

Site Status: Inactive **End Date:** 1998

Site Description: The 300 Area Radioactive Liquid Waste Sewer (RLWS) consists of a network of underground, double-encased stainless-steel pipe (encased in reinforced-fiberglass or plastic pipe as secondary containment) draining to the 340 Vault. Leak detection systems are housed in the outer encasement. Fifteen valve boxes are spaced along the gravity-drained pipeline between generating facilities and the 340 Vault. On October 1, 1998, the 300 RLWS was isolated from

the 340 Complex and generating facilities. The west leg of the RLWS collected discharges from the 329, 326, 325, 325-A and 327 buildings. The east leg collected effluent from the 324 building. Both legs join at valve box VB-8, between the 307 basins and the 340 Building. From VB-8 the flow drains to VB-9, and from VB-9 effluent drains to the 340 Vault. Generating facilities are isolated from the RLWS by closed valves outside of each facility. The 340 Vault tanks and the 340-A tanks are also valve-isolated from the RLWS.

Waste Type: Process Effluent

Waste Description: The sewer received radioactive liquid waste from various 300 Area research and development laboratories. Wastes consisted of radioactive effluent with small quantities of various chemicals, decontamination solutions, acids and bases. Effluent was typically derived from Hanford Site groundwater samples, tank waste samples, contaminated sediments, destructive examination of nuclear fuels, R&D process wastes, and residual waste from waste treatment studies. The waste was sampled at the 340 complex and stored for less than 90 days. Waste was then transported to the 200 West Area for storage or disposal.

Site Code:	300 RRLWS	Classification:	Accepted
Site Names:	300 RRLWS, 300 Area Retired RLWS, 300 Area Retired Radioactive Liquid Waste Sewer System, Crib Waste System, Contaminated Sewer, Intermediate Level Radioactive Liquid Waste System	ReClassification:	
Site Type:	Radioactive Process Sewer	Start Date:	1954
Site Status:	Inactive	End Date:	1975
Site Description:	The 300 Area Retired Radioactive Liquid Waste Sewer (RRLWS) is a network of 5-, 8-, 10-, and 15-centimeter (2-, 3-, 4-, and 6-inch) single-walled stainless steel piping and carbon steel fittings buried between 3 and 6 meters (10 and 20 feet) below grade. A separate 8-centimeter (3-inch) carbon steel transfer line installed in 1960 connected the 309 Building to the 340 Complex. No isolation valves, radiation monitors, or other leak detection capabilities were built into the RRLWS system. Since the potential for corrosion was low, the retired system was abandoned in place.		

Waste Type: Process Effluent

Waste Description: The unit received radioactive wastes from various 300 Area facilities including the fuel fabrication and research and development laboratories. Wastes discharged to the sewer included water and small quantities of chemicals, decontamination solutions, aqueous fuel fabrication solutions, acids, and bases. Wastes discharged to the system by the 309 Building included reactor operational wastes such as resin backwash and deionizing solutions. The system handled approximately 100,000 liters per month (25,000 gallons per month) of beta-gamma waste with an upper radiation level of 20 rem per hour. A 1992 video survey shows that highly corrosive materials were transferred by this system. The survey also suggests that mercury contamination and high radiation levels are present.

Site Code:	300 SE	Classification:	Accepted
Site Names:	300 SE, 300 Area Solvent Evaporator, Solvent Evaporator, 300 ASE	ReClassification:	Closed Out (6/27/1995)

Site Type:	Process Unit/Plant	Start Date:	1983
Site Status:	Inactive	End Date:	1986
Site Description:	<p>The site has been remediated and interim closed out.</p> <p>The site consisted of a mobile pilot plant trailer, a Terra-Vit melter structure, Large-Scale ISV Off-Gas Assembly (hood), storage units, metal sheds, sea-land units, spare parts and other support structures, most of which were removed in 1999. The vitrified material and soil, miscellaneous equipment, empty barrels, crates, metal scaffolding, and pallets of miscellaneous materials were also removed. Five in-situ vitrified monoliths (up to 1000 tons) had been in the ground on the west side of the site. One of these monoliths was located below the Large-Scale Off-Gas Hood.</p> <p>Within the test site was a fenced concrete pad where an electrical substation had been located. The electrical transformer pad was a separate waste site, (300-231, Vitrification Test Site Transformer Pad, Substation C3-S15). The transformers have been removed.</p>		
Waste Type:	Soil		
Waste Description:	<p>Vitrification was performed on wastes containing americium, plutonium, cesium, cobalt, strontium, and ruthenium. After these tests were performed, the site was cleaned up to regulatory limits and the area released. Other simulated waste tests were performed which produced solid waste materials including five monoliths weighing up to 1000 tons. These large monoliths remain in the ground as of 7/29/98. All simulated in-situ vitrification tests were performed using chemical additives which will require a waste disposition review as part of the site characterization process.</p> <p>Empty ethylene glycol drums remain at the site. Some cooling systems may still contain glycol.</p>		
Waste Type:	Equipment		
Waste Description:	<p>The site contains excess piping, drums, electrodes, bricks, transformers, HEPA filters, off-gas handling units, cement/grout materials, glass frit, and storage sheds. Some of the material on outside pallets is deteriorating because of weathering.</p>		
Waste Type:	Soil		
Waste Description:	<p>The site contains soil and vitrified blocks remaining from testing</p>		
Site Code:	300-1	Classification:	Accepted
Site Names:	300-1, Old North Richland Automotive Maintenance Yard	ReClassification:	No Action (2/24/1999)
Site Type:	Dumping Area	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	<p>The site was the proposed location of the Environmental and Molecular Sciences Laboratory (EMSL) until excavations for construction began. During excavations, it was discovered that a Native American burial ground is in the area.</p>		
Waste Type:	Misc. Trash and Debris		

Waste Description: The area was used by North Richland residents to conduct automotive repairs and recreational activities. No evidence exists that radiological contamination may be at the site. Debris removed from the area in late 1993 included empty bottles, lumber, empty cans of automotive oil, 19-liter (5-gallon) cans and buckets, an 46-centimeter (18-inch) wooden wire spool, an automotive front grill, old automotive oil filters, etc.

Site Code: 300-2 **Classification:** Accepted

Site Names: 300-2, Contaminated Light Water Disposal **ReClassification:**

Site Type: Trench **Start Date:** 1965

Site Status: Inactive **End Date:** 1966

Site Description: The site is a release to soil. The site is currently occupied by the 3766 Building and the area immediately around it.

Waste Type: Water

Waste Description: About 189,250 liters (50,000 gallons) of secondary cooling water and other contaminated water containing 33 millicuries iodine-133 and 12 millicuries iodine-131 were disposed of to ground. About 10 microcuries of alpha emitters (calculated as plutonium-239) and about 40 millicuries of non-volatile beta emitters plus rutheniums were transferred to the trench during the first 36 hours of the incident. A small number of short pumpings were made after that, however, the total gallonage and radioisotopic inventory are insignificant in comparison to those during the first 36 hours.

Site Code: 300-4 **Classification:** Accepted

Site Names: 300-4, DOE 351 Substation Soil Contamination **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1943

Site Status: Inactive **End Date:** 1990

Site Description: The site consists of the contaminated soil inside the southwest corner of the fenced (active) electrical substation.

Waste Type: Chemicals

Waste Description: The waste is uranium contaminated soil. According to the referenced document, there is a potential for spillage of polychlorinated biphenyl (PCB) to the soil. This statement was based on four samples that contained PCBs in the range of 1 to 3 milligrams per kilogram. The 300-FF-2 Record of Decision for this site also lists solvents as a potential contaminant.

Site Code: 300-5 **Classification:** Accepted

Site Names: 300-5, 300 Area Fire Station Fuel Tanks, 3709A Fire Station **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was two underground fuel tanks, the pump island, ancillary piping, and contaminated soil. An unknown quantity of contaminated soil, under the fuel dispensing island at the 3709-A Building (300 Area Fire Station) was discovered on April 10, 1992. The fueling facility consisted of two 1893 liter (500 gallon) underground storage tanks (USTs), one containing unleaded gasoline (Tank 300-FS-15), the other diesel (Tank 300-FS-16), and approximately 9.1 meters (30 feet) of piping that lead to the fuel dispenser and island. The release was due in part to sections of corroded flex piping (with multiple pinhole size perforations) located directly under the pump island and also possibly from loose pipe/pump fittings. The pump island was removed immediately following the removal of the tanks and piping. Evidence that confirmed the release consisted of petroleum product odors that were detected by personnel immediately following the lifting of the pump island. The release was additionally confirmed by sampling performed during the site assessment. The system was undergoing permanent closure due to a failed tightness test conducted on August 26, 1991. These tanks were removed on April 14, 1992. The site is not marked in the field.

Based on maps and descriptions, the site is under a paved portion of the access driveway on the southeast side of 3709A Building. A section of the asphalt has been patched where the tanks were dug up.

Waste Type: Oil

Waste Description: One of the storage tanks contained gasoline and the other contained diesel fuel.

Site Code: 300-6 **Classification:** Accepted

Site Names: 300-6, 366/366A Fuel Oil Bunkers **ReClassification:**

Site Type: Storage Tank **Start Date:** 1964

Site Status: Inactive **End Date:** 1998

Site Description: The site appears as a large excavated area with soil staged adjacent to the excavation. The soil will eventually be used as fill. The area is isolated by a rope and orange safety fence.

Waste Type: Oil

Waste Description: Prior to the tanks and residual fuel being removed, the bunkers stored product fuel oil for use in the 384 powerhouse boilers.

Site Code: 300-7 **Classification:** Accepted

Site Names: 300-7, Undocumented Solid Waste Burial Ground Adjacent to 618-8, Possible Early Burial Ground Site **ReClassification:**

Site Type: Burial Ground **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a small rise that extends to the north and west from the 300 Area North Parking Lot. It forms an irregular shaped polygon where the north edge of the parking lot is the south edge of the waste site. The site can be seen as a scarred area in several historical photographs (EMO-1026, pages A.26, A.30, A.34 labeled Burial Ground 8). Surface debris piles can be seen and subsurface disturbances have been identified with Ground Penetrating Radar. Currently, the site is covered with natural vegetation. Some of the visible surface debris consists of concrete, trash

and cables. The area of subsurface anomalies is not marked.

Waste Type: Construction Debris

Waste Description: The site contains solid construction debris, such as concrete, metallic waste, asbestos, and uranium contamination.

Site Code: 300-8

Classification: Accepted

Site Names: 300-8, Aluminum Recycle Storage Area, North of Railroad and North of 618-8, Aluminum Shavings Area

ReClassification: Interim Closed Out (10/28/2005)

Site Type: Dumping Area

Start Date:

Site Status: Inactive

End Date:

Site Description: The has been remediated and interim closed out. The Aluminum Recycle Staging area consisted of six irregularly shaped Soil Contamination Areas located along the railroad track north of 300 Area. The contamination areas were on both sides of the railroad track and separated by unposted dirt roads.

Waste Type: Misc. Trash and Debris

Waste Description: The area was used to stage uranium contaminated aluminum scrap to be sold to salvage contractors. Other contaminants include aluminum-silicon alloy and beryllium contaminated aluminum.

Site Code: 300-9

Classification: Accepted

Site Names: 300-9, Possible Early Burial Ground Sites North of RR and North of 618-8, Solid Waste Burial Ground

ReClassification:

Site Type: Burial Ground

Start Date: 1943

Site Status: Inactive

End Date: 1945

Site Description: The location of the site referred to as the Early Burial Ground is not well documented. It has been confused with the 618-8 Burial Ground and the Undocumented Solid Waste Burial Ground (site code 300-7) located adjacent to 618-8. A suspect location was identified in the 300-FF-2 Technical Baseline Report using a historical aerial photograph (negative #2530 taken in 1954), but additional review of the information determined that site to be a borrow pit. Other historical aerial photographs (negative #9619 taken in 1962) were studied and determined two other suspect areas. These locations were selected for geophysical surveys during the 300-FF-2 Operable Unit Limited Field Investigation activities. Later, an aerial photograph taken in 1948 was found (picture number 89711).

