

0094250

DOE/RL-88-30 REVISION 20

HANFORD SITE WASTE MANAGEMENT UNITS REPORT

# SECTION

2 OF 5



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row of eight vent pipes is visible. They run perpendicular to the entrance road.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit received unknown amounts of sanitary sewage from the 1701-H Badge House (security checkpoint), the 1720-H Security Patrol Change Room, offices, and the 1709-H Fire Station. The sewage per capita is 130 liters (35 gallons) plus 20% for sludge.

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<b>Site Code:</b>	1607-H4	<b>Classification:</b>	Accepted
<b>Site Names:</b>	1607-H4, 1607-H4 Septic Tank and Associated Drain Field, 1607-H4 Sanitary Sewer System, 124-H-4, 1607-H4 Septic Tank	<b>ReClassification:</b>	Interim Closed Out (2/26/2001)
<b>Site Type:</b>	Septic Tank	<b>Start Date:</b>	1948
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1965
<b>Site Description:</b>	This site has been remediated and closed out. The unit included a septic tank, tile field, and associated piping. The system had a six-person capacity and an average detention period of 24 hours. The tile field was constructed of 10-centimeter (4-inch) pipe, 2.4 meters (8 feet) in length.		

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit received an unknown amount of sanitary sewage from the 181-H River Pumphouse. The sewage per capita is 130 liters (35 gallons) plus 20% for sludge.

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## 100-HR-2

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**Site Code:** 100-H-2 **Classification:** Accepted  
**Site Names:** 100-H-2, Buried Thimble Site, Thimble Pit **ReClassification:** Interim Closed Out (3/1/2001)  
**Site Type:** Burial Ground **Start Date:** 1953  
**Site Status:** Inactive **End Date:**  
**Site Description:** This site has been remediated and closed out.  
**Waste Type:** Equipment  
**Waste Description:**

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**Site Code:** 100-H-15 **Classification:** Not Accepted (8/8/1997)  
**Site Names:** 100-H-15, Possible Septic Tank & Tile Field, 100-H-25 **ReClassification:**  
**Site Type:** Septic Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site appears in a photograph taken in 1950 as a rectangular site enclosed by a white rail fence. In the photograph, a line of disturbed soil is visible extending from the east end of the fenced area to a point near the southeast corner of the 151-H Electrical Substation. It appears to terminate at a manhole associated with the 1607-H1 septic tank.

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**Site Code:** 100-H-16 **Classification:** Accepted  
**Site Names:** 100-H-16, 184-H Salt Dissolving Pit and Brine Pump House, H Area Power House Brine Pit, 184-H Brine Pit **ReClassification:** Rejected (8/12/1997)  
**Site Type:** Sump **Start Date:** 1948  
**Site Status:** Inactive **End Date:**  
**Site Description:** The salt dissolving pits and brine pump pit were part of a single below-grade concrete structure that provided brine for the 184-H Powerhouse. No evidence of the structure can be seen today.

The salt dissolving pits each had inner dimensions of 4.3 meters (14 feet) long by 2.4 meters (8 feet) wide by 2.8 meters (9.25 feet) tall. They had a design high water line 2.4 meters (7.75 feet) from the pit bottom. An overflow slot that connected the two dissolving pits was located 0.3 meters (1 foot) above the high water line. The bottom of each pit was filled with a 12.7 centimeter (5 inch) layer of 1.3 to 2.6 centimeter (1/2 to 1 inch) gravel topped by a 17.8 centimeter (7 inch) layer of 0.3 to 0.6 centimeter (1/8 to 1/4 inch) gravel. The dissolving pits each had a 2.4 meter (8 feet) by 0.9 meter (3 feet) opening at the top for receiving salt. each pit had a capacity of 23,600 kilograms (52,000 pounds) of salt.

The brine pump pit is located adjacent to the two salt dissolving pits. The pit was 3.3 meters (10.67 feet) long by 2.2 meters (7.33 feet) wide by 2.1 meters (7 feet) deep. It held two pumps and associated piping (all brass) for the brine system. The floor of the pump pit sloped toward a 46 by 46 by 46 centimeters (18 by 18 by 18 inches) sump in a corner. A sump pump discharged to a nearby french drain (100-H-32).

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**Waste Type:** Demolition and Inert Waste

**Waste Description:** The site was probably demolished in place. No documentation has been located related to cleanup. It is not known if salt cake was left in the structure.

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**Site Code:** 100-H-27 **Classification:** Not Accepted (8/8/1997)

**Site Names:** 100-H-27, 100-H Area Patrol Headquarters Storm Runoff Ditch **ReClassification:**

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

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

**Site Description:** The site is a ditch that receives stormwater runoff from a nearby asphalt parking areas. The ditch runs northward from a 15 centimeter (6 inch) vitrified clay pipe that discharged at a headwall. A site visit in March 1999 found the ditch almost completely filled with tumbleweeds. The ditch is not marked or posted.

**Waste Type:** Stormwater Runoff

**Waste Description:**

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**Site Code:** 100-H-32 **Classification:** Accepted

**Site Names:** 100-H-32, 184-H Brine Pit French Drain **ReClassification:** Rejected (1/30/2003)

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

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

**Site Description:** There is no visual evidence of a french drain at this location. It was likely removed with the associated brine pit (100-H-16).

**Waste Type:** Chemicals

**Waste Description:** The french drain received any water or brine that collected in the 184-H Brine Pit Sump. The liquid would be expected to have contained high concentrations of sodium chloride (salt).

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**Site Code:** 100-H-37 **Classification:** Accepted

**Site Names:** 100-H-37, 100-H Mud Dauber Contamination Area **ReClassification:** Interim Closed Out (8/5/2010)

**Site Type:** Contamination Migration **Start Date:** 2002

**Site Status:** Inactive **End Date:** 2003

**Site Description:** The site consist of a set of radiologically dispersed contamination areas caused by mud dauber wasp nesting activity. During cleanup of the 105-H Fuel Storage Basin (FSB) while removing and processing dirt and sediment from the lower 38 cm (15 in) of the FSB, elevated airborne radioactivity levels that exceeded posting criteria were created. One of the corrective actions was to maintain at least 5.1 cm (2 in) of water on the basin floor. The mud daubers utilized the large source of mud on the 105-H Fuel Storage Basin (FSB) for construction of their tube nests. The mud daubers transported the contaminated mud from the FSB into the areas surrounding the

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reactor. The site contained 43 areas where contaminated nests were located. The majority of the areas contained more than one nest, some were greater than ten nests.

**Waste Type:** Soil

**Waste Description:** The waste is contaminated mud dauber nests and other materials depending on the where the nest(s) were placed, including electrical utility poles, manholes, and other structures. The mud dauber contamination limits: removable - beta-gamma 1000 dpm/100cm<sup>2</sup>; alpha 20 dpm/100cm<sup>2</sup>. Total - beta-gamma 5000 dpm/100cm<sup>2</sup>; alpha 100 dpm/100cm<sup>2</sup>.

The contaminants of potential concern include beta-gamma emitting isotopes C-14, Ni-63, H-3, Co-60, Sr-90, Cs-137, Eu-152, Eu-154. The alpha emitting isotopes would be Pu-239/240, and Am-241. RCF samples 11261, 11262, 11263, 11259, 11260 were used to determine the radioactive isotopes for the site.

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<b>Site Code:</b>	100-H-38	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-H-38, Trenches and Pit Southwest of 105-H	<b>ReClassification:</b>	
<b>Site Type:</b>	Burial Ground	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site consists of an area approximately 3 acres in size and is marked by ground scars resembling trenches and pits. The site is situated along a natural depression on the western boundary of the H Area perimeter fence.		

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<b>Site Code:</b>	100-H-39	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-H-39, Possible Thimble Pit Locations, Potential Thimble Burial Site, Orphan Site H-007	<b>ReClassification:</b>	Rejected (5/3/2010)
<b>Site Type:</b>	Trench	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site is four possible thimble pit or trench locations. Historical documents indicate areas that may have been used to bury thimbles or materials related to the removal of thimbles in 100-H Area.		

**Waste Type:** Equipment

**Waste Description:** Radioactive Thimbles may be buried at these locations. The 100-H-2 waste site is an analogous site. There are two types of radioactive waste associated with Thimbles; neutron activated steel and aluminum material containing cobalt-60 and surface contaminated waste primarily with zinc-65.

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<b>Site Code:</b>	100-H-40	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-H-40, Disposal Pit	<b>ReClassification:</b>	No Action (5/20/2010)
<b>Site Type:</b>	Trench	<b>Start Date:</b>	

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

**Site Description:** The site consists of a pit used for the disposal of maintenance shop waste.

**Waste Type:** Soil

**Waste Description:** Contaminants of potential concern may include lead, ICP metals, TPH, PAH, PCBs. This site may contain maintenance shop waste, e.g. paint cans and auto repair waste (Denton, L interview 1990).

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**Site Code:** 100-H-55 **Classification:** Accepted

**Site Names:** 100-H-55, Cast Iron Pipe **ReClassification:** Rejected (2/25/2010)

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

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

**Site Description:** The site has been evaluated and found to be a valve access can not a pipe. Originally, this feature was reported to be a 20 cm (8 in) diameter cast iron pipe protruding 30 cm (12 in) from the ground at an angle (08082007-038-630). The pipe was discovered during an Orphan Sites Field Evaluation conducted in August of 2007 (EL-1628 p. 2). Geophysics was conducted in February 2009, and the results indicate that the visible segment of the 20 cm (8 in) diameter cast iron pipe is not part of an intact system (0596705). The pipe extends under the road at a depth of 0.8 m (2.6 ft) and terminates at the edge of the other side of the road.

**Waste Type:** Soil

**Waste Description:** The waste consists of the pipe and underlying soil. Since the pipe can not be related to any particular human activity, the contaminants of potential concern are unknown.

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**Site Code:** 100-H-58 **Classification:** Accepted

**Site Names:** 100-H-58, Mud Dauber Nests On Active Powerlines In H Area **ReClassification:**

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

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

**Site Description:** The site consists of contaminated mud dauber (wasps) nests in the 100-H- Area.

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**Site Code:** 118-H-1 **Classification:** Accepted

**Site Names:** 118-H-1, 100-H Burial Ground No. 1, 100-H-1, See Subsites **ReClassification:**

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

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

**Site Description:** The waste site was a mixed solid waste burial ground. The overall site runs east and west. There are numerous trenches of various dimensions, generally running north and south. The boundaries are permanently marked with concrete posts numbered H-65-1 through H-65-23.

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The site has been divided into two subsites; 118-H-1:1 100-H-Burial Ground Trenches and Sorting Cells and 118-H-1:2 Anomaly Staging Area and Fuel Bunker.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site received activated components and miscellaneous solid wastes (surface contaminated). Typical examples of activated components are aluminum dummies and process tubing, steel gun barrels and step plugs, thermocouple wires and balls from the 3X safety system. Portions of several horizontal control rods were buried in slit trenches near the southwest corner of the site. Typical examples of surface contaminated materials are hand tools, rags and sweeping compound, light bulbs, sheets of plastic and paper. This type of material was usually sealed in cardboard boxes and placed in separate trenches from the activated components.

**SubSites:**

**SubSite Code:** 118-H-1:1

**SubSite Name:** 118-H-1:1, 100-H-1 Burial Ground trenches

**Classification:** Discovery

**ReClassification:**

**Description:** The 118-H-1:1 subsite consists of the original burial ground (trenches A-F) and sorting cells (1-3). In general, all trenches and sorting cells are angled from north to south. The site is located about 396 m (1,300 ft) southwest of the 105-H Building.

The trenches (A-F) were the primary solid waste burial ground for the 100-H Area. Mixed solid waste such as lead bricks, process tubing, oil drums, and miscellaneous reactor hardware were disposed in the trenches between 1949 and 1965. The trenches were backfilled to grade with 6 feet of soil cover. The sorting cells were created during remediation of the burial ground in 2008 and were used to determine the presence of suspect spent nuclear fuel and anomalies.

The burial ground trenches received activated components and miscellaneous solid wastes (surface contaminated). Typical examples of activated components are aluminum dummies and process tubing, steel gun barrels and step plugs, thermocouple wires and balls from the 3X safety system. Portions of several horizontal control rods were buried in slit trenches near the southwest corner of the site. Typical examples of surface contaminated materials are hand tools, rags and sweeping compound, light bulbs, sheets of plastic and paper. This type of material was usually sealed in cardboard boxes and placed in separate trenches from the activated components.

**SubSite Code:** 118-H-1:2

**SubSite Name:** 118-H-1:2, Anomaly Staging Areas and Fuel Storage Bunker

**Classification:** Discovery

**ReClassification:**

**Description:** The 118-H-1:2 subsite consists of the two anomaly staging areas and a fuel bunker. The areas were delineated using yellow and magenta rope with radiological postings. The fuel bunker was located north of the 118-H-1:1 Trench E. The two anomaly staging areas were just west of 118-H-1:1 (one was north of Trench F and one was south).

All anomalous items found in the 118-H-1:1 Burial Ground were staged in the 118-H-1:2 anomaly staging area. The anomalies stored there included lead bricks, process tubing, oil

drums, and miscellaneous reactor hardware. The fuel bunker was constructed to store pieces of reactor fuel prior to characterization and dismantling.

118-H-1:1 anomalies include a breached pipe with a white solid inside, a forklift battery, suspect hydraulic oil, a damaged drum containing liquid, grey waxy material, oil stained soil, and a deteriorated drum. No spent nuclear fuel was discovered at the 118-H-1:1 Burial Ground.

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<b>Site Code:</b>	118-H-2	<b>Classification:</b>	Accepted
<b>Site Names:</b>	118-H-2, H-1 Loop Burial Ground, 100-H Burial Ground No. 2, P-13 Test Loop	<b>ReClassification:</b>	Interim Closed Out (11/15/2010)
<b>Site Type:</b>	Burial Ground	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1965
<b>Site Description:</b>	The site runs east and west and contains two in-line concrete vaults. Both vaults were covered to grade with approximately 3.7 meters (12 feet) of soil. The site boundaries are permanently marked with concrete posts numbered H-65-24 through H-65-29.		
<b>Waste Type:</b>	Equipment		
<b>Waste Description:</b>	The east vault received one stainless steel double tube removed from the reactor in 1955 after several years of irradiation. Within the same area there are also solutions which were used to clean the tube, and miscellaneous capsule components. The west vault was constructed in 1958 and used during deactivation of the 105-H Reactor Building for disposal of a small amount of contaminated pipe.		

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<b>Site Code:</b>	118-H-3	<b>Classification:</b>	Accepted
<b>Site Names:</b>	118-H-3, Construction Burial Ground	<b>ReClassification:</b>	
<b>Site Type:</b>	Burial Ground	<b>Start Date:</b>	1953
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1957
<b>Site Description:</b>	The site's shape is an uneven polygon with sides measuring approximately 30 by 114 by 95 by 122 meters (100 by 375 by 313 by 400 feet). It runs in a northeast to southwest direction and is permanently marked with concrete posts numbered H-81-1 through H-81-13. There are reportedly only two trenches at this site and they have been covered to grade with 1.8 meters (6 feet) of soil.		
<b>Waste Type:</b>	Equipment		
<b>Waste Description:</b>	The site contains sections of contaminated 41-centimeter (16-inch) diameter pipe used as chutes for removal of thimbles from the 105-H Building during outages, reactor hardware, and components from reactor modification programs.		
	The COCs identified through process knowledge are listed in the 100 Area Remedial Action Sampling and Analysis Plan and are: cobalt-60, cesium-137, europium-152, europium-154, strontium-90, uranium-233/234, and uranium-238.		

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<b>Site Code:</b>	118-H-4	<b>Classification:</b>	Accepted
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**Site Names:** 118-H-4, Ball 3X Burial Ground      **ReClassification:**

**Site Type:** Burial Ground      **Start Date:** 1953

**Site Status:** Inactive      **End Date:** 1953

**Site Description:** The site consists of one trench running north-south. Concrete markers mark the north and south ends. The trench was covered to grade with approximately 1.5 meters (5 feet) of soil.

**Waste Type:** Equipment

**Waste Description:** The site contains thimbles, guides, and radioactive materials removed from the 100-H Reactor in 1953.

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**Site Code:** 118-H-5      **Classification:** Accepted

**Site Names:** 118-H-5, 105-H Thimble Pit      **ReClassification:** Interim Closed Out (1/5/2010)

**Site Type:** Burial Ground      **Start Date:** 1953

**Site Status:** Inactive      **End Date:** 1960

**Site Description:** The 118-H-5, 105-H Thimble Pit, was a mixed solid waste burial ground that operated in 1953 to receive a single experimental thimble assembly and was reopened in 1960 to receive contaminated soil from the original 105-H Pluto Crib Site (116-H-4 waste site). The 105-H Pluto Crib received contaminated cooling water from reactor process tubes containing ruptured fuel elements.

**Waste Type:** Equipment

**Waste Description:** The site contains a thimble assembly from the B Experimental Hole, 105-H X-level, buried in 1953. In 1960, the 105 Pluto Crib (116-H-4) was excavated due to the construction of the 105-H Confinement System and placed in this site.

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**Site Code:** 126-H-1      **Classification:** Accepted

**Site Names:** 126-H-1, 184-H Powerhouse Ash Pit, 188-H Ash Disposal Area      **ReClassification:** Rejected (6/25/1998)

**Site Type:** Coal Ash Pit      **Start Date:** 1948

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

**Site Description:** The 126-H-1 site is a large ash disposal pit and ash pile. The ash pit is approximately 76.2 meters (250 feet) long, 76.2 meters (250 feet) wide and 3.7 meters (12 feet) deep. The pit is divided into two parts by a 2.4 meter (8 foot) berm that runs east to west. The floor of the ash pit is evenly covered with ash and cinder. Some light vegetation is evident. An ash pile is located just south of the pit. The pile measures approximately 25 meters (82.0 feet) by 60 meters (196.9 feet).

**Waste Type:** Ash

**Waste Description:** Unknown amounts of coal ash were sluiced to the pit with raw river water. Ash from other Hanford ash pits has been analyzed using the EP Toxicity Test in accordance with WAC 173-303, and no hazardous materials were found.

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<b>Site Code:</b>	128-H-1	<b>Classification:</b>	Accepted
<b>Site Names:</b>	128-H-1, 100-H Burning Pit, 100-H Burning Pit No. 1	<b>ReClassification:</b>	
<b>Site Type:</b>	Burn Pit	<b>Start Date:</b>	1949
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1965

**Site Description:** The site is in a large depression or pit that appears to have been a borrow area. The western half of the site is posted with signs reading "Warning, Do Not Deposit Salvable (sic) Material." A berm runs north-south near the east end of the site. In the area surrounded by the signs, there is some scattered surface debris including: wood, glass, metal, wire, cable, and clay pipe. There are also fragments of charred material throughout this area. In the space between the area delineated by signs and the berm, visible surface debris includes scattered concrete and metal. Fragments of charred material are also found throughout this area. The majority of the surface debris is found between the berm and the eastern edge of the site. In this area, the debris includes: wood, metal, chunks of concrete, what appear to be solvent and spray paint cans, transite and large pieces of metal on wooden pallets. There are also fragments of charred material in this part of the site as well as soil gas tubes. At the eastern end of the site, debris is found on the hillside south of the depression. Also on the hillside is what appears to be an earthen ramp and a pit filled with tumbleweeds. Debris is visible through the tumbleweeds and includes cans, concrete and pails or small drums.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents. The burning of solvents and experimental burns have been reported, by a past 100-H Area employee, to have taken place along the east side of the site.

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<b>Site Code:</b>	128-H-2	<b>Classification:</b>	Accepted
<b>Site Names:</b>	128-H-2, 100-H Burning Ground #2	<b>ReClassification:</b>	No Action (1/25/2010)
<b>Site Type:</b>	Burn Pit	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1965

**Site Description:** The site consisted of a depression and appeared as a graded rocky area with minimal soil. It was originally thought to be a burning ground. During a March 2000 visit, no evidence of burning was noticed but the following surface debris was observed: wood, metal cables, cans, lighting fixtures, concrete and a battery. Visible debris was scattered throughout the site. The depression cut into the hillside appeared to be a former borrow area. The ground surface was rough and showed evidence of heavy equipment.

In 2009 a site evaluation of historical photographs, field observations of surface area features, geophysical data, historical research, and confirmatory sampling data concluded that the site was a borrow area and not a burning ground.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site received combustible materials such as vegetation, office waste, paint waste, and chemical solvents.

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<b>Site Code:</b>	128-H-3	<b>Classification:</b>	Accepted
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**Site Names:** 128-H-3, 100-H Burning Ground #3      **ReClassification:** No Action (1/25/2010)  
**Site Type:** Burn Pit      **Start Date:**  
**Site Status:** Inactive      **End Date:**  
**Site Description:** This site is a pit that resembles a trench. There is little evidence of burning with the exception that some of the rocks are charred and show signs of exposure to fire. The pit was almost completely filled with tumbleweeds.

**Waste Type:** Ash

**Waste Description:**

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**Site Code:** 132-H-2      **Classification:** Accepted  
**Site Names:** 132-H-2, 117-H Filter Building Site      **ReClassification:** Interim Closed Out (8/1/2006)  
**Site Type:** Burial Ground      **Start Date:** 1961  
**Site Status:** Inactive      **End Date:** 1965  
**Site Description:** The site has been remediated and interim closed.  
The structure had been demolished in-situ in 1984. The site now resembles a gravel parking lot.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Total radionuclide inventory in the 117-H Building was estimated to be 0.41 millicuries. The radionuclides comprising this figure are tritium, carbon-14, cobalt-60, cesium-137, strontium-90, europium-154, europium-152, and plutonium-239/240. Of these radionuclides, strontium-90 is the most restrictive in the Allowable Residual Contamination Level (ARCL) calculations.

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**Site Code:** 1607-H1      **Classification:** Accepted  
**Site Names:** 1607-H1, 1607-H1 Septic Tank and Associated Drain Field, 124-H-1, 1607-H1 Sanitary Sewer System, 1607-H1 Septic Tank      **ReClassification:**  
**Site Type:** Septic Tank      **Start Date:** 1948  
**Site Status:** Active      **End Date:**  
**Site Description:** The septic tank has a 50-person capacity, is constructed of concrete and measures 4.6 by 1.7 by 4.4 meter (15 by 5.5 by 14.5 feet).  
The tile field is constructed of either 10-centimeter (4-inch) vitrified pipe, concrete pipe, or drain tile, 2.4 linear meters (8 feet) per capita. It measures 17.1 by 15.2 meters (56 by 50 feet) and is oriented on a northeast-southwest line from the tank.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit received sanitary sewage from 151-H and 105-H Buildings. The flow rate to this unit was estimated to be 503 liters/day (140 gallons/day).

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**Site Code:** 600-151 **Classification:** Accepted

**Site Names:** 600-151, Dumping Areas 50 Yards and 200 Yards Downstream of River Mile 14, Military Installation NW of 100H Area **ReClassification:**

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

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

**Site Description:** The site is the debris remaining from a military installation that was located northwest of the 100H Area. A field investigation of the site was performed on August 13, 1996 and is the basis for the site description. A paved road enters the site from the southwest. Debris is found throughout the area and includes: a partially buried washtub, tin cans, a stove pipe, empty fuel and solvent cans painted "army green", broken concrete and transite, an old stove, wire fencing material, and a large pile of steel fence posts (screw in type for barbed wire fencing). There is evidence of ground disturbance at the site including three pits. A vertical culvert was observed at grade level extending into the ground. The culvert interior was obscured due to the presence of tumbleweeds. Several areas of stressed vegetation were also observed in the area.

**Waste Type:** Barrels/Drums/Buckets/Cans

**Waste Description:** One 208 liter (55 gallon) drum, several 19 liter (5 gallon) cans, and several 0.95 liter (1 quart) cans were noted at the site. The 19 liter (5 gallon) containers appeared to be the type that would hold fuel such as gasoline or kerosene. Empty paint cans that contained "army green" paint are also present.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** A large pile of broken concrete, electrical wiring, piping and pieces of wood was observed at the site.

**Waste Type:** Equipment

**Waste Description:** A large pile of steel fence posts was observed at the site.

**Waste Type:** Soil

**Waste Description:** Several areas of stressed vegetation were found at the site.

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**Site Code:** 600-152 **Classification:** Accepted

**Site Names:** 600-152, Military Septic Tanks **ReClassification:** Interim Closed Out (4/1/2010)

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

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

**Site Description:** The waste site consisted of an underground septic tank and several surface features, including three in-line concrete covers and two manholes, which allowed access to the septic tank. Underground piping connected the surface features and the septic tank.

**Waste Type:** Sanitary Sewage

**Waste Description:** The tanks remain in place and may contain remnants of septage. The contents are labeled radioactive here because sampling showed gross beta at 72 pCi/liter (see field work discussion)

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for comparisons with Hanford Site background). The site was posted with Underground Radioactive Material signs.

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**Site Code:** 600-258 **Classification:** Not Accepted (5/31/2001)

**Site Names:** 600-258, RCRA General Inspection **ReClassification:**  
Summary Sheet HIRIVFY99, Item #1

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

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

**Site Description:** The site is surface debris from pre-Hanford activities. It is on the riverbank, facing the White Bluffs, and is covered with vegetation matching the surrounding terrain.

The debris on the ground is mostly old metal wire used to wrap wooden irrigation pipes. It appears to have been pushed over the edge as a way to clean up the fields. A small concrete structure is at the northern edge of the site. The structure appears to have been filled in with dirt, although the dirt could have been piled on top of the cover, posing a cave-in hazard. The debris is very scattered over the length of the site

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The material consists of rusted metal wire used to wrap wooden irrigation pipes, old bedsprings, food cans, a small concrete box (filled in with soil), and a little broken glass.

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**100-IU-1**

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**Site Code:** 600-41 **Classification:** Accepted  
**Site Names:** 600-41, H 70 Anti-Aircraft Artillery (AAA) Site **ReClassification:** Rejected (4/11/2002)  
**Site Type:** Military Compound **Start Date:** 1951  
**Site Status:** Inactive **End Date:** 1963  
**Site Description:** The unit is an abandoned Military Installation (H-70) consisting of a few covered foundations and cleared areas. Some man-made mounds were present. There is a paved road and a few trees at the site.

During the April 16 and April 19, 1999, visits, two earthen mounds were observed as well as the remains of several foundations. The site is overgrown with approximately 0.9 meter (3 foot) tall sagebrush, making it difficult to discern either features or the edges of the site. There are several opens areas covered with cheatgrass. Scattered pieces of metal, concrete, glass and transite were observed. A burn pit/dump had traces of burned wood, glass and transite. A burrow going into the center of the dump also shows buried glass.

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**Site Code:** 600-42 **Classification:** Accepted  
**Site Names:** 600-42, H 71 Anti-Aircraft Artillery (AAA) Site **ReClassification:** Rejected (4/11/2002)  
**Site Type:** Military Compound **Start Date:** 1951  
**Site Status:** Inactive **End Date:** 1963  
**Site Description:** The site is an abandoned military installation. The structures have been removed. The site is accessed by a northeast trending primitive road that runs through it. Berms run along the south side of this road and the remains of barbed wire fences can be found on either side. Well 699-68-105 is found near the northern edge of the site. The marker for this well is a good landmark. Most of the evidence of the site is found on the north side of the road.

During the April 16, 1999, visit, evidence of a small tile field was found. It appeared as though the septic tank associated with the tile field has been removed or has collapsed. A pit that could have housed a second septic tank was found on the south side of the road that runs through the site. No evidence of a second tile field was found. A concrete walkway and a rock walkway were found. Wood debris, glass and concrete chunks were found, as well as a metal lid stamped "120 MM GUN" and "CONT M79A." An approximately 1.2 meter (4 foot) by 2.4 meter (8 foot) underground bunker was discovered. Its wooden roof is collapsing and presents a physical hazard. The depth of the bunker could not be estimated. Numerous areas with little or no vegetation were also observed around the site. Evidence of an old orchard can be found north of the site. The orchard can be seen in photo # 02646. Within the old orchard is an earthen mound with vegetation growing on its sides but not on its crown.

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**Site Code:** 600-43 **Classification:** Accepted  
**Site Names:** 600-43, McGee Fish Farm **ReClassification:** Rejected (4/11/2002)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

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**Site Description:** The unit is an abandoned commercial fish farm. The fish ponds have been backfilled and revegetated. A site visit in 1999 found a moderate amount of miscellaneous debris, wire and automobile parts strewn around the area near where the fish tanks had been located.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The unit waste includes broken plastic pipe, plastic sheeting, wood, metal, glass debris and an abandoned vehicle.

**Site Code:** 600-44 **Classification:** Accepted  
**Site Names:** 600-44, Herbicide/Pesticide Empty Container Pile, Enyert Well Empty Pesticide Container Dump, 600-68 **ReClassification:** Deleted From NPL (7/8/1998)

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

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

**Site Description:** During the Riverland Expedited Response Action, a visual inspection of the area found several empty aldrin and dieldrin herbicide/pesticide containers lying on the surface. The containers were rusty five gallon and one gallon cans covering an area of approximately 20.90 meters squared (225 square feet). The condition of the containers suggested that they were placed there after Hanford operations began. However, the site is located on an old abandoned homestead about 150 meters (500 feet) east of the commercial vineyard on the west side of the cold Creek Road.

**Waste Type:** Barrels/Drums/Buckets/Cans

**Waste Description:** The site waste includes empty pesticide and herbicide containers, and debris piles from the homestead.

**Site Code:** 600-45 **Classification:** Accepted  
**Site Names:** 600-45, Transite and Metal Debris Pile **ReClassification:** Rejected (4/11/2002)  
**Site Type:** Dumping Area **Start Date:** 1951  
**Site Status:** Inactive **End Date:** 1964

**Site Description:** The site is not marked or posted. The unit consisted of piles of debris scattered on the ground surface. The unit covered approximately 500 square meters (5,382 square feet) that ended at a cliff. The material has been removed.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The unit waste includes broken transite shingles, pallet banding straps, exhaust stack made from drums, miscellaneous military food cans and a couple of drums that were rolled off the cliff.

**Site Code:** 600-101 **Classification:** Accepted  
**Site Names:** 600-101, RRCWP, Riverland Railroad Car Wash Pit **ReClassification:** Deleted From NPL (7/8/1998)  
**Site Type:** Depression/Pit (nonspecific) **Start Date:** 1945

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**Site Status:** Inactive **End Date:** 1963

**Site Description:** During the Expedited Response Action cleanup activities, the site resembled a concrete trench. Excavations were made to uncover the pits for sampling. The rail road car cleaning pits were about 1 meter (3 feet ) deep and 2 meters (6 feet) wide. Following remediation activities, the pits were backfilled to grade.

**Waste Type:** Water

**Waste Description:** The site was used as a steam cleaning and low-level decontamination station for locomotive engines and cars used at Hanford.

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**Site Code:** 600-102 **Classification:** Accepted

**Site Names:** 600-102, 600 AMBS, 600 Area Army Munitions Burial Site **ReClassification:** Deleted From NPL (7/8/1998)

**Site Type:** Burial Ground **Start Date:** 1971

**Site Status:** Inactive **End Date:** 1976

**Site Description:** The site consisted of a shallow excavation area that contained a wooden crate used to bury emergency supplies of explosives and munitions used during the 1970's for military exercises (Smith & Stanley, 1993). The excavated area was approximately 0.61 meters (2 feet) wide by 0.91 meters (3 feet) long. The explosives were removed in 1986. The excavation was backfilled in 1993.

**Waste Type:** Ordnance

**Waste Description:** The unit received military explosives as follows: 6 gun blast simulators, Model 110, dated October 1953; 78 boxes (packed 5 to a box) of fuse ignitors; Model M60, Lot KYC-1, dated May 1960; one trip flare, Model M49; one can containing 50 nonelectrical blasting caps, marked "ARMY"; 43 electrical blasting caps; ~500 ft of time fuse; ~200 ft of detonating cord; and remnants of one grenade or artillery simulator.

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**Site Code:** 600-140 **Classification:** Not Accepted (1/27/1998)

**Site Names:** 600-140, Gunny Sacks South of H-70 Antiaircraft Site **ReClassification:**

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

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

**Site Description:** The site is partially buried empty gunny sacks that appear to have been abandoned. The site was found on 01/11/95 during the Riverland field investigation.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The sacks were constructed of natural fibers.

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**Site Code:** 600-141 **Classification:** Not Accepted (1/27/1998)

**Site Names:** 600-141, Barrels South of H-70 Antiaircraft Site **ReClassification:**





**Waste**            The site was 11 old herbicide cans (2,4-D) that had some soil and liquid (in one can) remaining.  
**Description:**

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**100-IU-2**

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**Site Code:** 600-5 **Classification:** Accepted**Site Names:** 600-5, White Bluffs Waste Oil Dump,  
Asphalt Heliport **ReClassification:****Site Type:** Dumping Area **Start Date:****Site Status:** Inactive **End Date:**

**Site Description:** The site consists of a circular asphalt or heavy oil area 4.6 meters (15 feet) in diameter, and an asphalt or heavy oil ditch 7.6 meters (25 feet) long, 38 centimeters (15 inches) wide and 2.5 centimeters (1 inch) deep near and to the southwest. Also located at the site is a metal flag about 46 centimeters (18 inches) long fastened to a 1.3-centimeter (1/2-inch) steel pipe. A 10-centimeter (4-inch) diameter pipe is stuck end wise in the center of the pad and flush with the surface. The surrounding area has many homestead type dumps. The asphalt or heavy oil material which makes up the pad and ditch does not appear to contain gravel, making its appearance different than that of typical roadway type asphalt surfaces. It is unknown whether the pad and ditch were planned construction or the result of the dumping of a heavy oil type substance; however, they appear to have been planned.

**Waste Type:** Oil**Waste Description:** The site contains an asphalt or a heavy oil type substance.

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**Site Code:** 600-52 **Classification:** Accepted**Site Names:** 600-52, White Bluffs Surface Basin **ReClassification:** No Action (11/20/2003)**Site Type:** Drain/Tile Field **Start Date:****Site Status:** Inactive **End Date:**

**Site Description:** The site has been evaluated and determined to meet remedial action objectives. The evaluation supports reclassification.

The site was a depression.

**Waste Type:** Process Effluent

**Waste Description:** Nitric and hydrofluoric acids were discharged to the nearby Pickling Acid cribs. Sampling indicated slightly elevated levels of chrome and chloride when compared to background samples. Generally, the acid was neutralized prior to disposal, but may not have been completely neutralized prior to disposal.

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**Site Code:** 600-98 **Classification:** Accepted**Site Names:** 600-98, East White Bluffs City Landfills,  
East White Bluffs Dump and East White  
Bluffs Dump #2, East White Bluffs  
Landfill, EWBCL **ReClassification:** No Action (8/17/2004)**Site Type:** Sanitary Landfill **Start Date:** 1850**Site Status:** Inactive **End Date:** 1943

**Site Description:** This site consisted of two unlined, pre-Hanford landfills. A small amount of scattered surface debris (cans, glass and wood) was visible at dump #1. Dump area #2 was an area of gravel ridges and surface scars. The Technical Baseline Report stated that this area was a dumping area that had been bulldozed.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Both sites were used to dispose of industrial and domestic wastes common to the time that it was being used. Surface debris found around the East White Bluffs Dump included cans, glass and wood. Surface debris found the East White Bluffs Dump #2 included wood, metallic, domestic (pots, bowls, and glassware), and industrial debris (cables and plywood sheets). The sites contain no known radioactive constituents.

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<b>Site Code:</b>	600-99	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-99, JA Jones 2, J. A. Jones #2, JA JONES2	<b>ReClassification:</b>	No Action (9/12/2003)
<b>Site Type:</b>	Burial Ground	<b>Start Date:</b>	1948
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1955

**Site Description:** The site has been reclassified and does not require remediation.

**Waste Type:** Construction Debris

**Waste Description:** This site contained minor construction equipment used by the J. A. Jones Construction Company, including wood scraps, concrete, and some metallic waste. However, the excavation records indicate that the site contents were removed to the 200 Areas Burial Grounds in 1971 because of radioactive contamination in the landfill.

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<b>Site Code:</b>	600-100	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-100, White Bluffs Landfill, White Bluffs City Landfill, WBL, White Bluffs City Dump, 600-119	<b>ReClassification:</b>	
<b>Site Type:</b>	Sanitary Landfill	<b>Start Date:</b>	1850
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1943

**Site Description:** The site is an unlined excavation that received industrial, commercial, domestic and farm wastes.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site was used for normal commercial and domestic wastes at the time. It contains no known radioactive constituents. Per BHI-00049, the site was used for disposal of industrial, commercial, and domestic wastes, cans, bottles, and farm debris.

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<b>Site Code:</b>	600-120	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-120, White Bluffs Spare Parts Burn Pit, Spare Parts Burn Pit	<b>ReClassification:</b>	
<b>Site Type:</b>	Burn Pit	<b>Start Date:</b>	1943

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**Site Status:** Inactive **End Date:** 1948  
**Site Description:** The site is a burn pit that was used for industrial and commercial wastes. The site appears to have been backfilled with coal ash.

**Waste Type:** Chemicals  
**Waste Description:** The waste was solvents, waste oils, and flammable wastes. The site may have been used to dispose of other solid wastes. The site appears to have been backfilled with coal ash.

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**Site Code:** 600-121 **Classification:** Accepted  
**Site Names:** 600-121, White Bluffs Coal Ash Piles, Coal Ash Piles **ReClassification:** Rejected (10/6/1997)

**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is several small coal ash piles located just east of the Pickling Acid Cribs.  
**Waste Type:** Ash  
**Waste Description:** The waste is coal ash that has been placed in piles (discernible units).

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**Site Code:** 600-122 **Classification:** Not Accepted (10/6/1997)  
**Site Names:** 600-122, White Bluffs Large Fenced Depression **ReClassification:**  
**Site Type:** Depression/Pit (nonspecific) **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The eastern boundary of the site once was a power distribution line and powerline road. Power poles were removed by cutting them off just above the ground surface. Glass insulator material litters the area. Just west of this powerline is the fencing that surrounds the site. The fence is wood post and wire enclosure that appears to have been installed to keep deer out of the area. The fence is in very poor condition.

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**Site Code:** 600-123 **Classification:** Not Accepted (10/6/1997)  
**Site Names:** 600-123, White Bluffs Farm Site, Farm Site **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site was a farm site. One source indicates that it may have been occupied by the army for a period of time indicates the site is littered with waste debris, including battery cores, broken glass, concrete, cans, bottles, wire, machinery parts, and other domestic wastes (Carpenter, 1994). A site visit done on August 16, 1996 did not find any battery cores or evidence of military debris. Two of the building foundations are deep and open to the surface. One of these is filled with concrete rubble, piping and debris. There is one concrete slab that could be a building foundation and one small concrete structure that is approximately 1.2 meters (4 feet) by 0.9 meters (3 feet) and is approximately 0.9 meters (3 feet deep).

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is farm debris, including sheep fencing, irrigation and other farming equipment, scattered household debris, and foundations for buildings. No evidence of army occupation remains. There is no evidence of any hazardous materials, and is a residential, not industrial site.

**Site Code:** 600-124 **Classification:** Accepted

**Site Names:** 600-124, White Bluffs Burn Site and Paint Disposal Area, Burn Site and Paint Disposal Area **ReClassification:**

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

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

**Site Description:** The site is a burn area where there is evidence of surface burning and paint disposal. The entire area is littered with burned wood, partly burned roofing materials, glass, nails, metallic debris, transite and isolated paint cans. There is evidence of surface disposal of paint materials in dried paint chips and deposits. There is also a large area with decaying timbers laying in many parallel rows. It appears to be some type of floor structure.

**Waste Type:** Chemicals

**Waste Description:** The waste is the remains from paint disposal.

**Site Code:** 600-125 **Classification:** Accepted

**Site Names:** 600-125, White Bluffs Waste Disposal Trench 1, Waste Disposal Trenches **ReClassification:**

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

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

**Site Description:** The site currently looks like a sandy depression with wood, ceramic and metal debris on the surface.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste includes metal shavings, steel piping, plumbing fixtures, paint cans and automotive parts; as well as other metallic and wooden debris. In the same area there are several piles of used railroad ties, broken vitrified clay pipe, concrete pipe, 30.5-centimeter (12-inch) diameter, 6.1-meter (20-foot) long spiral welded pipe, plumbing fixtures, and degraded asbestos insulation.

**Site Code:** 600-126 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-126, White Bluffs Small Subsidence, Small Subsidence **ReClassification:**

**Site Type:** Depression/Pit (nonspecific) **Start Date:**

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

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**Site Description:** The site is a subsurface concrete structure that appears to be about 1.2 meters (4 feet) across. Soil around the structure has subsided into its underground void space. A few feet behind is a vertical pipe that opens into the void beneath the structure.

**Waste Type:** Construction Debris

**Waste Description:** Concrete

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**Site Code:** 600-127 **Classification:** Accepted

**Site Names:** 600-127, White Bluffs Loading Docks and Fuel Storage Area, Fuel Storage Area **ReClassification:**

**Site Type:** Storage **Start Date:**

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

**Site Description:** The site is two loading docks and a rectangular area surrounded by a low soil berm 0.5 meters (1.6 feet) high. The ground within the berm is covered by a layer of coal ash. Inside the bermed area are several wooden beams, the tops of which are flush with the ground surface. On the top of these beams are wooden shims placed so as to suggest that they once supported large round horizontal tanks associated with fuel storage. It appears that there were four or five of these large tanks located at the site. Other small debris piles are located nearby that consist of broken vitrified clay piping, plumbing fixtures, and concrete piping. On the north side just outside the berm, there appears to have been a smaller fuel tank site. The two loading docks located adjacent to the fuel storage area are described as the north loading dock and a south loading dock. Each loading dock was approximately 20 meters (66 feet) long by 12 meters (39 feet) wide. These two loading docks appear to have been a convenient location to offload heavy equipment.

**Waste Type:** Oil

**Waste Description:** The waste is petroleum product contaminated soil.

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**Site Code:** 600-128 **Classification:** Accepted

**Site Names:** 600-128, White Bluffs Oil and Oil Filter Dump Site, Oil and Oil Filter Dump Site **ReClassification:** Interim Closed Out (9/16/2003)

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

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

**Site Description:** The site has been remediated and interim closed out.

The site had been an oil dump area that included several canister-type oil filters. Surface debris was removed in the spring of 2003.

**Waste Type:** Oil

**Waste Description:** The waste is oil contaminated soil, oil cans and filters. There are also several small areas with broken glass, cans, and other metal debris.

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**Site Code:** 600-129 **Classification:** Accepted

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**Site Names:** 600-129, White Bluffs Pre-MED Community Dump Site 1, Pre-MED White Bluffs Community Dump Site (Oil Can Site) **ReClassification:** Interim Closed Out (3/2/2005)

**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 main part of the site is littered with cans, bottles, oil cans, glass, wire, rope, toys, and automotive bodies and parts. On the southern edge industrial wastes include insulators, fuse boxes, conduit, and six 208-liter (55-gallon) drums, one of which is labeled "Carbon Tet". Because of the large number of oil cans, it is believed that the site was used by both Manhattan Engineering District (MED) and White Bluffs residents for the disposal of domestic type waste (Carpenter, 1994). Three glass vials containing an unknown white powder were found on a site walkdown in 1999. Dry cell batteries were also observed on April 22, 1999.

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**Site Code:** 600-130 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-130, American Pipe Company Facilities, Stephensen's Cement Pipe Factory **ReClassification:**

**Site Type:** Fabrication Shop **Start Date:**

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

**Site Description:** The site consists of remnants of the following facilities: valve box and 2 inch water line, concrete foundation, warehouse foundation, concrete sump attached to warehouse foundation, debris pile, foundation, potential smokestack base, and small subsidences that appear to be rotted wooden poles. The area is littered with wood, metal parts, glass, burned building materials, and debris.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is miscellaneous trash and debris consisting of wood, metal parts, glass, burned building materials, and debris.

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**Site Code:** 600-131 **Classification:** Accepted

**Site Names:** 600-131, White Bluffs Water Station and Special Fabrication Shops and Warehouse, Special Fabrication Shop and Warehouse **ReClassification:** Interim Closed Out (9/12/2003)

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

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

**Site Description:** The site has been remediated and closed out.

The site included the remnants of the Special Fabrication Shop and Warehouse, boiler house, warehouse, loading dock/well and a water station.

**Waste Type:** Misc. Trash and Debris

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**Waste Description:** The waste was miscellaneous trash and debris, including concrete, transite, asphalt shingles, glass, and metallic debris. Transite contains asbestos, which was a hazardous substance. Asbestos was a CERCLA hazardous substance that may require action to mitigate a potential environmental impact. Asbestos wastes are excluded from the Dangerous Waste Regulations (WAC 173-303-071).

**Site Code:** 600-132 **Classification:** Accepted  
**Site Names:** 600-132, White Bluffs Construction Contractor Shop Landfill, Construction Contractor Shop Landfill **ReClassification:** Interim Closed Out (9/12/2003)  
**Site Type:** Depression/Pit (nonspecific) **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site has been remediated and interim closed out.  
 The site was a large open borrow pit. The floor was mostly gravel and cobble with rabbitbrush and grasses. It contained scattered debris, such as broken concrete and pieces of metal, similar to the surrounding area. Surface debris was removed in 2003.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** If this site was actually the Construction Contractor Shop Landfill and not a borrow pit, the wastes that may have been disposed there could include oils, solvents, and cleaning agents (for example, carbon tetrachloride), typical of shop wastes. There may also be radioactive wastes, if this was not a mis-identified site (also see site 600-99). Carpenter (1995) identified two locations along the northwest boundary of the site with spots of oil (1.5-meter [4.9-foot] diameter for both spots).

The waste that was visible in 1999 was surface debris, common to the entire 100-IU-2 Operable Unit, such as rusted metal cans, concrete rubble, a few pieces of transite, and wire. Two small piles of aluminum shavings are at the site, one on the floor of the pit and one at ground level, near the first pile. A small mound of dirt on the southwest corner, at the surrounding surface elevation, has partially buried pieces of yellow bricks and thick metal. A field walkdown done in April 2003 determined the site was a gravel borrow area and not a landfill.

**Site Code:** 600-135 **Classification:** Accepted  
**Site Names:** 600-135, White Bluffs Spare Parts Machine Shop Landfill and Pit, Spare Parts Machine Shop Landfill, Horseshoe Pit **ReClassification:** Rejected (1/26/1998)  
**Site Type:** Burial Ground **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** This unit includes two potential waste sites. One site is called the Spare Parts Machine Shop Landfill, also known as the horseshoe pit. It was once a borrow pit that was later used as a waste disposal site. The borrow pit was dug in a semicircle to the northeast of nearby warehouses (hence the name horseshoe pit). The site appears to have been backfilled over about one-half to two-thirds of its area. The second site is a pit oriented in the east-west direction located directly west of Spare Parts Machine Shop Landfill. This pit measures about 90 meters (300 feet) long by 40 meters (130 feet) wide. No documentation could be found to indicate the purpose of the pit.

**Waste Type:** Equipment  
**Waste Description:** Equipment parts and pieces are scattered about the area.

**Waste Type:** Asbestos (non-friable)  
**Waste Description:** The entire area was covered with scattered transite siding.

**Site Code:** 600-136 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-136, White Bluffs Insulation Warehouses, Insulation Warehouses **ReClassification:**

**Site Type:** Storage **Start Date:**

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

**Site Description:** The site is a warehouse area within the White Bluffs townsite. It is covered with cheatgrass with some rabbitbrush and tumbleweed growth. There is very little evidence of the former warehouse buildings except for a few pieces of wood. Pavement from the former Lincoln St. shown in the referenced documents is still visible south of the site and aided identifying the precise location in the field. There was no evidence of asbestos at the site.

**Site Code:** 600-138 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-138, White Bluffs Fumigation Building, Fumigation Chamber Building **ReClassification:**

**Site Type:** Maintenance Shop **Start Date:**

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

**Site Description:** The site is the remains of a fumigation building. A field investigation was performed by T. F. Johnson on October 15, 1996. The terrain was flat with gravel surface soil and had cheatgrass and rabbitbrush vegetation. Very little evidence of the fumigation building remained at the site. A few pieces of wood and concrete were observed in the area. A standing wooden post remained near the site which may have been part of the fence surrounding the building.

**Site Code:** 600-139 **Classification:** Accepted

**Site Names:** 600-139, White Bluffs Automotive Repair Shop and Associated Waste Sites, Automotive Repair Shop **ReClassification:** Interim Closed Out (9/12/2003)

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

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

**Site Description:** The site has been remediated and interim closed out.

The site was an area thought to be associated with an automotive repair shop. Surface debris included numerous battery caps, engine gaskets, dumped waste oils, and fragments of tail light lenses. The surface debris was removed in May 2003.

**Waste Type:** Oil

**Waste Description:** The waste included battery caps, engine gaskets, fragments of tail light lenses, and dumped waste oils.

**Site Code:** 600-157 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-157, White Bluffs Concrete Foundation Pads **ReClassification:**

**Site Type:** Foundation **Start Date:**

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

**Site Description:** The site is described as several concrete foundation pads. Some of these pads have tie-down straps. Apparently these pads were used to support wooden warehouse buildings. The buildings were probably intentionally destroyed by fire, as the ground surface is littered with charred wood, burned electrical equipment (lights, switches, conduit, etc.), and nails.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is concrete pads and miscellaneous burned debris ( electrical equipment, e.g., lights, switches, conduit, etc. and nails).

**Site Code:** 600-158 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-158, White Bluffs Ground Storage Tank and Booster Pump Station **ReClassification:**

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

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

**Site Description:** There is an area of reduced vegetation that is a vague circular shape that could where a storage tank once sat. No evidence of a pumping station was found.

**Site Code:** 600-159 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-159, White Bluffs Bank Well **ReClassification:**

**Site Type:** Pump Station **Start Date:**

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

**Site Description:** The well had been a concrete structure covered with a steel plate and was surrounded by a light-duty steel post and orange barricade material. The well has been backfilled with grout and marked with a metal disk that reads "Well No. A8991, 699-80-39B, Abandoned 9-26-95."

**Site Code:** 600-160 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-160, White Bluffs Irrigation Debris **ReClassification:**

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

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

**Site Description:** The site is an area containing concrete irrigation pipe sections. The piping sections are large in diameter and not very long. The site consists of a pipe standing within a large-diameter pipe. Other debris is scattered across the nearby area.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is concrete irrigation piping.

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**Site Code:** 600-161 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-161, White Bluffs Plumbing Debris **ReClassification:**

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

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

**Site Description:** The site consists of two piles of plumbing debris. One pile contains ceramic plumbing fixtures and the other pile contains cast iron plumbing fixtures.

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**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is ceramic urinals, sinks, plumbing fixtures and cast iron piping fixtures.

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**Site Code:** 600-162 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-162, White Bluffs Pipe Debris and Bucket of Lead **ReClassification:**

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

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

**Site Description:** There had been two debris remnants, one consisting of two 8 inch steel pipe sections embedded in concrete and the second is a bucket of what appeared to be lead. The bucket of lead was removed in 1995.

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**Waste Type:** Misc. Trash and Debris

**Waste Description:** The remaining waste is two 8 inch sections of pipe encased in concrete.

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**Site Code:** 600-163 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-163, White Bluffs Pipe Testing Shop **ReClassification:**

**Site Type:** Laboratory **Start Date:**

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

**Site Description:** The vague outline of a building footprint was identified at this location.

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**Site Code:** 600-164 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-164, White Bluffs Earth Berm and Trench **ReClassification:**

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

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

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**Site Description:** The earth berm appeared to have been some of the material removed from the trench excavation.

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**Site Code:** 600-165 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-165, White Bluffs Valve Box **ReClassification:**

**Site Type:** Valve Pit **Start Date:**

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

**Site Description:** The site is a subsidence of about one square meter and is lined with concrete, suggesting a valve box or drain system. The subsidence indicates a subsurface structure with a void space that allows overburden to subside into it because of storm runoff. There is a section of power pole laying across the top of the structure.

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**Site Code:** 600-166 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-166, White Bluffs Subsidence **ReClassification:**

**Site Type:** Depression/Pit (nonspecific) **Start Date:**

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

**Site Description:** The site is a series of subsidence. A single subsidence measuring approximately four meters (13 feet) in size was originally identified in the White Bluffs Technical Baseline Report. The author of the report suggested that the site may be a subsurface structure with a void space that allowed overburden materials to be washed into it by rain runoff. A RARA Walkdown visit in May 1999 identified three additional, similar subsidence, two of which are in line with the original one. The subsidence found in 1999 measured approximately 1.83 meters (6 feet) across and 0.9 meters (3 feet) deep.

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**Site Code:** 600-167 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-167, White Bluffs Cistern **ReClassification:**

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

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

**Site Description:** The site is a large Pre-Manhattan Engineering District concrete cistern. The top of the concrete cistern structure is located slightly below grade level. The hole is almost filled with windblown tumbleweeds. A small portion of the concrete structure was visible on a 1999 site visit.

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**Site Code:** 600-170 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-170, White Bluffs Subsurface Concrete Structure **ReClassification:**

**Site Type:** Sump **Start Date:**

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

**Site Description:** The site is a series of subsurface concrete structures. The White Bluffs Technical Baseline Report originally described a single subsurface concrete structure, possibly a sump. A RARA Walkdown visit in May 1999 found four additional similar concrete structures/subsidence surrounding an old building foot print.

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**Site Code:** 600-171 **Classification:** Not Accepted (10/6/1997)  
**Site Names:** 600-171, White Bluffs Townsite (See Subsites) **ReClassification:**  
**Site Type:** Office **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is the White Bluffs Townsite located in the proximity of the intersection of Route 2 North and Federal Avenue. Most of the buildings have been demolished except for the White Bluffs Bank.

**SubSites:**

**SubSite Code:** 600-171:1  
**SubSite Name:** 600-171:1, White Bluffs Townsite Wells  
**Classification:** Rejected  
**ReClassification:**  
**Description:** Well Site Number 24 was located north of Federal Avenue and west of Third Avenue. A new well has been constructed within the remains of an older well. The new well is labeled 699-81-38, A5337, and appears to be in use. Another well was located almost due south of the intersection of Federal Avenue and Railroad Avenue, and north of Commercial Avenue. A third well was located at the northeast end of Federal Avenue. This third well appears to have been decommissioned. It has been filled with grout and is marked with a metal disk that reads "Well No. 699-83-36, Abandoned 9-21-95." A fourth well was located near the north end of Fifth Avenue by Building 20, MS-9 Warehouse.

**SubSite Code:** 600-171:2  
**SubSite Name:** 600-171:2, White Bluffs Townsite Insulation Warehouse, Site Number 32  
**Classification:** Rejected  
**ReClassification:**  
**Description:** This site was located at the northeast corner of Railroad Avenue and Lincoln Avenue. This site is the same as 600-136 and should not have been included as a subsite. Only those sites that did not have their own individual sitecodes should have been included in 600-171.

**SubSite Code:** 600-171:3  
**SubSite Name:** 600-171:3, White Bluffs Townsite, Office Equipment Warehouses, Site Number 33  
**Classification:** Rejected  
**ReClassification:**  
**Description:** There are six warehouses altogether. Three of the warehouses were located on the south side of Federal Avenue between First and Second Avenues. Another one was located on the northeast corner of First Avenue and Federal Avenue. One of the warehouses was located on the west side of First Avenue, half way between Federal Avenue and Lincoln Avenue. The sixth was located at the northeast corner of First Avenue and Lincoln Avenue.

**SubSite Code:** 600-171:4  
**SubSite Name:** 600-171:4, White Bluffs Townsite Elevated Water Storage Tank, Site Number 34

**Classification:** Rejected

**ReClassification:**

**Description:** The site was located at the northwest corner of Second Avenue and Lincoln Avenue.

**SubSite Code:** 600-171:5

**SubSite Name:** 600-171:5, White Bluffs Townsite Air and Welding Tool Maintenance Building, Site Number 36

**Classification:** Rejected

**ReClassification:**

**Description:** The site was located on the east side of Railroad Avenue and half way between Federal Avenue and Lincoln Avenue.

**SubSite Code:** 600-171:6

**SubSite Name:** 600-171:6, White Bluffs Townsite Fire Station, Site Number 37

**Classification:** Rejected

**ReClassification:**

**Description:** The site was located at the northwest corner of First Avenue and Federal Avenue.

**SubSite Code:** 600-171:7

**SubSite Name:** 600-171:7, White Bluffs Townsite Service Division Engineer Office, Site Number 38

**Classification:** Rejected

**ReClassification:**

**Description:** The site was located north of Federal Avenue between Second Avenue and Third Avenue.

**SubSite Code:** 600-171:8

**SubSite Name:** 600-171:8, White Bluffs Townsite Government Checkers and Ration Office, Site Number 39

**Classification:** Rejected

**ReClassification:**

**Description:** The site was located just east of the White Bluffs Townsite Service Division Engineer Office, Site Number 38.

**SubSite Code:** 600-171:9

**SubSite Name:** 600-171:9, White Bluffs Townsite Two Stationary Storage Warehouses, Site Number 42

**Classification:** Rejected

**ReClassification:**

**Description:** Both sites were located south of Federal Avenue and East of Railroad Avenue.

**SubSite Code:** 600-171:10

**SubSite Name:** 600-171:10, White Bluffs Townsite Fire Inspection Office, Site Number 43

**Classification:** Rejected

**ReClassification:**

**Description:** The site was located near the southwest corner of Federal Avenue and First Avenue.

**Site Code:** 600-172 **Classification:** Accepted

**Site Names:** 600-172, White Bluffs French Drain or Dry Well **ReClassification:** Rejected (10/6/1997)

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

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

**Site Description:** The site is either a french drain or dry well that is a 61 centimeter concrete pipe, that has a steel lid, and appears to be about 1 meter deep. The sides are perforated, indicating that its purpose may have been for storm runoff or steam condensate. There does not appear to be an inlet pipe inside the structure.

**Waste Type:** Steam Condensate

**Waste Description:** Possibly, the waste was steam condensate.

**Site Code:** 600-173 **Classification:** Accepted

**Site Names:** 600-173, White Bluffs Domestic Debris Dump and Building Foundations **ReClassification:** Rejected (10/6/1997)

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

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

**Site Description:** The site is a domestic type waste dump and pre-Manhattan Engineering District building foundations. The waste dump consists of miscellaneous debris and the building foundations appear to be pre-Manhattan Engineering District. One building appears to have been a garage or farm shop because of the way that the concrete was formed.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste consists of miscellaneous debris including domestic bottles, glassware, paint cans, cans, containers of heavy industrial nuts and bolts (greater than 2.5 cm in diameter). Two building foundations are also included as a part of the site.

**Site Code:** 600-174 **Classification:** Accepted

**Site Names:** 600-174, White Bluffs French Drain **ReClassification:** Rejected (10/6/1997)

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

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

**Site Description:** The site is a 61 centimeter vitrified clay pipe french drain. The top is flush with the surface and it is filled with rocks.

**Waste Type:** Steam Condensate

**Waste Description:** The french drain may have been used to dispose of steam condensate.

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**Site Code:** 600-175 **Classification:** Accepted

**Site Names:** 600-175, Original Priest Rapids Ice House Drain Field **ReClassification:** Rejected (10/6/1997)

**Site Type:** Drain/Tile Field **Start Date:**

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

**Site Description:** The site is three large depressions thought to be the original drain field for waste water generated at the ice house. The site was originally marked by a steel post and wooden rail fence that can still be found around much of the site.

**Waste Type:** Water

**Waste Description:** The waste was waste water. It is unknown if other wastes were disposed of at the site or if the site was used for other purposes.

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**Site Code:** 600-176 **Classification:** Accepted

**Site Names:** 600-176, White Bluffs Paint Disposal Area **ReClassification:**

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

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

**Site Description:** The site is a dumping area where it appears that excess paint materials were disposed of by pouring them on the ground. The ground has dried paint chips on the surface. The paint spills and chips are scattered over a large area.

**Waste Type:** Construction Debris

**Waste Description:** Paint chips are on the surface of the ground.

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**Site Code:** 600-177 **Classification:** Accepted

**Site Names:** 600-177, White Bluffs Pipe Bender and Equipment Dumping Area **ReClassification:** Rejected (10/6/1997)

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

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

**Site Description:** The site consists of two areas that are within close proximity. The pipe bender is a large heavy-walled pipe, placed vertically in the ground with approximately 1.2 meters (4 feet) of the pipe extending above grade. Several holes of varied sizes have been drilled into the vertical pipe. The holes are the approximate size of varied small diameter pipes. The structure is assumed to have been used to do rough bending of pipe. Adjacent to the pipe bender is a large area of debris that appears to have been a miscellaneous equipment dumping/storage area. Random dumping of small quantities of oils also occurred in the area.

**Waste Type:** Oil

**Waste Description:** The site shows evidence of random oil dumping.

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**Site Code:** 600-179 **Classification:** Accepted  
**Site Names:** 600-179, Priest Rapids Ice House **ReClassification:** Rejected (10/6/1997)  
**Site Type:** Burial Ground **Start Date:** 1943  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is the remains of the Priest Rapids Ice House that was demolished in situ in 1975.  
**Waste Type:** Demolition and Inert Waste  
**Waste Description:** The waste consists of the demolished facility buried in place in 1975. Occasionally small pieces of wood and clay can be observed on the surface

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**Site Code:** 600-180 **Classification:** Accepted  
**Site Names:** 600-180, White Bluffs Suspect Automotive Repair Shop **ReClassification:** Rejected (10/6/1997)  
**Site Type:** Maintenance Shop **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is described as the remains of what appears to have been an automotive repair shop.  
**Waste Type:** Chemicals  
**Waste Description:** The waste may have been solvents, grease, antifreeze, oils, gasoline. Concern was expressed by the Environmental Protection Agency (EPA) because of the types of materials usually found at an automotive repair shop. However, there is no evidence of this type of disposal. (Per Discovery Site Evaluation Checklist completed by Steve Weiss 8/6/96). Remaining surface material consists of jack stands, car parts, wooden debris, and other metallic debris.  

During the May 1999 visit, the following were observed: light fixtures, paint cans, a muffler, lumber, sections of what appears to be stove pipe, a 55 gallon drum marked "Property of Shell Oil," and buckets containing what appeared to be tar. The site's remains didn't suggest an automotive repair shop as much as a supply hut.

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**Site Code:** 600-181 **Classification:** Accepted  
**Site Names:** 600-181, White Bluffs Oil Dump **ReClassification:** Interim Closed Out (9/12/2003)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site has been remediated and interim closed out.  

The site was an oil dumping area. The surface was near asphalt-like in appearance as a result of the large quantities of oil that had been dumped.

**Waste Type:** Oil  
**Waste Description:** The waste was oil contaminated soil. The top of the soil had formed into an asphalt-like surface.

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**Site Code:** 600-182 **Classification:** Accepted  
**Site Names:** 600-182, White Bluffs Asbestos Pipe Lagging and Excess Piping **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is excess piping materials and an area of highly degraded piping insulation that appears to be made of asbestos or a similar material. Several 6.1-meter (20-foot) sections of 30.5-centimeter (12-inch) spiral welded steel pipe are nearby. Other small debris piles are located very nearby that consist of broken vitrified clay piping, plumbing fixtures, and concrete piping.  
**Waste Type:** Asbestos (friable)  
**Waste Description:** The waste is piping insulation material that appears to be made of asbestos or a similar material.

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**Site Code:** 600-183 **Classification:** Accepted  
**Site Names:** 600-183, White Bluffs Burn Pile and Debris **ReClassification:** Rejected (10/6/1997)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a burn pile and debris dumping area. Within the site is one area consisting of a burn pile of domestic type debris. The other area consists of 5 gallon military type drums.  
**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The waste consists of miscellaneous debris, including domestic type debris and military drums. It is unknown if any hazardous materials remain.

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**Site Code:** 600-184 **Classification:** Accepted  
**Site Names:** 600-184, White Bluffs Townsite Septic System **ReClassification:** Rejected (10/6/1997)  
**Site Type:** Septic Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a concrete box with a metal lid. It is about 0.61 meters deep (2 feet) and is dry inside.  
**Waste Type:** Sanitary Sewage  
**Waste Description:** The waste is sanitary sewage (if the septic tank and/or drainfield could be located).

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**Site Code:** 600-188 **Classification:** Accepted  
**Site Names:** 600-188, White Bluffs Waste Disposal Trench 2 **ReClassification:**  
**Site Type:** Trench **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is an open trench with industrial wastes filling about one-third of the site. There is evidence of chemical or oil dumping and burning along the east side of the trench. The White Bluffs Technical Baseline Report (BHI-00448) states the evidence includes discolored soils and empty 208-liter (55-gallon) drums that are bulging, as if its contents had been burned within the drums.

During the April 1999 visit, three empty 208-liter (55-gallon) drums were observed. Only one of them appeared to be bulging. The drums are concentrated near the eastern edge of the site. The chemical or oil dumping and burning appears to have been confined to the area around these drums.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste consists of industrial wastes of wooden and metallic debris. There has been chemical or oil dumping and burning. There are also empty 208-liter (55-gallon) drums.

**Site Code:** 600-189 **Classification:** Accepted

**Site Names:** 600-189, White Bluffs Warehouse Facility French Drains, 100-H-23 **ReClassification:** Rejected (1/26/1998)

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

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

**Site Description:** The site is three french drains associated with a large warehouse and temporary construction facility. The area near the french drains is littered with debris and patches of gravel. There is no oil-stained soil or other indication of hazardous waste disposal at or near the french drains.

**Waste Type:** Water

**Waste Description:** The waste may have been wastewater/stormwater.

**Waste Type:** Asbestos (non-friable)

**Waste Description:** Transite siding was scattered throughout the area.

**Site Code:** 600-190 **Classification:** Accepted

**Site Names:** 600-190, White Bluffs Warehouse Tar and/or Paint Disposal Area **ReClassification:** Interim Closed Out (9/16/2003)

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

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

**Site Description:** The site has been remediated and interim closed out.  
The site was an area where tar and/or paints appeared to have been dumped.

**Waste Type:** Chemicals

**Waste Description:** The waste site consisted of tar and/or paint that had been dumped on the ground.

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**Site Code:** 600-191 **Classification:** Accepted  
**Site Names:** 600-191, White Bluffs Pre-MED **ReClassification:** Interim Closed Out (3/2/2005)  
 Community Dump Site 2  
**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 waste is miscellaneous trash and debris, including oil cans, cans, glass, domestic debris, car parts, and a few full 19-liter (5-gallon) cans of grease.

During the April 1999 visit, the cans of grease described in the Technical Baseline Report could not be found. However, in addition to the debris already mentioned above, antifreeze containers and dry cell batteries were observed.

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**Site Code:** 600-193 **Classification:** Accepted  
**Site Names:** 600-193, White Bluffs Gas Station **ReClassification:** Rejected (10/6/1997)  
**Site Type:** Storage Tank **Start Date:** 1942  
**Site Status:** Inactive **End Date:** 1975  
**Site Description:** The site is located in a shallow depression with heavy tumbleweed and cheatgrass growth. Prior to November 1997, the depression had been marked with a steel post and chain barrier and posted with two "DANGER KEEP AWAY" signs. The posts and chains were removed on November 19, 1997.

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**Site Code:** 600-194 **Classification:** Accepted  
**Site Names:** 600-194, White Bluffs Main Pipe **ReClassification:** Rejected (10/6/1997)  
 Fabrication Shop, Main Pipe Fabrication  
 and Blacksmith Shop  
**Site Type:** Fabrication Shop **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is the remnants of pipe fabrication shop. The building footprint can be discerned by observing the disturbed ground surface and the lack of rabbitbrush as compared to the surrounding terrain. In some areas near the western portion of the site, the concrete floor is visible. The floor appears to be intact, but much of it is covered by soil. Waste materials observed at the site include wood, coal, metal, metal lathe turnings, pipe, nails, brick, and concrete.  
**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The site contains concrete, brick, wood, coal, metal, and small amounts of glass. The Main Pipe Fabrication And Blacksmith Shop used acids and solvents in the pipe fabrication process which may have contaminated the waste materials and soil remaining at the site. Carbon tetrachloride was a common degreasing agent at the time and may be present in the debris.

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**Site Code:** 600-195 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-195, White Bluffs Townsite Electrical Substation **ReClassification:**

**Site Type:** Electrical Substation **Start Date:**

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

**Site Description:** The site is the location of a demolished substation that serviced the White Bluffs Townsite. The site had two footprints measuring 4.3 meters by 3.8 meters and 1.8 meters by 5.5 meters (14 feet by 11 feet and 6 feet by 18 feet). The footprints of the former substation site are still visible.

The soil at the site is sandy. Cheatgrass vegetation growth within the site appears stunted and indicates the size and location of the former site. There is no evidence of oil spills or stains in the soil at this site or the ground surrounding the site.

**Waste Type:** Soil

**Waste Description:** No waste was observed at the site.

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**Site Code:** 600-196 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-196, White Bluffs Farm Dump Site and Partially Backfilled Pit **ReClassification:**

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

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

**Site Description:** The site is areas of random scattered debris and a pit. The debris includes cans, bottles, barbed wire and car parts scattered along the west side of a dirt road. The pit is a fairly large excavation on the east side of the road and shows no evidence of being used as a waste site.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Cans, glass, barbed wire, and auto parts

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**Site Code:** 600-198 **Classification:** Not Accepted (10/6/1997)

**Site Names:** 600-198, White Bluffs River Bank Concrete Structure, RCRA General Inspection LORIVFY96 Item #2 **ReClassification:**

**Site Type:** Foundation **Start Date:**

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

**Site Description:** The site is a box shaped concrete structure partially buried in the river bank. The site appears to have slid partially down the bank. The structure is filled with dirt and debris. There is a large quantity of 0.635 centimeter (0.25 inch) nylon tubing hanging around and in the structure. Four steel pipes extend from each corner of the box. An electrical conduit also extends from the box. A square notch was observed on a top corner of the box.

**Waste Type:** Construction Debris

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**Waste Description:** Concrete, steel pipe, and nylon tubing.

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**Site Code:** 600-199 **Classification:** Accepted

**Site Names:** 600-199, White Bluffs Ash Covered Concrete Pad **ReClassification:** Rejected (3/11/1998)

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

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

**Site Description:** The site is a concrete foundation pad that is completely covered with coal ash. The original purpose of the pad is unknown.

**Waste Type:** Ash

**Waste Description:** The waste is coal ash which is a state regulated solid waste. The waste has been placed in a waste pile (discernible unit).

**Waste Type:** Asbestos (non-friable)

**Waste Description:** Transite siding was scattered throughout the area.

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**Site Code:** 600-200 **Classification:** Accepted

**Site Names:** 600-200, Priest Rapids Ice House Septic Tank **ReClassification:** Rejected (10/6/1997)

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

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

**Site Description:** The site is a large septic tank thought to have been associated with the Priest Rapids Ice House.

**Waste Type:** Sanitary Sewage

**Waste Description:** The waste is a septic tank, possibly containing human septage. Septage is a state regulated solid waste.

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**Site Code:** 600-201 **Classification:** Accepted

**Site Names:** 600-201, White Bluffs Paint and Solid Waste Disposal Site **ReClassification:** No Action (9/12/2003)

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

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

**Site Description:** The site has been evaluated to confirm that it does not require remediation. The site has been reclassified to "No Action".

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste was red paint and other debris including, glass, metal shavings, metal parts, and army-green canvas material.

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**Site Code:** 600-203 **Classification:** Accepted  
**Site Names:** 600-203, White Bluffs French Drains **ReClassification:** Rejected (10/6/1997)  
**Site Type:** French Drain **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The White Bluffs Technical Baseline Report states the site is two french drains and what appears to be a valve box. No additional information is known. A RARA Walkdown visit done in May 1999 found an additional small subsidence near the valve box and noticed a long narrow area of disturbed vegetation that may indicate these structures were part of an old irrigation system. A third french drain was also observed and mapped as a new component of this site.

**Waste Type:** Steam Condensate  
**Waste Description:** The waste may have been steam condensate.

**Site Code:** 600-209 **Classification:** Accepted  
**Site Names:** 600-209, White Bluffs Excess Railroad Tie Materials **ReClassification:** Rejected (10/6/1997)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is several stacks of excess railroad ties. The ground surface at the site appears to have been graveled, suggesting that the entire area was a warehouse area for industrial type materials.  
During the May 1999 visit, it was observed that scattered stacks and piles of railroad ties were found in a large undefined area on both sides of a powerline road. Ties were found to the west and south of 600-188.

**Waste Type:** Oil  
**Waste Description:** The waste is creosote soaked railroad ties and possibly creosote in the soil underneath the railroad ties. The Regulators were concerned about this site for the reasons stated above.

**Site Code:** 600-234 **Classification:** Not Accepted (5/31/2001)  
**Site Names:** 600-234, RCRA General Inspection 200Wfy97 Item #11 Historic Disposal Site **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is pre-Hanford farmstead debris. The site contains miscellaneous materials including cans, bottles, sheetmetal, and wire. The site covers an area approximately 45.7 meters (150 feet) square.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The waste is pre-Hanford homestead waste, including metal, glass, and wire.

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**Site Code:** 600-263 **Classification:** Accepted  
**Site Names:** 600-263, Pile of Cans and White Powder **ReClassification:** Rejected (5/31/2001)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** There are seven cans scattered within a distance of 2 meters (6.6 feet) of each other. The cans are rusty and approximately 20 centimeters (8 inches) long. Most of the cans are broken open, revealing their current contents of calcium carbonate. No vegetation stress was noticed. A few of the cans were intact, but appeared to be empty. Some lettering could be seen on the cans. Some of the cans were marked "RL - HAR, 300 Order, -----MMABLE, Sealed For Use" One intact canister is located approximately 6 meters (20 feet) from the group of ruptured cans. It has lettering that reads "-----RAY, \_\_\_HARGE, Y-45-SE-6".

**Waste Type:** Abandoned Chemicals

**Waste Description:** The chemical originally in the cans was calcium hydride, with a chemical formula of  $\text{CaH}_2$ . Hydrogen and calcium hydroxide are produced when calcium hydride is mixed with water. Calcium hydroxide rapidly decomposes to calcium carbonate in the environment.

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**Site Code:** 600-279 **Classification:** Accepted  
**Site Names:** 600-279, Vegetation Free Area Between White Bluffs and 100F **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a large area of white ash surrounded by dried grass.

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**Site Code:** 600-293 **Classification:** Accepted  
**Site Names:** 600-293, White Bluffs Service Station #1 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1944  
**Site Status:** Inactive **End Date:**  
**Site Description:** The service station supported the White Bluffs Central Shops. This site may include underground storage tank (s), associated piping and the underlying soil.

**Waste Type:** Oil

**Waste Description:** The waste is contaminated soil, tanks and associated piping. Contaminants of potential concern may include petroleum products, TPH, PAH and ICP metals.

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**Site Code:** 600-294 **Classification:** Accepted  
**Site Names:** 600-294, White Bluffs Service Station #2 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Unknown **End Date:**

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**Site Description:** The site was the location of a service station with the potential for an underground storage tank (s), associated piping and underlying soils.

**Waste Type:** Oil

**Waste Description:** The waste includes petroleum product contaminated soil, underground storage tanks and associated piping. Contaminants of potential concern may include petroleum products (TPH, PAH) and possibly ICP metals.

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**Site Code:** 600-295 **Classification:** Accepted

**Site Names:** 600-295, White Bluffs Paint Shop **ReClassification:**

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

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

**Site Description:** The site consists of surface and underlying soils associated with the former Paint Shop that was used to support the White Bluffs Central Shops. The footprint of the building is easily recognizable due to a lack of vegetation.

**Waste Type:** Soil

**Waste Description:** Contaminants of potential concern would include VOA, semi-VOA, ICP metals with mercury in the soil.

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**Site Code:** 600-296 **Classification:** Accepted

**Site Names:** 600-296, White Bluffs Fire Department Septic System **ReClassification:**

**Site Type:** Sanitary Sewer **Start Date:**

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

**Site Description:** The site consisted of the septic system for the White Bluffs Fire Department. It is a 1 by 1.5 meter (3.3 by 5 feet) sump with lid, a soil filled 1.5 by 2 meter (5 by 6.5 feet) concrete below grade box, a potential septic drain field with associated piping and the underlying soil. A 15 centimeter (6 inch) drain line extends from the fire house to the septic tank and onto a drain field. These features are all suspected of being the components of the former Hanford Works Fire Station septic system at White Bluffs.

**Waste Type:** Sanitary Sewage

**Waste Description:** The site includes the septic tank, drain field, associated piping and surrounding soils. Contaminants of potential concern include ICP metals and possibly other hazardous substances.

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**Site Code:** 600-297 **Classification:** Accepted

**Site Names:** 600-297, White Bluffs Imhoff Tank **ReClassification:**

**Site Type:** Sanitary Sewer **Start Date:**

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

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**Site Description:** This site consists of a septic tank and underlying soils which is the historical location of an Imhoff tank (separations tank).

**Waste Type:** Soil

**Waste Description:** Contaminants associated with the effluent to the tank from the White Bluffs facility complex have not been evaluated, so they are presently unknown.

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**Site Code:** 600-298 **Classification:** Accepted

**Site Names:** 600-298, Surface Debris and Stained Soil in 100-IU-2 **ReClassification:**

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

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

**Site Description:** The site is eight areas of surface debris and stained soil identified during the 100-IU-2 Operable Unit Orphan Sites Evaluation walkdown.

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**Site Code:** 600-299 **Classification:** Accepted

**Site Names:** 600-299, Surface Debris and Batteries **ReClassification:**

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

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

**Site Description:** The site consists of areas of scattered surface debris including batteries.

**Waste Type:** Batteries

**Waste Description:** A dry cell battery is typically composed of zinc, ammonium chloride, zinc chloride, carbon and manganese (IV) oxide ([http://en.wikipedia.org/wiki/Dry\\_cell](http://en.wikipedia.org/wiki/Dry_cell)). A wet cell battery may include lead and sulfuric acid as contaminants of potential concern.

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**Site Code:** 600-300 **Classification:** Accepted

**Site Names:** 600-300, Miscellaneous Surface Debris Sites **ReClassification:**

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

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

**Site Description:** The site consists of twelve areas containing miscellaneous scattered debris.

---

**Site Code:** 600-301 **Classification:** Accepted

**Site Names:** 600-301, White Bluffs Sanitary Sewer Pipelines **ReClassification:**

**Site Type:** Sanitary Sewer **Start Date:**

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

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**Site Description:** The site consists of the sewer pipelines in the White Bluffs area. It has five components consisting of the historical sewer system and underlying soils documented on construction drawing H-11-3709 and four other suspected related features discovered during the Orphan Site Evaluation (OSE) field investigation.

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**Site Code:** 600-302 **Classification:** Accepted

**Site Names:** 600-302, French Drain with Vent Pipe **ReClassification:**

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

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

**Site Description:** The site consists of a french drain, and underlying soil, with a vent pipe located approximately 2 meters (6 feet) northeast. The drain is about 1 meter (3 feet) in diameter, both have covers.

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**Site Code:** 600-303 **Classification:** Accepted

**Site Names:** 600-303, Vertical Pipes **ReClassification:**

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

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

**Site Description:** This feature consists of a 3 by 3 meter (9.8 by 9.8 foot) area with 4 vertical pipes, 2.5 to 3.8 centimeter (1 to 1 1/2 inch) in diameter, sticking out of the ground.

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**Site Code:** 600-304 **Classification:** Not Accepted (12/18/2008)

**Site Names:** 600-304, White Bluffs Sanitary Water **ReClassification:**

**Site Type:** Product Piping **Start Date:**

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

**Site Description:** This site consists of the White Bluffs sanitary water service piping as shown on construction drawing H-11-3709 and three associated features discovered during the Orphan Site Evaluation (OSE) process.

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**Site Code:** 600-305 **Classification:** Accepted

**Site Names:** 600-305, Suspect Asbestos Containing Material Sites **ReClassification:**

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

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

**Site Description:** Site consists of areas of scattered suspect asbestos debris. There are 5 sites that contain surface suspect asbestos debris. The sites are vegetated with native grasses and rabbit brush.

**Waste Type:** Asbestos (friable)

**Waste Description:** These sites contain suspect asbestos containing materials (ACM).

---

**Site Code:** 600-306 **Classification:** Accepted  
**Site Names:** 600-306, Burn Site #1 **ReClassification:**  
**Site Type:** Burn Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of a burned area with metal, wood, nails, iron plate, tar paper debris and the underlying soil.  
**Waste Type:** Misc. Trash and Debris  
**Waste Description:** Contaminants may include asbestos and petroleum products. No other waste information was available.

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**Site Code:** 600-307 **Classification:** Accepted  
**Site Names:** 600-307, Burn Site #2 **ReClassification:**  
**Site Type:** Burn Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of a burned area with metal, wood, tar paper debris and the underlying soil.  
**Waste Type:** Construction Debris  
**Waste Description:** Contaminants may include asbestos and petroleum products.

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**Site Code:** 600-308 **Classification:** Accepted  
**Site Names:** 600-308, Garnet Sand **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This site consists of a 6 by 6 meter area with scattered garnet sand and the underlying soil.  
**Waste Type:** Soil  
**Waste Description:** The contaminant of potential concern is lead.

---

**Site Code:** 600-309 **Classification:** Accepted  
**Site Names:** 600-309, Burn Site #3 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of a burned area with wood, clay pipe, fabric (suspect asbestos containing material - ACM), rubber hoses and the underlying soil. Soil and cobbles were also dumped here.  
**Waste Type:** Misc. Trash and Debris

**Waste Description:** Contaminants may include asbestos.

**Site Code:** 600-310 **Classification:** Accepted

**Site Names:** 600-310, Burn Site #4 **ReClassification:**

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

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

**Site Description:** The site consists of a burned area with glass, cinders, slag, metal and the underlying soil.

**Site Code:** 600-311 **Classification:** Accepted

**Site Names:** 600-311, Burn Site #5 **ReClassification:**

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

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

**Site Description:** The site consists of an area of concentrated burned debris and the underlying soil. Remnants of the burned debris include nails and tar like roofing material. It appears to be next to an area where a building had once been.

**Site Code:** 600-312 **Classification:** Accepted

**Site Names:** 600-312, Burn Site #6 **ReClassification:**

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

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

**Site Description:** The site consists of an area of concentrated burned debris and the underlying soil. Remnants of the burned debris include nails and tar like roofing material. The site appears to be next to an area where a building had once been.

**Site Code:** 600-316 **Classification:** Accepted

**Site Names:** 600-316, Dry Cell Batteries **ReClassification:**

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

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

**Site Description:** The site consists of five places where wet cell battery debris is lying on the ground surface.

**Site Code:** 600-341 **Classification:** Accepted

**Site Names:** 600-341, Inter Areas Battery Remnant Area #1 (See Subsites) **ReClassification:** Interim Closed Out (10/21/2010)

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

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

**Site Description:** The site had two subsites that consisted of four (4) areas containing dry cell battery remnants and/or battery debris. The subsites were: 600-341:1 Inter Areas Battery Remnant Area #1a and

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**600-341:2 Inter Areas Battery Remnant Area #1b****SubSites:****SubSite Code:** 600-341:1**SubSite Name:** 600-341:1, Inter Areas Battery Remnant Area #1A**Classification:** Accepted**ReClassification:** Interim Closed Out

**Description:** The Remaining Sites Verification Package (RSVP-2010-053) for the 600-341:1 has documented that the subsite has met the remedial action objectives (RAOs) and the corresponding remedial action goals (RAGS) established in the Remedial Design Report/Remedial Action Work Plan for the 100 Area (RDR/RAWP) (DOE-RL-96-17, Rev. 6) and the Interim Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units, (Remaining Sites ROD) (EPA 1999).

The subsite consisted of two areas which were field identified as area 1 and 2. They contained dry cell battery remnants and battery debris. Area 1 was approximately 1 m (3 ft) in diameter. Area 2 was observed to be approximately 0.5 m (1.5 ft) in diameter. There was no process history associated with the 600-341:1 subsite, although Area 1 was thought to be associated with a pre-Hanford farm.

The COPCs included cadmium, total chromium, lead, mercury, hexavalent chromium, total petroleum hydrocarbons (TPH), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), organochlorine pesticides, and polycyclic aromatic hydrocarbons (PAH). Although not considered COPCs, antimony, arsenic, barium, beryllium, boron, cobalt, copper, manganese, molybdenum, nickel, selenium, silver, vanadium, and zinc were evaluated for by performing analyses for the constituents of the expanded inductively coupled plasma (ICP) metals list.

Remediation of Area 2 of the 600-341:1 subsite occurred on February 11, 2010. The excavation was approximately 2.5 by 3.5 m (8 by 12 ft) and approximately 0.5 m (1.5 ft) deep. All of the Area 2 waste was sent to the Environmental Restoration Disposal Facility. Area 1 was remediated on February 16, 2010. Because the characterization sampling of Area 1 showed elevated cadmium levels, it was determined that the best disposal pathway was off-site shipment. Area 1 was excavated by hand to an approximate diameter of 1 m (3 ft) and a depth of 0.5 m (1.5 ft). A total of approximately 5 BCM (6.5 BCY) of material was removed from the waste site.

Verification sampling was conducted in May 2010 to support a determination that residual contaminant concentrations at this site meet the cleanup criteria specified in the RDR/RAWP and the Remaining Sites ROD. The verification sample results were provided in Appendix C of the RSVP and indicated that the waste removal action achieved compliance with the remedial action objectives.

These results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil (i.e., surface to 4.6 m [15 ft.]) and that contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This site does not have a deep zone; therefore, institutional controls to prevent uncontrolled drilling or excavation into the deep zone of the site are not required.

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**SubSite Code:** 600-341:2  
**SubSite Name:** 600-341:2, Inter Areas Battery Remnant Area #1B  
**Classification:** Accepted  
**ReClassification:** Interim Closed Out

**Description:** The remaining sites verification package (RSVP-2010-066) for 600-341:2 has documented that the current site conditions have achieved the remedial action objectives (RAOs) and the corresponding remedial action goals (RAGs) as established in the Remedial Design Report/Remedial Action Work Plan for the 100 Area (RDR/RAWP) and the Interim Action Record of Decision (Remaining Sites ROD) (EPA 1999).

The subsite consists of two areas (SG\_1-079, SG\_1-080) located 0.33 Km (0.2 miles) south of Route 6 and 0.84 Km (0.5 mi) east of SR 24 that contain dry cell battery remnants were discovered on October 23, 2008 while the Inter-Areas Segment 1 Orphan Site Evaluation was being conducted (EL-1616-1).

The areas were described as being battery remnants covering an area 2 to 3 m (7 to 10 ft) in diameter within a larger farmstead dump (metal cans and glass). Several photos show the debris. The 1943 aerial imagery shows an undeveloped road leading to the site location at the mouth of a large depression.

Two waste characterization samples were collected on December 17, 2009, showing contamination by polycyclic aromatic hydrocarbons (PAH), several metals, and total petroleum hydrocarbons (TPH). Sample J19DW6 was collected from Area 1 soil and sample J19DW7 was collected from Area 2 soil. Staining was not present on the surface at the sample locations, but subsurface debris was observed at approximately 10 cm (4 in.) below the surface. Remediation occurred on April 26, 2010. After excavation, Area 1 was approximately 24 m<sup>2</sup> (258 ft<sup>2</sup>) and Area 2 was approximately 12 m<sup>2</sup> (130 ft<sup>2</sup>). Each excavation was approximately 0.8 m (2 ft) deep. The vadose zone beneath the excavation was approximately 12.1 m (39.7 ft) thick. A total of approximately 15 BCM (20 BCY) of contaminated material was disposed at the Environmental Restoration Disposal Facility.

Verification sampling was conducted in July 2010 to support a determination that residual contaminant concentrations at this site meet the cleanup criteria specified in the RDR/RAWP and the ROD.

Contaminants of potential concern (COPCs) included arsenic, lead, zinc, PAH, and TPH. The laboratory-reported data results for all constituents are stored in the Environmental Restoration (ENRE) project-specific database prior to provision to the Hanford Environmental Information System (HEIS) and were presented as an attachment to the Direct Contact Hazard Quotient and Relative Percent Different (RPD) calculation in Appendix C of the RSVP.

These results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow-zone soil (i.e., surface to 4.6 m [15 ft]) and that contaminant levels remaining in the soil were protective of groundwater and the Columbia River. This site did not extend into the deep zone; therefore, institutional controls to prevent uncontrolled drilling or excavation into the deep zone of the site are not required.

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**Site Code:** 600-342

**Classification:** Accepted

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**Site Names:** 600-342, Inter Areas Contaminated Clothing Area near Susie Junction      **ReClassification:** Interim Closed Out (3/5/2010)

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

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

**Site Description:** The site consisted of a 20 m (66 ft) diameter area that contained discarded radiological protective clothing.

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**Site Code:** 600-343      **Classification:** Accepted

**Site Names:** 600-343, Inter Areas Burn Site #1      **ReClassification:** Interim Closed Out (9/27/2010)

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

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

**Site Description:** This site consists of residual ash from burned material and dumped asphalt in an excavated trench.

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**Site Code:** 600-344      **Classification:** Accepted

**Site Names:** 600-344, Inter Areas Stain Site #1      **ReClassification:** Interim Closed Out (10/21/2010)

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

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

**Site Description:** This site consists of a stained area with metal pre-Hanford container lids.

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**Site Code:** 600-345      **Classification:** Accepted

**Site Names:** 600-345, 100-BC Vicinity Oil Stain and Filter Area      **ReClassification:** Interim Closed Out (10/21/2010)

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

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

**Site Description:** This site consisted of a stained area with oil filters.

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**Site Code:** 600-346      **Classification:** Accepted

**Site Names:** 600-346, 100-BC Vicinity Ash and Debris Area      **ReClassification:** Interim Closed Out (9/27/2010)

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

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

**Site Description:** This site consists of several small fly ash dump areas with metal debris.

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**Site Code:** 628-1      **Classification:** Accepted

**Site Names:** 628-1, White Bluffs Burn Pit      **ReClassification:** Interim Closed Out (9/16/2003)

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**Site Type:** Burn Pit

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site has been remediated and interim closed out.

In the 2003 Waste Site Evaluation document (0600X-CA-V0034), this unit was described as a triangle shaped area, covered with sand and gravel. The original WIDS Information form (Rod Griffin, 2/28/1990) described the area as a pit. It cannot be determined if the gravel was natural erosion, backfill, or both. Physical evidence (e.g. small pieces of ash, etc.) indicates that the area affected was approximately 0.1 hectare (1/4 acre). Vegetation was stressed. Rabbit brush growth was almost nonexistent compared to the growth on the surrounding terrain and tumbleweeds were discolored and stressed.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Soil sampling will be required to determine what contaminants are present.

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**100-IU-3**

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**Site Code:** 600-6 **Classification:** Accepted

**Site Names:** 600-6, MIL - H-12-L, Battery B Nike Missile Launch Site **ReClassification:** Rejected (1/30/2003)

**Site Type:** Military Compound **Start Date:** 1953

**Site Status:** Inactive **End Date:** 1960

**Site Description:** The unit is an abandoned military installation that once included two sheds (paint and acid storage), a generator building, an oil tank, an 11,356 liter (3,000 gallon) UST, a 200 meter (650 feet) deep well, and a septic system. In 1990 the site consisted of concrete foundation pads, a backfilled underground storage area, a 3-4 ft deep excavation, and a large soil depression at the northwest corner of the unit. The large soil depression in the northwest corner of the site was suspected to be a disposal area, based on a general disturbance pattern within the nearby soil (Roos 1990). All above-ground structures were sold to Washington State University prior to 1974 and have been removed.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Only concrete building foundations and a soil depression remain. An Acid pit was sampled but no hazards were identified.

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**Site Code:** 600-7 **Classification:** Accepted

**Site Names:** 600-7, Nike Asbestos Pipe Site, Concrete/Asbestos Pipe Site **ReClassification:** Rejected (1/30/2003)

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

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

**Site Description:** The unit is a depression containing miscellaneous construction debris and exposed pieces of concrete/asbestos pipe. Demolition activities at waste site 600-6 are believed to be the reason for debris found on this waste site.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** This unit contains concrete/asbestos pipe, concrete, and miscellaneous construction debris.

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**Site Code:** 600-8 **Classification:** Accepted

**Site Names:** 600-8, MIL - H-06C, Control Center for Battery A Nike Missile, Wahluke Slope Nike Missile Base, WSNMB, 600-103 (Part) **ReClassification:** Deleted From NPL (7/8/1998)

**Site Type:** Military Compound **Start Date:** 1950

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

**Site Description:** The unit is an abandoned military installation that consists of a few concrete foundation pads, and a possible disposal location at a leveled area on the north side of the access road. Over the nearby cliff in the "saddle" were a few 19-liter and 208-liter (5-gallon and 55-gallon) drums and a small amount of debris. The Camp Hanford Forward Positions Descriptive Summary states

that two 7600- liter (2000-gallon) underground storage tanks and one aboveground 5,700-liter (1,500-gallon) oil tank were included in the list of structures at this site. The document also states that all listed structures were sold to Washington State University and removed.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** The unit waste includes lumber, concrete, empty 5 gallon and 55 gallon containers and miscellaneous debris.

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<b>Site Code:</b>	600-9	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-9, MIL - H-06L, Battery A Nike Missile Installation Launch Site, Wahluke Slope Nike Missile Base, WSNMB, 600-103 (Part)	<b>ReClassification:</b>	Deleted From NPL (7/8/1998)
<b>Site Type:</b>	Military Compound	<b>Start Date:</b>	1951
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1964
<b>Site Description:</b>	This unit is an abandoned military site. All surface structures have been removed or leveled. Remaining features include a building foundation, roadways, parking areas, and drainage structures. The underground structure has been backfilled with 29-cubic yards of slurry. A 55-gallon drum buried to its rim, presumed to be a drywell, was also backfilled. Its function is unknown.		

**Waste Type:** Demolition and Inert Waste

**Waste Description:** The unit contained miscellaneous debris including: paint cans, construction materials, asbestos siding and brake pads, and exposed re-bar associated with structure foundations.

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<b>Site Code:</b>	600-10	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-10, MIL - H-12C, Battery B Nike Missile Control Center	<b>ReClassification:</b>	Rejected (1/30/2003)
<b>Site Type:</b>	Military Compound	<b>Start Date:</b>	1953
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1960
<b>Site Description:</b>	This unit is an abandoned military site that functioned as the control center for the Battery B Nike Missile site. The site was cleaned up as part of the North Slope Expedited Response Action.		

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Wastes identified at the unit include a 5-gallon can of military lubricant (containing minimal amounts of free product), wire, several paint and lubricant cans, and some re-bar associated with building foundation,

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<b>Site Code:</b>	600-11	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-11, MIL - H-81R	<b>ReClassification:</b>	Rejected (1/30/2003)
<b>Site Type:</b>	Military Compound	<b>Start Date:</b>	1953

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**Site Status:** Inactive **End Date:** 1960  
**Site Description:** The unit is an abandoned military installation to support the anti-aircraft gun system. The site was cleaned up as part of an expedited response action.

**Waste Type:** Demolition and Inert Waste  
**Waste Description:** Wastes identified at the unit are miscellaneous surface debris including batteries, bottles and a buried, open-top 55-gallon drum.

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**Site Code:** 600-12 **Classification:** Accepted  
**Site Names:** 600-12, MIL - H-83C, Battery C Control Center **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Military Compound **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1960  
**Site Description:** This unit is an abandoned military installation, a control center for the battery C Nike missile site.  
**Waste Type:** Demolition and Inert Waste  
**Waste Description:** The unit waste includes several hundred rounds of spent 30/06 casings, steel links for belt-fed automatic weapons, and several tires.

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**Site Code:** 600-13 **Classification:** Accepted  
**Site Names:** 600-13, MIL - H-83L, Battery "C" Launch Site, PSN 80 **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Military Compound **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1974  
**Site Description:** This unit is an abandoned military installation. Buildings and other above ground structures have been removed. Underground structures have been filled.

The Air Defenses of Hanford: Camp Hanford The Forward Positions 1950-1964 descriptive summary (Anonymous 1993) states there were 15 aboveground structures (including barracks, paint, oil, and acid storage), a septic system, and assorted "miscellaneous tanks." The barracks were located about 0.4 kilometers (0.25 miles) away from the launch site. The summary also reported that the site is "destroyed;" the AEC cleanup was from May to July 1974. The ammunition magazines were detonated in June 1974. The adjacent PSN 80 was merged with this site after 1956 (Anonymous 1993).

**Waste Type:** Demolition and Inert Waste  
**Waste Description:** Wastes identified at the unit are miscellaneous disposal area debris, material from 1960's practice maneuvers, and miscellaneous trash scattered over a 50 acre area.

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**Site Code:** 600-14 **Classification:** Accepted  
**Site Names:** 600-14, MIL - PSN 01 **ReClassification:** Rejected (1/30/2003)

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**Site Type:** Military Compound **Start Date:**

**Site Status:** Inactive **End Date:** 1960

**Site Description:** The unit is an abandoned military tent camp and anti-aircraft battery site.

During the April 1999 visit, no foundations were observed but several regular shaped disturbed areas and chunks of concrete were visible. What appeared to be an abandoned well was found under a removable metal cover. There is an area of erosion or subsidence with exposed concrete along the edges. Circular areas with little or no vegetation were also seen around the site. Mature trees, grasses and 0.6 to 1.2 meter (2 to 4 foot) tall sagebrush cover the site. An underground septic tank and drain field may still exist as there is no record of them being removed.

The well that serviced the position was 892 feet deep, and drilled in 1953.

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**Site Code:** 600-15 **Classification:** Accepted

**Site Names:** 600-15, MIL - PSN 04 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Military Compound **Start Date:** 1950

**Site Status:** Inactive **End Date:** 1960

**Site Description:** This unit is an abandoned tent camp and anti-aircraft battery. This unit consisted of a well marked "contaminated", and foundations for anti-aircraft gun emplacements.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** The waste at the unit consists of several unlabeled yellow 5-gallon containers, several blue plastic 55-gallon drums that are marked with "Sterling Imaging Inc. Pasco WA." construction debris, and miscellaneous trash.

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**Site Code:** 600-16 **Classification:** Accepted

**Site Names:** 600-16, MIL - PSN 07/10, PSN 10, H-07-H, Base Camp 500 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Military Compound **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1961

**Site Description:** The unit is an abandoned military installation. It was the Headquarters for the Antiaircraft battalion and later the Headquarters for the Nike battalion. Before final cleanup, the site consisted of a 3 foot by 8 foot by 18-inch wooden underground structure, a grease pit, a concrete lined pit, building foundations and a french drain constructed from two 55-gallon steel drums.

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**Site Code:** 600-17 **Classification:** Accepted

**Site Names:** 600-17, MIL - PSN 12/14 Site and Military Dump, Tent Camp 505, PSN 12, H-14 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Military Compound **Start Date:** 1950

**Site Status:** Inactive **End Date:** 1960

**Site Description:** This site is an abandoned military installation. The site includes a small burial site on the southern edge of the camp site, a large dump southeast of the camp in a shallow gully, a well, and an 8 foot by 8 foot underground room. All of the buildings have been removed.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** The waste at the unit consisted of metal scraps, old paint cans, commissary-type waste (e.g., food cans, condiment containers and beer bottles), washing machine parts, a water tank, a water heater, 1-gallon solvent cans, and artillery shell packing boxes marked 120 M.

**Site Code:** 600-18 **Classification:** Accepted

**Site Names:** 600-18, MIL - PSN 72/82, PSN 72, H-82, Tent Camp 515 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Military Compound **Start Date:** 1951

**Site Status:** Inactive **End Date:** 1961

**Site Description:** The site is an abandoned military tent camp site and anti-aircraft battery. The unit consisted of a few small disposal pits and piles located west of the road and a small firing range located at the northeast corner of the unit. The site also contained a pumphouse and a 500 gallon underground tank. A disposal area was identified with a considerable amount of surface debris; all debris has been removed.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** The unit contained wood debris, empty 5-gallon and 1-quart oil cans, an empty 5 gallon can of lubricant, artillery packing materials, two partially buried plywood boxes, ash, communications wire, cable, lead and brass. The unit also contained a septic tank.

**Site Code:** 600-19 **Classification:** Accepted

**Site Names:** 600-19, MIL - PSN 90, H-90, Base Camp 410 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Military Compound **Start Date:**

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

**Site Description:** This is an abandoned anti-aircraft military installation. Before final cleanup in 1994, structures included a concrete foundation pad, an abandoned well, cinderblock well pumphouse with a 550 gallon underground tank, a usable well, abandoned well, and a recently used old oil rack and grease pit, wash platform, generator shed, septic system, and support facilities. Other unit features include an old dumping ground (located south of Highway 24), several trash pits, and a 10 feet by 15 feet by 4 feet deep trench.

During the April 1999 visit, several concrete foundations and walkways were observed, as well as a stone wall, earthen mounds and a small cinderblock structure. Mature trees are growing around the abandoned installation.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Unit waste consists of small amounts of refuse including tent parts electrical parts, automobile parts, and sand bag material. In addition, a small area of the ground was oil stained near the oil

rack.

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**Site Code:** 600-72 **Classification:** Accepted  
**Site Names:** 600-72, Wahluke Slope H-12-R Debris Site, H-12R **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is an abandoned military radar and dump site that runs east-west approximately 5 acres in size. A gravel road forms the perimeter of the site. AEC (1993) lists only that it is associated with the H-14 and H-12 sites, and possibly built after 1956.

**Waste Type:** Construction Debris  
**Waste Description:** The primary hazard at this site is construction debris including domestic garbage, wood, oil cans, and 55 gallon drum. Visible debris has been removed.

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**Site Code:** 600-73 **Classification:** Accepted  
**Site Names:** 600-73, Wahluke Slope Igloo Sites **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Military Compound **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This is the site of two ammunition storage "igloos." The buildings have been removed and the area has been cleaned up.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The debris at this site included a stock watering drum, glass bottles, tin cans, barbed wire, and other garbage. The debris has been removed.

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**Site Code:** 600-74 **Classification:** Accepted  
**Site Names:** 600-74, Wahluke Slope PSN 12/14 Military Construction Dump, Motor Pool Dump **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Military Compound **Start Date:** 1950  
**Site Status:** Inactive **End Date:** 1960  
**Site Description:** This military construction and motor pool dump site is located approximately 2/3 miles north and east of the PSN 12/14 camp location. It is an area of building remains, trash and debris extending in an east-west direction near the border of sections 13 and 24 in Section T14N R27E. Lubricant cans and automobile parts suggested some of the trash may be from a military motor pool. Construction debris (boards with nails) is all that remained in 2001.