Waste Type: Misc. Trash and Debris

Waste Description: Actual burial inventory is unknown. Process knowledge suggests the waste would consist of the uranium contaminated waste from very early 300 Area experimental processes.

Waste Type: Misc. Trash and Debris

Waste Description: Uranium contaminated aluminum shavings are scattered on the surface of the site. Other surface contaminants may include aluminum-silicon alloy and beryllium contaminated aluminum.

Site Code: 300-10 **Classification:** Accepted
Site Names: 300-10, Burial Trench West of Process Trenches **ReClassification:** Closed Out (12/17/1997)
Site Type: Burial Ground **Start Date:** 1950
Site Status: Inactive **End Date:**

Site Description: The northwest corner terminates very near a dirt road that intersects the midpoint of the west 316-5 Process Trenches. A field walkdown done on 11/18/94 reported the site appeared as a soil covered field with natural vegetation. The site has been remediated and closed out, and revegetated with crested wheatgrass.

Site Code: 300-11 **Classification:** Accepted
Site Names: 300-11, Pumphouse Underground Gasoline Tank, 382 Pumphouse UGT, 382-1 **ReClassification:**
Site Type: Unplanned Release **Start Date:** 1943
Site Status: Inactive **End Date:** 1992

Site Description: The site was releases to the soil that were discovered following the removal of an underground gasoline tank in September 1992. The tank had failed a leak test. The tank was removed, however, the contaminated soil has not been cleaned up. See Section on Cleanup Activities. The site is not marked in the field and currently appears as a graveled lot adjacent to the 382 Building.

Originally, there were 3 tanks at this location, Tanks 382-1, 382-2, and 382-3. Tanks 382-2 and 382-3 were excavated and removed in 1994. A full site assessment (WAC 173-360-385) was performed for these tanks. There was no contamination found in the soil. (See Site Comment Section and Field Work - Analytical Sampling for these two tanks).

Waste Type: Oil

Waste Description: The gasoline fuel storage tanks were used to store leaded and unleaded gasoline for use by the emergency gasoline engine powered pumps in the 382 Building. Tank 382-1 was removed in 1992. Tanks 382-2 and 382-3 were removed in 1994.

Site Code: 300-12 **Classification:** Not Accepted (9/2/1998)
Site Names: 300-12, 325 Laboratory Diesel Fuel Tank **ReClassification:**
Site Type: Storage Tank **Start Date:**
Site Status: Inactive **End Date:** 1992

Site Description: The unit is located at the northwest corner of the 325 Building. There was a single underground diesel fuel storage tank. It was taken out of service and removed (including accessible piping) in October, 1992. Sampling was performed at the time of tank removal (See Cleanup Activities Section). The site currently appears as a paved area between the building and air conditioning

equipment. It can be distinguished from surrounding pavement by its newer appearance.

Waste Type: Storage Tank

Waste Description: The tank was used to store diesel fuel for an emergency generator located beside the 325 building. There are no known leaks or spills associated with this tank.

Site Code: 300-13 **Classification:** Not Accepted (9/2/1998)

Site Names: 300-13, 350 Building Release to Sanitary Sewer System **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an unplanned release to the 300 Area Sanitary Sewer System. The site was discovered during routine surveillance and maintenance of the 350 Building Sanitary Sewer Lift Station. The lift station is a below grade sewage pump station accessible through a raised manhole, painted white and located in the grassy strip of land on the west side of the 350 Building between the security fence and the roadway. A gray electrical panel is located adjacent to and on the east side of the manhole. The panel houses the controls for the sewer lift pumps.

Waste Type: Sanitary Sewage

Waste Description: The site was sanitary sewage contaminated by latex paint.

Site Code: 300-14 **Classification:** Accepted

Site Names: 300-14, 331 Building Animal Waste Tanks Pit **ReClassification:** Rejected (9/22/1998)

Site Type: Depression/Pit (nonspecific) **Start Date:** 1974

Site Status: Inactive **End Date:** 1977

Site Description: This site includes the unlined pit east of the building, a backwash storage tank, and six diversion chambers that are located north of the pit. Originally, the animal waste collection tanks were located in a pit just east of the 331-D Animal Waste Treatment Building. The pit is 28.0 meters (92 feet) by 22.3 meters (73 feet) and approximately 7.6 meters (25 feet) deep. The sides of the pit slope about 30 degrees. The tanks have been removed. Eight concrete tank pedestals remain at the bottom of the pit. A stairway leads to the bottom of the pit. A backwash storage tank remains between the 331-D building and the pit. Water was observed at the bottom of the pit. Six diversion chambers for the sewer system are located northwest of the pit.

Waste Type: Animal Waste

Waste Description: Animal waste from the 331 Complex were routed through the animal waste sewer to the 331-D animal waste treatment facility.

Site Code: 300-15 **Classification:** Accepted

Site Names: 300-15, 300 Area Process Sewer System **ReClassification:**

Site Type: Process Sewer **Start Date:** 1943

Site Status:	Active	End Date:	
Site Description:	<p>The site is an underground process sewer extending throughout the 300 Area for the disposal of process wastes such as steam condensate, cooling water and non-regulated liquids. The piping consists primarily of 20 centimeter (8 inch) vitrified clay pipes with acid-proof joints. Many other materials have been used in more recent retrofits and system modifications, including cast-iron, stainless-steel, carbon steel, and polyvinyl chloride. Large sections of the process sewer were re-lined with cured-in-place epoxy during the 1995 Project L-070 system upgrade. These process sewer feeder pipes join larger 46 centimeter (18 inch) diameter vitrified clay pipes that currently discharge to the Treated Effluent Disposal Facility (TEDF) Sump northeast of 306E Building. Prior to 1995, the system discharged to the 316-5 Process Trenches, which were constructed in 1975. Before 1975 the process sewers discharged to the north and south process ponds (WIDS Sites 316-2 and 316-1).</p> <p>Project L-070 upgraded the 300 Area process sewer and retention process sewer systems with a combination of vacuum, gravity and pressurized piping. The process sewer currently handles up to 760 liters per minute (200 gallons per minute), though rates of 4900 liters per minute (1300 gallons per minute) were observed during the late 1980's. Other ancillary systems are also part of the 300 process sewer. These systems include the flow monitoring stations, catch basins, sample ports, pumps, and the lift stations.</p>		
Waste Type:	Process Effluent		
Waste Description:	<p>Process sewer waste typically included: potable water, cooling water, precipitation runoff (which includes 4 stormwater catch basins next to the 3701U building, H-3-304714 Sht. 3 Rev. 1), waste brine solution (sodium chloride with magnesium salts), chromium, copper, uranium nitrate, sulfate, and fluoride ions. Effluent is traditionally composed of three sources: potentially contaminated effluent, sanitary water, and cooling water.</p> <p>Nearly 70 percent of the process sewer effluent results from once-through cooling for HVAC systems, pumps, compressors, and other equipment. More than 80 percent of the discharge points contribute less than 19 liters per minute (5 gallons per minute) of effluent to the process sewer. Discharge rates were reported as high as 4900 liters per minute (1300 gallons per minute) in the 1980's, while current figures estimate flow rates of less than 760 liters per minute (200 gallons per minute).</p> <p>Four chief chemical contaminants in the process sewer have been lead, silver, acetone, and cyanide. Silver was most likely contributed from the 3705 photographic processes. Cyanide compounds were detected downstream of the 384 powerhouse, and are attributable to either coal dust or the regeneration salt and softening resin used in water conditioning. Most of the lead is believed to have entered the process sewer from prior 3709 building (paint shop) processes. Acetone releases appear to have occurred in small quantities when labware was washed.</p>		
Site Code:	300-16	Classification:	Accepted
Site Names:	300-16, Solid Waste Near 314 Building, Contamination Found During Utility Pole Replacements	ReClassification:	
Site Type:	Unplanned Release	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	<p>The site is not marked in the field. All of the wooden poles in this area are painted yellow and posted with "Radiologically Controlled Area" and "Underground Radioactive Material" signs.</p>		

The site described in BHI-00012 as being covered with crushed rock under an overhead steam utility line. There is a minor amount of small scraps of rusty steel and aluminum.

There are two additional occurrences of a similar nature that were identified. On March 6, 1992 a telephone pole that was located between 303A and 3722 was removed and found to have contamination on a five foot length section that had been below grade. On September 22, 1995 another telephone pole located on the east side of the 314 Building was removed. The lower four feet was found to be contaminated.

Waste Type: Soil

Waste Description: On March 6, 1992, May 4, 1994, September 22, 1995 radioactive contamination (yellow-cake uranium) was discovered on the bottom ends of several utility poles that had been removed.

Site Code: 300-17 **Classification:** Not Accepted (9/2/1998)

Site Names: 300-17, 331 Building Trench, 331-D Ditch, Outfall A **ReClassification:**

Site Type: Ditch **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a ditch that runs from the southeast corner of the 331-D Building to the top of the west bank of the Columbia River. The ditch is fed by an underground pipe which drains stormwater from the roadway between the north side of Building 331-C and the south side of Building 331. The open trench is piped to a culvert passing beneath a gravel roadway and the perimeter fence. The discharge is approximately 46 meters (150 feet) from the river. The bank is moderately sloped with natural vegetation. This outfall results from non-industrial sources.

The site has a natural berm at the fence line. No erosion is evident on the sloping bank.

Waste Type: Stormwater Runoff

Waste Description: The waste is stormwater runoff from the roadway between the 331 and 331-C Buildings.

Site Code: 300-18 **Classification:** Accepted

Site Names: 300-18, SCA #4, Surface Contaminated Area #4 **ReClassification:** Interim Closed Out (8/25/2005)

Site Type: Dumping Area **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site has been remediated and interim closed out.

Waste Type: Misc. Trash and Debris

Waste Description: The site contained contaminated soil, metal shavings, nuts and bolts and concrete reading 3,000 to 4,000 disintegrations/minute beta-gamma.

Site Code: 300-19 **Classification:** Accepted

Site Names: 300-19, 324 Sodium Removal Pilot Plant, 324 Building Sodium Removal Pilot Plant **ReClassification:** Closed Out (6/9/1997)

Site Type: Process Unit/Plant **Start Date:** 1979

Site Status: Inactive **End Date:** 1987

Site Description: The Sodium Removal Pilot Plant consisted of a reaction vessel, a nitrogen gas supply, a steam supply, and equipment for decontamination studies. The reaction vessel was decommissioned and removed in 1991.

Waste Type: Chemicals

Waste Description: Decontamination and research and development activities generated liquid effluents that contained radionuclides and sodium hydroxide. The sodium hydroxide was neutralized prior to discharging the solution to a crib.

Site Code: 300-21 **Classification:** Not Accepted (2/12/1999)

Site Names: 300-21, 333 Building Underground Limestone Tank **ReClassification:**

Site Type: Neutralization Tank **Start Date:**

Site Status: Inactive **End Date:** 1973

Site Description: The site was an underground storage tank that held limestone used to neutralize acid wastes. The Waste Acid Treatment System (WATS) Limestone Neutralization Tank leaked in 1973 and was removed.

Waste Type: Equipment

Waste Description: The waste was a tank containing limestone used to neutralize acid waste. The tank was removed in 1973.

Site Code: 300-22 **Classification:** Accepted

Site Names: 300-22, 309 Building B-Cell Cleanout Leak **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1962

Site Status: Inactive **End Date:** 1962

Site Description: The site is an unplanned release from a parted hose coupling that contaminated the ground outside the emergency airlock of the 309 Building on September 20, 1962. The site is covered with new asphalt. The asphalt area is roped off and trucks are not allowed on the asphalt. The rupture loop annex is present below ground at the site.