**Waste Type:** Construction Debris  
**Waste Description:** Miscellaneous debris and trash from demolished wooden buildings, automobile parts and 1 gallon and 5 gallon oil cans. The automobile parts and cans suggest the trash may have come

from a motor pool.

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**Site Code:** 600-75 **Classification:** Accepted  
**Site Names:** 600-75, Wahluke Slope PSN 80 Debris Site **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is no longer visible. The debris was removed. According to Roos (1990), the site is similar to the H-12R site (600-72) and the "Radar" sites (600-76). It is roughly oval and surrounded by a gravel road. Roos found two locations with four small concrete pads with imbedded bolts, but thought that there should be three sets of pads. He found only one concrete building foundation, and no obvious disposal pits.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The debris at this site included building materials, insulators, glass bottles, tin cans, cable, and other garbage. Two septic tanks openings were discovered at this site. These tanks were filled with 12.2 cubic meters (16 cubic yards) of concrete. The debris was picked up. An area of petroleum-contaminated soil around a concrete well structure was excavated and five 208 liter (55-gallon) drums of contaminated soil were removed.

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**Site Code:** 600-76 **Classification:** Accepted  
**Site Names:** 600-76, Wahluke Slope Radar Site, **ReClassification:** Rejected (1/30/2003)  
Underground Rooms  
**Site Type:** Military Compound **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is roughly oval, approximately 400 meters (1/4 mile) by 370 meters (400 yards), and surrounded by a gravel

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**Site Code:** 600-77 **Classification:** Accepted  
**Site Names:** 600-77; Wahluke Slope Shrapnel Sites; **ReClassification:** Rejected (1/30/2003)  
Antiaircraft Gun Shrapnel Sites 1, 2, and 3  
**Site Type:** Military Compound **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The shrapnel sites are three nearby but separate areas containing shrapnel from antiaircraft gun firing on the North Slope.

**Waste Type:** Ordnance

**Waste Description:** Two pieces of aluminum or magnesium shrapnel have been found at Shrapnel Site 2. Two pieces of iron or steel shrapnel have been found at Shrapnel Site 3. At the major shrapnel area, Shrapnel Site 1, it is reported that over 100 lbs (45 kg) of shrapnel has been found. Shrapnel consists of iron fragments and aluminum or magnesium fuze ring pieces.

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**Site Code:** 600-78 **Classification:** Accepted  
**Site Names:** 600-78, Power Pole 12-3 Cistern, 12-3 Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The cistern is approximately 1.5 meters (5 feet) in diameter by 2.4 meters (8 feet) deep. Debris was removed and it was filled with gravel.  
**Waste Type:** Demolition and Inert Waste  
**Waste Description:** The homestead cisterns were relatively free of debris, except for wood. The cistern was filled with approximately 10 yards<sup>3</sup> (7.7 m<sup>3</sup>) of pit-run gravel. Nearby debris has been removed.

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**Site Code:** 600-79 **Classification:** Accepted  
**Site Names:** 600-79, Wahluke Slope Clay Pit Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The clay pit cistern is a circular, concrete-lined pit approximately 1.7 meters (5 feet 6 inches) deep and 1.5 meters (5 feet) wide that has been backfilled with gravel. It is located near a pit that was used to obtain clay for lining irrigation canals. No obvious disposal pits remain from the homestead.  
**Waste Type:** Demolition and Inert Waste  
**Waste Description:** The debris at this site included glass bottles, tin cans, asbestos pipe, and other garbage.

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**Site Code:** 600-80 **Classification:** Accepted  
**Site Names:** 600-80, Wahluke Slope Cow Camp Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The cistern is approximately 1.4 meters (4 feet 9 inches) in diameter and backfilled with gravel. A depth value was not estimated during original site investigation because the cistern was filled with debris. Later documents do not mention a measured depth.  
**Waste Type:** Demolition and Inert Waste  
**Waste Description:** The debris at this site included glass bottles, tin cans, and other garbage. Several of the empty bottles were from livestock antibiotic and pesticide for delousing cattle.

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**Site Code:** 600-81 **Classification:** Accepted  
**Site Names:** 600-81, Wahluke Slope Homestead Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Settling Tank **Start Date:**

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**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a pre-Hanford cistern measuring approximately 1.52 to 1.83 meters (5 to 6 feet) in diameter and backfilled with gravel.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The debris at the bottom of the cistern appeared to be homestead-associated food containers.

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**Site Code:** 600-82 **Classification:** Accepted  
**Site Names:** 600-82, Wahluke Slope Overlook Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** Roos (1990) reported two unfenced cisterns at this homestead location; one cistern measures 2.5 meters (8 feet) in diameter and 4.3 meters (14 feet) deep, and the other is 1 meter (3.5 feet) across by 1.2 meter (4 feet) deep.

**Waste Type:** Demolition and Inert Waste  
**Waste Description:**

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**Site Code:** 600-83 **Classification:** Accepted  
**Site Names:** 600-83, Wahluke Slope Stock Tank Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The stock tank cistern is approximately 3.7 meters (12 feet) by 3.7 meters (12 feet) by 1.2 meters (4 feet) deep with the top of the tank about 0.6 meters (2 feet) above the ground surface (Roos 1994). There were many metal cans in the area, as well as lumber used for fencing and corrals. No homestead structure was found. A well with an approximate 20 centimeters (8 inches) diameter casing is north of the tank cistern.

**Waste Type:** Demolition and Inert Waste  
**Waste Description:**

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**Site Code:** 600-84 **Classification:** Accepted  
**Site Names:** 600-84, Wahluke Slope Wagon Road Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The cistern is approximately 2.4 meters (8 feet) in diameter by 2.4 meters (8 feet) deep.

**Waste Type:** Demolition and Inert Waste

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**Waste Description:** Debris at this site included glass bottles, tin cans, and other garbage.

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**Site Code:** 600-85 **Classification:** Accepted  
**Site Names:** 600-85, Wahluke Slope Stove Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** This cistern is located on Wahluke Slope, east of 100-F Area, east-southeast of 100-H Area.

**Waste Type:** Demolition and Inert Waste

**Waste Description:**

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**Site Code:** 600-86 **Classification:** Accepted  
**Site Names:** 600-86, Wahluke Slope Wasteway Cistern **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The cistern is approximately 2.4 meters (8 feet) in diameter by 0.9 meters (3 feet) deep. The walls are partially collapsed. The cistern has been filled with gravel. Roos (1990) reported that the cistern was mostly destroyed and filled in.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Debris at this site included glass bottles, tin cans, cable, concrete, and other garbage.

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**Site Code:** 600-87 **Classification:** Accepted  
**Site Names:** 600-87, Wahluke Slope Dune Homestead **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The homestead site contained buildings and a domestic trash disposal area.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Debris consisted of domestic trash, parts of a barn or shed, parts of a flour mill, carriage pieces and a harness.

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**Site Code:** 600-88 **Classification:** Accepted  
**Site Names:** 600-88, Wahluke Slope Lonetree Homestead **ReClassification:** Rejected (1/30/2003)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

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**Site Description:** The site contains a single live cherry tree, several dead trees and some small disposal areas. No above ground structures remain.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Debris consisted of metal cans and broken glass.

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**Site Code:** 600-89 **Classification:** Accepted

**Site Names:** 600-89, Wahluke Slope Asphalt Batch Plant **ReClassification:** Rejected (1/30/2003)

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

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

**Site Description:** The site is a graveled area about 0.8 hectares (2 acres) in size located on the Wahluke Slope. The site is north-northeast of the 100-D Area and south of Highway 24. It was apparently used as a temporary batch plant for mixing asphalt for paving operations. Two adjacent pits on site were empty. Another 4.6- by 4.6-meters (15- by 15-feet) area was used for disposal of concrete. The original users of the area are unknown.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Debris from this site included asphalt, concrete, sheet metal, and other debris.

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**Site Code:** 600-90 **Classification:** Accepted

**Site Names:** 600-90, Wahluke Slope Coyote Bait Can/Bait Station **ReClassification:** Rejected (1/30/2003)

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

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

**Site Description:** This unit is composed of two separate sites, both on Wahluke Slope. The Coyote Bait Can is located southeast of 100F area and northeast of the Hanford Townsite. A large military ammunition box was partially buried at this site. The lid of the box was marked "BAIT CAN." Evidence in the area suggest that it was once used to store bait for coyote trapping. The Coyote Bait Station is east of the bait can, near the eastern edge of the wildlife area. At this location, over 50 coyote skulls were counted. Large animal bones in the area indicated that a poisoned carcass was most often used for bait. Historical records report that trappers would poison horse carcasses to attract and kill the coyotes for their pelts. Bones at this location were old and may predate government control of the land (Roos 1990).

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**Site Code:** 600-91 **Classification:** Accepted

**Site Names:** 600-91, Wahluke Slope Gravel Pit #47, Pit 47 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Depression/Pit (nonspecific) **Start Date:**

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

**Site Description:** The site is made up of two apparently active gravel pits. The smaller pit had been used as a disposal area.

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**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The debris at this site included building materials, glass bottles, tin cans, paint cans, cable, concrete, oil cans, and other garbage in the far pit. There was a significant amount of oil contaminated soil.

**Site Code:** 600-92 **Classification:** Accepted  
**Site Names:** 600-92, Wahluke Slope Gravel Pit #56, Borrow Pit #56, Pit 56 **ReClassification:** Rejected (1/30/2003)

**Site Type:** Depression/Pit (nonspecific) **Start Date:**

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

**Site Description:** The site consists of several borrow pits.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Debris included communications wire, timbers, bottles, cans, barbed wire fencing, and fence posts. Potentially hazardous items identified included one 19 liter (5-gallon) can full of dead beetles (possible herbicide/insecticide) and two 19 liter (5-gallon) oil cans with liquid.

**Site Code:** 600-93 **Classification:** Accepted  
**Site Names:** 600-93, Hanford Firing Range **ReClassification:** Rejected (1/30/2003)

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

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

**Site Description:** This range was used by the original Hanford Site security force for target practice. A bench has been cut out of the bluff measuring approximately 100 yards long. Some 55 gallon drums were placed at the base of the bluff along the bench to serve as targets. Numerous spent bullets have been found in the target area. A burial trench located west of the firing range contained empty metal ammunition boxes.

**Site Code:** 600-94 **Classification:** Accepted  
**Site Names:** 600-94, Wahluke Schoolhouse **ReClassification:** Rejected (1/30/2003)

**Site Type:** Foundation **Start Date:**

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

**Site Description:** This site is an old schoolhouse located on the Wahluke Slope. Only the concrete front steps remain to this old schoolhouse. The school structure has been removed. The steps were apparently preserved because a USGS survey marker is imbedded in the top step. This site is not at the townsite of Wahluke.

**Site Code:** 600-95 **Classification:** Accepted  
**Site Names:** 600-95, Wahluke Slope Bridge Disposal Area, Bridge Overlook Site **ReClassification:** Rejected (1/30/2003)

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

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<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site consists of two separate areas, both of which were littered with old lumber and lesser amounts of glass and metallic debris. All debris was removed. Roos (1990) reported that the site contained the remains of three or four wood frame structures, with roofing material, window screen, railroad ties, structural lumber, personal items such as toothbrushes and razors, and military oil cans.		
<b>Waste Type:</b>	Demolition and Inert Waste		
<b>Waste Description:</b>	Debris at this site included building materials, wood, glass, wire mesh, and paper products. Trash includes items that appear to be of military origin such as tooth brushes, razors, bottles, cans and military oil cans		

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<b>Site Code:</b>	600-104	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-104; USBR; USBR 2,4-D Burial Site; USBR-2.4-D	<b>ReClassification:</b>	Deleted From NPL (7/8/1998)
<b>Site Type:</b>	Burial Ground	<b>Start Date:</b>	1966
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1967
<b>Site Description:</b>	The 2,4-Dichlorophenoxyacetic acid (2,4-D) disposal site is approximately 122 meters (400 feet) by 18.3 meters (60 feet). The disposal site has been stabilized with native grasses and shrubs.		
<b>Waste Type:</b>	Chemicals		
<b>Waste Description:</b>	In 1966, 2,4-D contaminated soil was generated from leaking storage tanks at a USBR Station in Eltopia, WA. The burial consisted of 900 gallons of 2,4-D that had leaked into 50 cubic yards of soil. A second burial in 1967 consisted of the ten storage tanks, which were flattened and buried in the same location.		

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<b>Site Code:</b>	600-154	<b>Classification:</b>	Not Accepted (1/27/1998)
<b>Site Names:</b>	600-154, Remains of Windmill, RCRA General Inspection HIRIV-FY96 Item #6	<b>ReClassification:</b>	
<b>Site Type:</b>	Dumping Area	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site is the remaining parts from an old windmill. The windmill was constructed of sheet metal and steel. An abandoned well was observed approximately 90 meters (295 feet) southwest of the windmill.		
<b>Waste Type:</b>	Equipment		
<b>Waste Description:</b>	The waste is parts from an old windmill which was constructed of sheet metal and steel.		

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<b>Site Code:</b>	600-229	<b>Classification:</b>	Not Accepted (1/27/1998)
<b>Site Names:</b>	600-229, RCRA General Inspection 200Wfy97 Item #21 Historic Disposal Site, Dumping Area Near White Bluffs	<b>ReClassification:</b>	

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Ferry Landing (East Side)

**Site Type:** Dumping Area

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site contains several empty rusty 19 liter (5 gallon) steel containers that are partially buried or filled with soil. The site also contains wire, wire rope, and small amounts of sheet metal.

**Waste Type:** Barrels/Drums/Buckets/Cans

**Waste Description:** Several empty rusty 19 liter (five gallon) steel containers are at the site. The containers are partially buried.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site contains a relatively small amount of metal such as wire rope, barbed wire, wire, and sheet metal.

## 100-IU-4

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**Site Code:** 600-105 **Classification:** Accepted

**Site Names:** 600-105, SDBDL, Sodium Dichromate Barrel Disposal Landfill **ReClassification:** Closed Out (2/12/1996)

**Site Type:** Burial Ground **Start Date:** 1945

**Site Status:** Inactive **End Date:** 1945

**Site Description:** The site contained approximately 5000 crushed 55 gallon drums. The 1993 Sodium Dichromate Expedited Response Action removed the crushed barrels. A site visit by Roger Carpenter in 1996 identified a few empty 55 gallon drums on a pallet near well #6-91-46A

**Waste Type:** Barrels/Drums/Buckets/Cans

**Waste Description:** The wastes disposed of at this site were empty, crushed drums containing sodium-dichromate residue. It is estimated, assuming that 1% of the original quantity of sodium dichromate remained in the drum on disposal, that 30.9 tons of sodium dichromate were disposed. The sodium dichromate was used for water treatment in the 100 Areas. This disposal technique was used only once at this site.

## 100-IU-5

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<b>Site Code:</b>	600-106	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-106, WBPAC, White Bluffs Pickling Acid Cribs, White Bluff Pickling Acid Cribs	<b>ReClassification:</b>	Closed Out (2/12/1996)
<b>Site Type:</b>	Crib	<b>Start Date:</b>	1943
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1945

**Site Description:** The site is located west of 100-F Area, south of the intersection of Route 2 North and Federal Ave. The site consists of two cribs located side by side. The western crib is 200 feet by 45 feet with a 3 foot diameter riser pipe. The eastern crib is 225 feet by 50 feet. Vent pipes protrude from the surface of each crib at 7 to 9 foot intervals. The surface was covered with large cobbles.

**Waste Type:** Chemicals

**Waste Description:** The site was used to dispose spent pickling acid used to pickle galvanized piping for use in the reactor buildings during construction. The process used several thousand gallons of nitric and hydrofluoric acid. Generally, the acid was neutralized prior to disposal, but may not have been completely neutralized prior to disposal. Chromium was also identified as a contaminant of concern.

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## 100-IU-6

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**Site Code:** 600-3 **Classification:** Accepted

**Site Names:** 600-3, Hanford Townsite Excess Material Storage Yard/Paint Pit **ReClassification:**

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

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

**Site Description:** The site consists of a shallow trench that appears to be an old borrow pit, approximately 37 by 27 by 1.2 meters (120 by 90 by 4 feet), and a dumping area spread out over an area approximately 280 by 490 meters (925 by 1,600 feet). Both the dumping area and pit show signs of an attempt to cover the waste, with bulldozer tracks being prevalent throughout the areas. The site also shows evidence of burning.

The remains of an old railroad spur are present at the approximate center of the site. This spur traverses the site in an east-west direction.

Vegetation, such as grasses and rabbitbrush can be found at the dumping area. However, there are some smaller areas throughout that have stressed vegetation ranging from very little to none.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Dried paint and paint cans can be found on the south side of the pit. Closure rings for 208-liter (55-gallon) drums, roofing paper, and a white fibrous substance suspected of being asbestos are also present. The dumping area contains various solid wastes that include, broken wet cell battery cases and plates, stainless steel pipe and materials, various sizes and types of containers (three which are labeled as containing ethylene glycol), machining operations cuttings, pieces of aluminum, pieces of galvanized sheet, burnt wood, and the remains of dry cell batteries.

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**Site Code:** 600-20 **Classification:** Accepted

**Site Names:** 600-20, Tank Cleaning Site, 615 Hot Mix Plant for Road Materials **ReClassification:** Rejected (10/1/1997)

**Site Type:** Depression/Pit (nonspecific) **Start Date:**

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

**Site Description:** The site was originally described as two abandoned asphalt tanks, each with a volume capacity of 45,420 to 52,990 liters (12,000 to 14,000 gallons [based on the exterior measurements provided in WHC-MR-0425]). A 1999 waste site walkdown identified several valve pits, and a depression which contains discarded asphalt material, several pails and drums. Waste asphalt, dumped in solid and liquid form, is prevalent at the site, as is other construction and equipment debris. In warm weather, the discarded asphalt liquefies and resembles puddles. The asphalt puddle in the depression (trench) south of the tank area was approximately 0.3 meters (1 foot) deep in May and June 1999.

**Waste Type:** Oil

**Waste Description:** The remaining waste is located in the pit. The floor of the pit is coated with asphalt.

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**Site Code:** 600-23 **Classification:** Accepted

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**Site Names:** 600-23, Dumping Area Within Gravel Pit #11, Gravel Pit 11      **ReClassification:** Interim Closed Out (11/30/2001)

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

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

**Site Description:** The site has been remediated and closed out.

The waste site was an area of buried debris inside a large gravel pit (WIDS site code 600-248). The majority of the waste was located in the southern portion of a terrace, which was at the west end of the gravel pit, south of the entrance road.

**Waste Type:** Construction Debris

**Waste Description:** The middle terrace at the west end of the unit contained construction debris. Based on interviews with Hanford employees, drums, construction debris, laboratory equipment from 1706 KE and large pieces of equipment from the 300 Area may have been buried at the site. It had been indicated that the equipment was located on the east edge of the pit. It was possible that some asbestos may have been present. Some of the material disposed of here may have been radiologically contaminated. The contents of the drums were not known.

**Waste Type:** Barrels/Drums/Buckets/Cans

**Waste Description:** Barrels, most of which were empty, were present at the face of the terrace.

**Waste Type:** Asbestos (non-friable)

**Waste Description:** Transite building siding was observed at the site.

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**Site Code:** 600-24      **Classification:** Accepted

**Site Names:** 600-24, West P-11, H-21 Anti-Aircraft Artillery Compound and Dump Site      **ReClassification:** Rejected (10/1/1997)

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

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

**Site Description:** The site shows evidence of several former building foundations and walkways located along both sides of the roadway. A 20 foot wide by 36 foot wide concrete pad exists with concrete cradles for a large (approximately 30 x 8 foot radius) water tank. A well # 64-27, A-5295 BNW, is located in the concrete pad. Metal water pipes are visible at most building sites. Multiple small dumping sites are evident northwest and northeast of the compound, but none could be located that exhibit more than a small scattering of debris. Lesser amounts of debris are located at a site 100 meters southeast of the end of the paved road. An ammunition case is also located here. A coal pile site exists on the east shoulder of the railroad tracks northwest of the compound, and a large pile of military barbed wire fence posts (screw type) is located west of the tracks. The remains of building debris may be found throughout the area, especially in northeast portion of the site.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste at this unit includes: foundations, pipes (above and below grade), paint cans, a pile of army fence posts, antifreeze cans and miscellaneous debris.

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<b>Site Code:</b>	600-26	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-26, Hanford Townsite Burn Pile	<b>ReClassification:</b>	Rejected (10/1/1997)
<b>Site Type:</b>	Dumping Area	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The Technical Baseline Report states the site consists of a 2.4 meter (8 foot) excavation containing a construction refuse burn pile. However, it also states that the author was unable to locate the site in the field.		

This site was originally identified as a "mystery site" by Richard Roos. In his field notes, Roos describes the site as "old burn pile, apparently a construction disposal location. Site is graded off, perhaps 8' below original grade." He then goes on to describe various features north of the site, such as 600-20 (The Tank Cleaning Site) and several gravel pits. Under "Unusual or Identifying Features," Roos lists "very large spikes (10" x 1/2"), molten glass and metal, wood ashes. A dump site for concrete building foundation is located behind the soil mound..." The site is described as being east of this soil mound. This soil mound with the concrete chunks on its west side is easy to find and can be seen from Highway 2 North. The mound is found in a large excavated area. The excavation was made into the side of a slope and is not a typical borrow or gravel pit. It increases in depth from east to west. The area east of the soil mound and within the excavated area appears to coincide with Roos' description. However, there appear to have been several areas of burning, not just a single burn pile. The spikes, molten glass and wood ashes described by Roos were found in this area during the June 1999 visit.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Unit wastes include construction debris and possible asbestos and barrels.

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<b>Site Code:</b>	600-27	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-27; Well DC-6, Well 699-50-18C, 6-54-18A, A8855; 6-54-18B, A8856; 6-54-18C, A8857; 6-54-18D, A58858; Water Supply Valve Pits, Foundations and Dumping Area	<b>ReClassification:</b>	Rejected (10/6/1997)
<b>Site Type:</b>	Dumping Area	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site contains wells, valve pits, foundations, and a dumping area. The site has four monitoring wells identified as follows: 6-54-18A, A8855; 6-54-18B, A8856; 6-54-18C, A8857; 6-54-18D, A58858. Note that 6-54-18C is an alias for 699-54-18C. The second identifier beginning with an alpha character is a barcode value located on all wells that are presently used by the samplers during the collection of samples and groundwater elevations.		

The well named 699-50-18C, DC-6 does not exist either in the Hanford Environmental Information System (HEIS) database or in historical well documents. Two ex-Basalt Waste Isolation Project (BWIP) personnel were also consulted about this well. Both persons stated that the well does not exist and that the picture shown in the Technical Baseline Report is not an old BWIP well.

The two other sites that were previously identified as "wells" (see photograph in the Technical Baseline Report) are likely to be valve pits for water utilities and are marked with four steel posts

surrounding the pits. The easternmost pit has been filled in with soil and a concrete structure can be seen just under the soil. The other pit has a wooden cover and had two water pipes protruding through the cover. One water pipe was approximately 7.6 centimeters (3 inches) in diameter and was open ended. The other pipe was approximately 2.54 centimeters (1 inch) in diameter and had a faucet (garden hose type) attached to the end. In addition, two valve handles also protruded from the wooden cover.

Two power poles were observed between the wells and Route 2 North. The power poles appeared to be active and the breaker switches were not locked out.

Evidence of former buildings shows up between the well house and Route 2 North. Building debris includes concrete footings, concrete pads, transite, sewer pipe, electrical wiring and a large diameter clay pipe approximately 0.77 meters (30 inches) in diameter buried vertically from the surface to approximately 2 meters (6.5 feet) below grade. The clay pipe has no incoming/outgoing pipes.

The area surrounding the wells show evidence of former roads and walkways that have been overgrown with weeds.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The original waste site package identified that chemical analysis of the monitoring well shows volatile organics. No evidence has been found to support this claim. In order to substantiate this information, the HEIS database was searched for groundwater monitoring wells near the area. The following wells were searched for volatile organics: 699-54-18E, 600-54-19, 699-52-18A, 699-52-18B, 699-52-18C, 699-52-19, 699-52-17, 699-54-18A, 699-54-18B, 699-54-18C, 699-54-18D, 699-54-15A. The results are as follows: Well Number 699-54-18D, Sample Number B07Q48, Date 11/24/92, Constituent 67-64-1, Acetone, 190 micrograms per liter; Well Number 699-54-18D, Sample Number B075S7, Date 11/17/92, Constituent 108-88-3, Toluene, 6.1 micrograms per liter; Well Number 699-54-18D, Sample Number B07Q48, Date 11/24/92, Constituent 108-88-3, Toluene, 5.69 micrograms per liter; Well Number 699-54-18D, Sample Number B01NN6, Date 11/24/92, Constituent 108-88-3, Toluene, 5.2 micrograms per liter. HEIS for Well 699-48-18 was searched for volatile organics. The results are for Sample Number H000DQT1, Date 8/25/87, Constituent 75-09-02 methylenechloride, analytical method id = 16, 80 micrograms per liter. A later sample for the same well showed Sample Number B08185, Date 1/28/93, Constituent 75-09-02 methylenechloride, analytical method id = 83, 5 micrograms per liter (below minimum detectable concentration). Other wells had no volatile organics or the results were below minimum detectable concentration. Some asbestos transite is visible in the area.

<b>Site Code:</b>	600-50	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-50, Hanford Construction Camp Coal Yard	<b>ReClassification:</b>	Rejected (10/1/1997)
<b>Site Type:</b>	Depression/Pit (nonspecific)	<b>Start Date:</b>	1943
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1945
<b>Site Description:</b>	The site is the remnants of the coal pile that supplied coal to the Hanford Construction Camp residents. The "charred black debris" (described in the previous version of the site description) is the 50 year old remnant bottom layer of coal dust from the pile. There are man made mounds on the northeast corner of the site. Previous documentation describes the mounds as thought to contain waste construction materials, such as, wood, bricks, melted plastics and ceramics. However, the man made mounds were created when the surface was bulldozed in preparation for		

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the coal pile. No waste materials are in evidence.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is coal dust remaining from the coal that was stored at the site.

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**Site Code:** 600-107

**Classification:** Accepted

**Site Names:** 600-107, 213-J&K Cribs, Gable Mountain Plutonium Storage Vault Cribs, 213-J & K Cribs

**ReClassification:** No Action (2/9/2004)

**Site Type:** Crib

**Start Date:** 1944

**Site Status:** Inactive

**End Date:** 1950

**Site Description:** The site has been evaluated and determined to meet remedial action objectives. The evaluation supports reclassification.

The sites consisted of two small cribs located on the southwest and southeast corners of the 213-J & K Storage Vault Facility.

**Waste Type:** Water

**Waste Description:** Very little water solution ever entered this unit. The distributor piping was removed and inspected. Rust scale taken from the interior of the pipes was found to be free of radioactivity background levels. The unit was removed from radiation zone status on November 11, 1974.

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**Site Code:** 600-108

**Classification:** Accepted

**Site Names:** 600-108, 213-K Vault, 213-J&K Storage Facility (SF), 218-E-16, 213-J & K Magazine Waste Storage Cavern

**ReClassification:**

**Site Type:** Storage

**Start Date:** 1944

**Site Status:** Inactive

**End Date:**

**Site Description:** This site, 600-108, refers to the 213-K Vault. The other half of the facility is the 213-J Vault, 600-257. Both vaults have been released from radiation zone status.

The 213 facility was constructed into the south side of the base of Gable Mountain. The vaults are two parallel reinforced concrete, earth covered storage facilities. The south end of each vault forms a continuous reinforced concrete wing-shaped retaining wall with an attached reinforced concrete loading platform. Distance between the two vaults is 13.6 meters (44.5 feet). Each vault contains three rooms: magazine, vestibule, and instrument room. There are two outside, steel-hinged doors opening onto the loading platform. An inner steel vault door separates the vestibule from the magazine. The 213-J Vault is the western vault. The 213-K Vault is the eastern vault.

**Waste Type:** Equipment

**Waste Description:** The vaults were originally constructed for storage of Hanford plutonium product in containers. They were used only briefly, (1944-1947), for that purpose. They were subsequently used to store explosives, ammunition and drums of equipment contaminated with radioactive sodium. Dose rates up to 5 millirad/hour were measured inside 213-K, on the drums containing sodium

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contaminated equipment (10/21/1981). No smearable radioactivity was detected on any of the surfaces inside the vaults. All contaminated materials have been removed from the 213-K Vault. It is now empty. Both the 213-K and 213-J vaults have been released from radiation zone status.

This site was listed as a candidate for sampling in the 100 Area Remaining Sites ROD. Based on a site walkdown conducted in 2003, it was determined that this site required remedial action. Material containing asbestos and other potentially hazardous material was observed.

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**Site Code:** 600-109 **Classification:** Accepted  
**Site Names:** 600-109, HTCL, Hanford Trailer Camp Landfill **ReClassification:**  
**Site Type:** Sanitary Landfill **Start Date:** 1943  
**Site Status:** Inactive **End Date:** 1945  
**Site Description:** The site is found within what is currently named Gravel Pit 15. Surface markings suggest that materials have been covered by bulldozing with excavation spoil. Visible debris is widely scattered within the pit. A large pile of river rock is located in the central part of the excavation.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The unit was used for typical domestic wastes that were used during construction of the Hanford Site facilities. Debris includes metal, glass, fabric and rubber. Nondomestic metal scrap, rebar and concrete is also present.

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**Site Code:** 600-110 **Classification:** Accepted  
**Site Names:** 600-110, HTL, Hanford Townsite Landfill **ReClassification:** No Action (8/4/2004)  
**Site Type:** Sanitary Landfill **Start Date:** 1850  
**Site Status:** Inactive **End Date:** 1943

**Site Description:** The site consisted of an unlined excavated area that had been backfilled.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site was used to dispose of normal industrial and domestic wastes common for the period.

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**Site Code:** 600-111 **Classification:** Accepted  
**Site Names:** 600-111, P-11 Critical Mass Laboratory Complex (Buildings, Crib, 2 septic and associated piping) **ReClassification:** Interim Closed Out (10/28/2008)  
**Site Type:** Laboratory **Start Date:** 1949  
**Site Status:** Inactive **End Date:** 1951

**Site Description:** Prior to demolition and cleanup, the site consisted of the P-11 Critical Mass Laboratory which included two facilities (120 Experimental Building and 123 Control Building), a crib, two septic system associated tile field and pipelines, and underground piping and remaining soil contamination. The facilities, crib, and underground piping were decontaminated and demolished

in 1974. The facility cleanup plan was unclear whether the concrete foundation of the 120 Building was removed. The foundation of the uncontaminated 123 Building does remain below grade. This site also included two septic tanks.

The 120 Building contained two test rooms, a change room with shower, lavatory, service sink and hot water tank. The flooring was a 30.5 cm (12 in) concrete slab perforated by floor drains. The floor drain material went via piping into a below grade catch basin. From the catch basin, the outlet pipeline went to the waste disposal crib.

The waste disposal crib was constructed of concrete slabs interlaced together to form an 2.4 m by 2.4 m by 1.5 m (8 ft by 8 ft by 5 ft) crib. At one time, a fence surrounded the crib.

The septic system was located due east of the 123 Building. There were two septic tanks, an old and a new (identified on drawing H-7-698). The old septic tank, located approximately 14.7 m (48.2 ft) from the 123 Building was filled with dirt and abandoned in place. Drawing H-7-698 Note 3 identifies that the original tank had been damaged. The piping from the 123 Building to the new septic tank was replaced with new 10 cm (4 in) vitrified pipe. The new septic tank was located approximately 0.5 m (1.6 ft) east of the abandoned septic tank. The tile field begins approximately 36.7 m (120.4 ft) further east and had twelve laterals, six per side.

**Waste Type:** Soil

**Waste Description:** Contaminants of Potential Concern (COPCs) included isotopic plutonium, americium-241, gamma-emitting radionuclides, polychlorinated biphenyls (PCBs), inductively coupled plasma (ICP) metals, mercury, and semivolatile organic compounds (SVOCs). Although asbestos was a COPC, it was only to be sampled if suspect asbestos material was observed during sampling activities.

The site received low-level plutonium waste from the 120 Building (Critical Assembly Room, Chemistry Laboratory, Storage and Tank Room, and Change Room). The 120 Building and the crib were demolished in 1974. The waste removed from the site during decontamination and demolition activities consisted of seven transuranic waste boxes, fibreglassed plywood and steel, that were buried in trench 8 of 218-W-4B (Burial Ground). All non-transuranic waste was buried in mixed fission product trenches 12 and 14 in 218-W-4A. The seventeen drums of transuranic waste were buried in trench 7 of 218-W-4B.

The details are 268 - 208 liter (55 gallon) drums, mixed fission products, weighing 50,770 kilograms (111,695 pounds); 17 - 208 liter (55 gallon) drums, transuranic waste, weighing 3,809 kilograms (8,380 pounds); 5 - fiberglass reinforced plywood boxes, weighing 2,600 kilograms (5,200 pounds); 73 - plywood boxes, weighing 124,682 kilograms (274,300 pounds); 2 - steel boxes, weighing 5,009 kilograms (11,020 pounds); 6 truck loads, 8,364 kilograms (18,400 pounds). A total of 10,909 kilograms (24,600 pounds) were buried as transuranic waste and 183,816 kilograms (404,395 pounds) were buried as mixed fission products.

Nontransuranic waste was based on a waste burial limit of 10 nanocuries per gram. This limit was determined by radiation monitoring personnel. These low level wastes were designated as mixed fission products and thus, did not require containment for 20 year retrievability.

<b>Site Code:</b>	600-146	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-146, Steel Structure on Northwest Side of Gable Mountain	<b>ReClassification:</b>	Interim Closed Out (7/21/2010)
<b>Site Type:</b>	Dumping Area	<b>Start Date:</b>	

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

**Site Description:** The site includes a steel structure constructed of steel "I" beam and "L" beams. The interior of the structure contains stainless steel piping running throughout. Metal grating is located on three levels of the structure. The structure appears to be laying in a horizontal position. Debris observed laying around the structure includes stainless steel pipe, metal rings, metal boxes, empty cans and wood.

Two earth berms are located just east of the metal structure. To the east of the berms is a small concrete pad approximately 1.5-1.8 meters (5-6 feet) square.

There is a pile of lumber near the metal structures. Some of the lumber has shingles attached. This could be the remains of a small building associated with the concrete pad.

There is a small, 5.1-7.6 centimeters (2-3 inches) in diameter, area of discolored soil containing metal fragments and charred wood.

**Waste Type:** Equipment

**Waste Description:** The waste is a steel structure, stainless steel piping, metal parts, metal fragments, and the lid from a military type ammunition can (no label).

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**Site Code:** 600-149 **Classification:** Accepted

**Site Names:** 600-149, Small Arms Range, Rifle and Pistol Range, 661 Complex, 600-54 (See Subsites) **ReClassification:**

**Site Type:** Military Compound **Start Date:**

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

**Site Description:** The site consists of two subsites: the Range complex which included a Range House Building, Well Pump House, and four firing ranges. The second subsite consists of the berm located behind the pistol/rifle range area.

**Waste Type:** Ordnance

**Waste Description:** Lead bullets and spent cartridges are found throughout the area. Grenade canisters have also been found in the area.

**Waste Type:** Asbestos (non-friable)

**Waste Description:** The site contains transite piping remnants.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site contains miscellaneous trash scattered about the site.

**SubSites:**

**SubSite Code:** 600-149:1

**SubSite Name:** 600-149:1, Small Arms Range, Rifle, and Pistol Range

**Classification:** Accepted

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**ReClassification:**

**Description:** The Range complex consisted of a Range House Building , Well Pump House, and four firing ranges. The entire complex was 381 meters (1,250 feet) by 555 meters (1,820 feet). and was surrounded on three sides by a Type No 1, three-strand, barbed wire fence. (Gable Mountain formed a natural access barrier on the fourth side.) The ranges were of four different types: a regular Army pistol range, a Federal Bureau of Investigation "killer course" range (also known as the "special range"), a submachine gun range, and "walk and draw" pistol range. The first two ranges were covered with a 5.1-centimeter (2-inch) thick bituminous road mix, and the latter two ranges were equipped with manually operated, moving targets. The Range House Building was located on the opposite side of the access road from the ranges and contained a conference room, equipment storage room, office, rest room, and three brick chimneys for stove heating purposes. The small Well Pumphouse pit was constructed of reinforced concrete and contained a hatch in the roof for the maintenance of pumping equipment.

Field surveillance activities conducted June 17, 1996 at the site revealed several 19 or 23-liter (5 or 6-gallon) drums (riddled with bullet holes), smoke grenade canisters (discharged and bullet riddled), bullet casings, suspected moving target devices, and concrete pads to the west of the site. Additionally, the site is demarcated by a wood post and barbed wire enclosure. The enclosure fenced three sides of the range and appeared to have been posted with warning signs. The signs, however, are no longer readable and consist of rectangular wooden postings attached to some of the remaining wooden fence posts. The fence appeared to be open on the hillside. Much of the fence is down and some of the wire sections have been removed leaving the posts standing. Portions of the old irrigation canal, at the base of the hillside, have been filled with soil apparently to give access to targets placed on the hillside. Rubble, wire, and transite pipe are scattered about the Range Complex site.

**SubSite Code:** 600-149:2

**SubSite Name:** 600-149:2, Berm Behind the Pistol/Rifle Range

**Classification:** Accepted

**ReClassification:** Interim Closed Out

**Description:** The Remaining Sites Verification Package, (RSVP-2008-049), has documented that the 600-149:2 subsite, the berm behind the pistol/rifle range, meets the objectives for interim closure as established in the Remedial Design Report/Remedial Action Work Plan for the 100 Area (RDR/RAWP) and the Interim Action Record of Decision for the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, 100-FR-1, 100-FR-2, 100-HR-1, 100-HR-2, 100-KR-1, 100-KR-2, 100-IU-2, 100-IU-6, and 200-CW-3 Operable Units, (Remaining Sites ROD).

The subsite consisted of the berm behind the pistol/rifle range, part of the 100-IU-6 Operable Unit, located north of the east end of Gable Mountain, west of Route 2, and northwest of the former Hanford town site.

Remedial action at the waste site was performed in September 2008. As part of the remedial action a portion of the surrounding area was evaluated for unexploded ordnance (UXO) by digital geophysical mapping (DGM) using an electromagnetic detection instrument with a geographical mapping system to obtain positioning data over an area of approximately 2.9 hectares (7.2 acres) (TerranearPMC 2008). This area included the boundary of the current remediation excavation, as well as the area to the northeast that was needed to support the site remediation.

Due to concerns that UXO may be present, the soil berm was inspected prior to the onset of remedial action. Three UXO items were discovered at a depth of approximately 18 cm (0.5

ft) during this inspection. These included a rifle grenade, a fuse from a smoke grenade, and a riot shell (smoke round). Approximately 1.0 m (3 ft) of material was removed from the face of the berm and 0.6 m (2 ft) of soil from the base/toe of the berm. The resulting 826 bank cubic meters (1,080 bank cubic yards) of soil was disposed at the Environmental Restoration Disposal Facility (ERDF).

Due to concerns that additional UXO may be present in the soil berm, direct load-out of soil for shipment to the ERDF was not performed. The material removed from the berm was staged for inspection of additional UXO and then sent to ERDF.

The contaminants of potential concern for verification sampling included antimony, lead, and tin. A comparison against ecological risk screening levels has been made for the site contaminants of concern (COCs) and other constituents. Screening levels were exceeded for antimony, boron, copper, lead, manganese, selenium, vanadium, and zinc. Exceedance of screening values does not necessarily indicate the existence of risk to ecological receptors. Because concentrations of antimony, manganese, vanadium, and zinc were below Hanford Site background levels, it was believed that the presence of these constituents did not pose a risk to ecological receptors. Boron, copper, and selenium concentrations are consistent with those seen elsewhere at the Hanford Site (no established background value is available for boron). Lead present at concentrations exceeding background will be evaluated in the context of additional lines of evidence for ecological effects as part of the final closeout decision for this site.

Verification sampling for the subsite was performed in October 2008 to collect data to determine if the RAGs had been met. Verification soil samples were analyzed using EPA-approved analytical methods. The laboratory-reported data results for all constituents were stored in the Environmental Restoration project-specific database prior to archival in the Hanford Environmental Information System and were presented in Appendix A of the RSVP.

These results show that residual soil concentrations support future land uses that can be represented (or bounded) by a rural-residential scenario. The results also demonstrate that residual contaminant concentrations support unrestricted future use of shallow zone soil (i.e., surface to 4.6 m [15 ft]) and contaminant levels remaining in the soil are protective of groundwater and the Columbia River. This subsite does not have a deep zone component; therefore, no deep zone institutional controls are required. Statistical sampling to verify the completeness of remediation was performed and analytical results for the decision unit were shown to meet the cleanup objectives for direct exposure, groundwater protection, and river protection. Accordingly, an interim closure reclassification is supported for the subsite.

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<b>Site Code:</b>	600-153	<b>Classification:</b>	Not Accepted (5/31/2001)
<b>Site Names:</b>	600-153, Dumping Area Between River Mile Markers 29 and 30	<b>ReClassification:</b>	
<b>Site Type:</b>	Dumping Area	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site is pre-Hanford debris, such as a metal strong box, car springs, broken dishes, barbed wire, and wood.		
<b>Waste Type:</b>	Misc. Trash and Debris		
<b>Waste Description:</b>	Observed debris includes a metal strong box, car springs, culvert, piping, wire, barbed wire, old piping, glass, broken dishes, metal culvert and wood.		

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**Site Code:** 600-168 **Classification:** Not Accepted (10/1/1997)  
**Site Names:** 600-168, Buckholdt Ranch Toilet Pits, Herriford Ranch Toilet Pits **ReClassification:**  
**Site Type:** Depression/Pit (nonspecific) **Start Date:**  
**Site Status:** Inactive **End Date:** 1943  
**Site Description:** The general area of the ranch is marked by several acres of orchard tree stumps visible from the highway (Route 2 North). The site contains a number of toilet pits (outhouse pits) that remain open.

The toilet pits were described as being located between the house foundation and the road to the south. The ground in this area is very uneven and has a rolling surface. During the June 1999 visit, it was observed that much of the southern end of the orchard east of the house foundation has the same undulating ground surface. Several hazards are found near this site, including the house foundation, a wood-lined pit on the north side of the foundation, and the former well or pump house near the south side of the site.

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**Site Code:** 600-169 **Classification:** Not Accepted (10/1/1997)  
**Site Names:** 600-169, Hanford Construction Camp Trenches **ReClassification:**  
**Site Type:** Trench **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is three trenches located south of the Hanford Construction Camp, along the gravel road that is an extension of Avenue A. Each trench runs northwest to southeast and parallels the road. Spoil piles are pushed to the west side of the trenches. Their purpose is unclear. A 1997 site visit observed a pile of broken concrete between the southern most trench and the adjacent trench

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**Site Code:** 600-178 **Classification:** Accepted  
**Site Names:** 600-178, 213-J and 213-K Guard House Toilet Pit **ReClassification:**  
**Site Type:** Depression/Pit (nonspecific) **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a toilet pit opening within a 4.3 by 4.9-meter (14 by 16-foot) concrete pad that is the remains from the guard house. Apparently the opening is to a sanitary sewage pit located beneath the pad. No evidence of a sewage distribution system (septic tank) is apparent.  
**Waste Type:** Sanitary Sewage  
**Waste Description:** The waste was human sewage.

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**Site Code:** 600-185 **Classification:** Accepted  
**Site Names:** 600-185, Hanford Construction Camp Honey Dump Site **ReClassification:** Rejected (10/1/1997)

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**Site Type:** Trench **Start Date:** 1943  
**Site Status:** Inactive **End Date:** 1945  
**Site Description:** The site is described as a dumping and cleaning station for the portable toilets used at the various Hanford construction sites.

**Waste Type:** Sanitary Sewage  
**Waste Description:** The unit received portable toilet cleaning chemicals and human waste.

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**Site Code:** 600-186 **Classification:** Accepted  
**Site Names:** 600-186, Hanford Construction Camp Septic Tanks and Sewage Treatment Plants **ReClassification:**

**Site Type:** Trench **Start Date:** 1944  
**Site Status:** Inactive **End Date:**

**Site Description:** This waste site includes all the septic tanks as well as the sewage treatment plants at the Hanford Construction Camp. Five components of this site have been identified in the field and mapped.

Three former sewage treatment plant sites were identified from basins that remain at the sites. The northernmost site is the largest and deepest and appears as a trench. The trench begins at a group of trees and extends to the river, cutting into the river bank. Small pieces of concrete, concrete pipe, vitrified clay pipe and wood were observed around the trench. The bottom of the trench has fine soil that did not appear to be sludge derived from sewage. The second trench, just south of the first trench is shallower and not as obvious. Small pieces of concrete were observed surrounding the trench. A layer of sludge like material was observed on the east side of the trench. The southernmost trench, was obscured by blown in tumbleweeds. The outline of a foundation was found on the north side of the most southern trench. One septic tank was found between this trench and the turn off to the Honey Dump site. A large area west of the sewage treatment plants was searched for septic tanks, but none were found.

**Waste Type:** Sanitary Sewage  
**Waste Description:** All sewage carried by the three sewage disposal systems was chlorinated.

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**Site Code:** 600-192 **Classification:** Not Accepted (10/1/1997)  
**Site Names:** 600-192, Hanford Construction Camp Fumigation Chamber **ReClassification:**

**Site Type:** Maintenance Shop **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is the remains of a fumigation building. During a field investigation by T. F. Johnson on October 24, 1996, there was no evidence of the fumigation chamber at the site except for a few small pieces of concrete. The area was covered with cheatgrass, rabbitbrush, and tumbleweeds.

The fumigation chamber (disinfestation building) was a small wooden frame building. It was posted with "Poison Gas, Keep Out" signs and protected by an 2.4 meter (8 foot) barbed-wire security fence.

**Site Code:** 600-202 **Classification:** Accepted

**Site Names:** 600-202, Hanford Townsite Four Burn and Burial Pits **ReClassification:**

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

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

**Site Description:** The site includes four burn and burial pits located close together and arranged to form a single rectangle that lies in the northwest to southeast direction. Each rectangle is 150 meters (492 feet) by 75 meters (246 feet) by 6 to 12 meters (20 to 39 feet) deep. The total area is provided for the site dimensions.

The site is documented as four burn and burial pits combined to form a single rectangle that trends northwest to southeast, located 550 meters southeast of the intersection of Avenue A and 9th Street within the Hanford Construction Camp. The site rectangle is 150 by 75 meters and is 6 to 12 meters deep. The waste contains miscellaneous trash. Bulldozer marks suggest that debris was covered. There are extensive signs of burning over the site.

The 1999 walkdown that found the southwest pit partially backfilled. Two metal pipes (approximately 5 centimeters in diameter) with valves extending into the southeast pit from the east (river) side were located near the top of the pit. No pipes could be seen extending from the riverbank, but they may have been obscured by vegetation. No soil discoloration or vegetation stress was apparent.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is miscellaneous trash and debris and includes such items as fire-cracked rock, glass, china, jars, bottles, metal, kitchen materials, broken toilet bowl, and other materials. Bulldozer marks suggest that debris has been covered. The pits vary in depth, apparently because of varying levels of backfill. There is the potential that paints and solvents were burned in the pits. The site needs further evaluation.

**Site Code:** 600-204 **Classification:** Accepted

**Site Names:** 600-204, Hanford Townsite Burn and Burial Trench **ReClassification:** Interim Closed Out (9/16/2003)

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

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

**Site Description:** The site has been remediated and interim closed out.

The site was a long, narrow trench that was used as a burn pit. The trench was oriented north to south.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The trash was miscellaneous debris, including metal and glass fragments, nails, fire-scarred rock, cans, and bottles. The waste has been placed in a discernible unit.

**Site Code:** 600-205 **Classification:** Accepted

**Site Names:** 600-205, Hanford Townsite Landfill 2 **ReClassification:**



**Site Code:** 600-208 **Classification:** Accepted  
**Site Names:** 600-208, Hanford Construction Camp Boiler House Ponds **ReClassification:** No Action (8/12/2004)  
**Site Type:** Pond **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** Site 600-208 represents a series of liquid disposal ponds or trenches associated with the Hanford Construction Camp steam plants. The ponds were estimated to be roughly 6 meters (20 feet) by 20 meters (60 feet) and 1.5 meters (5 feet) deep.  
**Waste Type:** Water  
**Waste Description:** The waste was waste water and chemicals. The chemical released most frequently to the ponds would have been "water softener brine". There are no obvious signs of contamination.

**Site Code:** 600-213 **Classification:** Accepted  
**Site Names:** 600-213, Hanford Airport Underground Fuel Storage Tanks **ReClassification:** Rejected (1/31/2010)  
**Site Type:** Storage Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consisted of underground fuel storage tanks that were associated with the Hanford Airport. The airstrip runways are still visible. A windsock pole is visible just off the southeast corner of the airstrip intersection.  
Two field walkdowns in 2007 were performed, no visual evidence of building locations or fuel storage tanks were observed.  
A United States Geological Survey (USGS) June 1, 1948 aerial photograph of the area shows a connecting taxi-way between the south end of the north-south runway and the east end of the east-west runway. The photo shows buildings on the southeast side of the taxi-way. The taxi-way has a large north arrow painted on it that is about 61 meters (200 feet) long.

**Site Code:** 600-239 **Classification:** Accepted  
**Site Names:** 600-239, Debris in Pit 16, Hanford Aggregate Pit Debris, 615 Hot Mix Plant Debris **ReClassification:** No Action (5/31/2001)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site contains several large wooden beams, wooden pallets, large diameter steel pipe, steel plates, large mesh steel screens and rubber tires. All wastes observed were lying in neat piles on the ground surface within Pit #16; none appeared to be partially buried. One stacked pile of metal posts had some radiation warning signs still attached. There is a spot of old paint, about one square foot, in the pit.  
The site is naturally revegetating, with the sides regrowing grasses and rabbitbrush but the

bottom still mostly barren.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The waste is wood, metal and rubber.

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**Site Code:** 600-240 **Classification:** Accepted  
**Site Names:** 600-240, Debris in Pit 17, Hanford Aggregate Pit Debris, 615 Hot Mix Plant Debris **ReClassification:** Rejected (5/31/2001)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is metal and wooden debris scattered within Gravel Pit #17. The debris originated from the 615 Hot Mix Plant and operation of the gravel pit (Hanford Aggregate Pit). Some of the pipes and wood are partially buried in scattered locations. The pile is naturally revegetating to grasses and rabbitbrush. To the east of the pit is an irregularly shaped pile of a mix of asphalt pieces, soil, gravel, and cobble, about 12 meters by 3.5 meters by 1 meter high (40 feet by 12 feet by 3 feet high). Rabbitbrush plants have started to colonize the pile.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The waste is metal pipe, coarse mesh screens, wood, sheetmetal, concrete, a rubber tire, and a pile of asphalt pieces mixed with soil, gravel, and cobble.

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**Site Code:** 600-250 **Classification:** Not Accepted (5/31/2001)  
**Site Names:** 600-250, Metal Debris from RCRA General Inspection #LORIVFY97 Item #4 **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a recorded cultural resources site, a historic homestead where rusty sheet metal vent ducting and other miscellaneous debris have been abandoned, including: broken bricks and concrete, old lumber, metal cables and wiring. Some of the debris extends on to the top of the bank, including some half-buried, rusty cans.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** The waste is sheet metal and other debris.

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**Site Code:** 600-251 **Classification:** Not Accepted (4/10/2002)  
**Site Names:** 600-251, Steel Pipe from RCRA General Inspection #LORIVFY97 Item #6 **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is a near-vertical (tilted at about 20 degrees) steel pipe with the above ground portion of the pipe approximately 1.2 meters (4 feet) in length. The reason the pipe is tilted is not known. The pipe appears to be buried in the ground about 20 feet (6 meters) (John Auten, personal communication, December 19, 2001). The pipe is approximately 0.46 meters (1.5 feet) in diameter and has a 1.3 centimeters (0.5 inches) thick wall. The pipe is rusted and is filled with earth inside the pipe up to the level where it enters the ground. A well identification label is attached to its side (B8542). The pipe is covered with a flat metal lid.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste is a 40 centimeter (16 inch) diameter steel pipe extending from the ground approximately 1.5 meters (5 feet).

**Site Code:** 600-257 **Classification:** Accepted

**Site Names:** 600-257, 213-J Vault, 213-J&K Storage Facility, 213-J Magazine Waste Storage Cavern **ReClassification:**

**Site Type:** Storage **Start Date:** 1944

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

**Site Description:** This site refers only to the 213-J Vault. The 213-K Vault is described in Sitecode 600-108.

The 213 facility (213-J and 213-K) was constructed into the south side of the base of Gable Mountain. The vaults are two parallel reinforced concrete, earth covered storage facilities. The south end of each vault forms a continuous reinforced concrete wing-shaped retaining wall with an attached reinforced concrete loading platform. The distance between the two vaults is 13.6 meters (44.5 feet). Each vault contains three rooms: magazine, vestibule, and instrument room. There are two outside, steel-hinged doors opening onto the loading platform. An inner steel vault door separates the vestibule from the magazine. The 213-J Vault is the western vault. The 213-K Vault (site 600-108) is the eastern vault and is not part of site 600-257.

**Waste Type:** Equipment

**Waste Description:** The vaults were constructed for storage of Hanford plutonium and were used only briefly for that purpose. No smearable radioactivity or radiation above background was detected inside the 213-J Vault in 1981. 213-J was used by Pacific Northwest National Laboratory (PNNL) to store uncontaminated soil samples collected from around the world from a fallout study. In March 2002, PNNL removed the soil samples from the 213-J Vault. The vault is now empty.

**Site Code:** 600-272 **Classification:** Accepted

**Site Names:** 600-272, Petroleum-Contaminated Borehole, Well 699-43-2 **ReClassification:**

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

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

**Site Description:** The site is hydrocarbon contamination in well 699-43-2. Well 699-43-2 is a 16.8-centimeter (6-5/8-inch) diameter well with a 10-centimeter (4-inch) PVC liner. Limited information is available about well construction. This well is believed to have been drilled to a depth of 120 meters (390 feet) in 1980 to support geologic studies for reactor siting. The well is currently 103.4 meters (339 feet) deep. The depth to water is 9 meters (26 feet) below land surface. It is

believed that the well is not screened to groundwater and is open at the bottom.

**Waste Type:** Oil

**Waste Description:** The waste is an oil/water matrix. A sample of the water in the well showed 4.5 milligrams/liter (mg/L) of total petroleum hydrocarbons, 12.3 mg/L of oil and grease, and about 360 mg/L (36,000 micrograms per liter) of unknown alkanes. The likely source is diesel fuels or kerosene type materials. The liquid waste matrix will designate as D001 due to its low flash point.

**Site Code:** 600-280 **Classification:** Accepted

**Site Names:** 600-280, Hardened Tar Site **ReClassification:**

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

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

**Site Description:** The site is a 10 meter (33 foot) by 6 meter (19 foot) area where tar was dumped.

**Waste Type:** Construction Debris

**Waste Description:** The site has patches of hardened tar.

**Site Code:** 600-313 **Classification:** Accepted

**Site Names:** 600-313, Burned Area and Oil Stained Soil **ReClassification:**

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

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

**Site Description:** The site consists of potentially contaminated soil that is either an oil stain or burned area.

**Waste Type:** Soil

**Waste Description:** Contaminants of potential concern include TPH, PAH, PCBs and ICP metals.

**Site Code:** 600-314 **Classification:** Accepted

**Site Names:** 600-314, Telecommunication Component **ReClassification:**

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

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

**Site Description:** The site consists of scattered debris and the underlying soils at locations where probable telecommunications components lie on the surface. The site components have hardened black liquid on the outside surface and leaking out of them.

**Waste Type:** Equipment

**Waste Description:** The waste may be abandoned telecommunications equipment. The components may contain PCB from possible oil inside, suspect asbestos in outer asphaltic covering and possible lead in soldered joints.

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**Site Code:** 600-315 **Classification:** Accepted  
**Site Names:** 600-315, Black Granular Stain **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of underlying soils with a black granular stain surface area. There is very little vegetation in the affected area.

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**Site Code:** 600-317 **Classification:** Accepted  
**Site Names:** 600-317, Battery and Burn Area **ReClassification:**  
**Site Type:** Burn Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is described as scattered surface debris consisting of wet cell battery plates, burned material, and a white granular substance. It is located in the bottom of a borrow pit.

**Waste Type:** Batteries  
**Waste Description:** Lead and sulfuric acid from the batteries may be present.

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**Site Code:** 600-318 **Classification:** Accepted  
**Site Names:** 600-318, Wet Cell Batteries **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is described as wet cell battery debris lying on the ground surface at five locations.

**Waste Type:** Batteries  
**Waste Description:** There may be lead and battery acid present at the sites.

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**Site Code:** 600-319 **Classification:** Accepted  
**Site Names:** 600-319, Miscellaneous Debris **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is areas of surface debris consisting of ferrous metal, stained soil and dried paint. Many items are believed to have supported Army Tent Camp 230. One location consists of a 0.5 by 0.5 meter (2 by 2 feet) wooden lined below grade structure that is 0.5 meters (2 feet) deep. It contains empty paint and paint thinner cans. One empty can of military paint thinner has a date of 1956.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** Sulfur based cutting oils in the metal turnings and lead in the paint may be present.

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**Site Code:** 600-320 **Classification:** Accepted  
**Site Names:** 600-320, Oil Stains **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is described as eight areas with petroleum based material released to the ground surface.  
**Waste Type:** Oil  
**Waste Description:** These areas may contain ICP metals, PAHs, TPH and possible PCB contamination.

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**Site Code:** 600-321 **Classification:** Accepted  
**Site Names:** 600-321, Suspect Asbestos Containing Material and Debris **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is described as four surface soil areas with scattered metal, fire brick, suspect friable asbestos and pipe lagging.  
**Waste Type:** Asbestos (friable)  
**Waste Description:** The areas consist of suspect asbestos containing material (ACM) insulation.

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**Site Code:** 600-322 **Classification:** Accepted  
**Site Names:** 600-322, Rail Spur Pipe **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The waste site is described as an 8 inch (20 centimeter) diameter carbon steel pipe with a diamond hatched cover plate. The pipe and cover are flush with the ground surface. The pipe drains to the south under a rail spur.

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**Site Code:** 600-323 **Classification:** Accepted  
**Site Names:** 600-323, Suspect Bermed Area **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is described as a bermed area with coal cinders and an apparent ditch running east and west within the area.

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**Site Code:** 600-324 **Classification:** Accepted

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**Site Names:** 600-324, Burnt Debris Area **ReClassification:**  
**Site Type:** Burn Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This site consists of the a concrete pad with miscellaneous pipe and auto parts debris with burnt wood, metal debris and the underlying soil..

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**Site Code:** 600-325 **Classification:** Accepted  
**Site Names:** 600-325, Burned Roofing Materials **ReClassification:**  
**Site Type:** Burn Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of burned roofing materials at two adjacent areas.

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**Site Code:** 600-326 **Classification:** Accepted  
**Site Names:** 600-326, Odorous Black Material **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of two areas of brittle material containing some angular solid pieces. It is black in color and has a hydrogen sulfide odor.

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**Site Code:** 600-327 **Classification:** Accepted  
**Site Names:** 600-327, Suspect Dichromate Facility **ReClassification:**  
**Site Type:** Process Unit/Plant **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a large depression filled with Russian thistle, a 2.5 cm (1 inch) water pipe stub located on the north side of the depression and the underlying soil.

**Waste Type:** Soil  
**Waste Description:** Sodium dichromate and other chemicals that were utilized in the 145 Building (CMX) processes.

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**Site Code:** 600-328 **Classification:** Accepted  
**Site Names:** 600-328, Lead Slag **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This site consists of the underlying soil and scattered lead slag with a small stained soil area. The vegetation appears to be stressed.

**Waste Type:** Soil

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**Waste Description:** This site is potentially contaminated with lead, TPH, PAHs and RCRA metals.

**Site Code:** 600-329 **Classification:** Accepted

**Site Names:** 600-329, Concrete Outfall Structure **ReClassification:**

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

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

**Site Description:** This site consists of the an unknown concrete structure underlying soils near the Construction Shop of the Hanford Town-site operations, on the high water line of river the edge.

**Site Code:** 600-330 **Classification:** Accepted

**Site Names:** 600-330, Division Street Service Station **ReClassification:** Rejected (6/10/2010)

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

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

**Site Description:** During the 2010 geophysical investigation it was noted that the site was flat terrain with grasses and occasional rabbit brush. Originally the site was thought to consist of potential underground components of a service station, including storage tanks, associated piping, and contaminated soils.

**Waste Type:** Oil

**Waste Description:** The waste consists of underground storage tanks, associated piping and underlying soil.

**Site Code:** 600-331 **Classification:** Accepted

**Site Names:** 600-331, Lime Sulfur Barrel Site **ReClassification:**

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

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

**Site Description:** The site is described as the previous location of the lime sulfur barrel location. The site consists of the underlying soil that is the previous location of the lime sulfur barrel location (UPR-600-19). The site was remediated in 1997, however, sample data (Hanford Environmental Information System (HEIS)) sample number B0MJ58 indicates that high levels of lead remain.

**Site Code:** 600-332 **Classification:** Accepted

**Site Names:** 600-332, Gable Mountain Firing Range Septic System **ReClassification:**

**Site Type:** Sanitary Sewer **Start Date:**

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

**Site Description:** The site consists of the underlying soil, septic tank, associated piping and drain field for a septic system. The Orphan Site's evaluation of historical features identified the septic system that supported the small arms firing range at Gable Mountain. A field investigation was conducted on 2/19/2008 to locate a potential site for the septic system. Based upon the Photo # D-4882-NEG

(See photo #1.) and the field investigation, the above Washington State Plane coordinates listed for the site are of a potential location of the Range Building (not the coordinates for the septic system) shown in the photo. A fence like object seen in the photo on the northwest side of the building could be the septic tank location.

**Waste Type:** Equipment

**Waste Description:** The waste includes the septic tank, associated piping, and drain field underlying soil. There is no reference to a drain field, however it is assumed that one exists. Contaminants of potential concern include heavy metals.

**Site Code:** 600-333 **Classification:** Accepted

**Site Names:** 600-333, Underground Concrete Structure **ReClassification:**

**Site Type:** Process Unit/Plant **Start Date:**

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

**Site Description:** This site consists of a below grade concrete structure with three vertical shafts open to the surface and the underlying soil.

**Site Code:** 600-334 **Classification:** Accepted

**Site Names:** 600-334, CMX Building **ReClassification:**

**Site Type:** Process Unit/Plant **Start Date:**

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

**Site Description:** This site consists of four areas of interest; one a rectangular raised soil area where the 145 building complex was located. Area two is on the upstream side of the raised soil area which is a 5 by 5 meter (16 by 16 feet) depression that is 1.5 meters (5 feet) deep with broken concrete near its edge, it is unknown as to its origin in relation to the 145 building. Area three is on the river bank side of the raised soil area and is three open ended pipes (two vitreous and one cast iron) protruding horizontally from under the middle of the former building area. Area four is an 4.6 meter (15.1 feet) diameter burn area off the NW corner of the former building area of unknown origin.

**Waste Type:** Chemicals

**Waste Description:** Numerous other chemicals were used in the operation of this facility, these being identified in HW-7-4444.

Contaminants of Concern include: ferric sulfate, lead (from the sulfuric acid), mercury (from the sulfuric acid), sodium dichromate, sulfuric acid, Petroleum products.

**Site Code:** 600-335 **Classification:** Accepted

**Site Names:** 600-335, Service Station and UST **ReClassification:** Rejected (6/10/2010)

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

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

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**Site Description:** During the 2010 geophysical investigation it was noted that the site was flat terrain with grasses and occasional rabbit brush. Originally, the site was thought to consist of potential underground components of a service station, including storage tanks, associated piping, and contaminated soils, that were identified in historical photo # P-8244. The photo also appears to show two gasoline pumps.

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**Site Code:** 600-349 **Classification:** Discovery

**Site Names:** 600-349, Unexploded Ordnance (UXO) outside of 600-149 **ReClassification:**

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

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

**Site Description:** This site consists of potential Unexploded Ordnance (UXO) in an area bounded by the entire perimeter of the 600-149, Small Arms Range, Rifle and Pistol Range, 661 Complex, 600-54 (See Subsites) waste site extending from the perimeter as far as a fired rifle grenade could travel. The area with the highest potential to contain munitions and explosives of concern includes a portion of Gable Mountain south of Prid Canal.

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**Site Code:** 600-350 **Classification:** Discovery

**Site Names:** 600-350, PNL Water Catchment Experiment **ReClassification:**

**Site Type:** Experiment/Test Site **Start Date:**

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

**Site Description:** This site consists of two separate fenced areas containing linear soil mounds.

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**Site Code:** JA JONES 1 **Classification:** Accepted

**Site Names:** JA JONES 1, JA Jones 1, JA Jones Dumping Pit #1, JA Jones Construction Pit #1 **ReClassification:** Interim Closed Out (11/8/2001)

**Site Type:** Dumping Area **Start Date:** 1975

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

**Site Description:** The site has been remediated and closed out.

The site originally consisted of a trench dug from east to west, located on the west side of a depression and used by the J.A. Jones Company.

**Waste Type:** Construction Debris

**Waste Description:** This site contains miscellaneous nonradioactive solid wastes from various construction sites. It contains wood scraps, concrete, miscellaneous construction wastes and paint products.

**Waste Type:** Chemical Release

**Waste Description:** In 1977, seven to ten pick up truck loads of over stocked paint and solvents were disposed of into a pit located north of the 300 Area. A site visit with the employee who dumped the paint

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indicates it was placed in the trench known as JA Jones Pit 1. He indicated that latex, epoxy and enamel paints, as well as paint thinners were discarded. He opened the containers (one and 5 gallon cans) and emptied the contents into the pit. He then threw the empty containers into the pit.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site may contain some low level uranium contaminated materials. However, this information can not be confirmed because of the uncertainty the location where the material was dumped.

**Site Code:** UPR-600-11 **Classification:** Accepted

**Site Names:** UPR-600-11, Contaminated Soil Dumped at JA Jones Pit #1 **ReClassification:** Closed Out (1/27/1999)

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

**Site Status:** Inactive **End Date:** 1980

**Site Description:** The site was an area within the JA Jones Pit #1 where contaminated material was mistakenly disposed. The contaminated material was removed in 1980 and the area released from radiological control. There is no visual evidence of this occurrence.

**Waste Type:** Soil

**Waste Description:** The waste included soil and blacktop rubble. Surveys of the blacktop rubble revealed contamination with a maximum reading of 1000 counts per minute. Soil at the dump site had readings of less than 200 counts per minute. This is believed to be the field instrument detection limit. Blacktop and soil samples (quantity unknown) were collected for a laboratory counting. The blacktop had a maximum reading of 600 counts per minute natural uranium. The soil measured at less then detectable.

**Site Code:** UPR-600-16 **Classification:** Accepted

**Site Names:** UPR-600-16, P-11 Fire and Contamination Spread, UN-600-16, UN-616-16 **ReClassification:** Interim Closed Out (10/28/2008)

**Site Type:** Unplanned Release **Start Date:** 1951

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

**Site Description:** Fire and Contamination Spread waste site is an unplanned release that occurred on December 4, 1951, when plutonium contamination was spread by a fire that ignited inside the 120 Experimental Building.

The area is currently a flat, featureless field that has been sown with rye grass. The P-11 Laboratory structure has been removed but its location is marked with a permanent concrete benchmark.

**Waste Type:** Ash

**Waste Description:** An estimated amount of 1 to 4 grams (0.035 to 0.14 ounces) of plutonium was deposited over an area approximately 1,660 square meters (18,000 square feet) from a structure fire in 1951.

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**Site Code:** UPR-600-18 **Classification:** Accepted  
**Site Names:** UPR-600-18, Tank Truck Gasoline Spill, UN-600-18 **ReClassification:** Rejected (10/1/1997)  
**Site Type:** Unplanned Release **Start Date:** 1987  
**Site Status:** Inactive **End Date:** 1987  
**Site Description:** The site is an area where petroleum products leaked to the soil from a fuel delivery truck accident. The release occurred April 16, 1987 9:00 AM and resulted in the spill of CERCLA reportable materials. Appropriate notifications were made to the Department of Energy, Environmental Protection Agency, State of Washington, and Rockwell (maintenance and operations contractor) management.

**Waste Type:** Oil

**Waste Description:** The release was a total of 1,354 liters (395 gallons) of fuel consisting of 26 liters (7 gallons) of #2 diesel oil, 434 liters (112 gallons) of unleaded gasoline, 38 liters (10 gallons) of ethylene glycol, and 856 liters (226 gallons) of leaded gasoline.

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**Site Code:** UPR-600-19 **Classification:** Accepted  
**Site Names:** UPR-600-19, Lime Sulfur Barrel **ReClassification:** Rejected (10/1/1997)  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is an unplanned release. An old wooden barrel that pre-dated MED operations deteriorated and collapsed, spilling the contents (about 45 kilograms [100 pounds] of powdery lime sulfur) onto the ground. The site was abandoned when the DeWitt Buckholdt Ranch was taken over by the U.S. Army Corps of Engineers in 1943.

**Waste Type:** Chemical Release

**Waste Description:** The waste is lime sulfur powder. According to regulatory support personnel, lime sulfur is not a listed waste. WAC 16-154-100 Materials List for Organic Food Production -- Disease Control Materials and Practices states the following: "Approved materials. The following list of disease control materials and practices are approved for use in organic crop production. Some approved materials have certain restrictions regarding their use. These restrictions are noted in the list. Lime sulfur: Foliar application as a fungicide only."

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**100-KR-1**

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**Site Code:** 100-K-57 **Classification:** Accepted

**Site Names:** 100-K-57, 107-KE Drainage Ditches **ReClassification:**

**Site Type:** Ditch **Start Date:** 1967

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site appears as a dry, shallow ditch which extends from the 116-K-3 (1904-K Outfall Structure) and the 116-K-1 Crib. A second ditch extends from the culvert to the Columbia River. The culvert conveyed process effluent leakage from the area surrounding the 107-KE Basins under the road and to the ditch. The two ditches intersect below the bank located just north of the basins. The ditch at the bottom of the bank is approximately 300 meters (980 feet) long and 2 meters (6.6 feet) wide and the ditch leading from the culvert to the river is approximately 270 meters (890 feet) long and the width is generally 2 meters (6.6 feet) wide but widens significantly in the middle section. The southern portion of the ditch is located in an area posted as a "Soil Contamination Area." The ditch is barricaded from the river by a three strand barbed wire fence and is posted with "Keep Out" signs.

**Waste Type:** Soil

**Waste Description:** The soil in and around the ditch is contaminated with radionuclides as a result of conveying reactor process effluent to the river.

**Waste Type:** Process Effluent

**Waste Description:** The site received process effluent from the 107-KE Retention Basins when the site was active.

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**Site Code:** 100-K-63 **Classification:** Accepted

**Site Names:** 100-K-63, 100-KW Floodplain, 100-KW Flood Plain Contamination Area, UN-116-KW-1 **ReClassification:**

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

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

**Site Description:** The site is a large portion of the flood plain, along the shore of the Columbia River, north of 100-K West Reactor Area that is posted as a radiological contamination area. Most of it is posted as an Underground Radioactive Material Area, but there are two sections that remain posted as Soil Contamination Areas.

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**Site Code:** 100-K-64 **Classification:** Accepted

**Site Names:** 100-K-64, 100-KE Floodplain, 100-KE Flood Plain Contamination Area, UN-116-KE-1 **ReClassification:**

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

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

**Site Description:** The site is the portion of the flood plain, along the shore of the Columbia River, north of 100-K East Reactor Area that is posted as a radiological contamination area, Soil Contamination Area

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and Underground Radioactive Material. It is inside an 8 foot chain link fence. The gate has an Underground Radioactive Material sign posted on it.

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**Site Code:** 100-K-78 **Classification:** Accepted  
**Site Names:** 100-K-78, Fenced Contamination Area **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** In April 2000, the site was enclosed within a post and chain area and posted with Contamination Area signs.  
**Waste Type:** Soil  
**Waste Description:**

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**Site Code:** 100-K-80 **Classification:** Accepted  
**Site Names:** 100-K-80, 100KW River Effluent Pipeline, **ReClassification:**  
100KW River Line, River Line (West)  
from 116-K-3 Outfall  
**Site Type:** Radioactive Process Sewer **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This site is one of two adjacent, 213 centimeters (84 inches) diameter, carbon steel river effluent pipelines that extend 400 meters (1313 feet) from the face of 116-K-3 outfall structure into the main channel of the Columbia River (extending approximately 76 meters (250 feet) beyond the river shoreline). This waste site is the inactive pipeline from 105-KW.  
Both pipelines are exposed along most of the run, protruding 0.3 to 0.9 meters (1 to 3 feet) above the riverbed. The pipelines are approximately 122 centimeters (48 inches) apart. They were originally covered by a minimum of 0.6 meter (2 feet) of soil over their entire length.  
The initial 142 meters (467 feet) (from the reactors to the outfall inlet) are concrete piping, and the remainder welded steel piping.  
**Waste Type:** Process Effluent  
**Waste Description:** The waste includes the pipeline and the contaminated scale contained within it. The effluent included both reactor cooling water and process sewer waste.  
The Contaminants of Potential Concern are based on the 116-K-3 outfall, and include Co-60, Cs-137, Eu-152, Eu-154, Pu-239/240, and Sr-90.

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**Site Code:** 100-K-81 **Classification:** Accepted  
**Site Names:** 100-K-81, Contamination Area West of **ReClassification:**  
116-K-3  
**Site Type:** Unplanned Release **Start Date:**

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

**Site Description:** The site consists of a large cylindrical piece of equipment surrounded by a rope and posted as Soil Contamination Area.

**Waste Type:** Construction Debris

**Waste Description:** The Contaminants of Potential Concern include Co-60, Cs-137, Eu-152, Eu-154, Pu-239/240, and Sr-90.

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**Site Code:** 100-K-83 **Classification:** Accepted

**Site Names:** 100-K-83, 1904-K Spillway, 1904-K Flume, 116-K-3, 1904-K Outfall Structure **ReClassification:**

**Site Type:** Outfall **Start Date:**

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

**Site Description:** The 100-K-83 spillway (also referred to as a flume) was a combination of a three-sided, reinforced concrete trough beginning at the 116-K-3 Outfall, followed by an open earthen trench extending from the end of the concrete trough to the Columbia River shore.

**Waste Type:** Construction Debris

**Waste Description:** If ever put into service, the COPCs for the 100-K-83 spillway would be the same as for the 116-K-3 outfall, including Cobalt-60, Cesium-137, Europium-152/154, Plutonium 239/240, and Strontium-90. There is no corroborated physical or historical evidence that the spillway was ever used.

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**Site Code:** 100-K-86 **Classification:** Accepted

**Site Names:** 100-K-86, 100-K Stain Areas, Four Areas of Stained Soil in 100-K Area **ReClassification:**

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

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

**Site Description:** This site consists of stained soil in four areas with, surface debris and the underlying soil.

**Waste Type:** Soil

**Waste Description:** The waste is potentially contaminated soil. There was no information describing the release of the observed materials.

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**Site Code:** 100-K-87 **Classification:** Accepted

**Site Names:** 100-K-87, 100-K Asbestos Lagging **ReClassification:**

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

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

**Site Description:** The site consists of a 0.6 m (2 ft) segment of suspected friable asbestos pipe lagging and any contaminated soil related to the asbestos.

**Waste Type:** Asbestos (friable)

**Waste Description:** The waste is soil with potential friable asbestos. The contaminant of potential concern is asbestos.

---

**Site Code:** 100-K-88 **Classification:** Accepted

**Site Names:** 100-K-88, Yellow Granular Material **ReClassification:**

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

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

**Site Description:** The site consists of stained soil, scattered yellow granular material and the underlying soil. There is no vegetation within the release area.

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**Waste Type:** Soil

**Waste Description:** The contaminants of potential concern are unknown. The waste is potentially contaminated soil.

---

**Site Code:** 100-K-89 **Classification:** Accepted

**Site Names:** 100-K-89, 100-K Burn Site **ReClassification:**

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

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

**Site Description:** This site consists of burned debris (wood, metal and roofing material) and the underlying soil.

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**Waste Type:** Construction Debris

**Waste Description:** Contaminants of potential concern may include asbestos and petroleum products. The waste is burned debris (wood, metal and roofing material) and any potentially contaminated soil.

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**Site Code:** 100-K-90 **Classification:** Accepted

**Site Names:** 100-K-90, 100-K White Granular Material **ReClassification:**

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

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

**Site Description:** The site consists of white granular material and the underlying soil. The vegetation at the site appears to be unaffected by the presence of the substance.

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**Site Code:** 100-K-91 **Classification:** Accepted

**Site Names:** 100-K-91, 100-K Battery **ReClassification:**

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

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

**Site Description:** The site consists of one intact vehicle battery, partially buried, and the underlying soil. The surrounding vegetation appears to be unaffected by its presence.

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**Waste Type:** Batteries

**Waste Description:** The contaminants of potential concern may contain lead and possibly sulfuric acid in the soil. The waste is the battery and potentially contaminated soil.

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**Site Code:** 100-K-92 **Classification:** Accepted

**Site Names:** 100-K-92, 100-K Reddish Stained Gravels **ReClassification:**

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

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

**Site Description:** The site consists of two areas containing reddish crusted soil and the underlying soil.

Area 1. The site is reddish crusted soil indicating that a liquid may have been dumped to the ground. There is little or no vegetation growing in the stained area.  
Area 2. The site is reddish stained soil, metal debris and the remnants of a crushed drum. There is little or no vegetation growing in the affected area. (Logbook EL-1628 page 17.)

**Waste Type:** Construction Debris

**Waste Description:** The waste is the spilled/abandoned red material.

---

**Site Code:** 100-K-93 **Classification:** Accepted

**Site Names:** 100-K-93, 100-K Drum Remnant **ReClassification:**

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

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

**Site Description:** The site consists of a 208 L (55 gal) drum remnant with approximately .03 m<sup>3</sup> (1 ft<sup>3</sup>) of solidified gray/black tar like substance and the underlying soil. (Logbook EL-1628 page 17.)

**Waste Type:** Sludge

**Waste Description:** The waste is the abandoned drum, tar like substance, and any contaminated soil

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**Site Code:** 100-K-94 **Classification:** Accepted

**Site Names:** 100-K-94, 1702-KE and 1702-KW Guard House Dry Wells **ReClassification:**

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

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

**Site Description:** There are two identical dry wells, one at the 1702-KE guard house and one at the 1702-KW guard house. Each 76 centimeter (30 inch) dry well received drinking water through a 7.6 centimeter (3 inch) cast iron pipe that exited guard houses.

**Waste Type:** Water

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**Waste Description:** No evidence of hazardous or dangerous waste being discharged to these sites was discovered. The waste was excess (unconsumed) water coming from the drinking fountains at both guard houses.

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**Site Code:** 100-K-95 **Classification:** Accepted

**Site Names:** 100-K-95, 100-K Tar Dump **ReClassification:**

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

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

**Site Description:** The site consists of scattered areas of tar and the underlying contaminated soil. The area is approximately 150 m (500 ft) in diameter. The nearest maintained road is 270 m (900 ft) away. A field walkdown of the site was conducted on July 07, 2008. (Logbook EL-1616-1 page 63.)

**Waste Type:** Construction Debris

**Waste Description:** The waste is construction debris. The contaminants of potential concern consist of PAHs and PCBs.

---

**Site Code:** 100-K-99 **Classification:** Accepted

**Site Names:** 100-K-99, Radioactive Material Area Remaining After 107-KE Basin Removal, 116-KE-4 Contaminated Soil and Items **ReClassification:**

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

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

**Site Description:** The 107-KE Retention Basins had been located in this area, but were removed in 1995 (see sitecode 116-KE-4).

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Radioactively contaminated soil, Griffon material and a concrete block was found while excavating an area adjacent to the remediated 116-KE-4 basins. 24,000 dpm per 100 centimeters (squared) beta/gamma was found on the Griffon material. 6,000 dpm per 100 centimeters (squared) beta/gamma was found on the soil around the concrete block.

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**Site Code:** 100-K-100 **Classification:** Accepted

**Site Names:** 100-K-100, Radioactive Material Area Remaining After 107-KW Basin Removal, 116-KW-3 Remaining Contaminated Soil and Items **ReClassification:**

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

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

**Site Description:** The 107-KW Retention Basins had been located in this area, but were removed in 1995 (see sitecode 116-KW-3).

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**Site Code:** 116-K-1 **Classification:** Accepted  
**Site Names:** 116-K-1, 100-K Crib, 100-K Pond, 116-K-1 Trench, 107-K Pond, 107-K(E) Sump, 100-K Emergency Pond **ReClassification:** Interim Closed Out (5/17/2004)  
**Site Type:** Crib **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1956  
**Site Description:** The site has been remediated and interim closed out.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received reactor coolant water from the 107-K Retention Basins during reactor outages due to fuel ruptures. The site received 107-K Basin cleanout slurry from February 1955 to May 1956.

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**Site Code:** 116-K-2 **Classification:** Accepted  
**Site Names:** 116-K-2, 100-K Mile Long Trench, K Trench, 116-K-2 Trench, 100-K Emergency Trench, 107-K Effluent Trench, Bypass Crib Ditch **ReClassification:** Interim Closed Out (3/28/2006)  
**Site Type:** Trench **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1971  
**Site Description:** The site has been remediated and interim closed out.  
The site has been backfilled and stabilized using the original spoil piles that were located on either side of the trench.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received all contaminated effluent from floor drains in the 105-KE and 105-KW Reactors (low volume) and approximately 1893 liters (500 gallons) per minute of 105-KE and 105-KW Reactors metal storage basin overflow. Until 105-KE and 105-KW shut down around February 1, 1970, an undetermined amount of Retention Basin effluent leaked through 107-centimeter (42-inch) butterfly valves in the tank bottoms. Leakage was estimated at 37,854 to 75,708 liters (10,000 to 20,000 gallons) per minute. The valve leakage showed a history of increase until the 1968 valve and tank renovation. Leakage gradually increased again after these repairs. Other periodic flows included low volume, neutralized, dummy decontamination waste, process-cooling water during charge/discharge; occasional special disposals; and occasional tanks of process cooling water that was collected after a fuel cladding failure. In 1972, a minor construction tractor and hydride tanks removed from 100-K Area facilities were buried in the trench. In 1978, the radioactive inventory at the site was calculated at 2,100 curies.

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**Site Code:** 116-K-3 **Classification:** Accepted  
**Site Names:** 116-K-3, 1904-K Outfall Structure, 1908-K Outfall Structure **ReClassification:**  
**Site Type:** Outfall **Start Date:** 1955  
**Site Status:** Active **End Date:**

---

**Site Description:** This site includes the concrete outfall structure. Differing from designs at other early reactors, two 213 centimeter (84 inch) retention basin lines do not discharge into the outfall structure, but passed directly and continuously under it, becoming the river effluent pipelines. In the event a pipeline became plugged downstream of the outfall structure, overflow standpipes inside the outfall would divert effluents into the concrete structure, and ultimately out the spillway.

**Waste Type:** Construction Debris

**Waste Description:** The unit received reactor coolant water from the 107-K Retention Basins. The radionuclide content is unknown. The structure also received general area wastes through the concrete box sewer. The concrete box sewer wastes went into the single chamber of the structure and then drained into the two pipelines into the river.

The Contaminants of Potential Concern include Co-60, Cs-137, Eu-152, Eu-154, Pu-239/240, and Sr-90.

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<b>Site Code:</b>	116-KE-4	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-KE-4, 107-KE Retention Basins, 107-KE	<b>ReClassification:</b>	Interim Closed Out (6/30/2005)
<b>Site Type:</b>	Retention Basin	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971

**Site Description:** The site has been remediated and interim closed out.

**Waste Type:** Process Effluent

**Waste Description:** This site received cooling water effluent from the 105-KE Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Eighty percent of the total radionuclide inventory was contained within the soil adjacent to the basin.

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<b>Site Code:</b>	116-KW-3	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-KW-3, 107-KW Retention Basin, 107-KW	<b>ReClassification:</b>	Interim Closed Out (4/12/2004)
<b>Site Type:</b>	Retention Basin	<b>Start Date:</b>	1954
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1970

**Site Description:** The site has been remediated and closed-out.

The unit consisted of three open-top, carbon steel tanks with steel bottoms. The tanks were 61 meters (20 feet) apart. Decommissioning activities included removal of large steel access plates.

**Waste Type:** Process Effluent

**Waste Description:** This site received cooling water effluent from the 105-KW Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Eighty percent of the total radionuclide inventory is contained within the soil adjacent to the basin.

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## 100-KR-2

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**Site Code:** 100-K-1 **Classification:** Accepted

**Site Names:** 100-K-1, 119-KW French Drain, 119-KW Exhaust Air Sample Building French Drain, 100-K-45 **ReClassification:**

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

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

**Site Description:** The site is a 0.46 meter (1.5 foot) diameter concrete french drain that extends approximately 15 centimeters (6 inches) above the surrounding grade. It had a blue metal cover that is posted with "Confined Space" and "Surface Contamination" warning signs. A site visit in April 2000 found the area had been covered with cobble and surrounded with posts and chain. A sign reading "116-KW-1 Storage Basin French Drain is still marking the area.

**Waste Type:** Water

**Waste Description:** The unit received heat exchanger cooling water from sample equipment in the 119-KW Building, wastewater from a swamp-type cooler and effluent from a floor drain also located in the 119-KW Building.

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**Site Code:** 100-K-2 **Classification:** Accepted

**Site Names:** 100-K-2, 118-K-2, 118-K-2 Sludge Burial Ground, Burial Area **ReClassification:**

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

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

**Site Description:** The site has appeared in different locations on several sketch type drawings as a sludge burial ground. Today, the surface of the site is vegetation-free and covered with soil and rocks. The surface shows no signs of the waste site.

**Waste Type:** Sludge

**Waste Description:** The site is described as having received sludge from the retention basins (107-KE and 107-KW). Although an exact inventory for this sludge trench is not available, it is analogous to the 107-B retention basin sludge trench (116-B-14). Characterization done at the 107-B trench in 1978 found an average concentration of plutonium of 0.7 picocuries per gram and an average beta/gamma concentration of 240 picocuries per gram. The expected radionuclides include europium-155, cobalt-60, cesium-137, strontium-90 and nickel-63.

Note: DOE/RL-94-61 Appendix K (Draft A), mistakenly lists the average plutonium concentration for the 107-B Sludge Trench (116-B-14) as 0.7 curies per gram. The original report for this sampling activity lists the value as 0.7 picocuries per gram (see UNI-946, page 2-36).

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**Site Code:** 100-K-3 **Classification:** Accepted

**Site Names:** 100-K-3, 1706-KE Fish Pond Heat Exchanger Pit and Pump Pit, Water Studies **ReClassification:**

	Semi-Works		
<b>Site Type:</b>	Valve Pit	<b>Start Date:</b>	1956
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1965
<b>Site Description:</b>	This site includes two concrete pits, two concrete manholes, concrete encased pipelines and non-encased pipelines. This site includes those pipelines that were specific to the 1706-KE Water Studies Semi-Works, and does not include the large 0.9-meter (36-inch) or 1.8-meter (72-inch) 105-KE Reactor effluent pipelines.		

Heat Exchanger Pit: The Heat Exchanger Pit presently appears as a concrete pad. The structure is entirely below grade. A 1.2 by 3.0-meter (4 by 10-foot) access hatch is located at the south end. Adjacent to the access hatch is a square inlet ventilation pipe. At the north end is an exhaust vent pipe approximately 61 centimeters (24 inches) in diameter. On the west side of the pad, a 7.6-centimeter (3-inch) pipe extends approximately 0.3 meters (1 foot) above the surface of the pad. It is surrounded by a 4.9 by 7.3-meter (16 by 24-foot) yellow wooden fence and a light duty post and chain barricade posted with "Surface Contamination" signs.

Pump Pit: Approximately 9.1 to 12.2 meters (30 to 40 feet) to the east of the Heat Exchanger Pit is a related structure, the Pump Pit, that also appears as a concrete pad. This structure is entirely below grade. The Pump Pit is approximately 2.4 by 2.4 meters (8 by 8 feet), including 15 to 20-centimeter (6 to 8-inch) thick walls. The pump is labeled on H-1-24913KE as PIE (Pile Effluent Water) Pump No. 2. The Pump Pit above-grade structure has been painted and is marked as a "Confined Space".

Pipelines: The main 0.9-meter (36-inch) and 1.8-meter (72-inch) 105-KE Reactor effluent lines have been connected to smaller 0.9-meter (36-inch) diversion pipelines at the Pump Pit and just west of the Pump Pit and inline with the 1.8-meter (72-inch) effluent pipeline. These two pipelines, 7.6 centimeters (3 inches) in diameter from the 0.9-meter (36-inch) pipeline (identified on H-1-24974KE as PIE #2) and 7.6 centimeters (3 inches) in diameter from the 1.8-meter (72-inch) pipeline (identified on H-1-24974KE as PIE #1), enter the Heat Exchanger Pit.

A 2.54-centimeter (1-inch) pipeline leaves the 105-KE Reactor close to the same location as the two main effluent lines and goes directly to the Heat Exchanger Pit. This pipeline is labeled PIEX (Pile Effluent from Experimental Tubes) on H-1-24974KE.

The Heat Exchanger egress pipelines run from the Heat Exchanger Pit to the 1706-KE Building where they enter the 1706-KE Building at the northwest corner of the building. These were the pipelines used to provide raw water and "cooled" process effluent to the fish troughs in the 1706-KE Wet Fish Studies Laboratory (Site: 100-K-52). They are a 20-centimeter (8-inch) raw water pipeline, a 2.54-centimeter (1-inch) PIE pipeline, and a 5.1-centimeter (2-inch) PIEX pipeline.

A 3.8-centimeter (1.5-inch) PIE pipeline and a 5.1-centimeter (2-inch) pipeline leave the Heat Exchanger Pit and run to the Valve Pit at the front of the rectangular Fish Pond (Site: 100-K-4).

Manholes: Two manholes, 1706-KE-1 and 1706-KE-2, are located at the inflections (elbows) in the pipelines running from the Heat Exchanger Pit to the 1706-KE Building. Each (electrical service - H-1-24913KE) manhole is a below-grade concrete-reinforced structure 1.6 meters long by 1.6 meters wide by 2.6 meters deep (4.6 feet long by 4.6 feet wide by 8.6 feet deep). Each manhole has a 15.2-centimeter (6-inch) sump in the bottom filled with 30.5 centimeters (12 inches) of 7.6 to 10-centimeter (3 to 4-inch) field stone below the bottom of the sump. The manholes extend above grade about 15 centimeters (6 inches).

**Waste Type:** Process Effluent

**Waste  
Description:**

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**Site Code:** 100-K-4 **Classification:** Accepted  
**Site Names:** 100-K-4, 1706-KE Wet Fish Studies Ponds and Valve Pit **ReClassification:** Interim Closed Out (8/4/2010)  
**Site Type:** Pond **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1965

**Site Description:** This waste site has been demolished and removed. The site was two 9.1 meter (30 foot) diameter circular ponds separated by a 2.7 by 9.1 meter (9 by 30 foot) rectangular pond and valve pit. All ponds contained drains which presumably discharged to the process sewer.

**Waste Type:** Water

**Waste Description:** A mixture of raw water and heated effluent water passed through the troughs.

---

**Site Code:** 100-K-5 **Classification:** Accepted  
**Site Names:** 100-K-5, 1705-KE French Drain **ReClassification:**  
**Site Type:** French Drain **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is a french drain consisting of a 0.9 meter (3 foot) diameter vitrified clay pipe which protrudes approximately 0.3 meter (1 foot) above grade and has a heavy wooden cover.

**Waste Type:** Process Effluent

**Waste Description:** The site received waste effluent from floor drains, overflows, and drainage from the 1705-KE Experimental Water Treatment Basin and facilities.

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**Site Code:** 100-K-6 **Classification:** Accepted  
**Site Names:** 100-K-6, Vacuum Pit, Cyclone Separator, 105-KE Vacuum Pit **ReClassification:**  
**Site Type:** Process Unit/Plant **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The vacuum pit contains a cyclone separator in a vertically oriented 3-meter (10-foot) diameter culvert which extends from grade level to 9.2 meters (30 feet) below grade.

**Waste Type:** Soil

**Waste Description:** The soil beneath the steam turbine is reported to have been contaminated with radioactive materials and was covered with about 0.3 meters (1 foot) of gravel. The dose rate at the pit opening on January 20, 1994 was slightly less than 2 millirad/hour, suggesting a higher dose rate at the pit bottom.

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**Site Code:** 100-K-7 **Classification:** Not Accepted (10/1/1997)  
**Site Names:** 100-K-7, 165-KE Ethylene Glycol Tanks, **ReClassification:**  
 165-KE-E and 165-KE-W  
**Site Type:** Storage Tank **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site was two carbon steel underground (positioned horizontally) ethylene glycol storage tanks. One tank contained pure ethylene glycol and the other tank contained a mixture of water and ethylene glycol. The tanks supplied mixed and pure ethylene glycol for injection into process water pipelines to prevent freezing during cold periods. A pair of 10 centimeters (4 inches) fill pipelines led to a street box that contained a 10 centimeters (4 inches) cap. The street box was used for making a connection to railroad tank cars. The street box was just off the edge of a railroad spur.

Today, the site is gravel covered and no evidence of the site remains.

**Waste Type:** Chemicals  
**Waste Description:** The waste was tanks that contained ethylene glycol.

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**Site Code:** 100-K-8 **Classification:** Not Accepted (10/1/1997)  
**Site Names:** 100-K-8, 165-KW Ethylene Glycol Tanks, **ReClassification:**  
 165-KW-E and 165-KW-W  
**Site Type:** Storage Tank **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1970

**Site Description:** The site was two carbon steel underground (positioned horizontally) ethylene glycol storage tanks. One tank contained pure ethylene glycol and the other tank contained a mixture of water and ethylene glycol. The tanks supplied mixed and pure ethylene glycol for injection into process water pipelines to prevent freezing during cold periods. A pair of 10 centimeters (4 inches) fill pipelines led to a street box that contained a 10 centimeters (4 inches) cap. The street box was used for making a connection to railroad tank cars. The street box was just off the edge of a railroad spur.

All piping associated with these tanks utilized welded joints with threaded couplings at the top of each tank. The pipelines related to these tanks were: (1) suction line -- 2.54 centimeters (1 inch) outside diameter by 6.1 meters (20 feet) to the building; (2) -- 10.2 centimeters (4 inches) outside diameter by 6.1 meters (20 feet) to the building (165-KW-E [east] tank only); (3) vent line -- 10.2 centimeters (4 inches) outside diameter by 9.1 meters (30 feet) (including the above ground components); (4) fill connection and street box -- 10.2 centimeters (4 inches) outside diameter by 4.6 meters (15 feet) long (empty during normal operation); (5) cross tie line -- 10.2 centimeters (4 inches) by 3.05 meters (10 feet) long (empty during normal operation).

Today, the site is gravel covered and no evidence of the site remains.

**Waste Type:** Chemicals  
**Waste Description:** The waste was tanks that contained Ethylene glycol. The tanks had been rinsed and flushed during the shut down of the 105-KW Reactor and did not contain any fluid.

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**Site Code:** 100-K-9 **Classification:** Not Accepted (10/1/1997)

**Site Names:** 100-K-9, 118-KE-2 French Drain (North), 104-K Dry Well **ReClassification:**

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

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

**Site Description:** The site is the northernmost of two french drains at the 118-KE-2. The french drain is a 0.6 meters (2 feet) diameter steel pipe with a steel cover. It is gravel filled to grade and surrounded by a yellow wooden barricade. The steel cover is posted with a confined space sign. The adjacent area is covered with gravel and cobbles.

Each side of the 118-KE-2 Horizontal Control Rod Cave floor was sloped towards a drain. The drain was designed to receive rainwater that percolated through the earth berm covering the Rod Cave. The drains helped minimize water pooling between the two semicircular steel cave sections which are anchored and grouted to the concrete floor. Drainage is routed to each of the french drains via 7.6 centimeter (3 inch) drain pipelines.

**Waste Type:** Stormwater Runoff

**Waste Description:** The inlet to this french drain is between the two semi-circular steel pipes. It received stormwater that percolated down through the earth berm covering the caves.

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**Site Code:** 100-K-10 **Classification:** Not Accepted (10/1/1997)

**Site Names:** 100-K-10, 118-KE-2 French Drain (South), 104-K Dry Well **ReClassification:**

**Site Type:** French Drain **Start Date:** 1953

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

**Site Description:** The site is the southernmost of two french drains at the 118-KE-2. The french drain is a 0.6 meters (2 feet) diameter steel pipe with a steel cover. It is gravel filled to grade and surrounded by a yellow wooden barricade. The steel cover is posted with a confined space sign. The adjacent area is covered with gravel and cobbles.

Each side of the 118-KE-2 Horizontal Control Rod Cave floor was sloped towards a drain. The drain was designed to receive rainwater that percolated through the earth berm covering the Rod Cave. The drains helped minimize water pooling between the two semicircular steel cave sections which are anchored and grouted to the concrete floor. Drainage is routed to each of the french drains via 3 in (7.6 cm) drain pipelines.

**Waste Type:** Stormwater Runoff

**Waste Description:** The inlet to this french drain is between the two semi-circular steel pipes. It received stormwater that percolated down through the earth berm covering the caves.

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**Site Code:** 100-K-11 **Classification:** Not Accepted (10/1/1997)

**Site Names:** 100-K-11, 118-KW-2 French Drain (North), 104-K Dry Well **ReClassification:**

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

**Site Status:** Inactive

**End Date:**

**Site Description:** The site is the northernmost of two french drains at the 118-KW-2. The french drain is a 0.6 meters (2 feet) diameter steel pipe with a steel cover. It is gravel filled to grade and surrounded by a yellow wooden barricade. The steel cover is posted with a confined space sign. The adjacent area is covered with gravel and cobbles.

Each side of the 118-KW-2 Horizontal Control Rod Cave floor was sloped towards a drain. The drain was designed to receive rainwater that percolated through the earth berm covering the Rod Cave. The drains helped minimize water pooling between the two semicircular steel cave sections which are anchored and grouted to the concrete floor. Drainage is routed to each of the french drains via 3 in (7.6 cm) drain pipelines.

**Waste Type:** Stormwater Runoff

**Waste Description:** The inlet to this french drain is between the two-semi-circular steel pipes. It received stormwater that percolated down through the earth berm covering the caves.

**Site Code:** 100-K-12

**Classification:** Not Accepted (10/1/1997)

**Site Names:** 100-K-12, 118-KW-2 French Drain (South), 104-K Dry Well

**ReClassification:**

**Site Type:** French Drain

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site is the southernmost of two french drains at the 118-KW-2. The french drain is a 0.6 meters (2 feet) diameter steel pipe with a steel cover. It is gravel filled to grade and surrounded by a yellow wooden barricade. The steel cover is posted with a confined space sign. The adjacent area is covered with gravel and cobbles.

Each side of the 118-KW-2 Horizontal Control Rod Cave floor was sloped towards a drain. The drain was designed to receive rainwater that percolated through the earth berm covering the Rod Cave. The drains helped minimize water pooling between the two semicircular steel cave sections which are anchored and grouted to the concrete floor. Drainage is routed to each of the french drains via 3 in (7.6 cm) drain pipelines.

**Waste Type:** Stormwater Runoff

**Waste Description:** The inlet to this french drain is between the two semi-circular steel pipes. It received stormwater that percolated down through the earth berm covering the caves.

**Site Code:** 100-K-13

**Classification:** Accepted

**Site Names:** 100-K-13, French Drain West of the 166-KW Oil Storage Tank Facility

**ReClassification:**

**Site Type:** French Drain

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site is a french drain that is a 1.5 meter (5-foot) diameter vertical concrete pipe filled with gravel. Prior to the construction of the Cold Vacuum storage Facility, the drain had been almost flush with the ground surface. Facility construction required the area to be graded. The construction project has scraped the ground down about 1.8 meters (6 feet) leaving the french

drain about 2.3 meters (7.5 feet) above ground level. The french drain is now covered by a corrugated metal caisson to protect the french drain structure. Prior to current construction activities, the drain extended above grade about 0.46 meters (1.5 feet) and was surrounded by a yellow wooden barricade.

The french drain has no markings of any kind. No other documentation or drawings could be found that identify the site or its purpose. Prior to current construction, no facilities were close to the site.

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<b>Site Code:</b>	100-K-14	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-14, 183-KE Acid Neutralization Pit and Overflow French Drain	<b>ReClassification:</b>	
<b>Site Type:</b>	French Drain	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The pit is 4.6 meters (15 feet) deep with a bottom dimension of 1.5 meters (5 feet) in diameter. Eight to thirteen-centimeter (3 to 5 inch) aggregate was placed to a depth of 2.1 meters (7 feet). A 0.76 meter (2.5 foot) diameter, 2.4-meter (8 foot) long vitrified clay pipe (VCP) was placed vertically in the center of the pit and 1.2 meters (4 feet) of aggregate were placed around the pipe exterior. Approximately 1.5 meters (5 feet) of limestone chips were added to the pipe interior. A 5.1-centimeter (2 inch) schedule 80 polyvinyl chloride (PVC) pipe enters through the side 1 meter (3.3 feet) below grade. The pipe is an overflow and drain line for the 183-KE Day Use Acid Tank. The pit was then backfilled to grade. The VCP is exposed a few inches above grade and is covered with a 0.64 centimeter (0.25 inch) steel plate with four 2.54 centimeter (1 inch) vent holes. Four steel yellow corner posts surround the above grade VCP.		
<b>Waste Type:</b>	Chemicals		
<b>Waste Description:</b>	The site received sulfuric acid overflow and drainage from the 183-KE Day Use Acid Tank.		

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<b>Site Code:</b>	100-K-15	<b>Classification:</b>	Not Accepted (2/7/2001)
<b>Site Names:</b>	100-K-15, 183-KW Liquid Alum Storage Tank (West)	<b>ReClassification:</b>	
<b>Site Type:</b>	Storage Tank	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site is an above-ground vertical stainless-steel storage tank mounted on a concrete base. The tank was part of a system called, The Liquid Alum System, that supplied liquid alum for water treatment. The liquid was supplied either by rail car or tank truck, as both connections are shown on the Liquid Alum System diagram in HW-24800-103. The piping and instrument identification diagram, H-1-16552, shows the pipelines, valves, and instrumentation related to the tank. During the winter, the liquid alum was pumped through heat exchangers for purpose of heating and agitating the chemicals.		