Waste Type: Process Effluent

Waste Description: The waste is soil that was contaminated from decontamination efforts intended to reduce the overall levels of radioactivity within the reactor following the unplanned release that occurred on October 19, 1962.

Site Code: 300-23 **Classification:** Accepted

Site Names: 300-23, PRTR Diesel Storage Tank, 309-1 UST **ReClassification:** Closed Out (10/24/1996)

Site Type: Storage Tank **Start Date:** 1959

Site Status: Inactive **End Date:** 1969

Site Description: This site no longer exists as a waste site. The tank has been removed and the trench backfilled. Previously, this site was a tank that held diesel fuel used to power the Plutonium Recycle Test Reactor (PRTR) emergency generator located inside the 309 Building.

Waste Type: Storage Tank

Waste Description: The waste was the abandoned underground storage tank (UST). Residual diesel fuel and water remained in the tank.

Site Code: 300-24 **Classification:** Accepted

Site Names: 300-24, Soil Contamination at the 314 Metal Extrusion Building **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1994

Site Status: Inactive **End Date:**

Site Description: The area around the 314 building is mostly paved with a few areas of exposed soil. A site visit in June 1995 found the area posted with Underground Radioactive Material signs that also say "Contact Radiological Control Group prior to excavating". Later, the Underground Radioactive Material signs were moved to the 300 Area fence to eliminate the need for smaller individually posted areas inside 300 Area.

Waste Type: Soil

Waste Description: Soil samples of the dirt in the trench near the 314 Building found mostly uranium and a trace of cesium-137. The gross alpha count was 896 picocuries per gram.

Site Code: 300-25 **Classification:** Accepted

Site Names: 300-25, 324 Building **ReClassification:**

Site Type: Laboratory **Start Date:** 1966

Site Status: Active **End Date:**

Site Description: The 324 Building is a substantial concrete and steel structure. Portions of the Building are covered under a RCRA Closure Plan with on-going closure activities in progress.

The 324 Building is divided into four integrated-but-separate primary work areas: the Engineering Development Laboratory-102 (non radioactive) or EDL-102, the Engineering Development Laboratory-146 (radioactive) or EDL-146, the radiochemical engineering cells (REC), and the Shielded Materials Facility (SMF). Additional facilities in the 324 Building include development laboratories, maintenance shops, and service areas. Within the 324 Building are controlled experimentation areas referred to as 'hot cells' with radiation shielding provided by thick concrete walls. To protect against releases of radioactive material from the hot cells to the environment, integral metal liners with sumps (i.e., without drains) were installed in the cells and tank vaults. Confinement of radioactive particulate matter within the shielded cells is provided by a directed air flow through high-efficiency particulate air (HEPA) filter ventilation

system.

The RCRA Closure Plan covers the REC portion of the building, including the hot cells, low level and high level vault tanks, the airlock and pipe trench. See DOE/RL-96-73, Rev. 1 (3-98) for additional details.

In July of 1999, the Washington State Department of Ecology identified the following as areas of interest for this facility:

- 324 Shielded Material Facility (SMF) South Cell
- 324 Shielded Material Facility (SMF) East Cell
- B-Cell (Hot Cell)
- A-Cell (Hot Cell)
- C-Cell (Hot Cell)
- D-Cell (Hot Cell)
- Hot Cell Airlock (Hot Cell)
- High-Level Vault (4 tanks)
- Low-Level Vault (4 tanks)
- 324 Process Sewer System (WIDS site 300-15)
- 324 Retention Process Sewer System (WIDS site 300-214)
- EDL-102 (PNNL Vitrification Pilot)
- High Bay (2 tanks with heels)
- Room 146 (Fume hood - melter)
- Room 3B, 3F (Laboratory and Rad Flume Hood), and Storage Vault
- Waste Water Diverter System, Catch Tank and Ion Exchange Tank
- HNO₃ Bulk Chemical Tank - West Side of Facility.

The areas listed above that are within the boundaries of the TSD facility are:

- B-Cell (Hot Cell)
- A-Cell (Hot Cell)
- C-Cell (Hot Cell)
- D-Cell (Hot Cell)
- Hot Cell Airlock (Hot Cell)
- High-Level Vault (4 tanks)
- Low-Level Vault (4 tanks).

Waste Type: Equipment

Waste Description: Currently, the facility is undergoing deactivation to address radiological and chemical contamination remaining in the facility. The waste is contaminated equipment that is being removed from the facility, packaged, and transported to the 200 Area for burial.

Site Code:	300-26	Classification:	Accepted
Site Names:	300-26, Powerhouse Fuel Oil Spill, 384 Powerhouse #6 Fuel Oil Spill, Delivery Truck Spillage on Roads	ReClassification:	Rejected (1/27/1999)
Site Type:	Unplanned Release	Start Date:	1991
Site Status:	Inactive	End Date:	1991
Site Description:	The site was an unplanned release. The area of the release was previously used as a coal pile for the 384 Powerhouse. The soil is stained dark from coal dust. There is no visible evidence of the		

#6 fuel oil spill in the area. On the south side of the site adjacent to Apple Street there is an Underground Radioactive Material sign, and a buried gas pipeline.

Waste Type: Oil

Waste Description: The waste is #6 fuel oil contaminated soil and gravel. The release occurred on December 31, 1991. The occurrence report does not contain an estimate of the volume. There is no information on the extent of the spill. The leak was not discovered until after the truck left the job site.

Site Code:	300-27	Classification:	Accepted
Site Names:	300-27, Soil Contamination at 329 Biophysics Laboratory	ReClassification:	Rejected (2/12/1999)
Site Type:	Unplanned Release	Start Date:	1991
Site Status:	Inactive	End Date:	1991
Site Description:	Radioactive contamination was found at the site during a routine survey on August 14, 1991. The site is an area of crushed rock gravel with no vegetation located near the outside wall of the 329 Building. There are no hazard postings at this location. There is no visible evidence of radioactive contamination that was removed from this site. A cement pad with a liquid argon tank has been constructed adjacent to the site.		

Waste Type: Soil

Waste Description: The waste was contaminated soil that was later cleaned up.

Site Code:	300-28	Classification:	Accepted
Site Names:	300-28, Contamination Found Along Ginko Street, Solid Waste Site Near 303-G Building	ReClassification:	
Site Type:	Unplanned Release	Start Date:	1994
Site Status:	Inactive	End Date:	
Site Description:	The site is contaminated asphalt and soil beneath Ginko Street. Patches of new asphalt are visible where utility trenches were excavated.		

Waste Type: Soil

Waste Description: The waste is radioactively contaminated soil found just beneath the asphalt paving.

Site Code:	300-29	Classification:	Accepted
Site Names:	300-29, 305-B Berm, Source Location of UPR-600-11 Contaminated Soil	ReClassification:	No Action (1/18/2005)
Site Type:	Unplanned Release	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: The site is a U shaped soil berm that surrounds the east wing of the 305-B Chemical Waste Storage Building. No radiological postings are currently present.

Waste Type: Soil

Waste Description: The waste is radioactively contaminated soil (reported 5/29/80).

Site Code:	300-30	Classification:	Accepted
Site Names:	300-30, 3705 Photography Building	ReClassification:	Rejected (1/27/1999)
Site Type:	Process Unit/Plant	Start Date:	1963
Site Status:	Active	End Date:	

Site Description: The 3705 Building is a rectangular, one-story concrete block building erected on concrete footings and a slab-on-grade concrete floor. A corrugated metal sided mechanical room penthouse has been erected on the building roof. The roof itself is flat and is covered with built-up tar and gravel. The building contains no windows. Interior partitions are either gypsum wall board on stud frames or movable metal. Utilities serving the building include sanitary water and sewer, compressed air, process water, and electricity. The building was connected to the process sewer, but all connections were capped when the building was remodeled, probably between 1988 and 1990. The capped process sewer connection for the silver reclamation process is located behind a sheet rock wall that has been marked with an identification sticker.

Waste Type: Chemicals

Waste Description: The waste is spent photoprocessing chemicals. Prior to silver reclamation, the chemicals designate as a hazardous waste. After the silver reclamation, the solutions are nonregulated and nonhazardous. The treated solutions are disposed of offsite. The recovered silver is shipped offsite for recycling.

Additional waste is nondangerous/nonhazardous washwater and overflow from the film developers that goes to the City of Richland sanitary sewer system.

Site Code:	300-32	Classification:	Accepted
Site Names:	300-32, 333 Building, 333 N Fuels Manufacturing Building, New Fuel Cladding Facility	ReClassification:	
Site Type:	Fabrication Shop	Start Date:	1961
Site Status:	Inactive	End Date:	

Site Description: The 333 building is a large steel frame building with double metal insulated panel exterior walls. The foundation and floors are concrete. The roof covering consists of metal "Accustideck" insulated foam board covered with four-ply graveled asphalt roofing. A high bay through the length of the building accommodates bridge cranes and a monorail hoist.

Waste Type: Chemicals

Waste Description: Chemical wastes included nitric, sulfuric, hydrofluoric, chromic-nitric-sulfuric and other acids, along with degreasers trichloroethylene in the 1960's and early 1970's and perchloroethylene and 111-trichloroethane in the 1970's and 1980's. Heat treatment salts included sodium nitrate,

sodium and potassium nitrite, and sodium and potassium chloride. Additionally, many alcohol and acetone cleansers were used throughout the building's history.

Site Code: 300-33 **Classification:** Accepted

Site Names: 300-33, 306W Metal Fabrication Development Building Releases **ReClassification:** Interim Closed Out (11/22/2010)

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is the contaminated soil around and under the 306W Building. The area around the 306W building is paved and posted as having underground radioactive contamination.

Waste Type: Soil

Waste Description: The waste is contaminated soil under the paved areas surrounding the 306W building.

Site Code: 300-34 **Classification:** Accepted

Site Names: 300-34, 300 Area Process Sewer Leak (Found During Project L-070 Excavation at Manhole PS-87) **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1995

Site Status: Inactive **End Date:**

Site Description: The site was a release to soil that was discovered during excavation to install a new manhole (PS-87). PS-87 is a 0.7 meter (2.3 feet) diameter sewer opening with a round metal cover at grade. The cover is labeled "Confined Space" and "Radioactive Material Internally Contaminated."

Waste Type: Soil

Waste Description: Soil contaminated with radioactive material was found at about the 3.65 meter (12 foot) depth during excavation and installation of manhole PS-87, Project L-070 (300 Area Process Sewer Upgrade). Maximum soil contamination levels were beta-gamma 10,000 disintegrations per minute. Soil sample results reported 525 picocuries per gram Total Beta and 91 picocuries per gram Total Alpha.

Site Code: 300-35 **Classification:** Accepted

Site Names: 300-35, 3706A Fuel Storage Tank **ReClassification:** Closed Out (2/12/1999)

Site Type: Storage Tank **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an abandoned underground fuel storage tank. A 0.51 meter by 0.51 meter (1.7 feet by 1.7 feet) concrete block and sign (at the tank fill connection location) marks the location of the underground tank. The sign reads "EMPTY 300 GALLON UNDERGROUND DIESEL FUEL TANK LOCATED HERE. CONTACT MAINTENANCE Environmental Services South (376-7210) for information".

Waste Type: Storage Tank

Waste Description: The waste is an abandoned underground fuel storage tank that was pumped out and closed in place.