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<b>Site Code:</b>	100-K-16	<b>Classification:</b>	Not Accepted (2/7/2001)
<b>Site Names:</b>	100-K-16, 183-KW Liquid Alum Storage Tank (East)	<b>ReClassification:</b>	

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**Site Type:** Foundation **Start Date:** 1955

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

**Site Description:** The site was the western-most of the above-ground vertical tanks that were used to store liquid sodium silicate. Initially, tank trucks supplied the chemical for the tanks. Estimating from procurement and construction drawings for the bauxite tank (Project CAI 105), the sodium silicate tanks were removed in 1964 or 1965. Following removal, the bagged dry powder form of the chemical was used.

The grade-level concrete base remained following removal of the tanks. The west tank base (Sodium Silicate Tank #1) is occupied by a bauxite storage tower (silo) and transfer system.

**Waste Type:** Chemicals

**Waste Description:** The unit stored sodium silicate. While the tanks were in use, the sodium silicate was purchased and stored in liquid form.

**Site Code:** 100-K-21 **Classification:** Not Accepted (2/7/2001)

**Site Names:** 100-K-21, 183-KW Sodium Silicate Storage Tank (East) **ReClassification:**

**Site Type:** Foundation **Start Date:**

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

**Site Description:** The site was the eastern-most of the above-ground vertical tanks that were used to store liquid sodium silicate. Initially, tank trucks supplied the chemical for the tanks. Estimating from procurement and construction drawings for the bauxite tank (Project CAI 105), the sodium silicate tanks were removed in 1964 or 1965. Following removal, the bagged dry powder form of the chemical was used.

The grade-level concrete base remained following removal of the tanks.

**Waste Type:** Chemicals

**Waste Description:** The unit stored sodium silicate. While the tanks were in use, the sodium silicate was purchased and stored in liquid form.

**Site Code:** 100-K-22 **Classification:** Not Accepted (2/7/2001)

**Site Names:** 100-K-22, 183-KE Sodium Silicate Storage Tank (West) **ReClassification:**

**Site Type:** Foundation **Start Date:** 1955

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

**Site Description:** The site was the western-most of the above-ground vertical tanks that were used to store liquid sodium silicate. Initially, tank trucks supplied the chemical for the tanks. Estimating from procurement and construction drawings for the bauxite tank (Project CAI 105), the sodium silicate tanks were removed in 1964 or 1965. Following removal, the bagged dry powder form of the chemical was used.

The grade-level concrete base remained following removal of the tanks. The west tank base

(Sodium Silicate Tank #1) is occupied by a bauxite storage tower (silo) and transfer system.

**Waste Type:** Chemicals

**Waste Description:** The unit stored sodium silicate. While the tanks were in use, the sodium silicate was purchased and stored in liquid form.

**Site Code:** 100-K-23 **Classification:** Not Accepted (2/7/2001)

**Site Names:** 100-K-23, 183-KE Sodium Silicate Storage Tank (East) **ReClassification:**

**Site Type:** Foundation **Start Date:** 1955

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

**Site Description:** The site was the eastern-most of the above-ground vertical tanks that were used to store liquid sodium silicate. Initially, tank trucks supplied the chemical for the tanks. Estimating from procurement and construction drawings for the bauxite tank (Project CAI 105), the sodium silicate tanks were removed in 1964 or 1965. Following removal, the bagged dry powder form of the chemical was used.

The grade-level concrete base remained following removal of the tanks.

**Waste Type:** Chemicals

**Waste Description:** The unit stored sodium silicate. While the tanks were in use, the sodium silicate was purchased and stored in liquid form.

**Site Code:** 100-K-24 **Classification:** Not Accepted (2/7/2001)

**Site Names:** 100-K-24, 183-KW Bauxite Tank **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1966

**Site Status:** Inactive **End Date:** 1972

**Site Description:** The site is a single bauxite (aluminum oxide) above-ground storage tank (silo). The addition of the tank was part of a proposal to reduce water treatment costs by approximately \$278,000 per year in the 183-KE and KW Buildings. Hanford document, HW-76926, is the engineering study that proposed replacing the existing liquid alum coagulant feed process with one which fed bauxite and sulfuric acid.

The tank was constructed on the site of the former Sodium Silicate #1 Tank. The tank had a capacity of 109,000 kilograms (240,000 pounds). One of the unused solution tanks, 45,400 kilograms (100,000 pounds) in capacity in the 183 Building (KE and KW) was converted to a bauxite feed bin. The feed bin was vented and equipped with a bag filter. The two silos (KE and KW) and the feed bin together provided approximately 33 days storage capacity. Other components of the system are listed below.

A pneumatic conveying system was provided that was equipped with cyclone separators to transfer bauxite from hopper cars or boxcars to the outside silos and from either silo to the feed bin inside the building. The bauxite was transferred intermittently from the silos to the feed bin and did not interfere with any rail car unloading. The system was sized to unload a rail car in a single work shift.

Two dry feeders, including one spare, moved bauxite from the feed bin to a slurry mix tank. The spare feeder was included to eliminate the need to prepare slurry manually on a batch basis during maintenance shutdown of the other feeder.

A mix tank, with agitator, for slurring bauxite and water was a component of the system. Two pumps in parallel were used to transfer the slurry to reaction vessels.

Two parallel systems, each consisting of a glass-lined reaction vessel, with glass-lined pipe tie-ins; an eductor which took suction from the reaction vessel, adding dilution water; and a pump, in series with the eductor, discharged through the chlorine injection piping to the raw water headers. Glass-lined pipe was used between the reaction vessel and eductor, and plastic pipe between the eductors and injection piping. Acid was supplied to the reaction vessel, where it was mixed with the bauxite slurry by steam sparging, from an existing head tank by gravity feed.

An exhaust system included a water scrubber to remove steam, air, and acid fumes from the reaction vessels

**Waste Type:** Chemicals

**Waste Description:** The tank was used to store dry bauxite (hydrous aluminum oxide or hydroxides with various impurities). The tank appears to have been emptied, although dry powder can be seen through the plexiglass cover indicating that no additional cleanup was performed. Bauxite is not listed in 40 CFR 302.4 as a hazardous substance and is not a CERCLA pollutant. No dangerous wastes or CERCLA hazardous substances, pollutants, or contaminants were stored or disposed of at this site.

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<b>Site Code:</b>	100-K-25	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-25, 183-KE Caustic Neutralization Pit	<b>ReClassification:</b>	
<b>Site Type:</b>	Sump	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The 183-KE Caustic Neutralization Pit is an underground concrete structure used to neutralize caustic waste prior to disposal. The structure has been backfilled and covered to grade with gravel. The "pit" is a concrete box that is lined with acid-proof bricks. A 10.2-centimeter (4-inch) vitrified tile drain was located in the bottom of the pit and discharged the neutralized waste to the process sewer. The top of the pit was level with the surface and had a 7.6-centimeter (3-inch) plank cover.		

**Waste Type:** Chemicals

**Waste Description:** The pit received and neutralized sodium hydroxide waste.

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<b>Site Code:</b>	100-K-27	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-27, 183-KE Caustic Soda Storage Tank Site	<b>ReClassification:</b>	
<b>Site Type:</b>	Foundation	<b>Start Date:</b>	1954
<b>Site Status:</b>	Inactive	<b>End Date:</b>	

**Site Description:** The site was originally an above-ground, cylindrical, vertical steel storage tank on a concrete base. The above-ground tank was 7.8 meters (25.5 feet) in diameter with a 287,660-liter (76,000-gallon) capacity. Some time in the past (date unknown) the tank was removed. Today, the site is the 9.1-meter (30-foot) diameter grade-level concrete tank base and the soil surrounding the base.

**Waste Type:** Chemical Release

**Waste Description:** The tank was used to store sodium hydroxide. There is a possibility the tank and/or piping may have leaked.

**Site Code:** 100-K-28 **Classification:** Not Accepted (2/7/2001)

**Site Names:** 100-K-28, 183-KE Bauxite Tank **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1966

**Site Status:** Inactive **End Date:** 1972

**Site Description:** The site is a single bauxite (aluminum oxide) above-ground storage tank (silo). The addition of the tank was part of a proposal to reduce water treatment costs by approximately \$278,000 per year in the 183-KE and KW Buildings. Hanford document, HW-76926, is the engineering study that proposed replacing the existing liquid alum coagulant feed process with one which fed bauxite and sulfuric acid.

The tank was constructed on the site of the former Sodium Silicate #1 Tank. The tank had a capacity of 109,000 kilograms (240,000 pounds). One of the unused solution tanks, 45,400 kilograms (100,000 pounds) in capacity in the 183 Building (KE and KW) was converted to a bauxite feed bin. The feed bin was vented and equipped with a bag filter. The two silos (KE and KW) and the feed bin together provided approximately 33 days storage capacity. Other components of the system are listed below.

A pneumatic conveying system was provided that was equipped with cyclone separators to transfer bauxite from hopper cars or boxcars to the outside silos and from either silo to the feed bin inside the building. The bauxite was transferred intermittently from the silos to the feed bin and did not interfere with any rail car unloading. The system was sized to unload a rail car in a single work shift.

Two dry feeders, including one spare, moved bauxite from the feed bin to a slurry mix tank. The spare feeder was included to eliminate the need to prepare slurry manually on a batch basis during maintenance shutdown of the other feeder.

A mix tank, with agitator, for slurring bauxite and water was a component of the system. Two pumps in parallel were used to transfer the slurry to reaction vessels.

Two parallel systems, each consisting of a glass-lined reaction vessel, with glass-lined pipe tie-ins; an eductor which took suction from the reaction vessel, adding dilution water; and a pump, in series with the eductor, discharged through the chlorine injection piping to the raw water headers. Glass-lined pipe was used between the reaction vessel and eductor, and plastic pipe between the eductors and injection piping. Acid was supplied to the reaction vessel, where it was mixed with the bauxite slurry by steam sparging, from an existing head tank by gravity feed.

An exhaust system included a water scrubber to remove steam, air, and acid fumes from the reaction vessels.

**Waste Type:** Chemicals

**Waste Description:** The tank was used to store dry bauxite, aluminum oxide or hydroxides with various impurities. The tank appears to have been emptied, although dry powder can be seen through the plexiglass cover indicating that no additional cleanup was performed.

**Site Code:** 100-K-29 **Classification:** Accepted  
**Site Names:** 100-K-29, 183-KE Sandblasting Site **ReClassification:** Interim Closed Out (6/24/2004)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site has been remediated and Interim Closed Out. Before remediation the site surface was gravel/cobble and purple garnet. It was irregularly shaped and covered an area of 46 meters (50 yards) x 127 meters (30 yards).

**Waste Type:** Chemicals

**Waste Description:** At this site in the early 1980's, steel components from the 183-KE settling basins were sandblasted prior to being sold as scrap. Sampling in 1989 indicated the material present to be nonregulated for EP Toxicity.

**Site Code:** 100-K-30 **Classification:** Accepted  
**Site Names:** 100-K-30, 183-KE Sulfuric Acid Tank Bases (West Tank) **ReClassification:** Interim Closed Out (8/2/2004)  
**Site Type:** Storage Tank **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site has been remediated and interim closed out.

The site consisted of two above ground U-shaped concrete bases and above ground piping. A cylindrical tank laid horizontally on the two concrete U-shaped bases. The tank measured 3 meters (10 feet) in diameter, 10 meters (33 feet) long and had a 77,140-liter (20,380-gallon) capacity. It is unknown when the tank was removed.

**Waste Type:** Chemicals

**Waste Description:** The tank bases held a tank that was used to store sulfuric acid.

**Site Code:** 100-K-31 **Classification:** Accepted  
**Site Names:** 100-K-31, 183-KE Sulfuric Acid Tank Bases (East Tank) **ReClassification:** Interim Closed Out (8/2/2004)  
**Site Type:** Storage Tank **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site has been remediated and interim closed out.

The site consisted of two above ground U-shaped concrete bases and above ground piping.

**Waste Type:** Chemicals



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**Site Description:** The unit consists of 2.5 by 1.9-meter (8.3 by 6.3-foot) brick-lined concrete boxes. The boxes are 1.5 meters (5 feet) deep and backfilled with crushed limestone. Drain pipes entered about 0.6 meters (2 feet) below grade and emptied into a 0.9-meter (3-foot) diameter vitrified clay pipe (VCP) placed vertically in limestone chips. The VCP is filled with limestone chips. The VCP is broken at the top.

**Waste Type:** Chemicals

**Waste Description:** The site was used to neutralize and dispose of overflow and transfer waste from nearby sulfuric acid tanks.

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**Site Code:** 100-K-35 **Classification:** Accepted

**Site Names:** 100-K-35, 183-KE Acid Neutralization Pit **ReClassification:**

**Site Type:** Sump **Start Date:**

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

**Site Description:** The site is a below grade 2.5 meter by 1.9 meter (8.33 feet by 6.33 feet) brick-lined concrete box, approximately 1.5 meters (5 feet) deep and backfilled with crushed limestone. Drain pipes entered the pit approximately 0.6 meters (2 feet) below grade and emptied into a vertical 0.9 meter (3 foot) diameter vitrified clay pipe. The vitrified clay pipe is also filled with limestone chips and appears to be broken at the top. The site is covered by a wooden lid labeled "Confined Space" and is surrounded by post and chain.

**Waste Type:** Chemicals

**Waste Description:** The site was used to neutralize and dispose of overflow and transfer waste from nearby sulfuric acid tanks.

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**Site Code:** 100-K-36 **Classification:** Accepted

**Site Names:** 100-K-36, 1706-KE Chemical Storage Facility Dry Well **ReClassification:**

**Site Type:** French Drain **Start Date:** 1962

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

**Site Description:** The site is a dry well (french drain) that was added to the 1706-KE Building as part of the Chemical Storage Facility. The drain is located at grade level and centered between the 1706-KE Caustic Tank and the 1706-KE Sulfuric Acid Tank. The site is constructed from an 0.46 meter (18 inch) vitrified clay pipe that is 1.2 meters (4 feet) long and extends 7.6 centimeters (3 inches) above grade. The site is filled to grade with crushed limestone. Overflow and drain pipes [two 5.1 centimeter (2 inch) pipelines from each chemical storage tank] extend to just above the surface of the limestone fill.

**Waste Type:** Chemicals

**Waste Description:** A white crystalline material that may be sodium hydroxide can be seen in cracks of the tunnel. This may indicate that large quantities of sodium hydroxide and/or water have been disposed to this drain.

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<b>Site Code:</b>	100-K-37	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-37, 1706-KE Sulfuric Acid Tank	<b>ReClassification:</b>	Interim Closed Out (8/4/2010)
<b>Site Type:</b>	Storage Tank	<b>Start Date:</b>	1963
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1986

**Site Description:** The site consists of an above ground, vertical, stainless steel storage tank. The tank rests on a redwood timber deck above a 1.4 meter (4.45 foot) service space (at grade) that is protected by guard posts. A 5.1 centimeter (2 inch) fill line for tank truck usage is also located in the same area. Two 5.1 centimeter (2 inch) drain lines, one for vent and overflow and the other for valve leakage, enter a french drain (Site: 100-K-36) that is located (in the service area) between the caustic soda tank (100-K-38) and the sulfuric acid tank. The tank has a liquid level gauge, a 5.1 centimeter (2 inch) fill line, and a vent and overflow line. The top of the tank could be accessed via a ladder and platform at the top elevation of the tank. The tank was constructed with a bottom sloping towards the drain. When installed, the tank was shimmed to level it.

**Waste Type:** Chemicals

**Waste Description:** A heel of sulfuric acid remains on the bottom of the tank, and an unknown quantity of sulfuric acid remains in the transfer lines inside the 1706KE facility.

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<b>Site Code:</b>	100-K-38	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-38, 1706-KE Caustic Soda Tank	<b>ReClassification:</b>	Interim Closed Out (8/4/2010)
<b>Site Type:</b>	Unplanned Release	<b>Start Date:</b>	1963
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1986

**Site Description:** The site consists of contaminated soil from spills related to a caustic soda storage tank. The tank is an above ground, vertical, stainless steel storage tank. The tank rests on a redwood timber deck above a 1.4 meter (4.45 foot) service space (at grade) that is protected by guard posts. A 5.1 centimeter (2 inch) fill line for tank truck usage is also located in the same area. Two 5.1 centimeter (2 inch) drain lines, one for vent and overflow and the other for valve leakage, enter a french drain (Site: 100-K-36) that is located (in the service area) between the caustic soda tank and the sulfuric acid tank (Site: 100-K-37). The tank is insulated, has a liquid level gauge, a 5.1 centimeter (2 inch) fill line, a vent and overflow line, thermostat, and heating element. The top of the tank could be accessed via a ladder and platform at the top elevation of the tank. The tank was constructed with a bottom sloping towards the drain. When installed, the tank was shimmed to level it.

**Waste Type:** Chemicals

**Waste Description:** Site employees have reported that spills occurred at the site. The tank exterior was rinsed down after the spills and into the soil column. A white material that may be sodium hydroxide powder can be seen in the cracks of the lower level ceiling beneath the location of the tank base.

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<b>Site Code:</b>	100-K-39	<b>Classification:</b>	Not Accepted (10/1/1997)
<b>Site Names:</b>	100-K-39, 118-K-3 Filter Crib	<b>ReClassification:</b>	
<b>Site Type:</b>	Crib	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	

**Site Description:** The site was reported to be a crib. The first reference to a site identified as 118-K-3 Filter Crib was DOE/RL-90-20 (1992). In this document, it states that the site was used to dispose of demineralizer, and research and development waste from the 1706-KE Building. A sketch, Figure 5-1. Proposed Boring Locations at 100-KR-1 Operable Unit High Priority Liquid Waste Facilities, shows a site labeled 118-K-3 Filter Crib between and south of the retention basins. The area where this site is mapped is the identical location of a fenced electrical distribution intertie that connects electrical service between 100K East and 100K West.

WHC-SD-EN-TI-239, 100-K Area Technical Baseline Report states that the crib could not be located during field investigations for the report. Further, it says that a fenced, high-voltage power distribution system is located at the site described by DOE/RL-90-20. The document continues with the crib received liquid wastes from the 1705KE/KER Laboratory. Discussions with present and former site employees, and investigations using Hanford Drawings (H-1-20305, H-1-23215, and H-1-24226), indicate that all cribbed wastes from the 1706-KE/KER facilities were disposed in the 116-KE-2 Crib.

The initial Waste Information Data System (WIDS) entry for this site was not done until 1994. The information contained on the data entry form (A-6000-501) was based on WHC-SD-SD-TI-239. It was also recommended that the site not be entered as a waste site due to the uncertainty of the site's existence. A field visit by WIDS personnel was performed on August 16, 1994. There was no evidence of a waste site at the prescribed location.

<b>Site Code:</b>	100-K-42	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-42, 100 Area KE Basin, 105-KE Fuel Storage Basin, K East Basin, Irradiated Fissile Material Storage, Metal Storage Basin, 100-K-40 Release	<b>ReClassification:</b>	
<b>Site Type:</b>	Storage	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	

**Site Description:** The site is the fuel storage basin for the 105-KE Reactor. The fuel storage basin is located at the rear of the reactor. The concrete basin area served as a collection, storage, and transfer facility for the irradiated fuel elements discharged from the reactor. Irradiated reactor fuel elements were stored at the bottom of large water filled storage basins pending their shipment to the chemical separations facilities in the 200 Areas. The water in the basins served both as coolant and as shielding. The basin consists of a discharge chute and fuel element pickup area, a storage area, a transfer area, and a wash pad area.

The basin area is floored throughout at ground level with steel grating which is suspended from the steelwork of the roof above by means of vertical pipe columns. A grid of 32 monorails evenly spaced crosses the basin, overhead, from north to south, connects at the ends with a monorail which completely encircles the area. Bars suspended from trolleys which roll on these rails extend down through slots in the floor grating to a point near the bottom of the basin, where they support and carry buckets used for conveying the processed metal. Transverse rails extend from the outer rail loop into the transfer area at the west end of the basin, and the viewing and weasel pits at the east end. Crossovers are installed for switching the trolleys from track to track.

The transfer area contains two sets of standard gauge railway tracks which extend into the building at ground level through the west wall. Adjacent to each track is a loading pit, which leads off from the main basin. As the system functions, irradiated metal slugs drop from the rear or discharge face of the reactor through a discharge gate of special design to the bottom of the bay between reactor and basin. A heavy rubber mattress is installed here to cushion the fall. The

slugs are picked up by long handled tongs manipulated from the floor grating, and placed into buckets. The loaded buckets are suspended on the monorail conveyor system, by which they are conveyed across and around the storage basin to the loading pits. This transfer is timed in short moves over a lengthy period so that in effect the slugs are stored for some time in the storage basin, for the purpose of dissipating radioactivity. When the slugs reach the transfer area they are placed, still underwater, into large specially constructed containers called "casks". The loaded casks are hoisted from the bottom of the pits and placed on the cask cars, which are switched in on the adjacent tracks. The cars approximate standard railway equipment in size, and are designed and built for the cask freightage.

The viewing and weasel pits at the other end of the storage basin contain equipment for manipulating and examining selected slugs while under water. The function of the entire basin installation is to provide for handling radioactive metal under a shielding layer of water.

A number of irradiated uranium fuel elements were found in both fuel storage basins when sludge was removed in 1975 after reactor operations were terminated. Dorian and Richards (1978) reports that the 105-KW storage basin was cleaned, modified and being used for the storage of irradiated fuels from N Reactor. At the time of the report the 105-KE basin had been cleaned and was in the process of being modified for the same purpose. In 1974 and 1975, both basins were modified to a recirculating cooling system by the utilization of heat exchangers once used to transfer heat from the reactor cooling water elimination system to facility heating (Project H-501). The 105-KE basin has been used to store fuels in open storage containers. Consequently, the 105-KE basin is far more radioactively contaminated than the 105-KW basin.

**Waste Type:** Sludge

**Waste Description:** The spent nuclear fuel in the KE basin was in the form of irradiated uranium elements clad in aluminum or zirconium alloy and immersed in water. The fuel elements in the K East Basin were stored in open canisters. By-product material which includes corroded cladding, fuel particles, and insoluble plutonium and uranium metal had settled on the basin floor. Concrete debris resulting from erosion of the basin walls, transient soil and other types of dregs had also accumulated in the basins. This concurrent accumulation of various materials in the basins was commonly referred to by the Spent Nuclear Fuel (SNF) Project as the 100-K Basins sludge. The 100-K East Basin contained approximately 50 cubic meters of sludge.

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<b>Site Code:</b>	100-K-43	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-43, KW Basin, 105-KW Fuel Storage Basin, K West Basin, Irradiated Fissile Material Storage	<b>ReClassification:</b>	
<b>Site Type:</b>	Storage	<b>Start Date:</b>	1955
<b>Site Status:</b>	Active	<b>End Date:</b>	1971
<b>Site Description:</b>	The site is the fuel storage basin for the 105-KW Reactor. The fuel storage basin is located at the rear of the reactor. The concrete basin area served as a collection, storage, and transfer facility for the irradiated fuel elements discharged from the reactor. Irradiated reactor fuel elements were stored at the bottom of large water filled storage basins pending their shipment to the chemical separations facilities in the 200 Areas. The water in the basins served both as coolant and as shielding. The basin consists of a discharge chute and fuel element pickup area, a storage area, a transfer area, and a wash pad area.		

The basin area is floored throughout at ground level with steel grating which is suspended from the steelwork of the roof above by means of vertical pipe columns. A grid of 32 monorails

evenly spaced crosses the basin, overhead, from north to south, connects at the ends with a monorail which completely encircles the area. Bars suspended from trolleys which roll on these rails extend down through slots in the floor grating to a point near the bottom of the basin, where they support and carry buckets used for conveying the processed metal. Transverse rails extend from the outer rail loop into the transfer area at the west end of the basin, and the viewing and weasel pits at the east end. Crossovers are installed for switching the trolleys from track to track.

The transfer area contains two sets of standard gauge railway tracks which extend into the building at ground level through the west wall. Adjacent to each track is a loading pit, which leads off from the main basin. As the system functions, irradiated metal slugs drop from the rear or discharge face of the reactor through a discharge gate of special design to the bottom of the bay between reactor and basin. A heavy rubber mattress is installed here to cushion the fall. The slugs are picked up by long handled tongs manipulated from the floor grating, and placed into buckets. The loaded buckets are suspended on the monorail conveyor system, by which they are conveyed across and around the storage basin to the loading pits. This transfer is timed in short moves over a lengthy period so that in effect the slugs are stored for some time in the storage basin, for the purpose of dissipating radioactivity. When the slugs reach the transfer area they are placed, still underwater, into large specially constructed containers called "casks". The loaded casks are hoisted from the bottom of the pits and placed on the cask cars, which are switched in on the adjacent tracks. The cars approximate standard railway equipment in size, and are designed and built for the cask freightage.

The viewing and weasel pits at the other end of the storage basin contain equipment for manipulating and examining selected slugs while under water. The function of the entire basin installation is to provide for handling radioactive metal under a shielding layer of water.

A number of irradiated uranium fuel elements were found in both fuel storage basins when sludge was removed in 1975 after reactor operations were terminated. Dorian and Richards (1978) reports that the 105-KW storage basin was cleaned, modified and being used for the storage of irradiated fuels from N Reactor. At the time of the report the 105-KE basin had been cleaned and was in the process of being modified for the same purpose. In 1974 and 1975, both basins were modified to a recirculating cooling system by the utilization of heat exchangers once used to transfer heat from the reactor cooling water elimination system to facility heating (Project H-501). The 105-KW basin has been used to store fuels in sealed storage containers. Consequently, the 105-KW basin is far less radioactively contaminated than the 105-KE basin.

**Waste Type:** Sludge

**Waste Description:** The spent nuclear fuel in the KW basin was in the form of irradiated uranium elements clad in aluminum or zirconium alloy and immersed in water. The fuel elements in the K West Basin were stored in closed canisters. By-product material which included corroded cladding, fuel particles, and insoluble plutonium and uranium metal gas settled on the basin floor. Concrete debris resulting from erosion of the basin walls, transient soil and other types of dregs had also accumulated in the basins. This concurrent accumulation of various materials in the basins was commonly referred to by the Spent Nuclear Fuel (SNF) Project as the K Basins sludge. The K West Basin contained relatively little sludge as compared with the K East Basin which had approximately 50 cubic meters (38.2 cubic yards) of sludge.

<b>Site Code:</b>	100-K-44	<b>Classification:</b>	Not Accepted (10/1/1997)
<b>Site Names:</b>	100-K-44, Grounds Surrounding Deactivated Areas, Exclusion Area	<b>ReClassification:</b>	
<b>Site Type:</b>	Unplanned Release	<b>Start Date:</b>	

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**Site Status:** Inactive **End Date:**  
**Site Description:** The grounds within the 100-K exclusion area that are not part of other waste sites.

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**Site Code:** 100-K-46 **Classification:** Accepted  
**Site Names:** 100-K-46, 119-KE French Drain, Drywell **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1959  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is a drywell that received drainage from a floor drain in the 119-KE Sample Building. The site has been covered with crushed rock and there was no visible evidence of the drywell on the ground surface during a site visit by T. F. Johnson on October 31, 1996.

The drywell is connected the 119-KE Sample Building by a 5 centimeter (2 inch) drainage pipe buried at least 0.9 meters (3 feet) below grade. A 1.9 centimeter (3/4 inch) drain line from the building's evaporative cooler connected into the 5 centimeter (2 inch) drain line near the southern edge of the building.

**Waste Type:** Process Effluent

**Waste Description:** The drywell received effluent from the building's evaporative cooler. It is likely that the floor drain also received sample waste and janitorial waste since the building had no other drains or connections to the process sewer system.

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**Site Code:** 100-K-47 **Classification:** Accepted  
**Site Names:** 100-K-47, 1904-K Process Sewer **ReClassification:**  
**Site Type:** Process Sewer **Start Date:** 1955  
**Site Status:** Active **End Date:**

**Site Description:** This site includes those underground process sewer pipelines that begin at the 105-KE Reactor, 105-KW Reactor, 165-KE, 190-KE, 1706-KE, and terminate at either the 116-K-3 Outfall or join the 100-K-56 Pipeline south of the outfall.

Manholes indicate the location of some sections of the process sewer. The main portion of the sewer that extends from the point of intersection with the 30.5 and 40.6 centimeter (12 and 16 inch) pipelines coming from 105-KW Reactor and 165-KE building to drop manhole #5 is a 1.68 meters by 1.68 meters (66 inches by 66 inches) concrete sewer. All other process sewer pipelines are constructed of carbon steel.

The site does not include the facilities where the pipelines terminate, or pipelines that are housed within building structures, which are addressed separately. This site does not include the radioactive process sewer pipelines, water supply pipelines, glycol heat pipelines, or other reactor effluent underground pipelines addressed by other sites. This site does not include the 1.7 meter (66 inch) pipeline that originates at 165-KW and up to the point of intersection with the 30.5 and 40.6 centimeter (12 and 16 inch) pipelines coming from 105-KW Reactor. This component of the 1904-K Process Sewer is site 100-K-60. The site has been split because of the different programmatic responsibilities associated with the two sites.

**Waste Type:** Process Effluent

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**Waste Description:** Discharges included overflows from chemical makeup facilities that included chemical additives to reactor cooling water, e.g., aluminum sulfate (alum), with excess hydrated calcium oxide, sulfuric acid, and chlorine. Water pH was maintained at about 7.5, and free chlorine residual was about 0.3 milligrams per liter. Other discharges to the system included filter backflush waste water, coagulated sediments from the water treatment settling basins, demineralizer regeneration wastes, which included neutralized sulphuric acid and sodium hydroxide, brine wastes from water softeners, and pump cooling waste water.

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**Site Code:** 100-K-48 **Classification:** Accepted

**Site Names:** 100-K-48, 100-KE Oil Contamination Areas **ReClassification:**

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

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

**Site Description:** The site shows evidence of past fuel oil spills especially around the railroad tracks. The spills have been absorbed into the soil and have formed an asphalt like substance. Some areas may have been covered with clean soil.

**Waste Type:** Oil

**Waste Description:** The waste is oil solidified into a hard asphalt-like substance.

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**Site Code:** 100-K-49 **Classification:** Accepted

**Site Names:** 100-K-49, 100-KW Oil Contamination Areas **ReClassification:**

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

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

**Site Description:** The site shows evidence of past fuel oil spills especially around the railroad tracks. The spills have been absorbed into the soil and have formed an asphalt like substance. The area between the 166-KW and the road south of 166-KW was discovered to be contaminated with oil during excavation of a trench for the Cold Vacuum Drying Facility. An oil contaminated layer of soil about 7.6 to 10.2 centimeters (3 to 4 inches) thick was discovered a few inches below the surface.

**Waste Type:** Oil

**Waste Description:** The waste is oil solidified into a hard asphalt-like substance.

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**Site Code:** 100-K-50 **Classification:** Accepted

**Site Names:** 100-K-50, 1725-K & 1726-K Sanitary Sewer System Holding Tank **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1996

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

**Site Description:** The site is a sanitary sewage holding tank that services 1725-K and 1726-K. The site is marked by eight red concrete posts. The tank is constructed of concrete and has three manholes on top and one hinged hatchcover. A 20.3 centimeter (8 inch) sanitary sewer pipeline runs in a north-

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south direction 9.1 meters (30 feet) east of the 1725-K (MO-293) and the 1726-K (MO-442) buildings into the south side of the holding tank. The tank is divided into two chambers. The normal operating volume is 11,355 liters (3000 gallons) and the total reserve volume is 17,032 liters (4500 gallons).

**Waste Type:** Sanitary Sewage

**Waste  
Description:**

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<b>Site Code:</b>	100-K-51	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-51, 105-KE 90-Day Waste Accumulation Area, 100K 90-Day Waste Storage Facility	<b>ReClassification:</b>	Rejected (9/14/2000)
<b>Site Type:</b>	Storage Pad (<90 day)	<b>Start Date:</b>	
<b>Site Status:</b>	Active	<b>End Date:</b>	
<b>Site Description:</b>	The site is a white, portable steel building, with no windows, and three doors that are all on one side. The site is being used by the Spent Fuel Division for the 90 day storage of hazardous waste.		

**Waste Type:** Chemicals

**Waste  
Description:**

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<b>Site Code:</b>	100-K-52	<b>Classification:</b>	Not Accepted (10/1/1997)
<b>Site Names:</b>	100-K-52, 1706-KE Wet Fish Studies Laboratory	<b>ReClassification:</b>	
<b>Site Type:</b>	Storage	<b>Start Date:</b>	1956
<b>Site Status:</b>	Active	<b>End Date:</b>	1965
<b>Site Description:</b>	The site is currently in use by the Spent Nuclear Fuel (SNF) Program as a storage room. This site was split from 100-K-3 and 100-K-4, so that the programmatic responsibility for this area could be assigned to the correct program.		

Prior to its use as a storage area, the site was a laboratory {used by Pacific Northwest Laboratory} that conducted wet fish studies using effluent cooling water. There was a small "wet lab" located in the 1706-KE Building and three small outdoor ponds (Site: 100-K-4). The laboratory consisted of eight 1.5 meters (5 feet) long by 0.3 meters (1 foot) wide troughs containing a mixture of raw water and heated effluent water. The water was diverted from the heat exchanger pit (Site: 100-K-3) on the 105-KE Reactor discharge pipeline and passed through the troughs. Originally, the laboratory was planned in the event of shutdown of the 105-F Reactor and its laboratory.

**Waste Type:** Water

**Waste Description:** A mixture of raw water and heated effluent water passed through the troughs. The troughs and laboratory equipment have been removed from the building.

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<b>Site Code:</b>	100-K-53	<b>Classification:</b>	Accepted
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**Site Names:** 100-K-53, 100-KE Glycol Heat Recovery Underground Pipelines **ReClassification:**

**Site Type:** Product Piping **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** This site includes those underground pipelines that transported glycol solutions from the 116-KE-5 (150 KE Heat Recovery Station) to their entrance to the 165-KE Powerhouse (Power Control Building) facilities. The pipelines consist of two 0.46-meter (1.5-foot) steel supply and return pipelines. It does not include the above-grade pipelines at the 116-KE-4 Station, the 100-K-7 Storage Tanks and piping, or the pipelines housed within these facilities.

**Waste Type:** Chemicals

**Waste Description:** The waste is pipelines that contained an ethylene glycol/water solution that was maintained at a slightly positive pressure to preclude leakage of reactor effluent water into the system via the 150-KE Heat Exchanger.

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**Site Code:** 100-K-54 **Classification:** Accepted

**Site Names:** 100-K-54, 100-KW Glycol Heat Recovery Underground Pipelines **ReClassification:**

**Site Type:** Product Piping **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** This site includes those underground pipelines that transported glycol solutions from the 116-KW-4 (150 KW Heat Recovery Station) to their entrance into the 165-KW Powerhouse (Power Control Building) facilities. The pipelines consist of two 0.46-meter (1.5-foot) steel supply and return pipelines. It does not include the above-grade pipelines at the 116-KW-4 Station, the 100-K-8 Storage Tanks and piping, or the pipelines housed within these facilities.

**Waste Type:** Chemicals

**Waste Description:** The waste is pipelines that contained an ethylene glycol/water solution that was maintained at a slightly positive pressure to preclude leakage of reactor effluent water into the system via the 150-KW Heat Exchanger.

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**Site Code:** 100-K-55 **Classification:** Accepted

**Site Names:** 100-K-55, 100-KW Reactor Cooling Water Effluent Underground Pipelines (See Subsites) **ReClassification:**

**Site Type:** Radioactive Process Sewer **Start Date:** 1955

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

**Site Description:** This site consists of two subsites. Subsite 1) included the underground process effluent pipelines located on the north side of 105 KW Reactor, from the outside of the security fence. The pipelines terminated at the 116-K-3 Outfall, the 116-K-1 Crib, the 116-K-2 Trench, and the 116-KW-3 Retention Basins. Subsite 2) consisted of the process effluent underground pipelines from the west side of the reactor north to the security fence.

**Waste Type:** Process Effluent

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**Waste Description:** The waste was contaminated steel piping, concrete, and soil. Chemical additives to reactor cooling water included aluminum sulfate (alum) with excess hydrated calcium oxide, sulfuric acid, chlorine, diatomaceous earth (a scouring agent), and sodium dichromate. Water pH was maintained at about 7.5, and free chlorine residual was about 0.2 milligrams per liter. Radionuclide content at the retention basin during sampling by Richards for UNI-946, included the following: cesium-134, plutonium 239/240, cesium-137, strontium-90, hydrogen-3, nickel-63, europium-152, europium-154, europium-155, and cobalt-60.

**SubSites:**

**SubSite Code:** 100-K-55:1

**SubSite Name:** 100-K-55:1, Process Pipelines Outside of Reactor Fence to Outfall

**Classification:** Accepted

**ReClassification:** Interim Closed Out

**Description:** Remedial action activities involving excavation and staging of overburden material and removal of contaminated piping, debris, and soil began on December 9, 2002. Contaminated materials were disposed at the ERDF.

The Cleanup Verification Package for the 100-K-55:1 and 100-K-56:1 Pipelines and the 116-KW-4 and 116-KE-5 Heat Recovery Stations, (CVP-2005-00006), documented that the 100-K-55:1 and 100-K-56:1 pipelines were remediated in accordance with the Amendment to the Interim Action Record of Decision for the 100-BC-1, 100-DR-1, and 100-HR-1 Operable Units, Hanford Site, Benton County, Washington (ROD) (EPA 1997). Remedial action objectives (RAOs) and remedial action goals (RAGs) for these sites were documented in the ROD and the Remedial Design Report/Remedial Action Work Plan for the 100 Area (RDR/RAWP) (DOE-RL-96-17, Rev. 5). The 116-KW-4 and 116-KE-5 sites were also remediated as part of remedial efforts for the pipelines.

Final cleanup verification sampling was conducted from January 26, 2005, to June 23, 2005 following variance analysis. The final verification samples were submitted to offsite laboratories for analysis using approved U.S. Environmental Protection Agency (EPA) analytical methods as required per the 100 Area Remedial Action Sampling and Analysis Plan (SAP) (DOE-RL 96-22, Rev. 3) for the 100-K-55 and 100-K-56 pipelines. Sample numbers were too numerous to report, sample numbers and results may be found in Appendix A of CVP-2005-00006. Each verification sample was composed of a composite sample formed by combining soil collected at the required number of randomly selected locations within each sampling area (excluding the quality assurance/quality control samples).

The 100-K-55 pipelines consisted of the gravity-flow process effluent pipelines that formerly serviced the 105-KW Reactor, terminating at the 116-K-1 Crib, the 116-K-2 Trench, and the 116-KW-3 retention basins. The active 100-K-47 concrete culvert shown was not removed during remediation of the adjacent section of the 100-K-55:1 pipeline. Verification samples collected adjacent to the culvert did not indicate contamination associated with the culvert

The CVP-2005-00006 demonstrated that remedial actions at the 100-K-55:1, 100-K-56:1, 116-KW-4, and 116-KE-5 sites have achieved the RAOs and corresponding RAGs established in the RDR/RAWP. The contaminated materials from these sites have been excavated and disposed at the ERDF. The remaining soils at the sites have been sampled, analyzed, and modeled, and the results do not preclude any future uses (as bounded by the rural-residential scenario), allow unrestricted use of shallow zone soils, and pose no threat to groundwater or the Columbia River.

Institutional controls are required for the 100-K-55:1 and 100-K-56:1 sites to prevent drilling or excavation into deep zone soils [4.6 meters (15 feet)]. The 100-K-55:1, 100-K-56:1, 116-KW-4, and 116-KE-5 sites were verified to be remediated in accordance with the ROD and may be backfilled.

**SubSite Code:** 100-K-55:2

**SubSite Name:** 100-K-55:2, Effluent Pipelines Inside 105KW Reactor Security Fence

**Classification:** Accepted

**ReClassification:**

**Description:** This subsite consists of the remaining portion of the underground effluent pipeline inside the reactor security fence and near the active utility features of the 116-K-1 Crib, the 116-KW-3 Retention Basin and the 116-K-2 Trench.

**Site Code:** 100-K-56 **Classification:** Accepted

**Site Names:** 100-K-56, 100-KE Reactor Cooling Water Effluent Underground Pipelines (See Subsites) **ReClassification:**

**Site Type:** Radioactive Process Sewer **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** This site consists of two subsites. Subsite 1) included the underground process effluent pipelines north of the 105 KE Reactor from the outside of the security fence. The pipelines terminated at the 116-K-3 Outfall, the 116-K-1 Crib, the 116-K-2 Trench, and the 116-KE-4 Retention Basins. Subsite 2) consisted of the process effluent underground pipelines that exited the west side of the reactor continuing north to the security fence.

**Waste Type:** Process Effluent

**Waste Description:** The waste was contaminated steel piping, concrete, and soil. Chemical additives to reactor cooling water included aluminum sulfate (alum) with excess hydrated calcium oxide, sulfuric acid, chlorine, diatomaceous earth (a scouring agent), and sodium dichromate. Water pH was maintained at about 7.5, and free chlorine residual was about 0.2 milligrams per liter. Radionuclide content at the retention basin during sampling by Richards for UNI-946, included the following: cesium-134, plutonium 239/240, cesium-137, strontium-90, hydrogen-3, nickel-63, europium-152, europium-154, europium-155, and cobalt-60.

**SubSites:**

**SubSite Code:** 100-K-56:1

**SubSite Name:** 100-K-56:1; Reactor Process Effluent Pipelines from 105KE Reactor Security Fence to the Active Utilities 116-K-1 Crib, 116-K-2 Trench and 116-KE-4 Retention Basin, and Process Water Pipeline Between Reactors

**Classification:** Accepted

**ReClassification:** Interim Closed Out

**Description:** Remedial action activities involving excavation and staging of overburden material and removal of contaminated piping, debris, and soil began on December 9, 2002.

The Cleanup Verification Package for the 100-K-55:1 and 100-K-56:1 Pipelines and the 116-

KW-4 and 116-KE-5 Heat Recovery Stations, (CVP-2005-00006), documented that the 100-K-55:1 and 100-K-56:1 pipelines were remediated in accordance with the Amendment to the Interim Action Record of Decision for the 100-BC-1, 100-DR-1, and 100-HR-1 Operable Units, Hanford Site, Benton County, Washington (ROD) (EPA 1997). Remedial action objectives (RAOs) and remedial action goals (RAGs) for these sites were documented in the ROD and the Remedial Design Report/Remedial Action Work Plan for the 100 Area (RDR/RAWP) (DOE-RL-96-17, Rev. 5). The 116-KW-4 and 116-KE-5 sites were also remediated as part of remedial efforts for the pipelines.

Final cleanup verification sampling was conducted from January 26, 2005, to June 23, 2005 following variance analysis. The final verification samples were submitted to offsite laboratories for analysis using approved U.S. Environmental Protection Agency (EPA) analytical methods as required per the 100 Area Remedial Action Sampling and Analysis Plan (SAP) (DOE-RL 96-22, Rev. 3) for the 100-K-55 and 100-K-56 pipelines. Sample numbers were too numerous to report, sample numbers and results may be found in Appendix A of CVP-2005-00006. Each verification sample was composed of a composite sample formed by combining soil collected at the required number of randomly selected locations within each sampling area (excluding the quality assurance/quality control samples).

The 100-K-56 pipelines consisted of the gravity-flow process effluent pipelines that formerly serviced the 105-KE Reactor, terminating at the 116-K-1 Crib, the 116-K-2 Trench, and the 116-KE-4 retention basins. The CVP-2005-00006 demonstrated that remedial actions at the 100-K-55:1, 100-K-56:1, 116-KW-4, and 116-KE-5 sites have achieved the RAOs and corresponding RAGs established in the RDR/RAWP. The contaminated materials from these sites have been excavated and disposed at the ERDF. The remaining soils at the sites have been sampled, analyzed, and modeled, and the results do not preclude any future uses (as bounded by the rural-residential scenario), allow unrestricted use of shallow zone soils, and pose no threat to groundwater or the Columbia River.

Institutional controls are required for the 100-K-55:1 and 100-K-56:1 sites to prevent drilling or excavation into deep zone soils [4.6 meters (15 feet)]. The 100-K-55:1, 100-K-56:1, 116-KW-4, and 116-KE-5 sites were verified to be remediated in accordance with the ROD and may be backfilled.

**SubSite Code:** 100-K-56:2  
**SubSite Name:** 100-K-56:2, Effluent Pipelines Inside the 105-KE Reactor Security Fence  
**Classification:** Accepted  
**ReClassification:**  
**Description:** This subsite consists of the remaining portion of the underground effluent pipeline inside the reactor security fence and near the active utility features of the 116-K-1 Crib, the 116-KE-4 Retention Basin and the 116-K-2 Trench.

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<b>Site Code:</b>	100-K-58	<b>Classification:</b>	Not Accepted (2/13/2001)
<b>Site Names:</b>	100-K-58, 100-KE Service Water Pipelines, 100-KE Clean Water Pipelines	<b>ReClassification:</b>	
<b>Site Type:</b>	Product Piping	<b>Start Date:</b>	1957
<b>Site Status:</b>	Active	<b>End Date:</b>	
<b>Site Description:</b>	The site is the upstream (pre-reactor) pipelines that carried raw river water from the 181-KE Pumphouse to the KE water treatment facilities and carried treated water to the 105-KE Reactor. The site includes all water lines that connected the different sections of the water treatment plant,		

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but does not include the sulfuric acid or sodium dichromate pipelines, which are on the south side of the water treatment plant, and it does not include the treated water pipelines running between the 165-KE Building and 105-KE Reactor (these pipes are WIDS site 100-K-79). The site also does not include the reactor cooling lines 100-KE Reactor Cooling Water Effluent Underground Pipelines (See Subsites) (100-K-56), Glycol pipelines (100-K-53), or the 1904-K Process Sewer lines (100-K-47).

The two raw water lines that run between the 181-KE Pumphouse and the 165-KE Control House are constructed of 152-centimeter (60-inch) diameter steel pipe with 1.3-centimeter (0.5-inch) thick walls.

**Waste Type:** Water

**Waste Description:** The pipelines included carried raw, sanitary, and fire water throughout the 100-KE Area.

**Site Code:** 100-K-59 **Classification:** Not Accepted (2/13/2001)

**Site Names:** 100-K-59, 100-KW Service Water Pipelines, 100-KW Clean Water Pipelines **ReClassification:**

**Site Type:** Product Piping **Start Date:** 1957

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

**Site Description:** The site consists of the upstream (pre-reactor) pipelines that carried raw river water from the 181-KW Pumphouse to the KW water treatment facilities and carried sanitary and fire water to various facilities. The site includes all water lines that connected the different sections of the water treatment plant, except for the sulfuric acid and sodium dichromate pipelines on the south side of the water treatment plant, and the treated water pipelines running from the 165-KW Building to the 105-KW Reactor (WIDS site 100-K-79). It includes the sanitary water pipelines connecting the 165 KE and KW Control Houses (to a point half-way between them) and the sanitary water pipeline connecting the 183 KE and KW Head Houses (to a point half-way between them). The site does not include the reactor cooling lines (100-K-55), the 1904-K Process Sewer lines (100-K-60 and 100-K-47), or the Glycol Heat Recovery pipelines (100-K-54).

The two raw water lines that run between the 181-KW Pumphouse and the 165-KW Control House are constructed of 152-centimeter (60-inch) diameter steel pipe with 1.3-centimeter (0.5-inch) thick walls.

**Waste Type:** Water

**Waste Description:** The pipelines included carried raw, sanitary, and fire water throughout the 100-KE Area.

**Site Code:** 100-K-60 **Classification:** Accepted

**Site Names:** 100-K-60, 1904-K Process Sewer (165-KW) **ReClassification:**

**Site Type:** Process Sewer **Start Date:** 1955

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

**Site Description:** This site includes the underground process sewer pipeline that begins at 165-KW and runs up to the point of intersection with the 30.5 and 40.6-centimeter (12 and 16-inch) pipelines coming from 105-KW Reactor. The portion of the sewer that extends from the 165-KW Building to the

point of intersection with the 30.5 and 40.6-centimeter (12 and 16-inch) pipelines coming from 105-KW Reactor is a 1.68 by 1.68-meter (66 by 66-inch) concrete sewer.

This site does not include those underground process sewer pipelines that begin at the 105-KE Reactor, the 105-KW Reactor, the 165-KE, the 190-KE, or the 1706-KE, and terminate at the 116-K-3 Outfall. These components of the 1904-K Process Sewer are site 100-K-47. The site has been split because of the different programmatic responsibilities associated with the two sites. The site does not include the facilities where the pipelines terminate, or pipelines that are housed within building structures, which are addressed separately. This site does not include the radioactive process sewer pipelines, water supply pipelines, glycol heat pipelines, or other reactor effluent underground pipelines addressed by other sites.

**Waste Type:** Process Effluent

**Waste Description:** Discharges included overflows from chemical makeup facilities that included chemical additives to reactor cooling water, e.g., aluminum sulfate (alum), with excess hydrated calcium oxide, sulfuric acid, and chlorine. Water pH was maintained at about 7.5, and free chlorine residual was about 0.3 milligrams per liter. Other discharges to the system included: filter backflush waste water; coagulated sediments from the water treatment settling basins; demineralizer regeneration wastes, which included neutralized sulphuric acid and sodium hydroxide; brine wastes from water softeners; and pump cooling waste water.

<b>Site Code:</b>	100-K-61	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-K-61, 117-KW Filter Building	<b>ReClassification:</b>	
<b>Site Type:</b>	Process Unit/Plant	<b>Start Date:</b>	1960
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1970

**Site Description:** The ventilation exhaust filter building houses blowers and particulate filters used to treat the ventilation exhausted from the 105-KW Reactor Building. Included in this site are the 117-KW Building, the intake ventilation duct from the 105-KW Reactor Building, and the exhaust ventilation ducts to the 116-KW Reactor Exhaust Stack. The building and duct work are all made of reinforced concrete, 0.3 to 0.6 meters (1 to 2 feet) thick. The building is 12.2 meters (40 feet) high with 2.4 meters (8 feet) above grade. A soil berm is built up around the building from grade level to the top of the structure. The hatch on the top of the above ground portion of the filter structure is posted as Contamination Area and Danger-Restricted Area, Multiple Hazards.

The building is divided into two large filter cells with a smaller operating area between them. The filter cells each can hold six filter frames (two wide and three deep). The filter frames were designed to hold thirty-six filters that were 0.6 meters (2 feet) square by 0.3 meters (1 foot) thick. There are spaces between the frames to allow access for filter maintenance. The operating area between the two cells is divided into two levels. The upper level, called the access gallery has ten doors that lead from it. Four doors open into each of the filter cells and the two other doors provide access to the intake and exhaust ducts. The operating gallery is located below the access gallery. A sump is located at each end of the operating gallery to collect incidental drainage from above. A large open area extends the full length of the structure above the access gallery and the filter cells. It ranges in height between 2.5 and 2.4 meters (8.1 and 7.8 feet) due to the structure's sloping roof. The space provides access to the cement cover blocks that are positioned over each of the filter frames.