Site Code: 300-36 **Classification:** Not Accepted (1/27/1999)

Site Names: 300-36, 384 Powerhouse Oil Release to French Drain **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1995

Site Status: Inactive **End Date:** 1995

Site Description: The site was an unplanned release to a french drain. The french drain received condensate return from the steam heating system that went to the fuel oil bunkers. The french drain is a 0.65 meter (2.13 feet) diameter drain with a rust colored lid. Although gravel around the drain is slightly stained, it is most likely caused from normal steam condensate activity.

Site Code: 300-37 **Classification:** Accepted

Site Names: 300-37, PCB Leak to Soil Adjacent to 335A **ReClassification:** Closed Out (1/27/1999)

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site was a polychlorinated biphenyl (PCB) leak that contaminated the soil. The leak originated from a rectifier located on a concrete pad outside of the 335-A Building. The rectifier was installed in the early 1970's, but was never activated.

There are no signs marking the location of the rectifier. The site can only be determined by the use of detailed maps and archive photographs.

Waste Type: Oil

Waste Description: The waste was soil contaminated with polychlorinated biphenyls.

Site Code: 300-39 **Classification:** Accepted

Site Names: 300-39, 309 Building Ex-Vessel Irradiated Fuel Storage Basin, 309 Building Irradiated Fuel Storage Basin, 309 Fuel Storage Basin **ReClassification:**

Site Type: Storage **Start Date:** 1960

Site Status: Inactive **End Date:** 1974

Site Description: The Fuel Storage Basin is empty. All fuel handling and storage equipment has been removed. Gates, stoplogs and fixtures have been removed and all that remains are studs where the equipment was located. The basin has been covered with a plywood, sheet metal and metal grating cover supported by channel iron. This cover made it impossible to check the basin overflow drain system to see if they have been plugged. The Fuel Storage Basin is "L" shaped and may be described as having two sections. The largest section is the Fuel Storage Basin which runs north/south and was the first pit built; the pit is 40ft (12.2 m) long, 20 ft (6.1 m) wide and 34ft (10.4 m) below grade. The other section is the Loadout Facility which has two sections that run east/west and are smaller than the original basin and were built as the first basin reached capacity; one basin is 26 ft (7.9 m) long, 5 ft (1.5 m) wide, and 26 ft (7.9 m) below grade and the

other is 24 ft (7.3 m) long, 8 ft (2.4 m) wide, 26 ft (7.9 m) below grade. The ion vault and the truck bay are located at the east end of the Loadout Facility.

Waste Type: Equipment

Waste Description: The waste is radioactively contaminated equipment and structures.

Site Code: 300-40 **Classification:** Accepted

Site Names: 300-40, Corrosion of Vitrified Clay Process Sewer Pipe **ReClassification:**

Site Type: Unplanned Release **Start Date:** 1980

Site Status: Inactive **End Date:**

Site Description: Currently, the site appears as an uneven gravel covered area. It is bounded by a concrete curb and concrete pad on the west and a rail spur on the east. The southern section of the site is made up of the area around 303-F and the 311 Tank Farm. The northern end of the site is covered by the 3712 building.

Waste Type: Process Effluent

Waste Description: Potential wastes received in this piping system would consist of chemicals used in the 313 Building fuels manufacturing process. These include nitric acid, sodium hydroxide, alcohol, trichloroethylene, phosphoric acid, Duponol-M-3, hydrofluorosilicic acid, thorium, uranium, cutting oils, etc.

Site Code: 300-41 **Classification:** Accepted

Site Names: 300-41, 306E Neutralization Tank, Underground Lime Tank and Valve Pit **ReClassification:** Interim Closed Out (11/22/2010)

Site Type: Neutralization Tank **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site includes a neutralization tank and valve pit. The valve pit is constructed of concrete and is covered by a 2.18 meter (7.15 foot) diameter metal lid. The top of the pit is flush with the ground surface on its north side and approximately 5 centimeters (2 inches) above grade on its south side. A rectangular hatch in the lid allows access to the pit. The hatch is labeled "Confined Space." It appears as though there are three ports in the lid where pipes or hoses could enter the pit. These three ports are currently closed.

The pit is surrounded by sand and four metal safety posts. All that is visible of the neutralization tank is a riser that appears to be made of metal; the riser appears to be discolored by rust. The riser is covered by a 0.72 meter (2.36 foot) diameter metal lid, that is greater in diameter than the riser itself. The lid is labeled "Neutralization Tank" in fading black paint. The lid is held in place by a metal bar, bolts and wing nuts. The metal bar has discolored the lid with rust. The top of the lid is 0.42 meters (1.4 feet) above the ground surface, which is sand.

Waste Type: Chemicals

Waste Description: The neutralization tank and valve pit intercepted and neutralized nitric acid-bearing chemical wastes before discharge to the process sewer. In 1979, a HEDL Radiological Engineering

report stated, among other things, "The lime pit...contain[s] uranium and thorium sludge."

Site Code:	300-42	Classification:	Not Accepted (2/24/1999)
Site Names:	300-42, 306E Fabrication and Testing Laboratory	ReClassification:	
Site Type:	Fabrication Shop	Start Date:	
Site Status:	Active	End Date:	
Site Description:	<p>The site is the 306E Building. The area around the 306E building is paved and posted as having underground radioactive contamination.</p> <p>Currently, the building is occupied by COGEMA. The building is being used for instrument development and Computer Aided Design (CAD) support.</p>		

Site Code:	300-43	Classification:	Accepted
Site Names:	300-43, Unplanned Release Outside the 304 Building	ReClassification:	
Site Type:	Unplanned Release	Start Date:	1972
Site Status:	Inactive	End Date:	1989
Site Description:	<p>The site is uranium contaminated soil around the 304 building (formerly the 304 Concretion Facility) in the 300 Area. The site also includes residual contamination remaining in the 304 Storage Area (304 SA). The 304 Building is posted "Fixed Contamination Area." Sections of concrete and asphalt on the north side of the building are painted gray and posted "Fixed Contamination Area," including the fenced area. The painted and posted "Fixed Contamination Area" continues in a thin strip along the west side of the building, then grows to include a concrete or asphalt pad on the south side of the building. A thin strip of gray paint continues along the east side of 304, ending at the south wall of the change room. This painted area on the east side of the building is not posted "Fixed Contamination Area," but the unpainted asphalt further east is. The signs in the unpainted asphalt are approximately in line with the east edge of the 304 change room. A row of "Radiologically Controlled Area" signs runs along the south side of the 304 and 303A Buildings with the signs facing to the south.</p>		

Waste Type: Soil

Waste Description: The waste is uranium contaminated soil remaining following operations of the 304 CF and 304 SA facilities. Sampling and analysis during TSD closure activities for the 304 CF and 304 SA showed uranium contamination at levels up to 256 micrograms/gram for shallow soils at the exterior storage pad.

Site Code:	300-45	Classification:	Accepted
Site Names:	300-45; Surface Contamination Area, Location 3: Bird Droppings Area (Southwest Corner of the 316-5 Process Trenches Fence Line); SCA #1	ReClassification:	Closed Out (12/17/1997)
Site Type:	Unplanned Release	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: Heavy vegetation growth and anthills are in the area. The area has been downposted and released, and is no longer marked or posted. It was remediated in 1997 and closed out.

Waste Type: Soil

Waste Description:

Site Code: 300-46 **Classification:** Accepted

Site Names: 300-46, Soil Contamination Surrounding 3706 Building **ReClassification:**

Site Type: Unplanned Release **Start Date:**

Site Status: Inactive **End Date:**

Site Description: This site estimates the extent of uranium, transuranic and chemical contamination of the 3706 Building and the surrounding area. The ground surrounding the 3706 building is not posted as a radiologically controlled area. The 3706 Building is posted "Fixed Contamination Area." Numerous pipes were observed exiting the exterior walls on all sides of the building. Several of these pipes were associated with rust stains on the side of the building and the nearby ground. Several french drains were also observed on all sides of the building. Twenty recognized miscellaneous streams fall within the current extent for this site.

Waste Type: Chemicals

Waste Description: Contamination of the area surrounding the 3706 Building is believed to have resulted primarily from operations and associated spills and releases. Although radiological surveys near and around the 3706 Building have not detected any radiologically contaminated soil, subsurface contamination is suspected. The 3706 Building is contaminated with both radiological and chemical constituents, including high-activity substances. These wastes are composed of all components of the bismuth phosphate, REDOX, PUREX, and RECUPLEX processes along with laboratory cleansers, reagents and drying agents, as well as plutonium, uranium, thorium, and beryllium. Mercury deposits from multiple laboratory uses also were very prevalent. Additional chemical wastes include: sodium thiosulfate, hydroxylamine hydrochloride, barium chloride, barium nitrate, magnesium perchlorate, sodium iodine, sodium carbonate, thenoyltrifluoroacetone, thenoyltrifluoroacetone-benzene solutions, boric acid, silver nitrate, cupric oxide, arsenic nitrate, zinc nitrate, ammonium chloride, tartaric acid, and cupferron. Other wastes result from the spread of irradiated metal dusts and fines from the machining and grinding of metallurgical test samples. Contamination results from both inadequate containment systems and from spills, overflows, vaporizations, spreads of radioactive dusts and fines, and other incidents involving the loss of control of radioactive materials.

The Following Sites Were Consolidated With This Site:

Site Code: 300-131

Site Names: 300-131, 3706 Fire Sprinkler System Water, Miscellaneous Stream #515

Reason: Within Boundary Of Larger Site

Site Code: 300-132

Site Names: 300-132, 3706 Building Steam Condensate, Miscellaneous Stream #368

Reason: Within Boundary Of Larger Site

Site Code: 300-133
Site Names: 300-133, 3706 Building Steam Condensate, Miscellaneous Stream #367, Injection Well #27
Reason: Within Boundary Of Larger Site

Site Code: 300-134
Site Names: 300-134, 3706 Building Steam Condensate, Miscellaneous Stream #362
Reason: Within Boundary Of Larger Site

Site Code: 300-135
Site Names: 300-135, 3706 Building Steam Condensate, Miscellaneous Stream #365
Reason: Within Boundary Of Larger Site

Site Code: 300-136
Site Names: 300-136, 3706 Building Steam Condensate, Miscellaneous Stream #366
Reason: Within Boundary Of Larger Site

Site Code: 300-137
Site Names: 300-137, 3706 Building Steam Condensate, Miscellaneous Stream #440
Reason: Within Boundary Of Larger Site

Site Code: 300-138
Site Names: 300-138, 3706 Building Steam Condensate, Miscellaneous Stream #360
Reason: Within Boundary Of Larger Site

Site Code: 300-139
Site Names: 300-139, 3706 Building Steam Condensate, Miscellaneous Stream #357
Reason: Within Boundary Of Larger Site

Site Code: 300-140
Site Names: 300-140, 3706 Building Steam Condensate, Miscellaneous Stream #356
Reason: Within Boundary Of Larger Site

Site Code: 300-141
Site Names: 300-141, 3706 Building Steam Condensate, Miscellaneous Stream #439, Injection Well #29
Reason: Within Boundary Of Larger Site

Site Code: 300-142
Site Names: 300-142, 3706 Building Steam Condensate, Miscellaneous Stream #369, Injection Well #30
Reason: Within Boundary Of Larger Site

Site Code: 300-143

Site Names: 300-143, 3706 Building Steam Condensate, Miscellaneous Stream #361
Reason: Within Boundary Of Larger Site

Site Code: 300-144
Site Names: 300-144, 3706 Building Steam Condensate, Miscellaneous Stream #358
Reason: Within Boundary Of Larger Site

Site Code: 300-145
Site Names: 300-145, 3706 Building Steam Condensate, Miscellaneous Stream #438, Injection Well #25
Reason: Within Boundary Of Larger Site

Site Code: 300-146
Site Names: 300-146, 3706 Building Stormwater Runoff, Miscellaneous Stream #364
Reason: Within Boundary Of Larger Site

Site Code: 300-147
Site Names: 300-147, 3706 Building Stormwater Runoff, Miscellaneous Stream #363
Reason: Within Boundary Of Larger Site

Site Code: 300-148
Site Names: 300-148, 3706 Building Stormwater Runoff, Miscellaneous Stream #359, Injection Well #22
Reason: Within Boundary Of Larger Site

Site Code: 300-149
Site Names: 300-149, 3706A Building Steam Condensate, Miscellaneous Stream #432, Injection Well #28
Reason: Within Boundary Of Larger Site

Site Code: 300-150
Site Names: 300-150, 3706 Building Steam Condensate, Miscellaneous Stream #430
Reason: Within Boundary Of Larger Site

Site Code: 300-47 **Classification:** Not Accepted (2/12/1999)
Site Names: 300-47, Residual Hazardous Substances **ReClassification:**
Northwest of 3708 Building
Site Type: Unplanned Release **Start Date:**
Site Status: Inactive **End Date:** 1989

Site Description: The site was identified as two locations of potential contamination near the 3708 Building that resulted from tank leakage. The area around the 3708 Building is not currently posted for contamination and there is no evidence of underground tanks. The area is partially paved with asphalt, and otherwise surfaced in crushed gravel. There are no markers where the chemical tank and the oil tank were located. The nearby 3708 Building is posted as "radiologically controlled area", and is not currently in use.

Site Code: 300-48 **Classification:** Accepted
Site Names: 300-48, Thorium Oxide and Fuel **ReClassification:**
 Fabrication Chemical Wastes Around 3732
 Building
Site Type: Unplanned Release **Start Date:** 1949
Site Status: Inactive **End Date:** 1970
Site Description: This site is the 3732 Building foundation and the surrounding soil contamination. The site appears as a gravel covered mound. There are no hazard postings except for two signs related to the adjacent 303B Building.

Waste Type: Soil
Waste Description: The 3732 Building contained standard fuel fabrication chemical wastes, as well as residual thorium oxide contamination in crevices and areas throughout and near the building. The contaminated soil is underground. The practice of flushing contamination on floors outside to the dirt is a possible explanation for the source of the soil contamination.

Waste Type: Demolition and Inert Waste
Waste Description: The foundation of the 3732 Building was not removed as part of demolition activities. The contamination areas on the foundation were covered with a fixative paint before the site was stabilized.

Site Code: 300-53 **Classification:** Accepted
Site Names: 300-53, Unplanned Release East Side of **ReClassification:** Closed Out (2/12/1999)
 303-G
Site Type: Unplanned Release **Start Date:**
Site Status: Inactive **End Date:** 1996
Site Description: The site was contaminated soil that was discovered on the surface of some slightly eroded soil located within a posted Underground Radioactive Material (URM) Area. The actual erosion was at the end of a concrete splash guard underneath the water discharge pipe. Disruption of the ground surface by the fire suppression system testing exposed sub-surface contamination that had been previously covered with clean soil.

Waste Type: Soil
Waste Description: The waste was contaminated soil.

Site Code: 300-55 **Classification:** Accepted
Site Names: 300-55, 309 Rupture Loop Holding Tank, **ReClassification:** Rejected (2/24/1999)
 Rupture Loop Hold-Up Tank, RLT-2, 307-D
Site Type: Storage Tank **Start Date:** 1960
Site Status: Inactive **End Date:**

Site Description: The tank was an underground storage tank, 12.2 meters (40 feet) in diameter and 3.05 meters (10 feet) tall with a sloping top.

Waste Type: Equipment

Waste Description: The waste was a tank.

Site Code: 300-56

Classification: Accepted

Site Names: 300-56, 306-E 90-Day Waste Accumulation Area

ReClassification: Rejected (1/27/1999)

Site Type: Storage Pad (<90 day)

Start Date:

Site Status: Inactive

End Date:

Site Description: The site is a steel storage container designed to contain hazardous materials or waste. The site was previously used as a 90 day waste storage area. The site is currently in use as a hazardous material storage area. Materials currently stored include laboratory chemicals, a 208 liter (55 gallon) drum for waste oil recycling, and 320 kilograms (700 pounds) of peanut butter (sludge simulant).

Waste Type: Misc. Trash and Debris

Waste Description: The site received waste from the 306E building.

Site Code: 300-57

Classification: Accepted

Site Names: 300-57, 335 Building 90-Day Waste Accumulation Area

ReClassification: Closed Out (12/15/1998)

Site Type: Storage Pad (<90 day)

Start Date: 1994

Site Status: Inactive

End Date: 1998

Site Description: The site is a small cinder block room addition on the west side of the 335 Building. The exterior door is locked and labeled "90 Day Storage Accumulation" and "Danger".

Waste Type: Equipment

Waste Description: The 90 Day Waste Storage Accumulation Area was used to store sodium contaminated piping and components after dismantling, prior to shipment for disposal.

Site Code: 300-58

Classification: Accepted

Site Names: 300-58, 305B Steam Condensate Injection Well, Miscellaneous Stream #449

ReClassification: Rejected (9/2/1998)

Site Type: French Drain

Start Date:

Site Status: Inactive

End Date:

Site Description: The site is a french drain, identified as miscellaneous stream #449. The unit is a concrete pipe that is flush with the ground surface, and filled with cobbles and sand. No pipes to the drain are visible. The "Inventory of Miscellaneous Streams", Revision 3 says the site is inactive, source abandoned.

The french drain could also drain stormwater from nearby asphalt roads in very heavy rain. The original purpose of the site was likely to have been used for steam condensate. The soil and rocks are rust stained showing evidence of its use as a steam condensate drain. In addition, a steam line is located over the site. Although stormwater may enter the site, it is not necessarily conveyed to it.

Waste Type: Steam Condensate

Waste Description:

Site Code:	300-59	Classification:	Accepted
Site Names:	300-59, 305 Building Steam Condensate, Miscellaneous Stream #417	ReClassification:	Rejected (12/15/1998)
Site Type:	Injection/Reverse Well	Start Date:	
Site Status:	Inactive	End Date:	1998
Site Description:	The site is an injection well covered by a 1.29 meter (4.23 foot) metal lid. The lid is labeled "Confined Space." The lid is flush with the ground surface and is surrounded by soil and rocks. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.		

Waste Type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code:	300-60	Classification:	Accepted
Site Names:	300-60, 303A Building Steam Condensate, Miscellaneous Stream #339, F.D. #26	ReClassification:	Rejected (2/12/1999)
Site Type:	Injection/Reverse Well	Start Date:	
Site Status:	Inactive	End Date:	
Site Description:	The site is described as an injection well that receives steam condensate. This stream site is on the east side of the 303A Building, near the northeast corner. A condensate return pipe extends from the building at this point. The area next to the building was dug up when an electrical system was installed, which would explain why there is no evidence of the site at this point. The "Inventory of Miscellaneous Streams," Revision 3, describes the site as active. However, the overhead steam line terminates and is capped at the north edge of the 3717B Building. 303A is posted "Radiation Area and Radioactive Material Area" and "Caution, Fissile Materials." The roof of 303A is posted "Contamination Area." 304 is posted "Fixed Contamination Area."		

Waste Type: Steam Condensate

Waste Description: When the site was active, the flow was less than 0.038 liters per minute (0.01 gallons per minute).

Site Code:	300-61	Classification:	Accepted
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Site Names: 300-61, 303B Building Steam Condensate, Miscellaneous Stream #444, Injection Well #12 **ReClassification:** Rejected (1/19/1999)

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site has been described as an injection well. No engineered structure is evident at the location described for this site. Two steam lines labeled HPD-TRP-011 and HPD-TRP-12 were found; both are described in the "Inventory of Miscellaneous Streams," Revision 3. These two lines descend from the overhead line and disappear into the ground. A third line from the overhead steam line is found just east of HPD-TRP-011 and -012. This third line is unlabeled and terminates open-ended approximately 10 centimeters (3.9 inches) above the base of the wooden pole that supports it. The ground surface in this area is covered by gravel. According to the "Inventory of Miscellaneous Stream," Revision 3, this site is inactive, source abandoned.

Waste Type: Steam Condensate

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code: 300-62 **Classification:** Accepted

Site Names: 300-62, 303C Building - Steam Condensate, Miscellaneous Stream #495 **ReClassification:** Rejected (9/2/1998)

Site Type: French Drain **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is two, 2.5 centimeter (1 inch) metal pipes from steam drain lines entering the ground at the base of the steam support structure. No engineered drain structure is visible. The miscellaneous streams report (Revision 3) says the stream has been eliminated because the source has been shut off. The site received steam condensate from the main header, HRD-TRP-007, -008.

Waste Type: Steam Condensate

Waste Description:

Site Code: 300-63 **Classification:** Not Accepted (9/2/1998)

Site Names: 300-63, 305B Building Stormwater Runoff, Miscellaneous Stream #458 **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a 0.6 meter (2 foot) diameter concrete french drain, 0.5 meters (1.5 feet) deep, with a perforated steel plate cover, flush with the alley road. About 0.3 meters (1 foot) from the top is a 6 centimeter (3 inch) diameter drain pipe that goes toward the west. It is not clear if water drains out of this pipe to french drain, or out of french drain into this pipe when drain is full. Several steel lockers marked "Flammable Liquids" and "Poison" are adjacent to the south wall of building. They are each marked "empty," are on skids, and appear to have been moved to the location for storage, not use. They do not appear to have leaked.

Waste Type: Stormwater Runoff**Waste
Description:**

Site Code:	300-64	Classification:	Accepted
Site Names:	300-64, 303F Building Steam Condensate, Miscellaneous Stream #352	ReClassification:	Rejected (1/19/1999)
Site Type:	Injection/Reverse Well	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: The site is an HVAC steam condensate return to the WATS Pipe Trench (WIDS Site 300-224). The discharge goes into a rectangular concrete base covered by a 0.90 meter (2.95 foot) by 2.45 meter (8.04 foot) metal lid. Some of the concrete base appears to be rusty. The site is also surrounded by concrete. The lid is posted "Confined Space." There are three openings cut in the metal lid to allow pipes to pass through. An approximately 2.5 centimeter (1 inch) diameter metal pipe enters the middle opening. This pipe is labeled "P198" and appears to be electrical in nature. A second approximately 2.5 centimeter (1 inch) diameter metal pipe enters the south opening. There is a label on the wall next to this pipe that reads "NP-303F-01." This second pipe extends approximately 2 meters (6.6 feet) above the lid, makes a 90 degree turn away from 303F and terminates open-ended over one of the steam lines that enters the west wall of 303F. An approximately 10 centimeter (4 inch) diameter steam pipe and an approximately 2.5 centimeter (1 inch) diameter metal pipe enter the north opening. These two pipes extend down from the building's roof. According to John Remaize, the lines from the roof of 303F are HVAC and cooling lines. The lid does not fit tightly; there are openings between the lid and the concrete base. These openings could allow stormwater runoff from the 303F Building to enter. These opening also allow a limited view of the interior of the structure. Although it is difficult to see inside, the floor of the interior appeared to be dry during the October 29, 1998, walkdown. However, there also appeared to be more pipes inside than could be accounted for by those entering through the lid. Drawing H-3-304714, Sheet 2, shows the WATS and U-Bearing Pipe Trench (WIDS Site 300-224) enters/leaves WIDS Site 300-64 and connects to the 313 Building.

The site is on the east end of a row of removable panels labeled "Radioactive Material, Internally Contaminated." 303F is posted "Fixed Contamination Area" and the 303F roof is posted "Contamination Area." According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.

Waste Type: Steam Condensate

Waste Description: The site has been listed as inactive in all earlier versions of the Miscellaneous Streams. Comments in earlier versions indicate the site has not been active for some time. No flow rate or date for eliminating the source has been provided in any version of the Miscellaneous Streams document.