**Waste Type:** Equipment

**Waste Description:** The building contains radiologically contaminated equipment and surfaces that remain from when it was in use.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** When the 116-KW Reactor Exhaust Stack was shortened, the debris was placed inside the stack. Some debris is probably within the exhaust duct connecting the filter building to the stack.

**Site Code:** 100-K-62 **Classification:** Accepted

**Site Names:** 100-K-62, 117-KE Filter Building **ReClassification:**

**Site Type:** Process Unit/Plant **Start Date:** 1960

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The ventilation exhaust filter building houses blowers and particulate filters used to treat the ventilation exhausted from the KE Reactor Building. Included in this site are the 117-KE Building, the intake ventilation duct from the 105-KE Reactor Building, and the exhaust ventilation ducts to the 116-KE Reactor Exhaust Stack. Most of the filter structures are below grade. The building and duct work are all made of reinforced concrete, 0.3 to 0.6 meters (1 to 2 feet) thick. The building is 12.2 meters (40 feet) high with 2.4 meters (8 feet) above grade. The above ground portion of the filter structure is a soil berm is built up around the building from grade level to the top of the structure. There is an entry hatch on the top of the berm that is posted as Contamination Area and Danger-Restricted Area, Multiple Hazards.

The building is divided into two large filter cells with a smaller operating area between them. The filter cells each can hold six filter frames (two wide and three deep). The filter frames were designed to hold thirty-six filter that were 0.6 meters (2 feet) square by 0.3 meters (1 foot) thick. There are spaces between the frames to allow access for filter maintenance. The operating area between the two cells is divided into two levels. The upper level, called the access gallery has ten doors that lead from it. Four doors open into each of the filter cells and the two other doors provide access to the intake and exhaust ducts. The operating gallery is located below the access gallery. A sump is located at each end of the operating gallery to collect incidental drainage from above. A large open area extends the full length of the structure above the access gallery and the filter cells. It ranges in height between 2.5 and 2.4 meters (8.1 and 7.8 feet) due to the structure's sloping roof. The space provides access to the cement cover blocks that are positioned over each of the filter frames.

**Waste Type:** Equipment

**Waste Description:** The building contains radiologically contaminated equipment and surfaces that remain from when it was in use.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** When the 116-KE Reactor Exhaust Stack was shortened, the debris was placed in the "below ground interior portion" of the stack. Some debris is probably within the exhaust duct connecting the filter building to the stack.

**Site Code:** 100-K-66 **Classification:** Accepted

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**Site Names:** 100-K-66, 165-KW Power Control Building **ReClassification:**  
**Site Type:** Control Structure **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The building is painted a pink color and has three large stacks on the west end of the building. This site is a bomb resistant shelter without windows. All ventilation is supplied by fans. The building is posted Danger- Restricted Area- Asbestos.

**Waste Type:** Equipment  
**Waste Description:** The building contains asbestos and has been cleaned twice (in 1993) for PCBs.

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**Site Code:** 100-K-67 **Classification:** Accepted  
**Site Names:** 100-K-67, 165-KE Power Control Building **ReClassification:**  
**Site Type:** Control Structure **Start Date:**  
**Site Status:** Active **End Date:**  
**Site Description:**

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**Site Code:** 100-K-68 **Classification:** Accepted  
**Site Names:** 100-K-68, 105-KE Pump Gallery and Catch Tank, D Sump **ReClassification:**  
**Site Type:** Catch Tank **Start Date:**  
**Site Status:** Active **End Date:**  
**Site Description:** The structure is constructed of an 2.44 meter (8 foot) diameter corrugated steel caisson. A vinyl lined concrete catch tank is located at the bottom of the caisson. Located above the catch tank, is a pump gallery containing two sump pumps and a ladder for access. The total length of the caisson is 10.87 meters (35.67 feet) and extends from just above grade level at elevation 141.58 meters (464.50 feet) to elevation 131.32 meters (430.83 feet). The top of the caisson is covered with a conical 12 gauge sheet metal roof with a hatch for access.

**Waste Type:** Water  
**Waste Description:** Waste water from 105-KE Spent Fuel Storage Basin sub-basin drainage header.

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**Site Code:** 100-K-69 **Classification:** Accepted  
**Site Names:** 100-K-69, 105-KE Sump C **ReClassification:**  
**Site Type:** Sump **Start Date:**  
**Site Status:** Active **End Date:**  
**Site Description:** The structure is a concrete sump that receives water from the 105-KE fuel storage basin floor drains in the transfer area. Two electric powered sump pumps return the drain water to the basin.

**Waste Type:** Process Effluent

**Waste  
Description:**

**Site Code:** 100-K-70 **Classification:** Accepted

**Site Names:** 100-K-70, 105-KE Waste Storage Tank, Holding Tank **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1974

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

**Site Description:** The site is a steel storage tank for the 105-KE Spent Fuel Storage Basin radioactive drains. The tank is buried under a 1.8 meter (6 foot) deep earth berm. An absolute filter is located on the east end of the tank and a tank level gauge is located on the west end of the tank.

**Waste Type:** Process Effluent

**Waste  
Description:**

**Site Code:** 100-K-71 **Classification:** Accepted

**Site Names:** 100-K-71, 105-KE Collection Box **ReClassification:**

**Site Type:** Diversion Box **Start Date:** 1953

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

**Site Description:** The 105-KE Collection Box collects effluent from nine underground process sewer lines that originate in the 105-KE Reactor Building. The effluent exits the Collection Box via 12 inch cast iron and a 16 inch cast iron process sewer pipelines. Sewer pipelines entering the "Collection Box" include the following: Six inch clean drain, 10 inch contaminated drain, 10 inch potentially contaminated drain, 6 inch rod cooling water, 6 inch drain to pluto crib, 12 inch basin drain line, 8 inch basin overflow line, 6 inch vent line, and 4 inch vitrified clay tile decon drain to filter.

**Waste Type:** Process Effluent

**Waste Description:** The collection box received waste water from the contaminated drain, potentially contaminated drain, clean drain, drain to pluto crib, basin drain line, ink system drain, rod cooling water drain, floor drains, the decon drain to filter and basin overflow drain.

**Site Code:** 100-K-72 **Classification:** Accepted

**Site Names:** 100-K-72, 105-KW Pump Gallery and Catch Tank, D Sump **ReClassification:**

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

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

**Site Description:** The structure is constructed of a 2.4 meter (8 foot) diameter corrugated steel caisson. A vinyl lined concrete catch tank is located at the bottom of the caisson. Located above the catch tank, is a pump gallery containing two sump pumps and a ladder for access. The total length of the caisson is 11 meters (35 feet 8 inches) and extends from just above grade level at elevation 464.50 feet to elevation 430.83 feet.

**Waste Type:** Water

**Waste Description:** Waste water from 105-KE Spent Fuel Storage Basin sub-basin drainage header.

**Site Code:** 100-K-73 **Classification:** Accepted

**Site Names:** 100-K-73, 105-KW Collection Box **ReClassification:**

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

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

**Site Description:** The 105-KW Collection Box collects effluent from nine underground process sewer lines that originate in the 105-KW Reactor Building. The effluent exits the Collection Box via 30 centimeter (12 inch) cast iron and a 41 centimeter (16 inch) cast iron process sewer pipelines. Sewer pipelines entering the "Collection Box" include the following: 15 centimeter (6 inch) clean drain, 25.4 centimeter (10 inch) contaminated drain, 25.4 centimeter (10 inch) potentially contaminated drain, 15 centimeter (6 inch) rod cooling water, 15 centimeter (6 inch) drain to pluto crib, 30 centimeter (12 inch) basin drain line, 20 centimeter (8 inch) basin overflow line, 15 centimeter (6 inch) vent line, and 10 centimeter (4 inch) vitrified clay tile decon drain to filter.

**Waste Type:** Process Effluent

**Waste Description:** The collection box received waste water from the contaminated drain, potentially contaminated drain, clean drain, drain to pluto crib, basin drain line, ink system drain, rod cooling water drain, floor drains, the decon drain to filter and basin overflow drain.

**Site Code:** 100-K-74 **Classification:** Accepted

**Site Names:** 100-K-74, 105-KW Waste Storage Tank, Holding Tank **ReClassification:**

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

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

**Site Description:** The site is a steel storage tank for the 105-KW Spent Fuel Storage Basin radioactive drains. The tank is buried under a 1.8 meter (6 foot) deep earth berm. An absolute filter is located on the east end of the tank and a tank level gauge is located on the west end of the tank.

**Waste Type:** Process Effluent

**Waste Description:**

**Site Code:** 100-K-75 **Classification:** Accepted

**Site Names:** 100-K-75, 105-KW Sump C **ReClassification:**

**Site Type:** Sump **Start Date:**

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

**Site Description:** The structure is a concrete sump that receives water from the 105-KW fuel storage basin floor drains in the transfer area. Two electric powered sump pumps return the drain water to the basin and/or the underground holding tank.

**Waste Type:** Water

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**Waste  
Description:**

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**Site Code:** 100-K-76 **Classification:** Not Accepted (4/10/2002)  
**Site Names:** 100-K-76, 105-KW Unplanned Release **ReClassification:**  
Discovered Near 130-KW-1 Emergency  
Diesel Tank  
**Site Type:** Unplanned Release **Start Date:** 1992  
**Site Status:** Inactive **End Date:**

**Site Description:** This site is a duplicate of 130-KW-1. The site is the location of two removed underground diesel storage tanks. The "unplanned release" is the radiation contamination detected when the tanks were excavated. The excavated tank site has been backfilled with uncontaminated soil to grade and covered with gravel. There is no separate radiological posting. However, the 100-KE/KW Reactor Areas are posted Underground Radioactive Material on the perimeter fences.

**Waste Type:** Soil

**Waste Description:** The site contains radioactively contaminated soil.

**The Site Was Consolidated With:**

**Site Code:** 130-KW-1  
**Site Names:** 130-KW-1, 105-KW Emergency Diesel Oil Storage Tank, 130-KW-1A/130-KW-1B Tanks,  
105-KW Emergency Diesel Fuel Tank  
**Reason:** Duplicate Site

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**Site Code:** 100-K-77 **Classification:** Accepted  
**Site Names:** 100-K-77, Underground Railroad Ties **ReClassification:**  
Southeast of 1706KE  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The site is railroad ties discovered at the bottom of an excavation. The excavation measured approximately 2.9 meters by 3.1 meters by 2.1 meters deep (9.5 feet by 10 feet by 6.9 feet deep). The site has been backfilled, and the railroad ties at the bottom of the excavation were left in place, but the sidewall braces were probably removed prior to backfilling.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Buried railroad ties.

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**Site Code:** 100-K-79 **Classification:** Accepted  
**Site Names:** 100-K-79, Sodium Dichromate and **ReClassification:**  
Sulfuric Acid Product Pipelines at 100-K  
**Site Type:** Product Piping **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** This site includes:

- 1) the sodium dichromate product pipelines that run from the railroad offloading area to the dichromate storage tanks and then to the adjacent 183.1 Headhouses, at both KE and KW.
- 2) the sulfuric acid product pipelines that run from the sulfuric acid storage tanks to the 183.1 Headhouses, and the adjacent railroad offloading area, at both KE and KW, and
- 3) the treated water pipelines that run from the 165 Power Control Buildings to the 105 Reactors, also at both KE and KW.
- 4) the treated water pipeline connecting the 105KE and 105KW reactor buildings.

**Waste Type:** Equipment

**Waste Description:** The waste is residual sodium dichromate (chromium 6) and mercury (from sulfuric acid) in the pipes and potential leaks from the offloading station.

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**Site Code:** 100-K-82 **Classification:** Accepted

**Site Names:** 100-K-82, 105-KW Fuel Storage Basin Leak **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1978

**Site Description:** The release is not marked or posted.

**Waste Type:** Water

**Waste Description:** Fuel storage basin effluent that included debris from fuel cladding failures. The release is analogous to the release at 105-KE basin. Cobalt-60, Strontium-90, Cesium-137 and small amounts of plutonium were noted in the soil beneath the 105- K East basin.

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**Site Code:** 100-K-84 **Classification:** Accepted

**Site Names:** 100-K-84, Red Soil Found Southwest of 118-K-1 **ReClassification:**

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

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

**Site Description:** The site consists of red stained soil. Five small areas were identified. Some of the material appeared crushed while other pieces looked like "slag". Similar piles of material have been found south of the 200 West Area, 100BC Area, and Riverland (McGee Ranch) Area.

**Waste Type:** Soil

**Waste Description:** The waste is areas of red stained soil. X-ray diffraction (XRF) was performed immediately upon identification of the site. The XRF results indicated the presence of arsenic and lead. Later, the site was sampled for inorganics at Lionville. The sample numbers are J15DV5 and J15DV6. Sample number J15DV5 indicated 62.9 mg/kg arsenic and sample number J15DV6 indicated 116 mg/kg arsenic. Lead was not indicated as a contaminant in these two samples. Eberline performed a gamma scan for selected radionuclides. All results were below cleanup limits. The site contaminant of potential concern (COPC) is arsenic.

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**Site Code:** 100-K-85 **Classification:** Accepted

**Site Names:** 100-K-85, 100-K Temporary Construction Pit **ReClassification:**

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

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

**Site Description:** The site is a large open pit estimated to be 30 m ( 98 ft) in diameter and appears to have supported construction operations. The site appears as a flat grassy area.

**Waste Type:** Construction Debris

**Waste Description:** The waste may be temporary construction debris.

---

**Site Code:** 100-K-97 **Classification:** Accepted

**Site Names:** 100-K-97, 183-KW French Drain and Rail Spur Unplanned Release **ReClassification:**

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

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

**Site Description:** The site consists of a French Drain that was used to collect drainage from the chromate system transfer hose after unloading the railcar. It also includes an unplanned release along the railroad tracks on the Head House rail spur.

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**Site Code:** 100-K-98 **Classification:** Accepted

**Site Names:** 100-K-98, 183-KE French Drain and Rail Spur Unplanned Release **ReClassification:**

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

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

**Site Description:** The site consists of a French Drain that was used to collect the drainage from the transfer hose after unloading the railcar.

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**Site Code:** 100-K-101 **Classification:** Accepted

**Site Names:** 100-K-101, French Drains and Mercury Stained Soils near the 183KE Sedimentation Basin **ReClassification:**

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

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

**Site Description:** The site consists of a French Drain surrounded by mercury stained soil adjacent to the KE Sedimentation Basin near the abutments. There is also a black hose assembly.

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**Site Code:** 100-K-102 **Classification:** Accepted

**Site Names:** 100-K-102, French Drains and Mercury **ReClassification:**

Stained Soils near the 183KW  
Sedimentation Basin

**Site Type:** French Drain

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site consists of a French Drain surrounded by mercury stained soil adjacent to the Sedimentation Basin near the abutments. There is also a black hose acid delivery system.

**Site Code:** 100-K-103

**Classification:** Accepted

**Site Names:** 100-K-103, 1704-K and 1717-K Septic Systems, Additional Components of 1607-K4

**ReClassification:**

**Site Type:** Settling Tank

**Start Date:**

**Site Status:** Unknown

**End Date:**

**Site Description:** This WIDS site addresses seven components of the 1717K Septic System that were not included in the Closed Out 1607-K4 waste site. 100-K-103 includes the Original Tile Field, the Replacement Septic Tank, one Leaching Trench and four distinct Replacement Tile Field, built in 1995.

**Site Code:** 100-K-104

**Classification:** Accepted

**Site Names:** 100-K-104, 166-KE French Drain

**ReClassification:**

**Site Type:** French Drain

**Start Date:**

**Site Status:** Unknown

**End Date:**

**Site Description:** A site visit in July 2008 could not visually identify the french drain. The drain was fed by approximately 30 meters (100 feet) of underground piping.

**Site Code:** 100-K-105

**Classification:** Accepted

**Site Names:** 100-K-105, Pit at Southeast Corner of 100K

**ReClassification:**

**Site Type:** Depression/Pit (nonspecific)

**Start Date:** 1955

**Site Status:** Inactive

**End Date:**

**Site Description:** The pit cannot be visually identified at the present time. An open pit was clearly visible on historical photograph 3346-NEG, taken in April 1955. Later photographs do not show any evidence of the pit. It is presumed to have been backfilled prior to 1965.

**Site Code:** 100-K-106

**Classification:** Accepted

**Site Names:** 100-K-106, 182-K Fuel Oil Crib

**ReClassification:**

**Site Type:** Crib

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site is an underground, rock filled drainage crib next to the 182-K Building.

---

**Site Code:** 100-K-107 **Classification:** Accepted  
**Site Names:** 100-K-107, 1706-KER Abandoned Drain Field **ReClassification:**  
**Site Type:** Drain/Tile Field **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** A fenced area 31 meters (102 feet) northwest of the northwest corner of the 1706-KER building is assumed to be this abandoned drain field.

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**Site Code:** 100-K-108 **Classification:** Accepted  
**Site Names:** 100-K-108, 1706-KER Septic System, 1706-KER Septic Tank, Crib and Sewer Line **ReClassification:**  
**Site Type:** Septic Tank **Start Date:**  
**Site Status:** Unknown **End Date:**  
**Site Description:** The site consists of a septic tank, crib, and associated piping that received effluent from the hot maintenance shop in 1706-KER building.

**Waste Type:** Chemicals  
**Waste Description:** Contaminants of Potential Concern may include radionuclides (fission products), ICP metals, mercury, TPH and hexavalent chrome.

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**Site Code:** 100-K-109 **Classification:** Accepted  
**Site Names:** 100-K-109, Unplanned Chemical Release near 183.1KW Head House, Yellow Stained Soil adjacent to 183.1KW Head House **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The waste site is an area of yellow stained soil, from an unplanned release that is adjacent to the railroad track, south, southwest of the demolished 183.1KW headhouse.

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**Site Code:** 118-K-1 **Classification:** Accepted  
**Site Names:** 118-K-1, 100-K Burial Ground, 118-K **ReClassification:**  
**Site Type:** Burial Ground **Start Date:** 1953  
**Site Status:** Inactive **End Date:** 1975  
**Site Description:** The site runs northwest and southwest and contains approximately fifty trenches and pits and eleven silos. The trench and pit dimensions vary greatly. The silos range from 1.4 meter (4.5 feet) to 3 meters (10 feet) in diameter. Their depths range from 7.6 meters (25 feet) to 9.8 meters (32 feet deep). The site has two parts, the main burial ground and the area known as the CGI-791 addition.

**Waste Type:** Equipment

**Waste Description:** This unit contains numerous trenches and vertical steel pipes of various sizes that contain radioactive solid waste from 105-K and 105-N Reactors. The trenches miscellaneous debris. Some 100-N waste includes zirconium cladding hulls and basin n sludge. The incinerator operated for several years burning low-level contaminated combustible material. All contaminated burning was halted in October 1960. Six silos received reactor hardware, three silos contain incinerator ashes and two silos contain irradiated nickel plated boron balls from the emergency 3X system.

**Site Code:** 126-K-1

**Classification:** Accepted

**Site Names:** 126-K-1, 100-K Gravel Pit

**ReClassification:** Rejected (4/29/2009)

**Site Type:** Inert/Demolition Landfill

**Start Date:** 1975

**Site Status:** Active

**End Date:**

**Site Description:** The site has been reclassified to rejected. The debris disposed was of an inert/demolition type not regulated under CERCLA.

This unit is a gravel borrow pit that resulted from 100-K Area construction. The slope of the southwest corner contains demolition waste. This area is covered with pit run backfill material. The bottom contains one layer approximately 1.5-meter (5-foot) thick of demolition and inert waste covered with approximately 0.3 meters (1 foot) of pit run backfill material. Approximately 80% of this unit is unused.

**Waste Type:** Demolition and Inert Waste

**Waste Description:** The unit contains demolition and inert waste from the 100-K Area, the Near Surface Test Facility (NSTF) at Gable Mountain, and the Exploratory Shaft (ES) Site. Waste consists primarily of concrete, wood, steel pipe, structural steel, conduit, and wire.

**Site Code:** 128-K-1

**Classification:** Accepted

**Site Names:** 128-K-1, 100-K Burning Pit

**ReClassification:** Interim Closed Out (8/24/2004)

**Site Type:** Burn Pit

**Start Date:** 1955

**Site Status:** Inactive

**End Date:** 1971

**Site Description:** The site has been remediated and interim closed out.

The site was a slight depression, about 0.91 meters (three feet) below the surrounding grade, with pieces of debris (mostly concrete and metal) showing at the surface.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents.

**Site Code:** 128-K-2

**Classification:** Accepted

**Site Names:** 128-K-2, 100-K Construction Dump

**ReClassification:**

**Site Type:** Burn Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site has not been covered with fill. A single chain fence with asbestos warning signs marks the area.

**Waste Type:** Misc. Trash and Debris  
**Waste Description:** A wide variety of trash is exposed on the ground surface. There is evidence of burning in many locations. Most of the material on the surface is scrap metal and glass. Office waste, paint, solvents, laboratory waste have also been found. The area is also covered with nonfriable and friable asbestos.

**Site Code:** 130-K-1 **Classification:** Not Accepted (10/1/1997)  
**Site Names:** 130-K-1, 1717-K Gasoline Storage Tank **ReClassification:**  
**Site Type:** Storage Tank **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The site was an underground gasoline storage tank oriented with the long axis of the tank in an east-west direction. A 6.4 centimeters (2.5 inches) pipeline connected the tank to the building. The tank was emptied and rinsed with water when the facilities were deactivated in 1971.

The concrete pad over the top of the tanks was removed in July, 1989. This allowed Pacific Northwest Laboratories to return to the tank site and perform Underground Penetrating Radar (UPR) to aid in locating the tank without the interference caused by the rebar in the concrete.

The tank was excavated in July 1989. The soil around where the tanks had been located was sampled, the results analyzed, and the site backfilled to match the surrounding grade.

**Waste Type:** Oil  
**Waste Description:** The unit was used for storage of gasoline (product).

**Site Code:** 130-K-2 **Classification:** Accepted  
**Site Names:** 130-K-2, 1717-K Waste Oil Storage Tank **ReClassification:**  
**Site Type:** Storage Tank **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The site was an underground waste oil storage tank oriented with the long axis of the tank in a north-south direction. The tank was used for storing used motor oil. The tank was left with a residual heel when the facilities were deactivated in 1971.

The concrete pad over the top of the tanks was removed in July 1989. This allowed Pacific Northwest Laboratories to return to the tank site and perform Underground Penetrating Radar (UPR) to aid in locating the tank without the interference caused by the rebar in the concrete.

The tank was excavated in July 1989. The soil around where the tanks had been located was sampled, the results analyzed, and the site backfilled to match the surrounding grade.

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**Waste Type:** Oil

**Waste Description:** The unit was used for storage of used motor oil.

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<b>Site Code:</b>	130-K-3	<b>Classification:</b>	Not Accepted (10/1/1997)
<b>Site Names:</b>	130-K-3, 182-K Emergency Diesel Oil Storage Tank, 130-K-3A and 130-K-3B	<b>ReClassification:</b>	
<b>Site Type:</b>	Storage Tank	<b>Start Date:</b>	1961
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1970

**Site Description:** The unit consisted of two steel underground diesel oil storage tanks. The tanks were used to supply diesel fuel to three engines located within the 182-K (Emergency Water Pump House). The engines ran emergency pumps used to provide backup cooling water for the 105-KE and 105-KW Reactors.

The tanks were covered by a bermed mound of soil with the top of the mound 1.5 meters (5 feet) above grade level. The top of each tank was 1.2 meters (3.5 feet) above grade and covered by 0.46 meters (1.5 feet) of the soil berm. A 0.7 meters (2 feet) diameter manway (0.64 centimeters [0.25 inches] thick bolted steel plate cover) was located in the center of each tank. All piping associated with the tanks utilized welded joints with no threaded couplings. The piping and conduit associated with each tank was: 3 fuel oil pipelines -- 3.2 centimeters (1.25 inches) outside diameter by 3.7 meters approximately (12 feet) to the building; 1 fuel oil return pipeline -- 0.64 centimeters (3 inches) outside diameter by approximately 4.6 meters (15 feet) to the building (empty during normal operation); 1 centrifuge fuel oil pipeline -- 3.2 centimeters (1.25 inches) outside diameter by approximately 9.1 meters (30 feet) to the building; 1 vent pipeline -- 0.64 centimeters (3 inches) outside diameter by approximately 6.1 meters (20 feet) (including above ground components); 1 vertical fill pipeline connection -- 10.2 centimeters (4 inches) outside diameter by 15.2 centimeters (6 inches) tall (empty during normal operation); 1 fuel oil cross tie pipeline -- 7.6 centimeters (3 inches) outside diameter by approximately 3.05 meters (10 feet) long (empty during normal operation); 1 fuel level indicator conduit -- electrical and did not contain product.

There was no history of repairs made to these tanks.

In about 1970, the tanks were pumped empty of product and abandoned.

The tanks were excavated on April 13, 1993 following the Site Assessment Process. The soil around where the tanks had been located was sampled, the results analyzed, and the site was backfilled to match the surrounding grade.

**Waste Type:** Oil

**Waste Description:** The two tanks were used for storage of diesel oil (product).

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<b>Site Code:</b>	1607-K1	<b>Classification:</b>	Accepted
<b>Site Names:</b>	1607-K1, 1607-K1 Septic Tank and Associated Drain Field, 124-K-1, 1607-K1 Sanitary Sewer System, 1607-K1 Septic Tank	<b>ReClassification:</b>	
<b>Site Type:</b>	Septic Tank	<b>Start Date:</b>	1955

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

**Site Description:** The sanitary sewer system is composed of a septic tank, leaching trench and associated piping. The septic tank and dosing chamber are composed of reinforced concrete per Hanford Standard E-5-11. There is a maximum of 1.5 meters (5 feet) of fill on the cover slab. There are 61 meters (200 feet) of 15 centimeter (6 inches) vitrified clay pipe to the septic tank, followed by 6.1 meters (20 feet) of 15 centimeter (6 inches) vitrified clay pipe to the leaching trench. The leaching trench contains 9.1 meters (30 feet) of 15 centimeters (6 inches) vitrified clay pipe laid with open joints.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit receives sanitary sewage from 1701-K Badgehouse (security checkpoint), 1720-K Patrol Offices and Change Room, and 1721-K Trailer. The flow rate to this unit is estimated to have been 1,987 liters (525 gallons) per day.

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**Site Code:** 1607-K2 **Classification:** Accepted

**Site Names:** 1607-K2, 1607-K2 Septic Tank and Associated Drain Field, 124-KE-1, 1607-K2 Sanitary Sewer System, 1607-K2 Septic Tank **ReClassification:**

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

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

**Site Description:** The sanitary sewer system is composed of a septic tank, leaching trench and associated piping. The septic tank is composed of steel per Hanford Standard E-5-11. There is a maximum of 1.5 meters (5 feet) of fill on the cover slab. There are 26 meters (85 feet) of 15 centimeter (6 inches) vitrified clay pipe to the septic tank, followed by 6.1 meters (20 feet) of 15 centimeter (6 inches) vitrified clay pipe to the leaching trench. The leaching trench contains 33.5 meters (110 feet) of 15 centimeters (6 inches) vitrified clay pipe laid with open joints.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit receives sanitary sewage from 183-KE Water Treatment Plant. The flow rate is estimated to have been 1230 liters (325 gallons) per day.

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**Site Code:** 1607-K3 **Classification:** Accepted

**Site Names:** 1607-K3, 1607-K3 Septic Tank and Associated Drain Field, 124-KW-2, 1607-K3 Sanitary Sewer System, 1607-K3 Septic Tank **ReClassification:**

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

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

**Site Description:** The tank and drain field are enclosed within a wooden fence and marked with Septic Tank and Drain Field signs.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit received sanitary sewage from 183-KW Water Treatment Plant. The flow rate is estimated to have been 1,230 liters (325 gallons) per day.

**Site Code:** 1607-K4 **Classification:** Accepted  
**Site Names:** 1607-K4, 1607-K4 Septic Tank and Associated Drain Field, 124-K-2, 1607-K4 Sanitary Sewer System, 1607-K4 Septic Tank **ReClassification:** Closed Out (3/5/2001)  
**Site Type:** Septic Tank **Start Date:** 1955  
**Site Status:** Inactive **End Date:**

**Site Description:** The sanitary sewer system is composed of a septic tank, two leaching trenches and associated piping. The septic tank and dosing chamber are composed of reinforced concrete per Hanford Standard E-5-11. There is a maximum of 1.5 meters (5 feet) of fill on the cover slab. There are 149 meters (150 + 238 + 102 feet) of 20 centimeter (8 inches) vitrified clay pipe to the septic tank, followed by 6.1 meters (20 feet) of 15 centimeter (6 inches) vitrified clay pipe to the larger leaching trench. There are an additional 68 meters (122 + 102 feet) of 15 centimeter (6 inches) of vitrified pipe connecting 1717-K to the system. The leaching trench contains 128 meters (420 feet) of 15 centimeters (6 inches) vitrified clay pipe laid with open joints. The second leaching trench is connected directly to the system piping with 6.1 meters (20 feet) of vitrified piping. The piping within the leach trench is a single 9.1 meters (30 feet) of vitrified piping.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit received sanitary sewage from the 1704-K Office Building and the 1717-K Maintenance Shop.

**Site Code:** 1607-K5 **Classification:** Accepted  
**Site Names:** 1607-K5, 1607-K5 Septic Tank and Associated Drain Field, 124-KE-2, 1607-K5 Sanitary Sewer System, 1607-K5 Septic Tank **ReClassification:**  
**Site Type:** Septic Tank **Start Date:** 1955  
**Site Status:** Active **End Date:**

**Site Description:** The unit includes a tile field.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit receives sanitary sewage from 1706-KER Flow Laboratory, 1706-K Water Treatment Laboratory, 165-KE Powerhouse, 105-KE Reactor Building, and 115-KE Gas Recirculation System. The flow rate to this unit is estimated at 700 gal/d.

**Site Code:** 1607-K6 **Classification:** Accepted  
**Site Names:** 1607-K6, 1607-K6 Septic Tank and Associated Drain Field, 124-KW-1, 1607-K6 Sanitary Sewer System, 1607-K6 **ReClassification:**



have been disposed of into the crib as well as 100,000 kilograms (220,500 pounds) of sulfuric acid.

<b>Site Code:</b>	116-KE-3	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-KE-3, 105-KE Storage Basin French Drain, 105-KE Fuel Storage Basin Sub-Basin Drainage Disposal System Crib	<b>ReClassification:</b>	
<b>Site Type:</b>	Injection/Reverse Well	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971
<b>Site Description:</b>	The site is part of the sub-basin drainage disposal system for the 105-KE Fuel Storage Basin (100-K-42). The site includes the following components: a feed pipe, crib structure, dry well, and test hole.		

The area of the site is cobble covered and posted with "Underground Radioactive Material" warning signs. A mound of soil, installed in 1977 or 1978, is located nearby and covers some of the ancillary units related to this site. The test hole's 10.2-centimeter (4-inch) diameter steel casing that originally extended above finish grade level is no longer visible.

A 20.3-centimeter (8-inch) corrugated galvanized steel feed pipe 8.8 meters (29 feet) below grade comes from the fuel storage basin. The feed pipe enters the crib structure at elevation 133 meters (435.5 feet).

The crib structure, in plan view, is trapezoid shaped with the top at grade level (Elevation: 142 meters [464.5 feet]) and approximately 18.3 meters (60 feet) in width (excavation and backfill width) and the bottom (Elevation: 425.5 feet) 3.05 meters (10 feet) in width. The bottom 3.7 meters (12 feet) of the crib is filled with coarse gravel.

The distribution system (drain field) within the crib is a central feeder with side feeders ("fishbone") located 8.8 meters (29 feet) below grade. All feeder piping is composed of 20.3-centimeter (8-inch) corrugated and perforated galvanized steel pipe. The main feeder pipe within the drain field is 6.1 meters (20 feet) long. The side feeders coming from each side of the central feeder are 2.7 meters, 3.2 meters, 2.6 meters, and 1.5 meters (9.0 feet, 10.5 feet, 8.5 feet, and 5.0 feet) in length, 1.75 meters, 1.7 meters, and 1.3 meters (5.75 feet, 5.5 feet, 4.25 feet) apart, and set at an angle of 30 degrees (Drawing #H-1-23207 is labeled 30 degrees, however, it appears on the drawing to be closer to 60 degrees.) The drain field is 6.1 meters (20 feet) in diameter.

A dry well (injection well) was installed at the midpoint (Washington State Plane Coordinates: Easting 569130.985, Northing 146753.534) of the drain field main feeder pipe. The dry well is constructed of 20.3-centimeter (8-inch) schedule 40 steel well casing. The dry well casing runs from elevation 435.5 feet (8.8 meters/29 feet below grade) downward to a point 3.05 meters (10 feet) below the mean water table. The bottom 6.1 meters (20 feet) of the well casing is perforated.

The 10.2-centimeter (4-inch) steel test hole extended from the surface to the head end of the drain field. The test hole piping was the only part of site's structure that was above grade. The construction of the "D" catch tank modification would have covered the test hole.

**Waste Type:** Process Effluent



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All of the waste was removed in 1994.

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<b>Site Code:</b>	116-KE-6C	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-KE-6C, 1706-KE Waste Accumulation Tank, 1706-KE Waste Treatment System	<b>ReClassification:</b>	Interim Closed Out (8/4/2010)
<b>Site Type:</b>	Storage Tank	<b>Start Date:</b>	1984
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site consisted of a 550 gallon waste accumulating tank, which was part of the 1706-KE Waste Treatment System installed in 1984.		
<b>Waste Type:</b>	Equipment		
<b>Waste Description:</b>	The unit was used to treat radioactive wastes generated from sample analysis and test activities conducted in the laboratories of the 1706-KE Building. The system stopped operating in 1987. All of the waste was removed in 1994.		

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<b>Site Code:</b>	116-KE-6D	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-KE-6D, 1706-KE Ion Exchange Column, 1706-KE Waste Treatment System	<b>ReClassification:</b>	Interim Closed Out (8/4/2010)
<b>Site Type:</b>	Process Unit/Plant	<b>Start Date:</b>	1984
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	The site consisted of a 5 cubic foot mixed-bed resin ion exchange column, which was part of the 1706-KE Waste Treatment System installed in 1984.		
<b>Waste Type:</b>	Equipment		
<b>Waste Description:</b>	The unit was used to treat radioactive wastes generated from sample analysis and test activities conducted in the laboratories of the 1706-KE Building. The system stopped operating in 1987. All of the waste was removed in 1994.		

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<b>Site Code:</b>	118-KE-1	<b>Classification:</b>	Accepted
<b>Site Names:</b>	118-KE-1, 105-KE Reactor Building	<b>ReClassification:</b>	
<b>Site Type:</b>	Reactor	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971
<b>Site Description:</b>	The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building and remnant contaminated pipelines connected to the buildings and not removed through other remedial actions. The fuel storage basin is a separate site (100-K-42).		
<b>Waste Type:</b>	Equipment		
<b>Waste Description:</b>	The unit contains an estimated 58,000 curies of radionuclides, 151,000 kilograms (167 tons) of lead, and 708 cubic meters (25,000 cubic feet) of asbestos.		

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**Site Code:** 118-KE-2 **Classification:** Accepted

**Site Names:** 118-KE-2, 105-KE Horizontal Control Rod Storage Cave, Rod Cave **ReClassification:**

**Site Type:** Storage **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site was constructed by pouring a concrete slab 18 meters (60 feet) long by 2.4 meters (8 feet) wide. Two sections of 61-centimeter (24-inch) pipe were cut in half lengthwise, laid open side down on the slab. Vertical concrete walls and steel doors were added to the ends of the pipe sections, with the walls forming a wing at each end. The pipe sections were then covered with 1.8 meters (6 feet) of clean fill material, forming a 12-meter (40-foot) long tunnel (Hale 1957a). The berm width after the fill material was added is approximately 8 meters (25 feet). The entire structure is above grade.

**Waste Type:** Equipment

**Waste Description:** This site contains trace amounts of radionuclides. The radiation level at the entrance to the cave with the door open is 1 millirad/hour. The unit was used for temporary storage of radioactive rod tips for radioactive decay pending subsequent disposal.

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**Site Code:** 120-KE-1 **Classification:** Accepted

**Site Names:** 120-KE-1, 183-KE Filter Waste Facility Dry Well, 100-KE-1, 183-KE Filter Water Facility, 183-KE Acid Neutralization Pit, 100-K-26 **ReClassification:**

**Site Type:** Sump **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site was an underground concrete structure used to neutralize acid waste prior to disposal. The "pit" was a concrete box lined with acid proof bricks. The structure was divided into three sections by dividing brick weirs. Effluent released into the system was held up in a small chamber by the first weir. Effluent overflowed the first weir into a second small chamber and then overflowed the second weir into the third larger chamber. A 10.2-centimeter (4-inch) vitrified tile drain was located in the bottom of the third large chamber and is believed to discharge to the process sewer (see Site Comment). The top of the pit was level with the surface and had a 7.6-centimeter (3-inch) plank cover that was posted with "Confined Space" and "Caution, Acid" warning signs. In August 2000, the area around the acid tanks was stabilized with gravel. The french drain and sump were backfilled. They are no longer visible. They are not marked or posted.

**Waste Type:** Chemicals

**Waste Description:** The site received sulfuric acid for neutralization and acid sludge waste that was removed from the sulfuric acid storage tanks in the late 1960's and early 1970's.

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**Site Code:** 120-KE-2 **Classification:** Accepted

**Site Names:** 120-KE-2, 183-KE Filter Waste Facility **ReClassification:**

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French Drain, 100-KE-2, 183 KE Filter  
Water Facility

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

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The unit was an open-bottomed french drain with a depth of 0.9 meters (3 feet) and a diameter of 0.9 meters (3 feet). It has been located inside four, yellow posts with chain. In August 2000, the area around the acid tanks was stabilized with gravel. The french drain and sump were backfilled. They are no longer visible. They are not marked or posted.

**Waste Type:** Chemicals

**Waste Description:** The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

**Site Code:** 120-KE-3 **Classification:** Accepted

**Site Names:** 120-KE-3, 100-KE-3, 183-KE Filter Water Facility Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The unit was a trench lined with sand. The trench received a sludge-water slurry.

**Waste Type:** Chemicals

**Waste Description:** The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

**Site Code:** 120-KE-4 **Classification:** Accepted

**Site Names:** 120-KE-4, 183-KE1 Sulfuric Acid Storage Tank **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The unit is located above ground and has a storage capacity of 38,267 liters (10,109 gallons).

**Waste Type:** Chemicals

**Waste Description:** The unit was used for storage of sulfuric acid product.

**Site Code:** 120-KE-5 **Classification:** Accepted

**Site Names:** 120-KE-5, 183-KE2 Sulfuric Acid Storage Tank **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site is the westernmost of the two original sulfuric acid tanks at the 183-KE Headhouse. The tank is a horizontal, cylindrical shaped, steel tank supported above ground on concrete saddles.

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The tank has a capacity of 38,267 liters (10,109 gallons).

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<b>Site Code:</b>	120-KE-6	<b>Classification:</b>	Accepted
<b>Site Names:</b>	120-KE-6, 183-KE Sodium Dichromate Tank	<b>ReClassification:</b>	
<b>Site Type:</b>	Foundation	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971
<b>Site Description:</b>	The site is a foundation where a sodium dichromate storage tank was placed. The tank has been removed and all that remains is the concrete pad, contaminated soil, and any remaining piping. The vertical steel storage tank was 6.1 meters (20 feet) high, 5.8 meters (19 feet) in diameter, and had a 159,000-liter (42,000-gallon) storage capacity.		
<b>Waste Type:</b>	Chemicals		
<b>Waste Description:</b>	Staining from sodium dichromate can be seen in the soil near the concrete pad.		

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<b>Site Code:</b>	120-KE-8	<b>Classification:</b>	Accepted
<b>Site Names:</b>	120-KE-8, 165-KE Brine Pit, 165-KE Brine Mixing Tank	<b>ReClassification:</b>	
<b>Site Type:</b>	Sump	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971
<b>Site Description:</b>	The unit is a below grade concrete structure the provided brine for the 165-KE Powerhouse. The roof of the structure is approximately 0.3 meters (1 foot) above ground level. The opening into the pit is covered by a wooden cover that is in poor condition. The bottom of the pit has subsided and appears to have leaked or drained to the soils beneath the structure. Just south of the brine pit is a valve pit located within a vertical section of 1.2 meter (4 foot) diameter corrugated galvanized pipe. This valve pit contains residue and apparently was part of the brine operation.		
	The brine pit has inner dimensions of 4.3 meters (14 feet) long by 2.4 meters (8 feet) wide by 2.7 meters (9 feet) tall. The bottom of each pit is filled with a 12.7 centimeter (7 inch) layer of 1.3 to 2.6 centimeter (1/2 to 1 inch) gravel topped by a 17.8 centimeter (7 inch) layer of 0.3 to 0.6 centimeter (1/8 to 1/4 inch) gravel. The pit has a 1.2 meter (4 foot) by 1.1 meter (3.5 foot) opening for receiving salt.		
<b>Waste Type:</b>	Chemicals		
<b>Waste Description:</b>	The unit contains salt brine and residue. Based on sampling performed at the 120-KE-9 and 120-KW-7 brine pits, the brine and residue may be regulated as dangerous per WAC 173-303.		

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<b>Site Code:</b>	120-KE-9	<b>Classification:</b>	Accepted
<b>Site Names:</b>	120-KE-9, 183-KE Brine Pit, 183-KE Salt Dissolving Pits and Brine Pump Pit	<b>ReClassification:</b>	
<b>Site Type:</b>	Sump	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971

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**Site Description:** The Salt Dissolving Pits and Brine Pump Pit are part of a single below-grade concrete structure that provided brine for the 183-KE Water Treatment Facility. Four wooden covers and one metal cover were visible at the surface. The wooden covers were in poor condition. In August of 1998 the ceiling structures were demolished and the open chambers were backfilled to grade.

The two salt dissolving pits each have inner dimensions of 3.0 meters (10 feet) long by 2.1 meters (7 feet) wide by 2.4 meters (8 feet) deep. A 15-centimeter (6-inch) by 30-centimeter (12-inch) overflow slot that connects the two dissolving pits is located just below the structure's roof. The bottom of each pit was filled with a 13-centimeter (5-inch) layer of 1.3 to 2.6-centimeter (0.5 to 1-inch) gravel topped by a 18-centimeter (7-inch) layer of 0.3 to 0.6-centimeter (1/8 to 1/4-inch) gravel. The dissolving pits each had a 1.8-meter (5.75-foot) by 0.9-meter (3-foot) opening at the top for receiving salt. The pits also had a smaller 46 by 46-centimeter (18 by 18-inch) opening that was probably used for checking the water level within each pit.

The Brine Pump Pit is located adjacent to the two Salt Dissolving Pits. The pit is 3.3 meters (10.67 feet) long by 2.2 meters (7.33 feet) wide by 2.4 meters (8 feet) deep. It holds two pumps and the associated piping for the brine system. A 46 by 46 by 46-centimeter (18 by 18 by 18-inch) sump is located in the corner of the pit. The pump pit is accessible from the surface through a 0.6 by 0.6-meter (2 by 2-foot) opening.

**Waste Type:** Chemicals

**Waste Description:** The unit contains salt brine and residue.

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<b>Site Code:</b>	126-KE-2	<b>Classification:</b>	Accepted
<b>Site Names:</b>	126-KE-2, 183-KE Liquid Alum Storage Tank #2	<b>ReClassification:</b>	
<b>Site Type:</b>	Storage Tank	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971

**Site Description:** The site is an above ground vertical stainless steel storage tank mounted on a concrete base. The tank was part of a system called, The Liquid Alum System, that supplied liquid alum for water treatment. The liquid was supplied either by rail car or tank truck, as both connections are shown on the Liquid Alum System diagram in HW-24800-103. The piping and instrument identification diagram, H-1-16552, shows the pipelines, valves, and instrumentation related to the tank. During the winter, the liquid alum was pumped through heat exchangers for purpose of heating and agitating the chemicals.

Use of this tank for the storage of alum was discontinued in the Fall of 1996. The tank is now inactive, but the residual alum in the tank has not been cleaned out.

**Waste Type:** Chemicals

**Waste Description:** The unit was used for storage of liquid alum (aluminum sulfate). Material Safety Data Sheet (MSDS) #040407 lists aluminum sulfate as an EPA hazardous substance. The tank has not been cleaned out.

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<b>Site Code:</b>	126-KE-3	<b>Classification:</b>	Not Accepted (2/7/2001)
<b>Site Names:</b>	126-KE-3, 183-KE Liquid Alum Storage Tank #1	<b>ReClassification:</b>	

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**Site Status:** Inactive **End Date:** 1971

**Site Description:** The original height of this unit was 91.5 meters (300 feet). The current height is 53.4 meters (175 feet).

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Discharged ventilated air from the 105-KE Building flowed through concrete ducts directly out of the stack.

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**Site Code:** 116-KW-1 **Classification:** Accepted

**Site Names:** 116-KW-1, 115-KW Condensate Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The crib and pipeline have been removed and the site backfilled with clean soil to the average adjacent grade elevation.

**Waste Type:** Process Effluent

**Waste Description:** The site received condensate and other wastewater from reactor gas purification systems. Drilling of the crib in the mid-1970's revealed high concentrations of tritium and carbon-14. The radionuclide inventory in curies decayed through April 1, 1986, includes tritium (81.9 curies), carbon-14 (110 curies), and small amounts of other elements.

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**Site Code:** 116-KW-2 **Classification:** Accepted

**Site Names:** 116-KW-2, 105-KW Storage Basin French Drain, 105-KW Basin Reverse Well, 105-KW Fuel Storage Basin Sub-Basin Drainage Disposal System Crib **ReClassification:**

**Site Type:** Injection/Reverse Well **Start Date:** 1955

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

**Site Description:** The site is part of the sub-basin drainage disposal system for the 105-KW Fuel Storage Basin (100-K-43). The site includes the following components: a feed pipe, crib structure, dry well, and test hole.

The area of the site is cobble covered and posted with "Underground Radioactive Material" warning signs. A mound of soil, installed in 1977 or 1978, is located nearby and covers some of the ancillary units related to this site. The test hole's 10.2-centimeter (4-inch) diameter steel casing that originally extended above finish grade level is no longer visible.

A 20.3-centimeter (8-inch) corrugated galvanized steel feed pipe 8.8 meters (29 feet) below grade comes from the fuel storage basin. The feed pipe enters the crib structure at elevation 133 meters (435.5 feet).

The crib structure, in plan view, is trapezoid shaped with the top at grade level (Elevation: 142 meters [464.5 feet]) and approximately 18.3 meters (60 feet) in width (excavation and backfill width) and the bottom (Elevation: 425.5 feet) 3.05 meters (10 feet) in width. The bottom 3.7 meters (12 feet) of the crib is filled with coarse gravel.

The distribution system (drain field) within the crib is a central feeder with side feeders ("fishbone") located 8.8 meters (29 feet) below grade. All feeder piping is composed of 20.3-centimeter (8-inch) corrugated and perforated galvanized steel pipe. The main feeder pipe within the drain field is 6.1 meters (20 feet) long. The side feeders coming from each side of the central feeder are 2.7 meters, 3.2 meters, 2.6 meters, and 1.5 meters (9.0 feet, 10.5 feet, 8.5 feet, and 5.0 feet) in length, 1.75 meters, 1.7 meters, and 1.3 meters (5.75 feet, 5.5 feet, 4.25 feet) apart, and set at an angle of 30 degrees (Drawing #H-1-23207 is labeled 30 degrees, however, it appears on the drawing to be closer to 60 degrees.) The drain field is 6.1 meters (20 feet) in diameter.

A dry well (injection well) was installed at the midpoint (Washington State Plane Coordinates: Easting 568589.544, Northing 146473.534) of the drain field main feeder pipe. The dry well is constructed of 20.3-centimeter (8-inch) schedule 40 steel well casing. The dry well casing runs from elevation 435.5 feet (8.8 meters [29 feet] below grade) downward to a point 3.05 meters (10 feet) below the mean water table. The bottom 6.1 meters (20 feet) of the well casing is perforated.

The 10.2-centimeter (4-inch) steel test hole extended from the surface to the head end of the drain field. The test hole piping was the only part of site's structure that was above grade. The construction of the "D" catch tank modification would have covered the test hole.

**Waste Type:** Process Effluent

**Waste Description:** The waste is contaminated structures and soil from the fuel storage basin sub-basin drainage system.

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<b>Site Code:</b>	116-KW-4	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-KW-4, 150-KW Heat Recovery Station	<b>ReClassification:</b>	Interim Closed Out (9/23/2005)
<b>Site Type:</b>	Process Unit/Plant	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1970
<b>Site Description:</b>	The site has been remediated and interim closed out. The site consisted of heat exchangers, pumps, and associated piping on a concrete pad. Disconnected piping remained at the site, the pipe ends were covered with plywood.		

**Waste Type:** Equipment

**Waste Description:** Trace amounts of radioactive contamination remained on the piping. The heat exchange medium consisted of a 34% ethylene glycol-water solution.

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<b>Site Code:</b>	118-KW-1	<b>Classification:</b>	Accepted
<b>Site Names:</b>	118-KW-1, 105-KW Reactor Building	<b>ReClassification:</b>	
<b>Site Type:</b>	Reactor	<b>Start Date:</b>	1955
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1970
<b>Site Description:</b>	The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel		

storage basin; and 3) contaminated portions of the reactor building and remnant contaminated pipelines connected to the buildings and not removed through other remedial actions.

**Waste Type:** Equipment

**Waste Description:** This unit contains an estimated 51,000 curies of radionuclides, 1.41E+05 kilograms (155 tons) of lead, and 708 cubic meters (25,000 cubic feet) of asbestos.

**Site Code:** 118-KW-2 **Classification:** Accepted

**Site Names:** 118-KW-2, 105-KW Horizontal Control Rod Storage Cave **ReClassification:**

**Site Type:** Storage **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The cave was constructed by pouring a concrete slab 18.3 meters (60 feet) long by 2.4 meters (8 feet) wide. Two sections of 0.61-meter (24-inch) pipe were cut in half lengthwise and laid open side down, on the slab. Vertical concrete walls and steel doors were added to the ends of the pipe sections, with the walls forming a wing at each end. The pipe sections were then covered with 1.8 meters (6 feet) of clean fill material, forming a 12.2-meter (40-foot) long tunnel. The berm width after the fill material was added is about 7.6 meters (25 feet). The entire structure is above grade.

**Waste Type:** Equipment

**Waste Description:** The unit was used for temporary storage of irradiated and radioactively contaminated horizontal control rods containing unknown quantities of radionuclides. The tunnel contains four rod tips and other rod removal components. The radiation reading at the entrance to the cave with the door open is 50 millirad/hour.

**Site Code:** 120-KW-1 **Classification:** Accepted

**Site Names:** 120-KW-1, 183-KW Filter Water Facility Dry Well, 100-KW-1, 183-KW Acid Neutralization Pit, 100-K-17 **ReClassification:**

**Site Type:** Sump **Start Date:** 1955

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

**Site Description:** The site was an underground concrete structure used to neutralize acid waste prior to disposal. The "pit" was a concrete box that is lined with acid proof bricks. The structure is divided into three sections by dividing brick weirs. Effluent released into the system was held up in a small chamber by the first weir. Effluent overflowed the first weir into a second small chamber and then overflowed the second weir into the third larger chamber. A 10.2-centimeter (4-inch) vitrified tile drain was located in the bottom of the third chamber and is believed to discharge to the process sewer (see Site Comment). The top of the pit was level with the surface and had a 7.6-centimeter (3-inch) plank cover that is posted with "Confined Space" and "Caution, Acid" warning signs. In August 2000, the area around the acid tanks was stabilized with gravel. The french drain and sump were backfilled. They are no longer visible. They are not marked or posted.