Site Code:	300-65	Classification:	Accepted
Site Names:	300-65, 303J Building - Steam Condensate Mud Leg (Part of 300 Main Supply), Miscellaneous Stream #266	ReClassification:	Rejected (9/2/1998)
Site Type:	French Drain	Start Date:	
Site Status:	Inactive	End Date:	

Site Description: The site is a 0.35 meter (14 inch) diameter steel pipe in the ground, about 0.8 meters (2.5 feet) deep. The drain is covered with a steel plate with notches and holes for vents and two steam condensate pipes to enter. According to the miscellaneous streams report (Revision 3), the stream has been eliminated because the steam source has been shut off. Signs on the 303J Building say that it is a closed facility, and no material is stored inside.

Waste Type: Steam Condensate

Waste Description:

Site Code:	300-66	Classification:	Accepted
Site Names:	300-66, 303J Building HVAC Condensate, Miscellaneous Stream #267	ReClassification:	Rejected (9/2/1998)
Site Type:	Injection/Reverse Well	Start Date:	
Site Status:	Active	End Date:	

Site Description: The site is an open concrete french drain. Two pipes exit from about the ceiling level of the 303J Building and discharge to the drain. The concrete drain is filled with sand and small rocks and it does not appear to have been used recently. The current "Inventory of Miscellaneous Streams", Revision 3 lists the site as active as a steam condensate site. The responsible contractor believes the site to be an HVAC condensate drain (as it was listed in the previous "Inventory of Miscellaneous Streams", Revision 2).

Waste Type: Water

Waste Description:

Site Code:	300-67	Classification:	Accepted
Site Names:	300-67, Steam Condensate from 300 Area Main Steam Header, Miscellaneous Stream #414	ReClassification:	Rejected (12/15/1998)
Site Type:	Injection/Reverse Well	Start Date:	
Site Status:	Inactive	End Date:	1998

Site Description: The site is an injection well that received steam condensate. All that is visible of the site are the two metal lids and the metal lid frame. The lid frame measures 1.90 meters (6.23 feet) by 0.82 meters (2.69 feet) and is flush with the ground surface. The site is just east of an access manhole for the process sewers, which is labeled "Radioactive Material, Internally Contaminated." The "Inventory of Miscellaneous Streams," Revision 2, states when this injection well was in service, it overflowed to the process sewer. The 303B Building is posted "Fissile Materials," "Radiation Area and Radioactive Material Area," and "Fixed Contamination Area." The roof of the 303B Building is posted "Contamination Area." The 304 Building is posted "Fixed Contamination Area." This site is slightly down slope of the road to the north. There are small openings in the lid where stormwater runoff from the road may be able to enter the injection well. It does not appear as though runoff from the two buildings would be inclined to flow towards the site; the area between the buildings and the site is fairly level. The site is surrounded by gravel. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.

Waste Type: Steam Condensate

waste type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code: 300-68 **Classification:** Accepted
Site Names: 300-68, 305 Building - Steam Condensate, Miscellaneous Stream #451, Pit U23 **ReClassification:** Rejected (12/15/1998)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:** 1998

Site Description: The site is an injection well. The base of the injection well is constructed of corrugated metal and is covered by a 1.91 meter (6.27 foot) metal lid. The lid is approximately 30 centimeters (11.8 inches) above grade and is labeled "U-23" and "Confined Space." Two pipes enter the lid from the overhead steam lines. One of these pipes is approximately 20 centimeters (7.9 inches) in diameter and the other is approximately 6 centimeters (2.4 inches) in diameter. The site is surrounded by soil and gravel. The "Inventory of Miscellaneous Streams," Revision 3, says the site is inactive, source abandoned.

Waste Type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code: 300-69 **Classification:** Accepted
Site Names: 300-69, 305 Building Steam Condensate, Miscellaneous Stream #415 **ReClassification:** Rejected (12/15/1998)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:** 1998

Site Description: The site is an injection well covered by a 0.74 meter (2.43 foot) metal lid. The lid is flush with the ground surface and is surrounded by metal grating resting on top of the soil and gravel. A small diameter, less than 2.5 centimeters (1 inch), metal pipe elbow extends approximately 20 centimeters (8 inches) from the building approximately 5 centimeters (2 inches) above the ground surface. The other end of the pipe disappears into the ground. This pipe is in line with the injection well's lid. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.

Waste Type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code: 300-70 **Classification:** Accepted
Site Names: 300-70, 305 Building Steam Condensate, Miscellaneous Stream #416 **ReClassification:** Rejected (12/15/1998)
Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:** 1998

Site Description: The site is an injection well covered by a 0.51 meter (1.67 foot) metal lid. The lid is flush with the ground surface and is surrounded by asphalt. A small diameter, less than 2.5 centimeters (1 inch), metal pipe elbow extends approximately 0.15 meters (0.5 feet) from the building approximately 0.15 meters (0.5 feet) above the ground surface. The other end of the pipe disappears into the ground. This pipe is in line with the injection well's lid. The area around the lid and between the lid and the building appears to have been excavated. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.

Waste Type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code: 300-71 **Classification:** Accepted

Site Names: 300-71, 306E Building - HVAC **ReClassification:** Rejected (12/15/1998)
Condensate, Miscellaneous Stream #454

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:** 1998

Site Description: The site is an injection well that used to receive HVAC condensate. The injection well is constructed of concrete pipe and is covered by a 0.54 meter (1.77 foot) round metal lid with handles. The top of the pipe rises approximately 4 centimeters (1.6 inches) above the ground surface. During the December 17, 1998, walkdown, the interior of the well appeared to be damp. This may have been due to condensation since there was condensation on the bottom of the lid. The well appears to be 20 centimeters (0.66 feet) deep with the bottom covered by cobbles. No pipes were visible entering the well. What appeared to be a black widow was living on the bottom side of the lid. The site is hidden behind an old air conditioning unit that is labeled "6" on its north side and SeasonCon on its south side. The site is surrounded by sand which has been discolored by garnet dust. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.

Waste Type: Water

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of HVAC condensate only.

Site Code: 300-72 **Classification:** Not Accepted (1/19/1999)

Site Names: 300-72, 308 Building Stormwater Runoff, **ReClassification:**
Miscellaneous Stream #404

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is an injection well that receives stormwater runoff from the surrounding area. The site is covered by a 0.66 meter (2.17 foot) metal lid with perforations. The lid is flush with the surrounding concrete. During the November 8, 1998, walkdown, water could be seen through the perforations in the lid. It had rained three days prior to the walkdown. Sand has washed down the truck ramp and has partially covered the lid. The "Inventory of Miscellaneous Streams," Revision 3, states "Disposal site within 300 feet of an active/inactive crib, ditch or

trench." The site is within 91 meters (300 feet) of 316-3 Trench.

Waste Type: Stormwater Runoff

Waste Description: According to the "Inventory of Miscellaneous Streams," Revision 3, the flow rate is less than 0.01 gallons per minute.

Site Code: 300-73 **Classification:** Not Accepted (1/19/1999)

Site Names: 300-73, 308 Building Stormwater Runoff, Miscellaneous Stream #405 **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is an injection well that received stormwater runoff from the surrounding area. The site is covered by a 0.18 meter (0.59 foot) metal grate. At the time of the November 8, 1998, walkdown, the site was surrounded by approximately 7 centimeters (2.8 inches) of sand and debris. The drain itself was also filled with sand and debris. It had rained three days prior to the walkdown. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned. The document also states "Disposal site within 300 feet of an active/inactive crib, ditch or trench." The site is within 91 meters (300 feet) of 316-3 Trench.

Waste Type: Stormwater Runoff

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of stormwater only.

Site Code: 300-74 **Classification:** Not Accepted (1/19/1999)

Site Names: 300-74, 308 Building Stormwater Runoff, Miscellaneous Stream #406 **ReClassification:**

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is an injection well that received stormwater runoff. The site has a concrete base and is covered by a 0.64 meter (2.10 foot) by 0.64 meter (2.10 foot) metal grate. A sign on the grate reads "Drains to R.P.S." Sand and gravel cover part of the concrete surrounding the grate. The top of the concrete is flush with the ground surface on its south and west sides. The north side is approximately 1 to 5 centimeters (0.4 to 2 inches) above the ground surface. The east side of the concrete rises above the asphalt surface of the truck ramp. At the time of the November 8, 1998, walkdown, the site was filled with water and water had pooled in the adjacent truck ramp. It had rained three day's prior to the walkdown. According to the "Inventory of Miscellaneous Streams," Revision 3, the site has been grouted. It is inactive and listed as, "Disposal Site Permanently Abandoned." The document also states "Disposal site within 300 feet of an active/inactive crib, ditch or trench." The site is within 91 meters (300 feet) of 316-3 Trench.

Waste Type: Stormwater Runoff

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of stormwater only.

Site Code: 300-75 **Classification:** Accepted
Site Names: 300-75, 309 Building Stormwater Runoff and Chiller Water, Miscellaneous Stream #445, Injection Well #20 **ReClassification:** Rejected (1/19/1999)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The site is an injection well that received stormwater runoff and water from a chiller. The well is a concrete pipe covered by a 1.11 meter (3.64 foot) diameter metal lid. The top of the pipe is approximately 2.5 centimeters (1 inch) above grade. The lid is labeled "Confined Space." The site is surrounded by yellow safety posts and asphalt. John Remaize stated that the chiller has been removed. According to the "Inventory of Miscellaneous Streams," Revision 3, the drain has been permanently plugged and the stream has been routed to a process sewer. The document lists the site as inactive, "Source Permanently Abandoned."

Waste Type: Water
Waste Description: The waste was stormwater runoff and chiller water. When the site was active, the flow rate was less than 0.038 liters (0.01 gallons per minute).

Site Code: 300-76 **Classification:** Accepted
Site Names: 300-76, 306W Building Steam Condensate, Miscellaneous Stream #418 **ReClassification:** Rejected (9/2/1998)
Site Type: French Drain **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The site is a french drain that is a concrete pipe almost flush with the ground surface. A 2.54 centimeter (1 inch) metal pipe drops from an overhead steam line and drains to the unit. Adjacent steam drain lines may also enter the unit, but any connecting pipes are below the rocks that come to within about 15.2 centimeters (6 inches) of the top of the drain. The drain is covered with a round steel plate with four vent holes and a notch for the metal pipe. The rocks appear to be discolored from rust. The "Inventory of Miscellaneous Streams", Revision 3, says the site is inactive, source abandoned. The site does not appear to be active, but discharge pipe(s) is (are) still present (assuming adjacent pipes also discharge to the unit)

Waste Type: Steam Condensate

Waste Description:

Site Code: 300-77 **Classification:** Not Accepted (1/19/1999)
Site Names: 300-77, 309 Building Stormwater Runoff, Miscellaneous Stream #450 **ReClassification:**
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The site is an injection well that received stormwater runoff. It is located at the bottom of a covered stairwell. The drain is covered with a 26 centimeter (0.85 foot) by 21 centimeter (0.69 foot) metal grate and is surrounded by concrete. The stairwell is littered with wind borne debris.

The "Inventory of Miscellaneous Streams," Revision 3, states that the drain has been permanently plugged. The document lists the site as inactive, "Source Permanently Abandoned." During the November 4, 1998, walkdown, the site appeared to be plugged; no outlet was visible. The site was dry during this same walkdown.

Waste Type: Stormwater Runoff

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of stormwater only.

Site Code: 300-78

Classification: Accepted

Site Names: 300-78, 300 Area Main Header Steam Trap (Southwest Corner of 313 Building), Miscellaneous Stream #331

ReClassification: Rejected (2/12/1999)

Site Type: Injection/Reverse Well

Start Date:

Site Status: Active

End Date:

Site Description: The site is a rectangular shaped below grade concrete box that is covered with two steel plates. Seven pipes of various sizes enter the site from the 313 building. Standing water was observed in the bottom of the site. A concrete lined 6.7 meters long by 0.356 meters wide by 0.330 deep (22 feet long by 14 inches wide by 13 inches deep) trench extends from the site to the south. An opening at the south end of the trench was observed and may lead to the process sewer. This trench may be an overflow in the event the concrete box fills with water. Steel grating covers the top of the trench. A concrete pad surrounding the site is painted gray and posted as fixed radiological contamination.

Waste Type: Steam Condensate

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only ("Inventory of Miscellaneous Streams"). This information differs from that provided by John Remaize (Point of Contact). According to Mr. Remaize the site received HVAC condensate.

Site Code: 300-79

Classification: Not Accepted (1/19/1999)

Site Names: 300-79, 313 Building Stormwater Runoff, Miscellaneous Stream #457

ReClassification:

Site Type: Injection/Reverse Well

Start Date:

Site Status: Active

End Date:

Site Description: The site is a 1.14 meter (44 inch) diameter drywell that receives stormwater from six catch basins located to the south and the surrounding 313 Building Parking Lot area. The surrounding area is paved with asphalt and there is no known contamination within the drainage area. The drywell is 1.4 meters (55 inches) deep and is constructed of corrugated steel pipe. Water was observed at the bottom of the site.

Waste Type: Stormwater Runoff

Waste Description: The "Inventory of Miscellaneous Streams", Revision 3, states that the flow rate is less than 1.9 liters per minute (0.5 gallons per minute) of stormwater runoff only.

Site Code: 300-80 **Classification:** Accepted

Site Names: 300-80, 314 Building Stormwater Runoff and Steam Condensate, Miscellaneous Stream #268 **ReClassification:**

Site Type: French Drain **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a square concrete structure adjacent to the 314 Building and next to a fenced stairway leading down. The site is covered by a steel plate marked with a sign "Radioactive material, internally contaminated." The site does not appear to be a stormwater drain. It is above the surrounding grade and no drain pipes from the roof enter the site. The "Inventory of Miscellaneous Streams", Revision 3, says the stream has been eliminated because the source has been permanently abandoned and rerouted to the process sewer.

The responsible contractor agrees that the site did previously receive steam condensate, but is unable to verify stormwater discharges. Further inspection under the steel cover and the review of facility drawings are required to verify the function and site type.

Waste Type: Steam Condensate

Waste Description: DOE/RL-95/82, Revision 3 says that the site was used for stormwater runoff and steam condensate. This site does not appear to be used for stormwater runoff, since it is above the surrounding grade and no pipes from a roof enter the site. The stream was eliminated March, 1995 and rerouted to the process sewer.

Waste Type: Equipment

Waste Description: The structure for this site appears to have become contaminated (see photograph).

Site Code: 300-81 **Classification:** Accepted

Site Names: 300-81, 321 Building Steam Condensate, Miscellaneous Stream #370 **ReClassification:** Consolidated (2/12/1999)

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The drain is a 1.03 meter (3.3 foot) diameter concrete structure with a metal cover. The building source pipe is connected to the drain through the cover.

Waste Type: Steam Condensate

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

The Site Was Consolidated With:

Site Code: UPR-300-4

Site Names: UPR-300-4, UN-300-4, Contaminated Soil Beneath the 321 Building

Reason: Within Boundary Of Larger Site

Site Code: 300-82 **Classification:** Accepted
Site Names: 300-82, 321 Building Steam Condensate, Miscellaneous Stream #371 **ReClassification:** Consolidated (1/19/1999)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is a 1.04 meter (3.3 foot) diameter french drain with a metal cover. The drain is flush with the ground. An overhead steam line runs north to south above the drain. The source piping has been removed. The soil just north of the french drain is discolored with a rusty stain.
Waste Type: Steam Condensate
Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute).

The Site Was Consolidated With:

Site Code: UPR-300-4
Site Names: UPR-300-4, UN-300-4, Contaminated Soil Beneath the 321 Building
Reason: Within Boundary Of Larger Site

Site Code: 300-83 **Classification:** Accepted
Site Names: 300-83, 321 Building Steam Condensate, Miscellaneous Stream #372 **ReClassification:** Consolidated (1/19/1999)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is a square concrete structure with a metal cover and labeled, F. D. #35. The concrete structure is raised 12.7 centimeters (5 inches) from the surrounding ground level. Inside the cover is a pipe with a 12.7 centimeter (5 inch) diameter screen cover. The inside of the structure is dry and the pipe appears to be inactive. The concrete structure is 3.6 meters (12 feet) west of the stormwater drain (site code 300-92) in front of the roll-up door.
Waste Type: Steam Condensate
Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

The Site Was Consolidated With:

Site Code: UPR-300-4
Site Names: UPR-300-4, UN-300-4, Contaminated Soil Beneath the 321 Building
Reason: Within Boundary Of Larger Site

Site Code: 300-84 **Classification:** Accepted
Site Names: 300-84, 321 Building Vent Valve on Water Line, Miscellaneous Stream #348 **ReClassification:** Consolidated (1/19/1999)

Site Type: Valve Pit **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a 2.4 meter (8 foot) diameter, semicircular, steel caisson. It has a hatch opening marked "Confined Space". There are two valves at the bottom. The caisson is 2.2 meters (7.5 feet) deep. The site is marked "W-25" on the side of the caisson. One valve appears to be a main water shut off valve to the 321 building and the other is a drain valve. The 321 Building is unoccupied.

Waste Type: Water

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute).

The Site Was Consolidated With:

Site Code: UPR-300-4

Site Names: UPR-300-4, UN-300-4, Contaminated Soil Beneath the 321 Building

Reason: Within Boundary Of Larger Site

Site Code: 300-85 **Classification:** Accepted

Site Names: 300-85, 323 Building Steam Valve Pit, Miscellaneous Stream #453 **ReClassification:** Rejected (9/2/1998)

Site Type: Valve Pit **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a 150 centimeter (60 inch) diameter vertical steel caisson with a sloping steel lid. An access door is located on the lid. The interior of the caisson contains several pipes and valves. The site appears to be a valve pit. The site is posted as a confined space.

Waste Type: Water

Waste Description:

Site Code: 300-86 **Classification:** Accepted

Site Names: 300-86, 300 Area South Parking Lot Stormwater Runoff, Miscellaneous Stream #524 **ReClassification:** Rejected (12/15/1998)

Site Type: Depression/Pit (nonspecific) **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a basin approximately 2 meters (6.6 feet) deep that collects stormwater from the main 300 area south parking lot. A lawn has been planted within the basin, and two inlet pipes are visible at the northeast corner and the southeast corner of the site.

Waste Type: Stormwater Runoff

Waste Description: According to the "Inventory of Miscellaneous Streams," Revision 3, the flow is less than 18.75 liters per minute (5 gallons per minute).

Site Code: 300-87 **Classification:** Not Accepted (1/19/1999)

Site Names: 300-87, 309 Building Stormwater Runoff, Miscellaneous Stream #679 **ReClassification:**

Site Type: French Drain **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a french drain that received stormwater runoff. It is located at the bottom of a covered stairwell and is surrounded by concrete. The site was covered by a 0.22 meter (0.72 foot) metal grate, which was sitting next to the site at the time of the November 4, 1998, walkdown. During this same walkdown, it was apparent that the stairwell roof was leaking during a rainstorm. The site appears to have been plugged; water was puddling in the stairwell. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, "Source Permanently Abandoned." The document also states that the site has been permanently plugged.

Waste Type: Stormwater Runoff

Waste Description: When the site was active, the flow rate was less than 0.038 liters per minute (0.01 gallons per minute) of stormwater only.

Site Code: 300-88 **Classification:** Accepted

Site Names: 300-88, 320 Building Irrigation Line Effluent, Miscellaneous Stream #626 **ReClassification:** Rejected (9/2/1998)

Site Type: French Drain **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a french drain that is constructed of concrete and covered with a steel lid.

Waste Type: Water

Waste Description: The site receives irrigation water.

Site Code: 300-89 **Classification:** Accepted

Site Names: 300-89, 320 Building Irrigation Line Effluent, Miscellaneous Stream #627 **ReClassification:** Rejected (9/2/1998)

Site Type: French Drain **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a french drain that is constructed of concrete and covered with a steel lid.

Waste Type: Water

Waste Description: The site receives irrigation water.

Site Code: 300-90 **Classification:** Accepted

Site Names: 300-90, 320 Building Irrigation Line Effluent, Miscellaneous Stream #628 **ReClassification:** Rejected (9/2/1998)

Site Type: French Drain **Start Date:**

Site Status: Active **End Date:**

Site Description: The french drain is constructed of concrete and covered with a steel lid.

Waste Type: Water

Waste Description: The site receives irrigation water.

Site Code: 300-91 **Classification:** Accepted

Site Names: 300-91, 320 Building, Miscellaneous Stream #350 **ReClassification:** Rejected (9/2/1998)

Site Type: French Drain **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The french drain is constructed of concrete and covered with a steel lid.

Waste Type: Water

Waste Description: The site received irrigation water.

Site Code: 300-92 **Classification:** Accepted

Site Names: 300-92, 321 Building Stormwater Runoff, Miscellaneous Stream #680 **ReClassification:** Consolidated (1/19/1999)

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Active **End Date:**

Site Description: The drain is a small, steel grate, measuring 0.38 meters by 0.38 meters (1.25 foot by 1.25 foot).
The drain is plugged with dirt.

Waste Type: Stormwater Runoff

Waste Description: The "Inventory of Miscellaneous Streams", Revision 3, states that the flow rate is less than 0.038 liters per minute (0.01 gallons per minute) of stormwater runoff only.

The Site Was Consolidated With:

Site Code: UPR-300-4

Site Names: UPR-300-4, UN-300-4, Contaminated Soil Beneath the 321 Building

Reason: Within Boundary Of Larger Site

Site Code: 300-93 **Classification:** Not Accepted (1/19/1999)

Site Names: 300-93, 324 Building Stormwater Runoff, Miscellaneous Stream #354 **ReClassification:**

Waste Type: Steam Condensate

Waste Description: According to the "Inventory of Miscellaneous Streams," Revision 3, the flow for stormwater runoff and steam condensate is less than 0.05 gallons per minute.

Site Code: 300-96 **Classification:** Accepted

Site Names: 300-96, 325 Building Steam Condensate, Miscellaneous Stream #707 **ReClassification:** Rejected (9/2/1998)

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a 132.1 centimeter (52 inch) diameter french drain constructed of concrete and covered with a steel lid. A 3.8 centimeter (1.5 inch) diameter pipe extends from the west wall of the 325 building to the french drain.

Waste Type: Steam Condensate

Waste Description:

Site Code: 300-97 **Classification:** Not Accepted (9/2/1998)

Site Names: 300-97, 325 Building Stormwater Runoff and Fire System Testing Water, Miscellaneous Stream #706 **ReClassification:**

Site Type: French Drain **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a drain that is covered by a rusted perforated steel plate, 0.46 meters (1.5 feet) square. The site drains a small asphalt pad and a pipe coming out of bottom of the fire system shed. The drain cover plate appears to be sealed to the asphalt. Therefore, it was not possible to determine the depth of the site.

Waste Type: Stormwater Runoff

Waste Description:

Site Code: 300-98 **Classification:** Not Accepted (9/2/1998)

Site Names: 300-98, 325 Building South Stairwell Drain, Miscellaneous Stream #264, 300-229 **ReClassification:**

Site Type: French Drain **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a 12.7 centimeter (5 inch) square floor drain at the bottom of a stairwell that drains stormwater from a leaky roof.

Waste Type: Stormwater Runoff

Waste Description: The site receives less than 0.038 liters (0.01 gallons) per minute of stormwater runoff.