**Waste Type:** Chemicals

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**Waste Description:** The site received sulfuric acid for neutralization and acid sludge waste from the sulfuric acid storage tanks. The drywell sludge was sampled in 1985 and was analyzed for arsenic, barium, cadmium, Chromium, lead, mercury, silver and selenium. The sample taken from the 183-KW drywell contained elevated levels of mercury. The Washington State dangerous waste limit for mercury is 0.2 parts per million. The sample contained 0.387 parts per million of mercury. The other metals were below dangerous waste limitations.

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**Site Code:** 120-KW-2 **Classification:** Accepted

**Site Names:** 120-KW-2, 183-KW Filter Water Facility **ReClassification:**  
French Drain, 100-KW-2

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

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

**Site Description:** This unit was an open-bottomed french drain with a depth of 0.9 meters (3 feet) and a diameter of 0.9 meters (3 feet). In August 2000, the area around the acid tanks was stabilized with gravel. The french drain and sump were backfilled. They are no longer visible. They are not marked or posted.

**Waste Type:** Chemicals

**Waste Description:** The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

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**Site Code:** 120-KW-3 **Classification:** Accepted

**Site Names:** 120-KW-3, 183-KW1 Sulfuric Acid **ReClassification:**  
Storage Tank

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

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

**Site Description:** The site is the westernmost of the two original sulfuric acid tanks at the 183-KW Headhouse. The tank is a horizontal, cylindrical-shaped, steel tank supported above ground on concrete saddles. The tank has a capacity of 38,267 liters (10,109 gallons).

**Waste Type:** Chemicals

**Waste Description:**

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**Site Code:** 120-KW-4 **Classification:** Accepted

**Site Names:** 120-KW-4, 183-KW2 Sulfuric Acid **ReClassification:**  
Storage Tank

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

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

**Site Description:** The unit is an above ground sulfuric acid storage tank and has a capacity of 38,000 liters (10,109 gallons). The site is the easternmost of the two original sulfuric acid tanks at the 183-KW Headhouse. The tank is a horizontal, cylindrical-shaped, steel tank supported above ground on concrete saddles.

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**Waste Type:** Chemicals

**Waste Description:** The unit was used for storage of sulfuric acid product.

**Site Code:** 120-KW-5 **Classification:** Accepted

**Site Names:** 120-KW-5, 183-KW Sodium Dichromate Storage Tank **ReClassification:**

**Site Type:** Foundation **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site is a foundation where a sodium dichromate storage tank was placed. The tank has been removed and all that remains is the concrete pad, contaminated soil, and any remaining piping. The vertical steel storage tank was 6.1 meters (20 feet) high, 5.8 meters (19 feet) in diameter, and had a 1.59E+05-liter (42,000-gallon) storage capacity.

**Waste Type:** Chemicals

**Waste Description:** Staining from sodium dichromate can be seen in the soil near the concrete pad.

**Site Code:** 120-KW-6 **Classification:** Accepted

**Site Names:** 120-KW-6, 165-KW Brine Pit, 165-KW Brine Mixing Tank **ReClassification:**

**Site Type:** Sump **Start Date:** 1955

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

**Site Description:** The unit is a below grade concrete structure that provided brine for the 165-KW Powerhouse. The roof of the structure was approximately 0.3 meters (1 foot) above ground level. The opening into the pit was covered by a wooden cover. Just south of the brine pit is a valve pit located within a vertical section of 1.2-meter (4-foot) diameter corrugated galvanized pipe. This valve pit contains residue and apparently was part of the brine operation. In August 1998, remaining liquid was removed and the open pit was backfilled to grade.

The brine pit has inner dimensions of 4.3 meters (14 feet) long by 2.4 meters (8 feet) wide by 2.7 meters (9 feet) tall. The bottom of each pit is filled with a 13-centimeter (7-inch) layer of 1.3 to 2.6-centimeter (0.5 to 1-inch) gravel topped by a 18-centimeter (7-inch) layer of 0.3 to 0.6-centimeter (1/8 to 1/4-inch) gravel. The pit has a 1.2-meter (4-foot) by 1.1-meter (3.5-foot) opening for receiving salt.

**Waste Type:** Chemicals

**Waste Description:** The unit contains salt brine and residue. Based on sampling performed at the 120-KE-9 and 120-KW-7 Brine Pits, the brine and residue may be regulated as dangerous waste per Washington Administrative Code (WAC) 173-303.

**Site Code:** 120-KW-7 **Classification:** Accepted

**Site Names:** 120-KW-7, 183-KW Brine Pit, 183-KW Salt Dissolving Pits and Brine Pump Pit **ReClassification:**

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**Site Type:** Sump **Start Date:** 1955

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

**Site Description:** The Salt Dissolving Pits and Brine Pump Pit were part of a single below grade concrete structure that provided brine for the 183-KW Water Treatment Facility. Four wooden covers and one metal cover were visible at the surface. The wooden covers are in poor condition. The unit contained saltcake and brine. In August 1998, remaining liquid was removed and the unit was backfilled to grade.

The two salt dissolving pits each have inner dimensions of 3.0 meters (10 feet) long by 2.1 meters (7 feet) wide by 2.4 meters (8 feet) deep. A 15-centimeter (6-inch) by 30-centimeter (12-inch) overflow slot that connects the two dissolving pits is located just below the structure's roof. The bottom of each pit was filled with a 12.7-centimeter (5-inch) layer of 1.3 to 2.6-centimeter (1/2 to 1-inch) gravel topped by a 17.8-centimeter (7-inch) layer of 0.3 to 0.6-centimeter (1/8 to 1/4-inch) gravel. The dissolving pits each had a 1.8-meter (5.75-foot) by 0.9-meter (3-foot) opening at the top for receiving salt. The pits also had a smaller 46 by 46-centimeter (18 by 18-inch) opening that was probably used for checking the water level within each pit.

The Brine Pump Pit is located adjacent to the two Salt Dissolving Pits. The pit is 3.3 meters (10.67 feet) long by 2.2 meters (7.33 feet) wide by 2.4 meters (8 feet) deep. It holds two pumps and associated piping for the brine system. A 46 by 46 by 46-centimeter (18 by 18 by 18-inch) sump is located in the corner of the pit. The pump pit is accessible from the surface through a 0.6 by 0.6-meter (2 by 2-foot) opening.

**Waste Type:** Chemicals

**Waste Description:** The unit contains salt brine and residue. A minimal sampling was performed at the site. The brine samples were analyzed by Hanford Environmental Health Foundation (HEHF) on September 5, 1989. A sample from one of the dissolving pits was described as a light yellow water-miscible liquid with approximately 1% yellow/orange residue and a pH of 6. The sample contained 12.5% sodium ion, 19.8% chloride ion, and 33 milligrams/liter potassium. The measured concentrations of EP-Toxicity metals were 0.12 milligrams/liter arsenic, 1.3 milligrams/liter barium, 0.1 milligrams/liter cadmium, 0.78 milligrams/liter chromium, 0.58 milligrams/liter lead, 0.28 milligrams/liter selenium, and 0.66 milligrams/liter silver. All other analytes were below detection limits. A sample from the other dissolving pit was also described as a very light yellow water-miscible liquid with approximately 10% white and tan crystals and a pH of 6. The sample contained 7.9% sodium ion, 19.7% chloride ion, and 240 milligrams/liter potassium. The measured concentrations of EP-Toxicity metals were 0.14 milligrams/liter arsenic, 1.9 milligrams/liter barium, 0.57 milligrams/liter chromium, 0.72 milligrams/liter lead, 0.31 milligrams/liter selenium, and 0.58 milligrams/liter silver. All other analytes were below detection limits. Only the liquid portions of the samples were analyzed. An informal review of results by the Sitewide Hazardous Waste Engineering Support Unit (SHWES) indicated that the brine and residue may be regulated as Dangerous Waste per Washington Administrative Code (WAC) 173-303.

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**Site Code:** 130-KW-1 **Classification:** Accepted

**Site Names:** 130-KW-1, 105-KW Emergency Diesel Oil Storage Tank, 130-KW-1A/130-KW-1B Tanks, 105-KW Emergency Diesel Fuel Tank **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1960

**Site Status:** Inactive **End Date:** 1971

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**Site Description:** The site is the location of two underground diesel storage tanks that were removed in 1992. Although the location description states the diesel tanks were located between the 105-KW exhaust stack and the 119-KW building, a sign is posted at the northwest corner of the 115 KW building that reads "130-KW-1 Diesel Tanks" This is further east and south of the reactor stack. There is no visual evidence of the tanks in either location. The site has been backfilled with uncontaminated soil to grade and covered with gravel. There is a very large Underground Radioactive Material area that surrounds the reactor facility. This site is not separately posted or marked.

**Waste Type:** Soil

**Waste Description:** The tanks were used for storage of diesel fuel (product). Radioactive contamination was discovered on the exterior of both tanks when they were removed. The Organic Vapor Monitor readings were below the detection limit.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** 100-K-76

**Site Names:** 100-K-76, 105-KW Unplanned Release Discovered Near 130-KW-1 Emergency Diesel Tank

**Reason:** Duplicate Site

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**Site Code:** 130-KW-2 **Classification:** Accepted

**Site Names:** 130-KW-2, 166-KW Oil Storage Tank **ReClassification:**

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

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

**Site Description:** The bunker is an underground, reinforced concrete structure. It has two compartments, each having a storage capacity of 3,033,629 liters (801,400 gallons).

**Waste Type:** Oil

**Waste Description:** The tank was used for storage of oil (product) for the 165-KW Boilers.

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**Site Code:** 132-KW-1 **Classification:** Accepted

**Site Names:** 132-KW-1, 116-KW Reactor Exhaust Stack **ReClassification:**

**Site Type:** Stack **Start Date:** 1955

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

**Site Description:** The original height for this unit was 91.5 meters (300 feet). The current height is 53.4 meters (175 feet).

**Waste Type:** Demolition and Inert Waste

**Waste Description:** Discharged ventilation air from the 105-KW Building flowed through concrete ducts directly out the exhaust stack.

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**Site Code:** 600-4 **Classification:** Accepted

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**Site Names:** 600-4, Howitzer Site **ReClassification:** Rejected (10/1/1997)  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is a dumping area left from its use as a military encampment. It includes a garbage dump, the remains of old military tent city, gun emplacements, two small water towers, and scattered debris.

A portion of a large gravel pit, located approximately 525 meters (1722 feet) south of Route 1 and west of the railroad tracks that are located closest to the entrance to 100-K, was used as the garbage dump. A wooden loading ramp was used to dump the garbage. To the northwest is the remains of the old military tent city.

Earth mounds topped with wooden decks surround the site. Presumably these structures are lookout platforms. On the south side of the site, one of the platforms is on top of what appears to be soils removed from the trench that traverses the site. This would indicate that the site was emplaced after the trench was dug and would account for the trench being backfilled at the center of the site.

The trench that traverses the site from northwest to southeast may have been the location of a temporary water supply pipeline that ran from the pre-Hanford Allard pumping station to the 200 North Area and the Central Electrical Control Station located in the 200 North Area. The entire length of this trench was traced for the Technical Baseline Document (WHC-SD-EN-TI-239).

At least three large wooden bunkers with earthen berms surrounding the sides were also located in the area. The wooden roofs, made up of 20.3 centimeter by 20.3 centimeter (8 inch by 8 inch) beams have collapsed into the structures. The overall site covers an area of approximately 6.07 hectares to 8.1 hectares (15 to 20 acres).

**Waste Type:** Misc. Trash and Debris

**Waste Description:** This unit contains various types of solid wastes including old food containers, 18.9 liter (5 gallon) gas and oil cans, empty ammo crates (confirmed to be empty), and two piles of coal approximately 6.1 meters (20 feet) in diameter. In addition to old military containers and ammo boxes, a 18.9 liter (5 gallon) drum with holes in the bottom was found. The drum was partially buried and appeared to be some type of french drain or sanitary sewage facility (latrine).

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**Site Code:** 600-29 **Classification:** Accepted

**Site Names:** 600-29, 100-K Construction Lay-down Area, 100-K-41 **ReClassification:**

**Site Type:** Dumping Area **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1954

**Site Description:** The unit is an abandoned dumping area containing several rectangular depressions and waste burning sites. There are many areas of discolored soil that include coal, rust colored soil and white residue patches. Slightly south of a gravel road that transverses the site is the Strong Motion Accelerometer (SMA) also known as H1K. The SMA site consists of a four-panel solar array and two 30-gallon galvanized drums (PNNL-14953-3). The two 30-gallon drums are set in the ground such that the base of the drum is about 1 m below the surface. One drum houses only the SMA; the other drum, which is connected via a sealed conduit to the SMA drum, contains the batteries. South of 100 -KW is a cement building foundation with a portion of it enclosed in a chain link fence. The foundation has two french drains, one near the north side and one near the

east side. In the southwest corner of the foundation are plumbing holes indicating bathroom facilities. It is possible a septic tank may also be located nearby.

During June of 1999 Global Positioning System (GPS) project entailed mapping the locations of selected Radiation Area Remedial Action (RARA) sites in the 100-K Area. The 600-29 was one of the sites surveyed. See report number (WCH CCN 0511006). A total of thirty data points were collected with Washington State Plane (WSP) coordinates with a brief description. Some points were collected to define the outer extent of the site as well as to map features within the site.

During November of 2003 a Geophysics Investigations (CCN 110813) was conducted over the entire area defined by the 1999 GPS survey. The report included a general location map, and summaries for Electromagnetic Induction (EMI) and magnetic data contours plots and maps of the surface features. The area was approximately four hundred by fifteen hundred meters and is the current area mapped in the Washington Closure Hanford (WCH) Geographic Information System (GI). This updated area is 333,287 m<sup>2</sup> (82 acres) rather than the originally estimated 185,806 m<sup>2</sup> area (45 acres).

During the 2007 Orphan Site Evaluation (OSE) for the 100-K operable unit and surrounding area field investigation, the 600-29 waste site was walked down to collect further site characterization data. A total of forty discrete feature locations within the 600-29 site boundaries were collected using a hand-held GPS unit. Photos and GPS coordinates were collected for each feature. The features were categorized as one of three types 600-29 waste component, miscellaneous restoration, and stewardship.

**Waste Type:** Construction Debris

**Waste Description:** Unit wastes consist of miscellaneous metals, wood, cans, bottles, construction hardware and materials, what appears to be tar dumped on the ground, buckets and mops covered with what appears to be tar, a 18.725-liter (5-gallon) bucket of oily rags, broken pieces of a toilet bowl, what appears to be asbestos and transite, and wire rope.

**Site Code:** 600-55

**Classification:** Accepted

**Site Names:** 600-55, Paved Area and Collapsed Structure

**ReClassification:** Rejected (10/1/1997)

**Site Type:** Dumping Area

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site is a dumping area that consists of an asphalt paved area which may have been a parking lot, miscellaneous farm debris and a collapsed wooden building. The pre-Hanford farm debris is scattered approximately 135 meters (443 feet) to the east of the paved area. There is also a cellar and an old stove near the collapsed wooden structure.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The miscellaneous debris at the site consists of asphalt paving, empty paint and paint solvent containers, an empty antifreeze container, a fan belt, wood, and metal.

**Site Code:** UPR-100-K-1

**Classification:** Accepted

**Site Names:** UPR-100-K-1, 105-KE Fuel Storage Basin Leak, UN-100-K-1, UN-116-KE-2

**ReClassification:**



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**100-NR-1**

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**Site Code:** 100-N-1 **Classification:** Accepted

**Site Names:** 100-N-1, HGP SWMU #6, HGP Settling Pond **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Pond **Start Date:** 1965

**Site Status:** Inactive **End Date:** 1993

**Site Description:** The site has been remediated and interim closed out.

The settling pond was cut into the side of a steep slope leading to the river. A concrete flume was located at the south end of the site. An outlet valve and pipe were located on the west side of the site.

**Waste Type:** Process Effluent

**Waste Description:** The pond operated concurrently with the Hanford Generating Plant (HGP) and received process water from the plant that contained trace oxygen scavenging conditioners such as morpholine, hydrazine and ammonia. Sampling has indicated elevated levels of chromium, lead, nickel, calcium, copper, zinc and ammonia. Trace surface radioactive contamination is detectable.

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**Site Code:** 100-N-3 **Classification:** Accepted

**Site Names:** 100-N-3, Maintenance Garage French Drain, HGP SWMU #9, Maintenance Garage Waste Water Treatment Unit **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** French Drain **Start Date:** 1965

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

**Site Description:** The site has been remediated and interim closed out.

The unit was marked by a 3-meter (10-foot) square barricade and gravel covering a 31-meter (100-foot) square surface. A 1.2-meter (4-foot) diameter steel plate covered the center.

**Waste Type:** Oil

**Waste Description:** The unit received petroleum wastes.

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**Site Code:** 100-N-4 **Classification:** Accepted

**Site Names:** 100-N-4, HGP SWMU #5, HGP Tile Field **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Drain/Tile Field **Start Date:** 1966

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

**Site Description:** The site has been remediated and interim closed out.

**Waste Type:** Sanitary Sewage

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**Waste Description:** The unit received sanitary sewage and lab waste. Testing for corrosion inhibitors hydrazine and morpholine were performed in the lab. It is likely that reagents used for these tests were discharged to the unit.

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**Site Code:** 100-N-5 **Classification:** Accepted

**Site Names:** 100-N-5, HGP Disposal and Storage Area, HGP Bone Yard, HGP SWMU #10 **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Storage **Start Date:**

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

**Site Description:** The site has been remediated and interim closed out.

**Waste Type:** Construction Debris

**Waste Description:** The unit contained scrap iron, brass, copper, electrical components, piping, cable, and miscellaneous pieces of metal equipment. The site also contained oil stains, sand blasting grit, and ion exchange resin beads on the soil.

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**Site Code:** 100-N-6 **Classification:** Accepted

**Site Names:** 100-N-6, 128-N-1, 128N-FS-3 **ReClassification:**

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

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

**Site Description:** In 1994, the site appeared to have been leveled and scraped.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** In 1992 soil samples were collected and analyzed for the 100-NR-1 Remedial Investigation/Corrective Measures Study (RI/CMS). Field screening were less than detectable for volatile organic compounds (VOC), total petroleum hydrocarbons (TPH), and polychlorinated biphenyls (PCB). Heavy metals and metal-complexed compounds did not differ from background.

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**Site Code:** 100-N-7 **Classification:** Not Accepted (9/11/2000)

**Site Names:** 100-N-7, 182-N Facility Liquid Unplanned Release (Remediated) **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1987

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

**Site Description:** The release site consists of a concrete flume on the river bank that extends into the river. The release at this site was approximately 19 liters (5 gallon) of oil that was mixed with a continuous permitted water discharge. The oil was dispersed into the river with the rest of the permitted discharge from the flume. The flume is currently dry and there is no evidence of the release.

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**Waste Type:** Oil

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**Waste  
Description:**

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**Site Code:** 100-N-8 **Classification:** Accepted  
**Site Names:** 100-N-8, 108-N Facility, 108-N CUF **ReClassification:** Rejected (9/11/2000)  
**Site Type:** Loading Dock **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1990

**Site Description:** The 108-N Chemical Unloading Facility (CUF) was designed to remove liquids from railroad cars. The 108-N Building, metal structure used to offload chemicals, tank foundations, and tank pit are part of this site and remain at the location. The ground surface around these facilities is graveled.

**Waste Type:** Chemicals

**Waste Description:** The site received 93% sulfuric acid, and 50% sodium hydroxide solutions.

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**Site Code:** 100-N-9 **Classification:** Accepted  
**Site Names:** 100-N-9, 120-N-5 Facility Liquid Unplanned Release 1 (08/07/87) **ReClassification:** Rejected (9/11/2000)  
**Site Type:** Unplanned Release **Start Date:** 1987  
**Site Status:** Inactive **End Date:** 1987

**Site Description:** The site is a concrete-lined neutralization pit and acid/caustic transfer trench. There is no remaining evidence of the spill at the site.

**Waste Type:** Chemical Release

**Waste Description:** The unplanned release was sulfuric acid.

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**Site Code:** 100-N-10 **Classification:** Accepted  
**Site Names:** 100-N-10, 120-N-5 Facility Liquid Unplanned Release 2 (09/02/87) **ReClassification:** Rejected (9/11/2000)  
**Site Type:** Unplanned Release **Start Date:** 1987  
**Site Status:** Inactive **End Date:** 1987

**Site Description:** The release occurred at the 120-N-5 Acid/Caustic Transfer Trench. There is no remaining evidence of the spill at the concrete-lined trench.

**Waste Type:** Chemical Release

**Waste Description:** The site received caustic sodium hydroxide.

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**Site Code:** 100-N-11 **Classification:** Accepted  
**Site Names:** 100-N-11, 120-N-5 Transfer Trench Liquid Unplanned Release 3 **ReClassification:** Rejected (9/11/2000)



**Site Description:** The site is posted at four corners with "Underground Radioactive Material" signs. Approximately 0.3 to 0.6 meters (1 to 2 feet) of soil has been placed on top of the site.

**Waste Type:** Soil

**Waste Description:**

**Site Code:** 100-N-16 **Classification:** Accepted

**Site Names:** 100-N-16, Burn Pit 1, 128N-FS-2 **ReClassification:**

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

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

**Site Description:** The site appears as a 18 meters (20 yards) by 18 meters (20 yards) semi-cleared circular area. Ash is evident on the surface and the area is covered with glass, wire, coil, pipe, tin cans, metal, and other burned debris.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Nonhazardous waste (paper, wood, trash) generated at 100-N were burned here. In 1992 soil samples were collected and analyzed for the 100-NR-1 Remedial Investigation/Corrective Measures Study (RI/CMS). Field screening samples were less than detectable for volatile organic compounds (VOC) and total petroleum hydrocarbons (TPH). Heavy metals and metal-complexed compounds did not differ from background. The site tested positive for polychlorinated biphenyls (PCBs).

**Site Code:** 100-N-17 **Classification:** Accepted

**Site Names:** 100-N-17, Burn Pit 2, 128N-FS-1 **ReClassification:**

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

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

**Site Description:** The site is covered with gravel, cobbles and dead tumbleweeds. Much of the site has been backfilled with fill material

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Nonhazardous waste (paper, wood, trash) generated at 100-N were burned here. Other combustible materials such as vegetation, office wastes, tools, hardware, and possibly paints and solvents have been burned at this site. In 1992 soil samples were collected and analyzed for the 100-NR-1 Remedial Investigation/Corrective Measures Study (RI/CMS). Field screening samples were less than detectable for volatile organic compound (VOC), total petroleum hydrocarbons (TPH), and polychlorinated biphenyls (PCB). Heavy metals and metal-complexed compounds did not differ from background.

**Site Code:** 100-N-18 **Classification:** Accepted

**Site Names:** 100-N-18, Hanford Generating Plant Burn Pit, HGP Burn Pit **ReClassification:**

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

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

**Site Description:** The site shows evidence of burning including charred wood and burned metal. Vegetation at the site is sparse with a few rabbitbrush plants.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Soil samples were collected from disturbed areas of the pit and analyzed using field screening methods. Samples tested contained less than detectable concentrations of volatile organic compounds (VOCs), heavy metals, total petroleum hydrocarbons (TPH), and polychlorinated biphenyls (PCBs).

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**Site Code:** 100-N-19 **Classification:** Accepted

**Site Names:** 100-N-19, HGP Construction Debris Dump **ReClassification:** Rejected (6/30/2004)  
Solid Waste Site, SWMU #11

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

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

**Site Description:** The site is a large area consisting of a series of pits and depressions containing soil, rock, concrete, metal, wood, and asphalt that have been dumped in the area over time. The site is relatively long [more than 1000 meters (3000 feet) long] and narrow [about 150 meters (500 feet) wide] in shape.

**Waste Type:** Construction Debris

**Waste Description:** The site contains mounds of soil, rock, concrete, metal, wood, and asphalt that have been dumped in the area..

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**Site Code:** 100-N-21 **Classification:** Accepted

**Site Names:** 100-N-21, Blast Yard Solid Waste Site, **ReClassification:** Rejected (9/11/2000)  
1143-N Blast Yard

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

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

**Site Description:** The area has thin, scattered patches of red garnet sandblasting material. Paint chips, reported in 1994 as being mixed in with the garnet (Cote 1994), are no longer visible. The site is in use as a parking lot.

**Waste Type:** Soil

**Waste Description:** The area has scattered patches of red garnet sandblasting material.

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**Site Code:** 100-N-22 **Classification:** Accepted

**Site Names:** 100-N-22, Sanitary Sewer System **ReClassification:**  
(Undocumented), 1705-N Septic Tank and Cesspool

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

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

**Site Description:** A 1.1-meter (3.5-foot) metal cover with a confined space posting is at ground-level in the general area of the underground site.

**Waste Type:** Sanitary Sewage

**Waste Description:**

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**Site Code:** 100-N-23 **Classification:** Accepted

**Site Names:** 100-N-23, Resin Disposal Pit Liquid Waste Site 1 **ReClassification:**

**Site Type:** Process Pit **Start Date:**

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

**Site Description:** The overflow sump appears as an open rectangular pit with a 61-centimeter (24-inch) drain pipe protruding from the north side of the pit.

**Waste Type:** Chemicals

**Waste Description:** According to site personnel, the pit was used to dispose of resin generated in the 163-N Demineralized Water Plant. The pit later served as the clearwell overflow up until about 1990. Although it is not used for that purpose anymore, it could be used on an emergency basis. On May 5, 1980 and January 1976 the overflow sump received neutralized waste that was pumped from cleanup actions for an acid spill that occurred on the 108-N/163-N Transfer Line.

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**Site Code:** 100-N-24 **Classification:** Accepted

**Site Names:** 100-N-24, Hydrogen Dry Well Liquid Waste Site, Hydrogen Peroxide Drywell **ReClassification:**

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

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

**Site Description:** The site is identified by a buried vertical concrete pipe with a 0.83-meter (2.75-foot) diameter steel cover. The hydrogen peroxide drywell is a non-reinforced concrete pipe of 0.83-meters (2.75-feet) above a subchamber 2.53 meters (8.3 feet) in diameter. The subchamber is set in a gravel pocket 3.35 meters (11 feet) in diameter. Welded wire fabric cells 15 centimeters (6 inches) by 10.1 centimeters (4 inches) were within the subchamber.

**Waste Type:** Chemicals

**Waste Description:** The waste is the predominantly concrete and metal structure of the hydrogen peroxide drywell. The site received 50 percent hydrogen peroxide and water from the hydrogen peroxide sump under the hydrogen peroxide tank located in the 109-N Decontamination Facility. The solution used for washing down of the storage tank area.

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**Site Code:** 100-N-25 **Classification:** Accepted

**Site Names:** 100-N-25, French Drain 1 Liquid Waste Site (100N TBR 4.86) **ReClassification:**

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**Site Type:** French Drain **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site has a 0.9-meter (3-foot) diameter metal cover at grade. The surrounding area is covered with gravel.

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**Site Code:** 100-N-26 **Classification:** Accepted  
**Site Names:** 100-N-26, French Drain 2 Liquid Waste Site (100N TBR 4.86) **ReClassification:**  
**Site Type:** French Drain **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The vertical concrete pipe extends 5 centimeters (2 inches) above grade and is closed by a vented metal cover. The surrounding area is covered with gravel.

**Waste Type:** Steam Condensate  
**Waste Description:** The site receives yard steam condensate.

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**Site Code:** 100-N-27 **Classification:** Accepted  
**Site Names:** 100-N-27, 108-N Sump, 108-N Neutralization Pit **ReClassification:** Rejected (9/11/2000)  
**Site Type:** Sump **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1990  
**Site Description:** The acid neutralization pit is constructed of concrete with a brick lining, and is covered with a steel lid.

**Waste Type:** Chemicals  
**Waste Description:** The pit was used to neutralize waste sulfuric acid before eventual release to the river. Chemicals received by the pit included 93% sulfuric acid and 50% sodium hydroxide.

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**Site Code:** 100-N-28 **Classification:** Accepted  
**Site Names:** 100-N-28, Resin Disposal Pit Liquid Waste Site 2 **ReClassification:**  
**Site Type:** Process Pit **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site appears as a slight depression around a 1.5-meter (5-foot) square concrete structure that has a 0.8-meter (2.5-foot) by 0.63-centimeter (0.25-inch) rusted metal cover. The site is surrounded with four heavy steel posts connected with chain. The steel cover is posted as a confined space. The cover was opened by site personnel revealing a 0.44-meter (17.5-inch) by 0.38-meter (15-inch) solid lead shielding plug with four lifting lugs. The plug was provided as a shield for protection against any radiation that may be contained in the disposed resin charge. Under the plug is a 3.05-meter (10-foot) by 25.4-centimeter (10-inch) diameter pipe leading to the disposal pit. The pit is 5.3 meters (17.5 feet) by 3.8 meters (12.5 feet) by 4.1 meters (13.5 feet)

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high (including the footing). The pit is lined with 0.38 meters (15 inches) of gravel and concrete masonry block and portland cement mortar. The bottom of the pit contains 0.38 meters (15 inches) of 5 to 7.6-centimeter (2 to 3-inch) gravel. The bottom of the structure is approximately 7.47 meters (24.5 feet) below grade.

**Waste Type:** Process Effluent

**Waste Description:** The waste is the below grade structure, including the lead shield plug, piping to the pit from the 109-N Facility, and the pit structure. Site employees report that the pit was initially used for reactor decontamination waste and may have never actually been used as a resin disposal pit. Documentation (HW-69000-Volume II) states that the Resin Disposal Pit was designed to receive the resin charge from the 109-N Ion Exchanger.

**Site Code:** 100-N-29 **Classification:** Accepted

**Site Names:** 100-N-29, Unplanned Release on 25-Centimeter (10-Inch) Blowdown Pipeline #1 **ReClassification:**

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

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

**Site Description:** The 1300-N Emergency Dump Basin is an open basin that held radioactive water. The area surrounding it is level and graveled with no vegetation.

**Waste Type:** Water

**Waste Description:** An inventory table from an unnumbered document is attached to the listed reference. Contaminants in the Dump Basin liquid include average concentrations of 6.25 E+05 of H-3, 6.12 E+01 of C0-60, 5.70 E+04 of Sr-90, 2.51 E+01 of Zr-95, <5.16 E+01 of Ru-106, 2.16 E+01 of Sb-125, <5.16 E+00 of Cs-134, 9.27 E+02 of Cs-137, 1.62 E-02 of Pu-239 and 1.82 E-01 of Pu 239/240.

**Site Code:** 100-N-30 **Classification:** Accepted

**Site Names:** 100-N-30, Unplanned Release on 10-Inch Blowdown Pipeline #2 **ReClassification:**

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

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

**Site Description:** The site is a level, graveled area with no vegetation. The area surrounding the dump basin is also graveled. The site is an open metal basin that held radioactive water.

**Waste Type:** Water

**Waste Description:** Contaminants in the Dump Basin liquid include average concentrations of 6.25 E+05 of H-3, 6.12 E+01 of C0-60, 5.70 E+04 of Sr-90, 2.51 E+01 of Zr-95, <5.16 E+01 of Ru-106, 2.16 E+01 of Sb-125, <5.16 E+00 of Cs-134, 9.27 E+02 of Cs-137, 1.62 E-02 of Pu-239 and 1.82 E-01 of Pu 239/240.

**Site Code:** 100-N-31 **Classification:** Accepted

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**Site Names:** 100-N-31, Unplanned Release on 30-Inch Pipe Line      **ReClassification:**

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

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

**Site Description:** The unit is an open metal basin that held radioactive water. The surface area has no vegetation and is level and graveled.

**Waste Type:** Water

**Waste Description:** Through process knowledge, it is known that water was slightly chemically treated with hydrazine and mophaline which are very volatile and most likely not detectable. The water was radioactively contaminated.

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**Site Code:** 100-N-32      **Classification:** Accepted

**Site Names:** 100-N-32, Unplanned Release on 25-Centimeter (10-Inch) Blowdown Pipeline #3      **ReClassification:**

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

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

**Site Description:** The unit is an open metal basin that held radioactive water. The surface area is level, graveled, and has no vegetation.

**Waste Type:** Water

**Waste Description:**

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**Site Code:** 100-N-33      **Classification:** Accepted

**Site Names:** 100-N-33, 100-N Military Installation Ash Pit      **ReClassification:**

**Site Type:** Coal Ash Pit      **Start Date:**

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

**Site Description:** The irregularly-shaped site is covered with a dark material that looks like uniform grain-size ash, perhaps the remnants of coal burning.

**Waste Type:** Ash

**Waste Description:** A description of the waste is not known at this time.

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**Site Code:** 100-N-34      **Classification:** Accepted

**Site Names:** 100-N-34, Debris Site      **ReClassification:**

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

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

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**Site Description:** The site is an irregular shape with gravel/cobble (some in piles), weedy vegetation, and dead tumbleweeds (some in piles) present. Construction debris including asphalt, concrete, and metal pipe are also present.

**Waste Type:** Misc. Trash and Debris

**Waste Description:**

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**Site Code:** 100-N-35 **Classification:** Not Accepted (Proposed)

**Site Names:** 100-N-35, BPA Hanford Substation, Hanford Generating Plant (HGP) Substation **ReClassification:**

**Site Type:** Electrical Substation **Start Date:** 1971

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

**Site Description:** The substation consists of a control house, maintenance building, microwave tower, and a switchyard.

**Waste Type:** Oil

**Waste Description:** There is asbestos insulated piping in the basement of the mechanical room. Mineral oil containing polychlorinated biphenyls and solvents is used during routine equipment maintenance.

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**Site Code:** 100-N-36 **Classification:** Accepted

**Site Names:** 100-N-36, 107-N Oil Stained Pad **ReClassification:**

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

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

**Site Description:** The site consists of an air compressor pad adjacent to the 107-N Building. The concrete pad and adjacent asphalt are stained with lube oil from the air compressor that was previously installed on the concrete pad. The surface area is covered with asphalt except for the concrete pad that is approximately 1.2 meters (4 feet) by 2.4 meters (8 feet).

**Waste Type:** Oil

**Waste Description:** The waste consists of non-hazardous petroleum product (oil) from air compressor leaks.

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**Site Code:** 100-N-37 **Classification:** Accepted

**Site Names:** 100-N-37, 109-N Asbestos Release **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1995

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

**Site Description:**

**Waste Type:** Asbestos (non-friable)

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**Waste  
Description:**

**Site Code:** 100-N-38 **Classification:** Accepted  
**Site Names:** 100-N-38, Unplanned Release at 1300-N **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This is an open basin with a steel liner that held radioactive water. The area surrounding the basin is level, graveled, and has no vegetation.

**Waste Type:** Water

**Waste Description:** Through process knowledge it is known that several water leaks have occurred around and adjacent to the dump basin in the early 1980's. Contaminants in the Dump Basin liquid include average concentrations of 6.25 E+05 of H-3, 6.12 E+01 of C0-60, 5.70 E+04 of Sr-90, 2.51 E+01 of Zr-95, <5.16 E+01 of Ru-106, 2.16 E+01 of Sb-125, <5.16 E+00 of Cs-134, 9.27 E+02 of Cs-137, 1.62 E-02 of Pu-239 and 1.82 E-01 of Pu 239/240.

**Site Code:** 100-N-39 **Classification:** Accepted  
**Site Names:** 100-N-39, Hanford Substation **ReClassification:** Rejected (7/14/2005)  
 Construction Dump Area, SWMU #11  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** This site should be rejected because it is a duplicate of 600-32 and contained within the larger dumping area 100-N-19. There is no similar dump near the area originally mapped (in Arcview) as the site location, inside the BPA Substation fence.

The site is a construction dump with evidence of burning activity. The Hanford Generating Plant RCRA Facility Assessment Report states "The site is a large, irregular shaped burn pit and a large borrow pit covering 5 to 10 acres. The site contains large blocks of concrete and miscellaneous debris."

**Waste Type:** Construction Debris

**Waste Description:** The waste includes construction debris and combustible construction waste that was burned. The site contains large blocks of concrete, miscellaneous debris, one empty drum and one pile of sand blast grit

**The Site Was Consolidated With:**

**Site Code:** 600-32  
**Site Names:** 600-32, N Area Landfill  
**Reason:** Duplicate Site

**Site Code:** 100-N-40 **Classification:** Accepted  
**Site Names:** 100-N-40, Unplanned Release at 108-N **ReClassification:** Rejected (9/11/2000)

**Site Type:** Unplanned Release **Start Date:** 1987

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

**Site Description:** The site is a graveled field at the 108-N Chemical Unloading Facility.

**Waste Type:** Chemical Release

**Waste Description:** The waste is sodium hydroxide spilled to the ground.

**Site Code:** 100-N-41 **Classification:** Accepted

**Site Names:** 100-N-41, 1701-NE Gate House Septic Tank, HGP SWMU #9 **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Septic Tank **Start Date:** 1965

**Site Status:** Inactive **End Date:** 1986

**Site Description:** The site has been remediated and interim closed out.

**Waste Type:** Sanitary Sewage

**Waste Description:**

**Site Code:** 100-N-45 **Classification:** Accepted

**Site Names:** 100-N-45, 1703-N Office Building Septic Tank, HGP SWMU #9 **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Septic Tank **Start Date:** 1965

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

**Site Description:** The site has been remediated and interim closed out.

**Waste Type:** Sanitary Sewage

**Waste Description:**

**Site Code:** 100-N-46 **Classification:** Accepted

**Site Names:** 100-N-46, HGP Diesel Oil Storage Tank **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Storage Tank **Start Date:** 1965

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

**Site Description:** The site has been remediated and interim closed out.

The site consisted of an underground storage tank (UST) containing diesel fuel.

**Waste Type:** Storage Tank

**Waste Description:** The site consisted of an underground storage tank containing an unknown amount of diesel fuel.

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**Site Code:** 100-N-47 **Classification:** Accepted

**Site Names:** 100-N-47, Military Artillery Site Solid Waste Site **ReClassification:**

**Site Type:** Military Compound **Start Date:**

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

**Site Description:** The site is about 610 meter (2,000 feet) long by 210 meter (700 feet) wide, with a portion extending north of the railroad tracks. Locust trees, rabbitbrush, young sagebrush, cheatgrass, Sipa comata, and Siberian wheatgrass are present at this disturbed site. The installation includes ten separate intact concrete foundations and remnants of at least one other. A number of concrete walkways and remnants of walkways are associated with the foundations. There are remnants of asphalt roadways, parking areas, and piles of broken-up asphalt. There is a 0.6-meter (2-foot) diameter sewer manhole and 3 associated downslope 1.2 by 1.2-meter (4 by 4-foot) square concrete hatchcovers (likely underground sanitary waste holding areas).

Strewn through the military artillery site are wood poles, metal cables, wire, metal pipe, glass, paint cans, firehose, metal cans, broken up concrete, concrete blocks, wood pallets, bricks, and transite siding. A number of 0.3-meter (1-foot) diameter wooden poles are standing, and some have been cut off at ground level. On the 6.1-meter (20-foot) by 15.2-meter (50-foot) concrete foundation that is positioned between two 6.1 meter (20 foot) high soil berms, are 31 (41-centimeter [16-inch] wide and 51-centimeter [20-inch] long) hive bodies and supers (bee boxes) left from a Pacific Northwest Laboratory (PNL) experiment conducted from 1981 to 1984.

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**Site Code:** 100-N-50 **Classification:** Accepted

**Site Names:** 100-N-50, HGP SWMU #4, Turbine Oil Filter Unit, Turbine Oil Cleaning System **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Single-Shell Tank **Start Date:** 1966

**Site Status:** Inactive **End Date:** 1986

**Site Description:** The site has been remediated and interim closed out.

**Waste Type:** Oil

**Waste Description:** The filters were periodically changed, but no information was available on the location of their disposal. This unit likely managed impurities in the turbine oil such as metals.

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**Site Code:** 100-N-51 **Classification:** Accepted

**Site Names:** 100-N-51, HGP Building Oil Storage Area, 100-N-51A, HGP SWMU #2 **ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Storage **Start Date:** 1966

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

**Site Description:** The site has been remediated and interim closed out.

The site consisted of a cinder block room with a fire sprinkler system, steel grate floor, and shelving along the walls. Drums and smaller containers of product (petroleum, oil, and lubricants) were stored on the floor and shelving. A blind concrete sump (no outlet) was located below the grated floor.

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**Waste Type:** Oil  
**Waste Description:** Used oil and rags from maintenance activities are stored in drums inside the room.

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**Site Code:** 100-N-51B **Classification:** Accepted  
**Site Names:** 100-N-51B, HGP Building Floor Drains and Sumps, HGP SWMU #3 **ReClassification:** Interim Closed Out (6/15/2004)  
**Site Type:** Sump **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site has been remediated and interim closed out.

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**Site Code:** 100-N-52 **Classification:** Accepted  
**Site Names:** 100-N-52, HGP Gasoline Storage Tank **ReClassification:** Interim Closed Out (6/15/2004)  
**Site Type:** Storage Tank **Start Date:** 1976  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site has been remediated and interim closed out.  
**Waste Type:** Storage Tank  
**Waste Description:**

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**Site Code:** 100-N-53 **Classification:** Accepted  
**Site Names:** 100-N-53, 181-N Building Waste Oil Tank **ReClassification:**  
**Site Type:** Storage Tank **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site was an empty above-ground waste oil tank. The tank is 1.1 meters (3.5 feet) in diameter and 1.2 meters (4.1 feet) high. A site visit in July 1999 found that the tank has been removed.  
**Waste Type:** Oil  
**Waste Description:** The tank has been removed.

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**Site Code:** 100-N-54 **Classification:** Accepted  
**Site Names:** 100-N-54, 151-N Building Drywell, Miscellaneous Stream #727 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1964  
**Site Status:** Inactive **End Date:** 1997  
**Site Description:** The site is a french drain, made of 1.2 meter (4 foot) inner diameter and 1.65 meter (5 foot 5 inch) outer diameter concrete pipe, with a steel cover.

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**Waste Type:** Water

**Waste Description:** The site received waste water from the service sink located inside the 151-N building.

**Site Code:** 100-N-55

**Classification:** Accepted

**Site Names:** 100-N-55, 153-N Building Drywell,  
Miscellaneous Stream #728

**ReClassification:**

**Site Type:** French Drain

**Start Date:**

**Site Status:** Inactive

**End Date:** 1997

**Site Description:** The site is a french drain with a 1.2-meter (4-foot) steel cover. Four yellow steel posts surround the site, located in a graveled roadway.

**Waste Type:** Steam Condensate

**Waste Description:** The site receives steam condensate from a condensate pump and drainage from a service sink inside the 153-N Building.

**Site Code:** 100-N-56

**Classification:** Accepted

**Site Names:** 100-N-56, 181-N Building Drywell

**ReClassification:** Rejected (9/11/2000)

**Site Type:** French Drain

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The drywell is not visible from ground surface and is apparently located underground. The drywell, judging by the site drawing, is adjacent to the fenceline north of the 181-N Building. The ground surface is graveled. Another drywell, 100-N-73 (Miscellaneous Stream 395) is in this area, but it drains a parking lot north of the 107-N Building via a concrete trench.

**Waste Type:** Water

**Waste Description:** River water from inside the 181-N Pumphouse is the only source of waste water to this site.

**Site Code:** 100-N-57

**Classification:** Accepted

**Site Names:** 100-N-57, 1304-N Emergency Dump Tank

**ReClassification:**

**Site Type:** Catch Tank

**Start Date:** 1970

**Site Status:** Inactive

**End Date:** 1988

**Site Description:** The site consists of a 500,000 gallon above-ground storage tank with a dome-shaped top.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Between March 14, 1995 and September 29, 1995 approximately 5,300 liters (1,400 gallons) of water, 230 liters (60 gallons) of sand, and 165 bags of debris were removed from the tank. The sectioned piping was left inside the tank and will be removed and disposed of during the subsequent final decontamination and demolition of the tank. Results from Ion Chromatography/Inductively Coupled Plasma analysis at the 222-S Laboratory detected levels of lead and chromium content classified the waste as mixed.

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**Site Code:** 100-N-58 **Classification:** Accepted  
**Site Names:** 100-N-58, South Pond, 120-N South Settling Pond, 1324-N South Settling Pond **ReClassification:** Closed Out (3/28/2002)  
**Site Type:** Pond **Start Date:** 1977  
**Site Status:** Inactive **End Date:** 1982  
**Site Description:** The site has been remediated and closed out.  
**Waste Type:** Process Effluent  
**Waste Description:** The 1324N South Settling Pond received regeneration wastes containing aluminum sulfate, sulfuric acid, sodium hydroxide solutions and cooling water from the 163-N Building and filter backwash water from the 183-N Building.

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**Site Code:** 100-N-59 **Classification:** Accepted  
**Site Names:** 100-N-59, Radioactively Contaminated Soil Northeast of 105-NB Building **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1995  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site was a broken, contaminated, underground pipeline. After excavating and repairing the broken pipe, the site was marked with a single Underground Radioactive Material sign. A site visit in August 2000 found that the single post with the Underground Radioactive Material sign was gone, but an Underground Radioactive Material sign was attached to the fence near the waste site.  
**Waste Type:** Soil  
**Waste Description:** The soil was radioactively contaminated when a liquid waste line broke.

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**Site Code:** 100-N-60 **Classification:** Accepted  
**Site Names:** 100-N-60, 1314-N Drywell **ReClassification:**  
**Site Type:** French Drain **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** Occurrence Report 73-39 mentions a release of decontamination solutions that overflowed from a catch basin to an adjacent drywell. The drywell was not included in the WIDS database. A field investigation done in 1996 failed to visually locate the drywell as discussed in the referenced occurrence report. The area within the shielding walls of the 1314-N Facility was inspected in addition to the interior of the 1314-N Building from the two doors on the west side of 1314-N. A partially buried catch tank was observed inside the 1314-N Building. It is suspected that the area surrounding the catch tank may have been referred to as the drywell. Drawing H-1-37675, Detail D, shows a 5 centimeter (2 inch) underground drain pipe to a "drywell". It is possible the drywell exists, but cannot be visually verified.

**Waste Type:** Chemicals

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**Waste Description:** The site received spent decontamination solutions from a railroad waste tank car.

**Site Code:** 100-N-61 **Classification:** Accepted  
**Site Names:** 100-N-61, 100-N Water Treatment and Storage Facilities Underground Pipelines **ReClassification:**  
**Site Type:** Process Sewer **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1987

**Site Description:** The site encompasses all underground water pipelines used to transport reactor cooling water between water treatment facilities and the 105-N Reactor Building. These include all underground lines running between buildings and those that run to drainage facilities. Pipelines within buildings and all pipelines that are downstream from the reactor building, i.e., those lines that carry cooling water from the reactor to effluent disposal facilities such as the dump tank and cribs are excluded.

**Waste Type:** Water

**Waste Description:** The waste is steel piping, concrete, and soil (if contaminants are present). Chemical additives to the reactor cooling water included sulfuric acid, sodium hydroxide, aluminum sulfate (alum) with excess hydrated calcium oxide, sepanan, chlorine, and sodium dichromate. Water pH was maintained at about 7.5, and the free chlorine residual was approximately 0.2 milligrams/liter.

**Site Code:** 100-N-62 **Classification:** Accepted  
**Site Names:** 100-N-62, 100-N 105-N, 109-N, 163-N, 182-N, 183-N and 184-N Underground Pipelines **ReClassification:**  
**Site Type:** Radioactive Process Sewer **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1987

**Site Description:** This site includes those underground pipelines that transported reactor decontamination chemicals and/or radioactive liquid wastes from the 105-N/109-N Reactor facilities, and other pipelines that have the potential for radioactive contamination that are co-located on the east side of the 105-N/109-N Building complex. It does not include the pipelines that discharge to the 116-N-4 (1300-N), the 1304-N Emergency Dump Tank, pipelines to and from the 107-N and 105-N Buildings, or pipelines from the 105-N/109-N Buildings to the 1908-N Outfall that are addressed by a separate Waste Information Data System (WIDS) entry (100-N-65) for 100-N Reactor 105-N/109-N Cooling Water Effluent Underground Pipelines. Generally these lines leave the 105-N/109-N Buildings on the east side, and proceed in a north-south direction and east-west direction adjacent to the 105-N/109-N Building complex and to their respective treatment/disposal facilities. These pipelines consist of potentially contaminated underground steam and condensate return pipelines including a 0.18-meter (6-inch) decontamination return pipeline, a 0.18-meter (6-inch) radioactive drain, 0.36-meter (14-inch) miscellaneous chemical drains, a 0.61-meter (24-inch) backwash return pipeline, 0.05-meter (2-inch) and 0.08-meter (3-inch) chemical drain pipelines, and 0.08-meter (3-inch) radioactive vent, a 0.09 to 0.20-meter (4 to 8-inch) chemical supply pipelines (sodium hydroxide, ammonium hydroxide and phosphoric acid).

**Waste Type:** Process Effluent

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**Waste Description:** The waste is the underground pipelines from the east side of the 105-N and 109-N Buildings to the 184-N Powerhouse, 100-N-23 (Resin Disposal Pit Liquid Waste Site 1) and 100-N-24 (Hydrogen Dry Well Liquid Waste Site) waste sites. The chemical drain lines are known to have been used for the disposal of decontamination chemicals, however, specific chemicals and radionuclide content is currently unknown.

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**Site Code:** 100-N-63 **Classification:** Accepted

**Site Names:** 100-N-63, 100-N Reactor (1314-N, 116-N-1 and 116-N-3) TSD Underground Pipelines (See Subsites) **ReClassification:**

**Site Type:** Radioactive Process Sewer **Start Date:** 1963

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

**Site Description:** The site encompassed the Treatment, Storage, and Disposal (TSD) underground pipelines that transported reactor cooling water and radioactive liquid wastes from the 105-N Reactor facilities to the 116-N-1 (1301-N), 116-N-3 (1325-N) Crib, and 116-N-2 (1310-N Tank).

Not included in the site are underground pipelines that discharged to the 116-N-4 (1300-N Emergency Dump Basin), 1304-N Emergency Dump Tank, pipelines to and from the 107-N and 105-N Buildings, or pipelines from the 105/109-N Buildings to the 1908-N Outfall that are addressed by 100-N-64 (100-N Reactor 105/109-N Cooling Water Effluent Underground Pipelines).

Generally, the pipelines in site 100-N-63 leave the 105-N, 109-N and 1714-NB Buildings on the east, west and north sides, and proceed north-northeast to their respective treatment/disposal facilities. Pipeline sizes beyond the 1322-N Building vary. A 30.5-centimeter (12-inch) radioactive drain originates on the west side of the 109-N Building as a 25.4-centimeter (10-inch) pipeline, it extends north where a 30.5-centimeter (12 inch) disposal system pipeline connects at a point east of the number 3 spacer silo. It proceeds north to a point just east of the 1314-N Building then proceeds east to the 1322-N Building. There it can be diverted south to either the 116-N-2 (1310-N Golfball) via the 1310-N transfer tank or north turning eastward near the 1322-NC building to the 116-N-1 weir box.