Site Code: 300-99 **Classification:** Accepted
Site Names: 300-99, 325 Building Nitrogen Tank Blowdown Miscellaneous Stream #265, Injection Well #399-3 **ReClassification:** Rejected (9/2/1998)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The site is not visible without entering the confined space under the compressed gas storage loading dock. The loading dock has skirting around it, and therefore, the site is not visible. A limited field walkdown was performed for this site. No access could be gained to the site.

Waste Type: Water

Waste Description: The site received condensate blowdown from a liquid nitrogen tank. The tank has been removed.

Site Code: 300-100 **Classification:** Not Accepted (9/2/1998)
Site Names: 300-100, 325 Building Stormwater Runoff, Miscellaneous Stream #408 **ReClassification:**
Site Type: French Drain **Start Date:**
Site Status: Inactive **End Date:**

Site Description: The site drains stormwater from the chiller pad to the ground. The drain is covered with a 68.6 centimeter by 61 centimeter (27 inch by 24 inch) steel grate. The site is 22.9 centimeters - 25.4 centimeters (9 inches - 10 inches) deep and contains water just below the grating.

Waste Type: Stormwater Runoff

Waste Description:

Site Code: 300-101 **Classification:** Accepted
Site Names: 300-101, 326 Building Stormwater Runoff and Steam Condensate, Miscellaneous Stream #409 **ReClassification:** Rejected (9/2/1998)
Site Type: Depression/Pit (nonspecific) **Start Date:**
Site Status: Active **End Date:**

Site Description: The site is a roadway drain, with a 0.4 meter by 0.5 meter (1.3 foot by 1.7 foot) rectangular perforated steel cover. The cover is visible, but the structure is full of sand and gravel. The site drains stormwater from a loading dock and a large area of asphalt parking space. A steel pipe 3.7 meters (12 feet) away, on the side of the building, appears to be the steam condensate drain. Next to this pipe is a lock box that is marked with a "Radioactively controlled area" sign.

The steam condensate component for this site has been routed to the sanitary sewer. According to the "Inventory of Miscellaneous Streams", Revision 3, the site is active for stormwater only.

The disposal structure is a non-engineered structure.

Waste Type: Stormwater Runoff

Waste Description: Waste is also reported to be steam condensate. Lock box next to possible steam condensate line is marked with a warning sign: "Radioactively controlled area." The materials loaded at the loading dock are unknown, but no spills or unplanned releases are known.

Site Code: 300-102

Classification: Accepted

Site Names: 300-102, 328 Building Steam Condensate, Miscellaneous Stream #353

ReClassification: Rejected (12/15/1998)

Site Type: Injection/Reverse Well

Start Date:

Site Status: Inactive

End Date: 1998

Site Description: The site is an injection well that received steam condensate. The injection well is a 96 centimeter (38 inch) diameter structure with a heavy metal cover that has four holes in it. It is flush with the gravel surface surrounding it. According to the "Inventory of Miscellaneous Streams," Revision 3, the site is inactive, source abandoned.

Waste Type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters per minute (0.01 gallons per minute) of steam condensate only.

Site Code: 300-103

Classification: Not Accepted (9/2/1998)

Site Names: 300-103, 329 Building Stormwater Runoff, Miscellaneous Stream #422

ReClassification:

Site Type: French Drain

Start Date:

Site Status: Inactive

End Date:

Site Description: The site is a storm drain covered with a 63.5 centimeter by 45.7 centimeter (25 inch by 18 inch) steel grating that drains stormwater from the surrounding area. There are no contamination postings near the site.

Waste Type: Stormwater Runoff

Waste Description:

Site Code: 300-104

Classification: Not Accepted (9/2/1998)

Site Names: 300-104, 329 Building Stormwater Runoff, Miscellaneous Stream #546

ReClassification:

Site Type: French Drain

Start Date:

Site Status: Inactive

End Date:

Site Description: The site is a storm drain covered with a 63.5 centimeter by 45.7 centimeter (25 inch by 18 inch) steel grating that drains stormwater from the surrounding area. There are no contamination postings near the site.

Waste Type: Stormwater Runoff

**Waste
Description:**

Site Code: 300-105 **Classification:** Accepted
Site Names: 300-105, 331 Building Steam Condensate, Miscellaneous Stream #513, Pit U1 **ReClassification:** Rejected (9/2/1998)
Site Type: French Drain **Start Date:**
Site Status: Active **End Date:**
Site Description: The site is a steam pit. Several shut off valves are visible and a hatch cover provides access to the site. All locks have been removed from the valves.

Waste Type: Steam Condensate

**Waste
Description:**

Site Code: 300-106 **Classification:** Accepted
Site Names: 300-106, 331 Building Steam Condensate, Miscellaneous Stream #574 **ReClassification:** Rejected (9/2/1998)
Site Type: French Drain **Start Date:**
Site Status: Inactive **End Date:**
Site Description: The site is a drain line (not an injection well) that drains stormwater and possibly steam condensate from what appears to be a steam pipe near the drain. The site is not an injection well or a french drain. Water level in the drain was observed just below the top of the grating.

Waste Type: Steam Condensate

**Waste
Description:**

Waste Type: Stormwater Runoff

**Waste
Description:**

Site Code: 300-107 **Classification:** Not Accepted (9/2/1998)
Site Names: 300-107, 331 Building Stormwater Runoff, Miscellaneous Stream #447, Injection Well #32 **ReClassification:**
Site Type: French Drain **Start Date:**
Site Status: Active **End Date:**
Site Description: The site is a french drain constructed of concrete and covered with a steel lid. The drain has two 10.2 centimeter (4 inch) diameter pipes entering the drain at the bottom. Presumably, the site drains stormwater from drains located near two nearby entrances to the 331 building.

Waste Type: Stormwater Runoff

Waste Description:

Site Code: 300-108 **Classification:** Not Accepted (9/2/1998)

Site Names: 300-108, 331 Building Stormwater Runoff, Miscellaneous Stream #448, Injection Well #37 **ReClassification:**

Site Type: French Drain **Start Date:**

Site Status: Active **End Date:**

Site Description: The site is a stormwater french drain that drains the surrounding paved area and roof drains from the 331 building at a low point. There is no known contamination within the drainage area.

Waste Type: Stormwater Runoff

Waste Description:

Site Code: 300-109 **Classification:** Accepted

Site Names: 300-109, 333 Building Stormwater Runoff, Miscellaneous Stream #455 **ReClassification:** Interim Closed Out (8/20/2010)

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Active **End Date:**

Site Description: The site consisted of a 10-cm (4-in.) collection line and a french drain disposal system for stormwater collection and disposal north of the 333 Building. This system was designed and installed in 1990.

Waste Type: Stormwater runoff

Waste Description: The "Inventory of Miscellaneous Streams", Revision 3, states that the site receives less than 1.9 liters per minute (0.50 gallons per minute) of stormwater runoff only.

Site Code: 300-110 **Classification:** Accepted

Site Names: 300-110, 333 Building Stormwater Runoff, Miscellaneous Stream #456 **ReClassification:** Interim Closed Out (6/29/2010)

Site Type: Injection/Reverse Well **Start Date:**

Site Status: Inactive **End Date:**

Site Description: The site is a 0.41 meter diameter drain with a metal grate labeled "Internal Radioactive Contamination" due to its proximity to the WIDS Site 618-1 Burial Ground. The drain had a dirt bottom that is approximately 0.61 (2 feet) below the surface of the asphalt and an overflow line that drains to the process sewer.

Waste Type: Stormwater Runoff

Waste Description: The "Inventory of Miscellaneous Streams", Revision 3, lists the flow rate as less than 1.9 gallons per minute (0.50 gallons per minute). This document lists the stream as containing

stormwater only. The disposal structure is labeled as being internally contaminated.

Site Code: 300-111 **Classification:** Not Accepted (9/2/1998)
Site Names: 300-111, 337 Building Stormwater Runoff, Miscellaneous Stream #516 **ReClassification:**
Site Type: French Drain **Start Date:**
Site Status: Active **End Date:**
Site Description: The site is a french drain; a round concrete pipe 0.7 meters (2.25 feet) in diameter, at least 1.2 meters (4 feet) deep. Water covers the bottom, so the total depth was not determined. The site drains stormwater from the asphalt alley way used to access the trash and recycled cardboard pickup containers, and provide pedestrian access to the 337 Building. The miscellaneous streams report says this site is a "non-engineered structure" and "deleted" but it does not appear to be either case.

Waste Type: Stormwater Runoff
Waste Description: Site receives only stormwater runoff.

Site Code: 300-112 **Classification:** Accepted
Site Names: 300-112, 340 P-3 Pump Pit, Retention Process Sewer Pump Pit #3 French Drain, Miscellaneous Stream #428 **ReClassification:** Rejected (1/15/1999)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:** 1996
Site Description: The Pump Pit is an engineered structure with an entry hatch labeled "Non-Permit Confined Space". The drain is at the bottom of the pit. It has a perforated, circular cover that measures approximately 0.61 meters (2 feet) in diameter. The pumps and piping have been removed.

Waste Type: Water
Waste Description: When the site was active, it received flush water drainage and pump leakage. The source of the water was uncontaminated potable water. The flow rate was less than 0.038 liters (0.01 gallons) per minute.

Site Code: 300-113 **Classification:** Accepted
Site Names: 300-113, 340 Building Steam Condensate/ Water Heater Overflow, Miscellaneous Stream #341 **ReClassification:** Rejected (1/15/1999)
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Active **End Date:** 1996
Site Description: The drain is a 0.46 meter (18 inch) diameter metal pipe that extends slightly above grade. A 1.3 centimeter (0.5 inch) diameter pipe exits the building wall and terminates over the drain. The pipe is connected to a water heater overflow valve, that is inside the 340 Building. Before the steam utility was removed from the building, the drain received steam condensate.

Waste Type: Steam Condensate

Waste Description: The site received steam condensate before the steam was shut off in the building. When the site was active (steam condensate), the flow rate was less than 0.038 liters (0.01 gallons) per minute. Currently, the site is set up to receive overflow from the water heater located inside the 340 Building. The flow rate for this activity is unknown. The effluent from the water heater is nondangerous/nonradioactive potable water.

Site Code: 300-114 **Classification:** Accepted
Site Names: 300-114, 340A Building Steam **ReClassification:** Rejected (1/15/1999)
 Condensate, Miscellaneous Stream #427
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:** 1996
Site Description: Currently, there are no visual surface features. The drain area was backfilled with clean gravel when the steam system was removed from the building. The gravel over the drain is slightly darker than the other gravel in the area.

Waste Type: Steam Condensate

Waste Description: When the site was active, it received less than 0.038 liters (0.01 gallons) per minute of steam condensate.

Site Code: 300-115 **Classification:** Not Accepted (1/15/1999)
Site Names: 300-115, 340B Building Backflow **ReClassification:**
 Preventer Emergency Drain, Miscellaneous
 Stream #426
Site Type: Injection/Reverse Well **Start Date:**
Site Status: Inactive **End Date:** 1996
Site Description: Currently, there are no visible surface features. The drain was covered with clean gravel when the source was abandoned in 1996. The gravel over the drain is slightly darker than the other gravel in the area.

At least some component of the structure has been removed. The gravel would not cover the height of the exposed part of the structure. It may be that the lip of the structure was knocked into the drain or the entire drain may have been removed.

Waste Type: Water

Waste Description: The drain would have received nondangerous/nonradioactive (potable) water in the event of a failure of the service water backflow preventer. There has been no known failure of the backflow preventer. Thus, this site would not have received any discharge.

Site Code: 300-116 **Classification:** Accepted
Site Names: 300-116, 3506A Building Steam **ReClassification:** Rejected (12/15/1998)
 Condensate, Miscellaneous Stream #381