From the 1310-N transfer tank (silo) the pipelines continue to the 1310-N Golfball. A third 30.5-centimeter (12 inch) chemical drain pipeline returns from 116-N-2 (Golfball) to the 1310-N transfer tank. From the 116-N-1 weir box a 91.4 centimeter (36 inch) underground pipeline (see subsite 100-N-63:1) connects 116-N-1 to the 1312-N diversion box continuing to the 116-N-3 crib and trench. The final line, a 91.4-centimeter (36-inch) contaminated drain/flush pipeline, originates on the west side of the 105-N Building where it passes under the 1722-N building and continues in a parallel path with the previously discussed 30.5-centimeters (12-inch) radioactive drain pipeline.

**Waste Type:** Process Effluent

**Waste Description:** The waste is the contaminated underground pipelines. The following radionuclides were released from the reactor to the 116-N-1 and/or 116-N-3 Cribs and Trenches, passing through the underground pipelines. Residual contaminants of some radionuclides may be expected to remain in the underground pipelines. These include: tritium, zinc-65, iodine-131, plutonium-238, phosphorous-32, strontium-89/90, xenon-133, plutonium-239/240, chromium-51, zirconium-niobium-95, cesium-134/137, neptunium-239, manganese-54, molybdenum-technetium-99, barium-140, iron-59, ruthenium-103/106, cerium-141, cobalt-58/60, antimony-124/125, and cerium-praseodymium-144. Additionally, decontamination chemicals are known

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to have passed through the underground pipelines, including phosphoric acid and diethylthiourea

**SubSites:**

**SubSite Code:** 100-N-63:1

**SubSite Name:** 100-N-63:1, Pipeline Section from 116-N-1 to 116-N-3 Crib Including Concrete Encased Pipe Bypass Structure

**Classification:** Accepted

**ReClassification:** Interim Closed Out

**Description:** The western portion of this pipeline was located between 116-N-1 and the 1312-N Diversion Box. The effluent flowed through a 448-meter (1,468-foot) long by 0.9-meter (Diameter Nominal [DN] 900) (36-inch) diameter pipeline. Two pipelines continued on from the 1312-N Diversion Box to the north then eastward to the southwest end of the crib. One of the pipelines was a pipe encased concrete by-pass structure that ran parallel to the original. The by-pass structure was built at the same time as the 1312-N Retention Basin (also know as the 1312-N LERF), however, neither was put into service.

This portion of the pipeline 100-N-63:1, approximately 66 meters (216.54 feet) west of 1213-N Diversion Box continuing to the southwest end of the 116-N-3 Crib, has been remediated and closed-out in CVP-2002-00002. For purposes of the CVP/closure report and consistent with the permitted TSD site designation, the 116-N-3 Crib and Trench, the 100-N-63:1 Pipeline, and the bypass structure are collectively referred to as the 116-N-3 site.

Cleanup Verification samples, including QA/QC samples were collected and analyzed for the established contaminants of concern. Shallow zone and deep zone samples were collected between August 24, 2001 and April 8, 2002 and may be viewed on the HEIS database under SAF number B01-090.

**SubSite Code:** 100-N-63:2

**SubSite Name:** 100-N-63:2, Pipelines Between 109N, 105N, 107N, 1310N, 1322N, 1926N And 36" Process Drain to Outfall

**Classification:** Accepted

**ReClassification:**

**Description:** The 100-N-63:2 subsite encompasses the Treatment, Storage, and Disposal (TSD) underground pipelines that transported reactor cooling water, radioactive and chemical liquid wastes from the 105-N Reactor facilities to the 116-N-1 (1301-N) Crib. The pipelines originated on the north, east and west sides of the 105-N Reactor Building and ran to either the 116-N-1 Crib or the 100-N-77 effluent pipeline. It also includes the 91.4 cm (36 in) process drain that emptied into the 100N River Effluent Pipeline (100-N-77).

A diesel fuel spill occurred on 1/10/10 at the 100-N BioVenting Pilot Test Site at the 100-N Area. Approximately 330 gallons of diesel fuel were released due to an improper connection of the generator to a 1,000 gallon auxiliary fuel tank supporting the project. See the Release Description field for detailed information.

**Site Code:** 100-N-64

**Classification:** Accepted

**Site Names:** 100-N-64, 100-N Reactor 105/109-N Cooling Water Effluent Underground

**ReClassification:**

Pipelines

**Site Type:** Radioactive Process Sewer      **Start Date:** 1963

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

**Site Description:** This site includes those underground pipelines that transported reactor cooling water from the 105-N Reactor facilities to the 116-N-4 (1300-N), the 1304-N Emergency Dump Basin and Tank respectively, the 107-N Filter Building and the pipelines from these facilities to the 1908-N Outfall Structure. It does not include the underground lines that discharge to the 1301-N (116-N-1) and/or 1325-N (116-N-3) Cribs that are addressed by a separate Waste Information Data System (WIDS) entry for the 105-N Reactor, 1314-N, 116-N-1, and 116-N-3 underground pipelines (site 100-N-63).

Generally these lines leave the 105-N Reactor Building on the west side and proceed to the west to their respective treatment/disposal facilities. The 107-N Building includes return pipelines as well as other process pipelines contained in a concrete encasement between the 105-N and 107-N Buildings. This encasement houses 0.26-meter (10-inch) and 0.46-meter (18-inch) demineralized water lines, a 0.3-meter (12-inch) filtered water line, 1.3-centimeter (0.5-inch) instrument air, 5.1-centimeter (2-inch) steam, 15-centimeter (6-inch) fire, line and telephone, instrument, power, and fire alarm lines. The encasement is about 30 meters (98 feet) long. The remaining underground pipelines associated with the 1300-N and 1304-N include a 0.76-meter (30-inch) flush line, a 0.61-meter (24-inch) vent, a 0.76-meter (30-inch) overflow, a 25.4-centimeter (10-inch) blowdown, and a connection to the 25.4-centimeter (10-inch) radioactive drain line that becomes the 0.3-meter (12-inch) radioactive drain line not included with this waste site. The site does include overflow lines to the 1908-N Outfall Structure, but does not include the 1908-N Outfall Structure itself.

**Waste Type:** Process Effluent

**Waste Description:** The waste is the contaminated underground pipelines. The following radionuclides were released from the reactor through the underground pipelines to the 116-N-4 (1300-N), 1304-N Emergency Dump Basin and Tank, the 107-N Filter Building and to the 1908-N Outfall Structure. Residual contaminants of some may be expected to remain in the underground pipelines. These include: sodium-24, niobium-95, iodine-131, chromium-51, zirconium-95, tellurium-132, technetium-99, manganese-54, iron-59, ruthenium-103, cerium-144, and cobalt-60. Because of radioactive decay, only manganese-54, cobalt-60, and cerium-144 are expected to remain.

**Site Code:** 100-N-65      **Classification:** Accepted

**Site Names:** 100-N-65, UPR-100-N-17 Interceptor Trench, Diesel Oil Interceptor Trench      **ReClassification:**

**Site Type:** Trench      **Start Date:** 1966

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

**Site Description:** The site is a trench that was excavated along the Columbia River bank to intercept diesel oil before it could reach the river. In 1994, the trench was backfilled with material to the top of the adjacent berm. The trench was excavated as a result of an unplanned release of 303,000 liters (80,000 gallons) of diesel fuel that leaked from a pipeline within 166-N Tank Farm (See UPR-100-N-17). Several smaller unplanned releases also contributed to the need for the trench (See UPR-100-N-19 and UPR-100-N-20). Oil trapped in the trench was ignited and burned. A significant portion of the oil was thus removed before it could reach the river.

**Waste Type:** Oil

<b>Waste Type:</b>	Oil		
<b>Waste Description:</b>	The waste was diesel oil from spills in the 100-N Area diesel oil storage facilities.		
<b>Site Code:</b>	100-N-66	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-N-66, 105-N/109-N Reactor Building Complex	<b>ReClassification:</b>	
<b>Site Type:</b>	Reactor	<b>Start Date:</b>	1963
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1987
<b>Site Description:</b>	<p>The site is the 105-N Reactor Building and the 109-N Heat Exchange Building. The 105-N Building is a reinforced concrete and structural steel building with channeled steel siding. The reactor is contained within a reinforced concrete enclosure which serves as a confinement zone capable of withstanding moderate overpressures. This enclosure also contains the control rod systems, inlet and outlet pipe galleries, exhaust fans, elevators for servicing the front and rear faces, a gallery beneath the reactor for various monitoring purposes, and receiving basin for spent fuel elements. Surrounding the reactor enclosure on three sides are rooms housing auxiliary facilities and supporting services. These include offices, common facilities, the main control room, electrical control rooms, shop area, ventilation supply rooms, gas dryer and cooler rooms, instrumentation rooms, metal preparation and storage facilities, spent fuel storage, examination facility, and transfer area. On the fourth side of the confinement enclosure, to the rear of the reactor, is the 109-N Heat Exchange Building which shares a common wall with the 105-N Building.</p> <p>As in the other reactor buildings a zoned ventilation system is provided so that air flow is maintained in the direction of areas having the greatest potential risk of contamination. The control room has its own refrigerated air conditioning system. The 105-N Reactor Building is 137.77 meters (452 feet) by 78.94 meters (259 feet) with a stepped roof to 21.34 meters (70 feet). Additionally, a 55.78 meters (183 feet) by 21.34 meters (70 feet) basin and transfer area extend west at the southwest corner. The breakdown of the facility is 29 offices: 467.29 square meters (5,030 square feet); 4 shops: 1,009.82 square meters (10,870 square feet); storage: 295.42 square meters (3,180 square feet); common: 467.29 square meters (5,030 square feet); process, operating and fuel storage: 13,006 square meters (1.4E+05 square feet).</p> <p>The 109-N Building is a reinforced concrete, structural steel building with channeled steel siding. It is immediately adjacent to and shares a common wall (south wall of 109-N) with the 105-N Building.</p> <p>The 109-N Building contains a large pipe gallery on the north side which receives the primary reactor coolant system piping from the reactor for distribution into five separate cells each housing two large heat exchangers, a primary circulating pump and associated piping. A sixth cell contains a heat exchanger system for the moderator cooling system. The pipe gallery and steam generator cells are located in a reinforced concrete enclosure which, as in the case of the reactor, defines a confinement zone. Located outside of the confinement zone are the pump drive systems, dump condensers for disposal of export steam, condensate return pumps, other auxiliary equipment, a small chemical laboratory, and water sampling and monitoring facilities. A Service Bay has facilities for decontaminating the primary coolant system and contains the heating and ventilation equipment, shop areas, office and common space. The 109-N Building is 62.79 meters (206 feet) by 116.74 meters (383 feet) by 11.89 meters (39 feet) high. The breakdown of the facility is 3 offices: 75.25 square meters (810 square feet); 2 shops: 197.88 square meters (2,130 square feet); common: 111.48 square meters (1,200 square feet); processing area: 11,148 square meters (1.23E+05 square feet).</p>		
<b>Waste Type:</b>	Equipment		

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**waste type:** Equipment

**Waste Description:** The waste is the 105-N/109-N Building complex, including the reactor core. The 105-N and 109-N Building complex is radioactively contaminated or potentially contaminated within all confinement zones, irradiated fuel storage areas, primary and secondary coolant piping systems, and confinement ventilation systems.

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**Site Code:** 100-N-67 **Classification:** Accepted

**Site Names:** 100-N-67, HGP Dumping Area **ReClassification:** No Action (9/11/2000)

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

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

**Site Description:** The site is a pile of metal banding material, barbed wire, wire rope, concrete, and pipe. Some of the materials are partially buried.

**Waste Type:** Construction Debris

**Waste Description:** The site contains metal banding material, barbed wire, pipe, and concrete.

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**Site Code:** 100-N-68 **Classification:** Accepted

**Site Names:** 100-N-68, N Basin Low Level Radioactive Water Spill **ReClassification:**

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

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

**Site Description:** The site has been posted with contaminated area signs and the contamination has been temporarily stabilized with a fixative, tarps and plywood.

**Waste Type:** Water

**Waste Description:** Using current analytical data on the N Basin water, the total curies released in the spill/leak for all of the radionuclides was calculated to be 0.42 curies. No reportable quantities were exceeded.

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**Site Code:** 100-N-69 **Classification:** Not Accepted (9/11/2000)

**Site Names:** 100-N-69, 105-NB Stormwater Injection Well, Miscellaneous Stream #801 **ReClassification:**

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

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

**Site Description:** The site is covered with a 0.56 meter (1.8 foot) diameter steel grate and is 2.56 meters (8.4 feet) deep. The drywell is constructed of concrete. The site appears to drain stormwater that accumulates at a low point and from roof drains on the 105-NB building. Flow rates to the drain are estimated to be less than 19 liters (5 gallons) per minute. No contaminated areas were observed at the time of the inspection.

**Waste Type:** Stormwater Runoff

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**Waste Description:** This site receives less than 19 liters (5 gallons) per minute of stormwater only.

**Site Code:** 100-N-70 **Classification:** Not Accepted (9/11/2000)

**Site Names:** 100-N-70, 1705-N Stormwater Injection Well, Miscellaneous Stream #802 **ReClassification:**

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

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

**Site Description:** The site is covered with a 1 meter (3.3 foot) diameter steel grate at grade level and is constructed of concrete. The site is filled with gravel and is located in a depression. The site appears to be a drain for stormwater that collects in a depression from the surrounding area and the roof of 1705-N. The flow rates to the site is estimated to be less than 19 liters (5 gallons) per minute. No contaminated areas were observed at the time of the inspection.

**Waste Type:** Stormwater Runoff

**Waste Description:** This site received less than 19 liters (5 gallons) per minute of stormwater runoff only.

**Site Code:** 100-N-71 **Classification:** Not Accepted (5/31/2001)

**Site Names:** 100-N-71, 100-N Sewer System, Project 4546.010 **ReClassification:**

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

**Site Status:** Unknown **End Date:**

**Site Description:** This site was added to WIDS before the septic system was built; subsequently the project has been cancelled because of lack of funds (per Nolan Draper).

**Site Code:** 100-N-72 **Classification:** Not Accepted (9/11/2000)

**Site Names:** 100-N-72, 107-N Building East Area Stormwater Runoff, Miscellaneous Stream #396 **ReClassification:**

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

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

**Site Description:** The site is a concrete french drain, about 0.5 meters (1.5 feet) in diameter, with an open metal grate cover. The bottom is about 0.3 meters (1 foot) deep, and only sand and cobbles are visible. A concrete trench, about 18 meters (60 feet) long, drains the paved and graveled area north of the 107-N Building and empties into this french drain. The trench prevents stormwater from flowing to the west, and down a steep slope in the area fenced for security exclusion.

The area is posted with underground radioactive materials (URM) signs, like most of the 100-N Area. This french drain receives stormwater only, however.

**Waste Type:** Stormwater Runoff

**Waste Description:**

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**Site Code:** 100-N-73 **Classification:** Not Accepted (9/11/2000)

**Site Names:** 100-N-73, 107-N Building West Area Stormwater Runoff, Miscellaneous Stream #395 **ReClassification:**

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

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

**Site Description:** The drain is a concrete structure with a steel lid, fed by a concrete trough running from north of the 107-N Building, along the base of the security fence.

**Waste Type:** Stormwater Runoff

**Waste Description:**

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**Site Code:** 100-N-74 **Classification:** Accepted

**Site Names:** 100-N-74, 183-N Building Fire System Drain, Miscellaneous Stream #492 **ReClassification:** Rejected (9/11/2000)

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

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

**Site Description:** The site is in a graveled lot on the north side of the 183-N Building. A fire system relief valve (site 100-N-75) extends about 1 meter (3 feet) above the ground, and is surrounded by six steel barrier poles to protect it from vehicles. Two metal 10 centimeter (4 inch) pipes with handles for turning valves are next to the relief valve, but no pit is visible.

**Waste Type:** Water

**Waste Description:**

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**Site Code:** 100-N-75 **Classification:** Accepted

**Site Names:** 100-N-75, 183-N Building Fire System Relief Valve, Miscellaneous Stream #493 **ReClassification:** Rejected (9/11/2000)

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

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

**Site Description:** The relief valve is visible in a large graveled area north of the 183-N Building. It is surrounded by 6 metal posts that protect it from vehicles. The relief valve is just under 1 meter (3 feet) high, and painted red. The entire area is marked "Underground Radioactive Materials."

**Waste Type:** Water

**Waste Description:**

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**Site Code:** 100-N-76 **Classification:** Accepted

**Site Names:** 100-N-76, 181-N Pumphouse French Drains **ReClassification:** Rejected (4/12/2004)

**Site Type:** French Drain

**Start Date:**

**Site Status:** Active

**End Date:** 2001

**Site Description:** The site is two french drains; the drains were plugged with grout on June 13, 2001. The french drains were connected to each other underground, and provided steam condensate and stormwater drainage just east of the 181-N Pumphouse. These drains are believed to have been built to receive steam condensate blowdown. However, when the steam line was removed the drains were left behind, and drained excess stormwater.

Both drains are about 46 centimeters (18 inches) in diameter and constructed of concrete. A 10 centimeter (4 inch) pipe connects them; this pipe is about 20 centimeters below the lip in the southern drain and about 1 meter (3 feet) below the lip of the northern drain. Because the northern drain is noticeable higher than the southern drain, it is difficult to tell if the pipe is level or drains preferentially toward either side. The drains are about 16 meters (52 feet) apart.

**Waste Type:** Steam Condensate

**Waste Description:**

**Site Code:** 100-N-77

**Classification:** Accepted

**Site Names:** 100-N-77, 100N River Effluent Pipeline, River Line from 1908-N Outfall

**ReClassification:**

**Site Type:** Radioactive Process Sewer

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** This site consists of a 260 centimeter (102 inch) pipeline that exits the northwest face of the Outfall (1908-N) to the Columbia River.

**Waste Type:** Process Effluent

**Waste Description:** The waste includes the pipeline and the potentially contaminated scale and sediment contained within it.

**Site Code:** 100-N-78

**Classification:** Accepted

**Site Names:** 100-N-78, 1716-NE Maintenance Garage, HGP SWMU #8

**ReClassification:** Interim Closed Out (6/15/2004)

**Site Type:** Maintenance Shop

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site has been remediated and interim closed out.

**Site Code:** 100-N-79

**Classification:** Accepted

**Site Names:** 100-N-79, 1908-N Spillway, 1908 N Outfall Structure, 100-N-77:1 Flume

**ReClassification:**

**Site Type:** Outfall

**Start Date:**

**Site Status:** Inactive

**End Date:**

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**Site Description:** The site consists of a spillway (also referred to as an emergency outfall) and is constructed of reinforced concrete.

**Waste Type:** Construction Debris

**Waste Description:** There is anecdotal evidence that the spillway was never intended or expected to be used, as it was never permitted. An unknown level of radioactive contamination exists within the structure because the discharge lines were associated with the reactor's secondary steam system.

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**Site Code:** 100-N-80 **Classification:** Accepted

**Site Names:** 100-N-80, River Line from 1908-NE Outfall **ReClassification:**

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

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

**Site Description:** This site includes one, 335-centimeters (132 inches) (2 centimeter (0.75 inch) wall thickness) steel pipeline, extending from the face of the 1908-NE Outfall into the main channel of the Columbia River.

**Waste Type:** Process Effluent

**Waste Description:** The waste includes the pipeline and the potentially contaminated scale and sediment contained within it.

The contaminants of concern include cobalt-60, cesium-137, and petroleum hydrocarbons (diesel and heavy oil range hydrocarbons).

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**Site Code:** 100-N-81 **Classification:** Accepted

**Site Names:** 100-N-81, 100-N Kaiser Shops Garnet Sandblasting Material **ReClassification:**

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

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

**Site Description:** The site consists of garnet sand and any underlying contaminated soil surrounding the former 1517-N Paint Shop. The garnet sand is purple and covers an area approximately 690 square yards (577 square meters).

**Waste Type:** Soil

**Waste Description:** The waste is a red colored granular material. In 2005 a grab sample of the sandblasting waste material was analyzed for metals (J10VC5). The material contained chromium at a level (45.0 mg/kg) exceeding the soil cleanup level (18.5 mg/kg) for protection of groundwater and protection of the river.

Contaminants of potential concern have not been established at this time.

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**Site Code:** 100-N-82 **Classification:** Accepted

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**Site Names:** 100-N-82, 100-N Decontamination Pad      **ReClassification:**  
**Site Type:** Unplanned Release      **Start Date:**  
**Site Status:** Inactive      **End Date:**  
**Site Description:** The waste site is comprised of the decontamination pad and any underlying soil contamination should it be found to exist. The decontamination pad had a reinforced (rebar) concrete slab with a center drainage trench and sump. The slab sloped toward the center trench where the water was trapped in the sump (0100N-DD-C0117). A HDPE liner cover was installed on top of the decontamination pad to prevent rainwater from entering the trench and sump area (CCN-107899).

**Waste Type:** Equipment  
**Waste Description:** The waste is a contaminated concrete pad. Contaminants of potential concern (COPCs) include Co-60, Cs-134, Cs-137, Pu-238, Pu-239, H-3 and Ru-106.

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**Site Code:** 100-N-83      **Classification:** Accepted  
**Site Names:** 100-N-83, Two Contamination Areas Found Near 116-N-1      **ReClassification:**  
**Site Type:** Unplanned Release      **Start Date:**  
**Site Status:** Inactive      **End Date:**  
**Site Description:** The site consists of two radiologically contaminated areas identified during remediation of 116-N-1 Crib and Trench. The first area is located where an uncontaminated soil stockpile was previously removed. The second area is relatively undisturbed located near and around the eastern end of the former 116-N-1 Trench.

**Waste Type:** Soil  
**Waste Description:** The waste is radiologically contaminated soils. The contaminants of potential concern are radiological contaminants.

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**Site Code:** 100-N-84      **Classification:** Accepted  
**Site Names:** 100-N-84, 100-N 100-N Miscellaneous Pipelines (See Subsites)      **ReClassification:**  
**Site Type:** Radioactive Process Sewer      **Start Date:**  
**Site Status:** Inactive      **End Date:**  
**Site Description:** This site consists of all miscellaneous pipelines in the 100-N Area that were identified during the Orphan Site Evaluation (OSE) process and not previously tied to an existing waste site. The site includes product pipelines, service water pipelines, sewers and associated features (manholes, storm drains, valve boxes, etc.). Helium lines, electrical conduit, telephone lines, electrical grounding lines (ground), control air supply, fire alarm systems were excluded from the site.  
  
The miscellaneous pipelines supported the reactor operation and related support facilities throughout the N-Area. The process description is provided for each of the subsites in their respective writeups.

**SubSites:**

**SubSite Code:** 100-N-84:1  
**SubSite Name:** 100-N-84:1,100-N Area Raw Water Pipelines

**Classification:** Accepted

**ReClassification:**

**Description:** The subsite consists of the 100-N Area raw water pipelines includes: low pressure water, raw water, raw water return, raw water supply, raw water supply high and low pressure, emergency The lines are raw water supply, sprinkler, vent, fire line, irrigation, fog, and fish line pipelines. located throughout the 100-N Area's 100-NR-1 operable unit. The large majority of the pipelines being located in and around the 182-N High-Lift Pump House, 163 Demineralization Plant, 183-N Water Filter Plant, 184-N Power House, the 185-N Hanford Generating Plant, 109-N Heat Exchanger Building and a scattering of office buildings and trailers located to the south and south east of the 105-N Reactor Building. One additional 12-in raw water line used for temporary construction is located to in the north eastern portion of the 100-N area and connects to the export water pipeline.

The 100-N Area raw water system was built in 1963 with additional portions added as new support buildings were constructed. Raw water was pumped from the Columbia River at the 181-N Pump House to the 185-N Hanford Generating Plant, the 109-N Heat Exchanger Building, the 182-N High-Lift Pump House, and the 184-N Power House. These large delivery pipelines are not part of the 100-N-84 waste site. The subsite includes pipelines between the 105-N Reactor Building and it's supporting facilities.

The pipelines exiting the 182-N Building transferred raw water to the 105-N, 109-N, 163-N and 183-N Buildings. At the 182-N Building raw water was passed through screens before it was stored in 18.6 m (61 ft) deep independent pump suction wells for future distribution. Raw water supplied to the 109-N Heat Exchange Buildings supported the dump-condensers, graphite cooling heat exchangers turbines surface-condensers. Additionally raw water was supplied to the 182-N Building emergency raw water tank and various heat exchangers, along with the 100-N Area irrigation and fire systems. The fire system pipelines originating at the 182-N supported the 185-N Hanford Generating Plant and substation located to the south of the 105-N reactor Building and outside of the 100-N Fenced area. Raw water from the 109-N and 184-N buildings could also be returned to the Columbia river through the Sealwell.

The pipelines located between the 109-N, 182-N, 163-N and the 183-N Buildings lay within the 100-N-61 water treatment pipeline removal excavation footprint (H-1-89933). This area was excavated and backfilled in 2008 through 2009. Raw water lines collocated with 105-N Reactor Treatment Storage and Disposal Underground Pipelines along the east side of the 109-N and 105-N Buildings lay within the 100-N-63 excavation footprint (H-1-89933). This area was excavated and backfilled in 2009 through 2009.

**SubSite Code:** 100-N-84:2  
**SubSite Name:** 100-N-84:2, 100-N Area Fuel and Foam Pipelines

**Classification:** Accepted

**ReClassification:**

**Description:** The subsite includes the fuel oil and foam underground pipelines in the 100-N Area, located to the north west and west side of the 105-N Reactor Building.

Two fuel oil unloading, storage and transfer systems were used in the 100-N Area.

Diesel oil unloaded from rail cars at the 166-N unloading station was transferred for storage to the one of four aboveground storage tanks within the 1715-N Building. The diesel oil was then transferred through a 10.2 cm (4-in) underground supply pipeline to the 184-N Building day tank or through 5.1 cm (2-in) and 10.2 cm (4-in) underground pipelines to the three 56,781 L (15,000 gal) day tanks outside of the 182-N building. The diesel fuel from the 182-N day tanks was used to support the 182-N and 181-N diesel oil systems.

Number 6 fuel oil (also known as Bunker C fuel oil) was unloaded from rail cars at the 1900-N unloading station and transferred to the 166-N Building for storage in a 5,204,941 L (1,375,000 gal) capacity aboveground storage tank. The No. 6 fuel oil was transferred through underground pipelines from 166-N to two 184-N fuel oil day tanks.

Foam fire suppression lines to support the diesel oil tanks and pipelines are collocated with the diesel oil pipelines near the 166-N Building. The north west portions of the 100-N-84:2 pipelines are located within the 100-N-63 excavation footprint.(H-1-89933).

**SubSite Code:** 100-N-84:3

**SubSite Name:** 100-N-84:3, 100-N Area Filter and Potable Water Pipelines

**Classification:** Accepted

**ReClassification:**

**Description:** Site Description: The 100-N Area filter and potable water pipelines includes: makeup water, filter water, demineralized water, and potable water pipelines.

as supplied to 183-N Filter Plant Building for pretreatment and filtration. The 183-N filter plant supplied sanitary water to the entire 100-N Area. The plant also supplied filtered water to various buildings throughout the 100 N Area for use where treated water was not desirable or required. The term "treated water herein refers to filtered water that had liquid alum (aluminum sulphate), separan (polyacrylamide) and liquid chlorine added during pretreatment. Demineralized water from 163-N Building was used as makeup water feed for the pretreatment system in 183-N building, while raw water was used for chemical mixing in the 182-N and 183-N Buildings prior to being added to the water. The chemical feed systems were maintained using proportional ratios with the water flow. Demineralized water was used to prevent mineral deposits what would foul pipeline systems.

Chlorine was added for the control of slime and algae, and may have been used to assist in coagulation, odor and iron removal problems. Alum was used as the principle coagulant during pretreatment. 100-N-84:3 pipelines located between the 109-N, 182-N, 163-N and the 183-N Buildings lay within the 100-N-61 water treatment pipeline removal excavation footprint (H-1-89932). This area was excavated and backfilled in 2008 through 2009. The north west portions of the 100-N-84:3 pipelines are located within the 100-N-63 excavation footprint (H-1-89933).

Filtered water lines are located to the north and south of the 105-N reactor Building, while the potable water lines are located mainly to the southwest of the 105 reactor building to the 105-N support facilities.

**SubSite Code:** 100-N-84:4

**SubSite Name:** 100-N-84:4, 100-N Area Steam and Condensate Pipelines

**Classification:** Accepted

**ReClassification:**

- Description:** Site Description: The 100-N Area steam and condensate pipelines includes: steam, condensate, and injection and vacuum pump water.
- ProcessDescription:  
The N Reactor steam was used to generate electricity from 1966 to January 7, 1987. Condensate from the dump condensers was routed back to steam generators for regeneration. The main steam system was designed to distribute steam generated from generators on the roof of the 109-N Building as high, medium and low pressure steam. High pressure steam was exported through a 71 cm (28-in) pipeline to the 184-N Building to support the turbine generator and miscellaneous services. Medium pressure steam was distributed from 109-N for area heating (105-N, 182-N, 163-N, 183-N, 108-N, 1704-N, 1716-N, and 1734-N) and additional miscellaneous services. Low pressure steam was exported to the 184-N and 153-N Buildings for unit heaters and convectors. Stand-by boilers located 184-N were maintained independent of reactor operation supplying steam to the 184-N day tanks, the 166-N fuel unloading facilities and for the 109-N emergency seal water turbines. Once the steam had been utilized in each building condensate return pipelines exported the 184-N Building condenser receiver where it is recirculated deaerating heater for reuse. 109-N Building was equipped with a condensate diversion station controlling the levels in the deaerated water storage tank.
- A 10" condensate emergency drain could be used to release condensate from 109N to the 0.17 m (66-in) raw water pipelines downstream of the Sealwell.
- 100-N-84:3 pipelines located between the 109-N, 182-N, 163-N and the 183-N Buildings lay within the 100-N-61 water treatment pipeline removal excavation footprint (H-1-89932). This area was excavated and backfilled in 2008 through 2009.
- LocationDescription:  
The steam and condensate pipelines are concentrated around the 105-N Reactor building to support facilities and the 185-N Hanford Generating Plant.
- SubSite Code:** 100-N-84:5
- SubSite Name:** 100-N-84:5, 100-N Area Sanitary
- Classification:** Accepted
- ReClassification:**
- Description:** Site Description: The 100-N Area sanitary pipelines includes: sanitary water and sewer, storm drains, and disposal field pipelines.
- ProcessDescription:  
The 100-N Area was serviced by ten separate sewer systems consisting of one cesspool, one lagoon, one septic tank with an associated tile field, two septic tanks with seepage pits, and five septic tanks associated with drain fields. The septic tanks, pits, cesspools and lagoon are identified as the 124-N-1 through 124-N-10 waste sites. Waste sites 124-N-5, 124-N-6, 124-N-7, 124-N-8 have been reclassified as "rejected". The feed and drainage pipelines associated with these waste sites are included in 100-N-84:5.
- LocationDescription:  
The 100-N-84:5 pipelines are located throughout the 100-N Area's 100-NR-1 operable unit.
- SubSite Code:** 100-N-84:6
- SubSite Name:** 100-N-84:6, 100-N Area Chemical and Process Sewer Pipelines

**Classification:** Accepted

**ReClassification:**

**Description:** Site Description: 100-N Area Chemical and Process Sewer Pipelines include: Chemical waste, DMV waste, drain cold, dummy disposal line, Miscellaneous chemical drain, radioactive drain, chlorine, flush, and sample pipelines.

**ProcessDescription:**

The 100-N-84:6 pipelines originate from the 109-N Heat Exchanger Building, the 105-N Reactor Building, the 163-N Demineralization Plant, 182-N High-Lift Pump House, 183-N Filter Plant, and 184-N Power House. Various chemicals were utilized in these buildings.

Phosphoric, ascorbic and citric acids, and potassium permanganate were used in the 109-N and 105-N Buildings decontamination processes (WHC-SP-0460).

Ammonium hydroxide, morpholine and lithium hydroxide were added to control cooling water pH. Hydrazine was added to reduce oxygen concentrations in cooling water (WHC-SP-0460). The addition of these chemicals and the core's cooling water system design allowed the water to be recycled instead of using raw water as a once through coolant (DOE/RL-90-22)

Sulfuric acid and sodium hydroxide from supply tanks in 163-N Building were primarily consumed in the demineralizer plant. A 93% sulfuric acid solution was used to regenerate the cation resin used at the 163-N Building while a 50% sodium hydroxide solution was used to regenerate the anion resin. The 8-in acid drain from 163-N connected into the 100-N river channel discharge line to the Columbia River.

Sodium sulfite was used as a deoxygenizing chemical for low pressure filter water (182-N). Sodium dichromate was added to filtered water supply and raw water supply for cooling coils in the 105-N Reactor Building.

Radioactive drains at 109-N collect from the coolant systems, hot water quality laboratory, service bay hot shop. The 105-N and 109-N drains run to the 1301-N Liquid Waste Disposal Crib. 100-N-84:6 pipelines located between the 109-N, 182-N, 163-N and the 183-N Buildings lay within the 100-N-61 water treatment pipeline removal excavation footprint (H-1-89932). This area was excavated and backfilled in 2008 through 2009. A small portion of the 100-N-84:6 pipelines also lay within the adjacent 100-N-64 planned excavation (H-1-89934).

**LocationDescription:**

The 100-N-84:6 waste site pipelines are centrally located between the 100-N Area process buildings (105-N, 109-N, 182-N, 183-N, 184-N, and 163-N).

**SubSite Code:** 100-N-84:7

**SubSite Name:** 100-N-84:7, 100-N Area Unidentified and Other Miscellaneous Pipelines

**Classification:** Accepted

**ReClassification:**

**Description:** The 100-N-84:7 waste site pipelines include sections of various diameter pipelines located within the 100-NR-1 operable unit in and around the 105-N Reactor Building. These sections described as unidentified or multitube could not be positively identified based on review of historical documentation.

An above ground feature, labeled N-213, was observed during the 100-N Orphan Site

Evaluation (OSR-2009-0001). Being co-located with the 100-N-84 pipelines it was decided to incorporate this feature into this subsite.

**SubSite Code:** 100-N-84:8

**SubSite Name:** 100-N-84:8, 100-N Area Unidentified Pipelines within Planned Excavations

**Classification:** Accepted

**ReClassification:**

**Description:** The 100-N-84:8 waste site pipelines include sections of various diameter pipelines located within the 100-NR-1 operable unit in and around the 105-N Reactor Building. These sections described as unidentified or multitube could not be positively identified based on review of historical documentation. Most are believed to be less than 4m (13 ft) long or are within the planned remedial action excavation area which will result in removal of the pipeline section.

Two of the pipeline sections included in the 100-N-84:8 waste site are longer than 4m (13 ft). However these pipeline sections lay completely with the planned remediation excavation of the UPR-100-N-21 and UPR-100-N-23 waste sites (H-1-89916), and 100-N-22 waste site (H-1-89924). An above ground feature, labeled N-218, was observed during the 100-N Orphan Site Evaluation (OSR-2009-0001) to be co-located with the 100-N-84 pipelines. As a consequence this feature was dispositioned as part of 100-N-84.

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**Site Code:** 100-N-85 **Classification:** Accepted

**Site Names:** 100-N-85, Gas Station Fuel Tanks **ReClassification:**

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

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

**Site Description:** This site consisted of a self-service gasoline station with two fuel pumps, a meter card station, an above ground tank, two underground tanks, and a compressor house. The waste site consists of soil contaminated with gasoline and diesel which remained after the removal of two underground fuel storage tanks located at the former 1716-NA Service Station.

**Waste Type:** Soil

**Waste Description:** The waste is soil contaminated with gasoline and/or diesel fuel from underground storage tanks and associated piping. Soil samples obtained from beneath the tanks indicated toluene (4.7 mg/kg), diesel range organics (1,000 mg/kg) and kerosene range organics (3,085 mg/kg) contamination (WHC-SD-EN-TI-136, Table 2).

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**Site Code:** 100-N-86 **Classification:** Accepted

**Site Names:** 100-N-86, 151-N Substation Transformer and Oil Circuit Breakers **ReClassification:**

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

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

**Site Description:** This site consists of concrete support pedestals for a 230-13.8 kv transformer, the concrete pad for three oil circuit breakers (OCBs) and any underlying contaminated soils. The site was located at the 151-N Substation which appeared as various electrical equipment and a control building surrounded by a fence.

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**Waste Type:** Soil

**Waste Description:** The waste is potentially contaminated concrete and underlying soils.

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**Site Code:** 100-N-87 **Classification:** Accepted

**Site Names:** 100-N-87, 116-N Ventilation Stack Piping and French Drain **ReClassification:**

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

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

**Site Description:** The site consists of the drain piping and French drain for the 116-N ventilation Stack.

**Waste Type:** Soil

**Waste Description:** The waste consists of the drain piping, french drains and underlying gravel and soil.

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**Site Code:** 100-N-88 **Classification:** Accepted

**Site Names:** 100-N-88, 1143-N French Drain **ReClassification:**

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

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

**Site Description:** The site consists of a 0.61 m (24 in) "catch basin" (french drain) and its associated 5.1 cm drain cold (DR) (2 in) pipeline and underlying soil (drawing H-1-45007, Sht 6). Until about 1997, a sink within the facility discharged to this site. The potential existed for the site to have inadvertently received paint solvents and other hazardous liquids from the activities within the building. The sink was removed about 1997, and discharges to this site ceased.

**Waste Type:** Soil

**Waste Description:** Soil within and beneath the french drain and associated pipeline, potentially wetted with hazardous solvents and lead-based paints. COPCs consist of paint solvents and lead-based paints.

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**Site Code:** 100-N-89 **Classification:** Accepted

**Site Names:** 100-N-89, 117-NVH French Drain **ReClassification:**

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

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

**Site Description:** The french drain is a 61 cm (24 in) concrete pipe buried to 91 cm (36 in). The top of the pipe is at grade and it is filled with gravel. An additional 46 cm (18 in) of gravel is beneath the pipe. A metal plate covers the pipe (H-1-50093).

**Waste Type:** Soil

**Waste Description:** The waste includes the concrete pipe and gravel (french drain) and underlying soils if determined to be contaminated. The french drain reportedly received raw water back flushed from an inline

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screen on the raw water supply. There are no contaminants of potential concern associated with raw water.

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**Site Code:** 100-N-90 **Classification:** Accepted  
**Site Names:** 100-N-90, 100-N Reactor Rod Caves **ReClassification:**  
**Site Type:** Storage **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The Rod Cave is two 30.5 cm (12 in) carbon steel pipes buried in the earth berm on the north side of the 117-N Air Filter Building. The west ends of the pipes have aluminum covers; the east ends are buried in the berm. Two vertical pipes for monitoring radiation levels extend through the berm.  
**Waste Type:** Equipment  
**Waste Description:** The waste consists of two carbon steel pipes used to store control rods. COPCs Carbon-14 and Cobalt-60  
**Waste Type:** Soil  
**Waste Description:** The waste includes potentially contaminated soils underlying the carbon steel pipes. COPCs Carbon-14 and Cobalt-60

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**Site Code:** 100-N-91 **Classification:** Accepted  
**Site Names:** 100-N-91, 100-N Battery Debris **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of a 0.6 meter diameter (2 feet) diameter battery dump. The exterior of the batteries has degraded and the contents is mixed into the soil. There is no vegetation growing in the affected area.  
**Waste Type:** Batteries  
**Waste Description:** The waste includes discarded batteries and potentially contaminated underlying soils. The COPCs consist of metals.

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**Site Code:** 100-N-92 **Classification:** Accepted  
**Site Names:** 100-N-92, 100-N Stain Area #1 **ReClassification:**  
**Site Type:** Dumping Area **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site consists of a 3 meter (10 feet) diameter area stained with a white substance resembling dried paint and two 4 liter (1 gallon) cans.  
**Waste Type:** Misc. Trash and Debris

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**Waste Description:** Site COPCs consist of volatile organic compounds and lead. The waste consists of the stained soil and debris.

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**Site Code:** 100-N-93 **Classification:** Accepted

**Site Names:** 100-N-93, 100-N Stain Area #2 **ReClassification:**

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

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

**Site Description:** The site consists of potentially contaminated soil. It includes concrete, metal, glass debris, stained soil, suspected friable asbestos, and garnet sand with areas lacking in vegetation.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste consists of potentially contaminated soil, concrete, metal, glass, friable asbestos and garnet sand.

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**Site Code:** 100-N-94 **Classification:** Accepted

**Site Names:** 100-N-94, 100-N Oil Filters #1 **ReClassification:**

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

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

**Site Description:** The site consists of the underlying soil and approximately 50 oil filters.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Metals, polyaromatic hydrocarbons, total petroleum hydrocarbons, and polychlorinated biphenyls.  
The waste includes discarded oil filters and potentially contaminated soils.

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**Site Code:** 100-N-95 **Classification:** Accepted

**Site Names:** 100-N-95, Hanford Generating Plant (185-N) Septic Tank **ReClassification:**

**Site Type:** Sanitary Sewer **Start Date:**

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

**Site Description:** This feature consists of a septic tank, associated piping and underlying soil.

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**Site Code:** 100-N-96 **Classification:** Accepted

**Site Names:** 100-N-96, 100-N Military Camp Disposal Pits **ReClassification:**

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

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

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**Site Description:** This site consists of three separate suspect disposal pits located southwest of the 100-N-47 military camp, identified from a 1957 aerial photograph. The suspect disposal pits were located outside the boundary of the military camp.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste consists of solid waste generated by the military camp. Site COPCs were listed as volatile organics, semivolatile organics, polychlorinated biphenyls and metals

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**Site Code:** 100-N-97 **Classification:** Accepted

**Site Names:** 100-N-97, 100-N Oil Filters #2 **ReClassification:**

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

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

**Site Description:** This site consists of underlying soil and 3 oil filters. There is no vegetation growing within the release area.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste includes discarded oil filters and potentially contaminated soil. Site COPCs consist of metals, polyaromatic hydrocarbons, total petroleum hydrocarbons, and polychlorinated biphenyls.

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**Site Code:** 100-N-98 **Classification:** Accepted

**Site Names:** 100-N-98, 100-N Stain Area #3 **ReClassification:**

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

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

**Site Description:** The site consists of two locations where the surface is stained and no vegetation is growing in the affected area. One location (OSE - N-193) consists of multiple stained spots in a 30 meter (98.4 feet) diameter area. The other location (OSE - N-194) is a single stained spot approximately 3 meter (9.8 feet) in diameter.

**Waste Type:** Soil

**Waste Description:** The waste consists of the stained soil.

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**Site Code:** 100-N-99 **Classification:** Accepted

**Site Names:** 100-N-99, 100-N Oil Filters #3 **ReClassification:**

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

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

**Site Description:** The site consists of two locations where oil filters were discarded. The affected areas are devoid of vegetation and appear stained.

**Waste Type:** Misc. Trash and Debris

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**Waste Description:** The waste includes discarded oil filters and potentially contaminated soil. Site COPCs consist of metals, polyaromatic hydrocarbons, total petroleum hydrocarbons, and polychlorinated bipheynls.

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**Site Code:** 100-N-100 **Classification:** Accepted

**Site Names:** 100-N-100, 100-N Oil Filters #4 **ReClassification:**

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

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

**Site Description:** This site consists of petroleum based material released to the ground surface and the underlying soils. The soil is crusted and no vegetation is growing in the affected area. There are 4 oil filters at this location.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** The waste includes discarded oil filters and potentially contaminated soils. Site COPCs consists of metals, polyaromatic hydrocarbons, total petroleum hydrocarbons, and polychlorinated bipheynls.

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**Site Code:** 100-N-101 **Classification:** Accepted

**Site Names:** 100-N-101, 100-N Stain Area #4 **ReClassification:**

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

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

**Site Description:** The site consists of the underlying soil. The soil has no vegetation growing in the affected area.

**Waste Type:** Soil

**Waste Description:** The waste consists of the stained soil.

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**Site Code:** 100-N-102 **Classification:** Accepted

**Site Names:** 100-N-102, 100-N Potentially Contaminated French Drains **ReClassification:**

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

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

**Site Description:** This site consists of potentially contaminated french drains at three separate locations, and includes any known associated piping and surrounding soil. These subsites were discovered during the historical review activity of the Orphan Sites Evaluation of the N Area operable unit (100-NR-1). All remaining portions of this site are located below grade.

The first location had an absorption pit and two drain lines generally to the north of the former 116-N Ventilation Stack location. These subsite components were associated with the former 119-N and 119-NA Sample Buildings, which sampled potentially contaminated exhaust air and associated condensables from the 116-N Stack. The stack and sample buildings have been demolished, and the line to the absorption pit was capped.

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The second location had a dry well, and a miscellaneous chemical drain line, to the south of the former 166-N Fuel Oil Storage Pump House. The pump house has been demolished and the surrounding soil deferred to Field Remediation (D4-100N-0004). The french drain and associated pipelines are not addressed in the deferral.

The third location had a french drain noted on as-built drawing H-1-45007, Sheet 35. The drain had no identified associated piping, and was located west of the former 1126-NA Mobile Office (see Figure 2). The mobile office, as well as other nearby buildings, has been demolished.

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<b>Site Code:</b>	100-N-103	<b>Classification:</b>	Accepted
<b>Site Names:</b>	100-N-103, 100-N Steam Condensate French Drains	<b>ReClassification:</b>	
<b>Site Type:</b>	French Drain	<b>Start Date:</b>	
<b>Site Status:</b>	Inactive	<b>End Date:</b>	
<b>Site Description:</b>	This site consists of 12 discrete locations and underlying soil of steam condensate french drains and their associated below grade piping components. The french drains were discovered during the Orphan Site Evaluation (OSE) historical review. Each of the facilities that the french drains are associated with, were identified and process or function of the buildings determined. Generally french drains are a minimum 4.6m (of 15 ft.) from the edge of buildings. Field verification and photographs of the present site conditions were obtained.		

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<b>Site Code:</b>	116-N-1	<b>Classification:</b>	Accepted
<b>Site Names:</b>	116-N-1, 1301-N Liquid Waste Disposal Facility, 1301-N Crib and Trench	<b>ReClassification:</b>	Interim Closed Out (4/14/2009)
<b>Site Type:</b>	Crib	<b>Start Date:</b>	1963
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1985
<b>Site Description:</b>	The waste site included a large crib and trench that has been remediated and reclassified to interim closed out. Before remediation the site was enclosed within a chain link fence and posted with "No Trespassing", "Danger - Unauthorized Personnel Keep Out", "Radiologically Controlled Area", "Underground Radioactive Material" and "Surface Contamination" signs.		

**Waste Type:** Process Effluent

**Waste Description:** The unit received radioactive water containing activation and fission products and small quantities of corrosive liquids and laboratory chemicals at an average flow rate of approximately 5,680 liters per minute (1,500 gallons per minute) (note: the 8 million liters assumes the crib effluent was steady 24 hours per day). The crib received radioactive effluent streams from the 105-N and 109-N Buildings. After 1965, the trench received the same wastes as the crib. Operational contaminant inventory records from 1964 through 1985 show a total of 3,000 curies of tritium, 2,300 curies of cobalt-60, 1,900 curies of strontium-90, 2,600 curies of cesium-137, and 23 curies of plutonium-239 being released to the crib and trench. An estimate of dangerous wastes from the decontamination of the primary coolant system discharged annually include 2,800 kilogram (6,100 pounds) of hydrazine test solution, 2,800 kilograms (6,100 pound) of ammonia test solution, 3,500 kilograms (7,800 pounds) of chloride test solution and 1,800 kilograms (3,900 pounds) of fluoride test solution per year of operation. No actual amounts are available. The estimates include common floor drains that discharged to the crib.

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**Site Code:** 116-N-2 **Classification:** Accepted

**Site Names:** 116-N-2, 1310-N Chemical Waste Storage Tank, The Golf Ball, 1310-N Waste Storage Area **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1964

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

**Site Description:** The 116-N-2 Facility complex consists of piping, pumps, a transfer tank (commonly referred to as the silo) and a large, spherical storage tank (commonly referred to as the golf ball). The site was used as a collection tank for N Reactor primary piping decontamination wastes. The 3.4E+06-liter (9.0E+05-gallon) spherical tank is partially buried in the ground. A compacted soil radiation barrier, 7.6 meters (25 feet) high, surrounds the tank on three sides.

**Waste Type:** Process Effluent

**Waste Description:** Phosphoric acid used in the internal decontamination of the primary loop of the reactor, and successive rinse water were temporarily stored in this tank before being shipped to the 200 Area storage tanks. The liquid in the tank was neutralized with sodium hydroxide. Three unplanned releases of decontamination solution occurred at this site which cumulatively totaled 3.43E+05 liters (90,600 gallons).

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**Site Code:** 116-N-3 **Classification:** Accepted

**Site Names:** 116-N-3, 1325-N Liquid Waste Disposal Facility, 1325-N Crib and Trench **ReClassification:** Interim Closed Out (12/23/2002)

**Site Type:** Crib **Start Date:** 1983

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

**Site Description:** The site has been remediated and closed out.

**Waste Type:** Process Effluent

**Waste Description:** This unit received radioactive activation and fission products and small quantities (below regulatory limits) of corrosive liquids and laboratory chemicals. Dangerous waste code numbers include: F003, D002, D006, D007, D008, D009, U133, WC02, and WT02.

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**Site Code:** 116-N-4 **Classification:** Accepted

**Site Names:** 116-N-4, 1300-N Emergency Dump Basin **ReClassification:**

**Site Type:** Retention Basin **Start Date:** 1963

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

**Site Description:** The site consists of the 1300-N Emergency dump basin. The 116-N-4 Emergency Dump Basin is a rectangular shaped, outdoor, concrete storage basin with a 10.7-centimeter (0.188-inch) carbon steel liner.

**Waste Type:** Sludge

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**Waste Description:** Sediments were sampled in 1995 and found to contain radionuclides exceeding Westinghouse Hanford Company Category I limits and heavy metal concentrations below Resource Conservation and Recovery Act (RCRA) limits. The site is, therefore, radiologically contaminated but is not a mixed waste site. Radionuclide and heavy metal characterization is provided in BHI-00731. Since basin leakage has occurred, additional contaminants may be expected in the soils beneath the basin. Contaminants in the Dump Basin liquid include average concentrations of 6.25 E+05 of H-3, 6.12 E+01 of C0-60, 5.70 E+04 of Sr-90, 2.51 E+01 of Zr-95, <5.16 E+01 of Ru-106, 2.16 E+01 of Sb-125, <5.16 E+00 of Cs-134, 9.27 E+02 of Cs-137, 1.62 E-02 of Pu-239 and 1.82 E-01 of Pu 239/240.

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**Site Code:** 116-N-8 **Classification:** Accepted  
**Site Names:** 116-N-8, 163-N Mixed Waste and Hazardous Waste Container Storage Pad, 1330-N, 116-N-8 Storage Pad **ReClassification:** Rejected (9/6/2000)  
**Site Type:** Storage Pad (<90 day) **Start Date:** 1986  
**Site Status:** Active **End Date:**

**Site Description:** Containers are stored on a curbed and fenced concrete pad. The pad is covered by an open metal shed, divided into three storage areas each with its own locked gate. The entire unit is approximately 45 by 18 meters (150 by 60 feet). A small cabinet in front holds personal protective equipment and spill response materials. The front of the unit is an asphalt parking/driving area; the sides and back are gravel.

**Waste Type:** Soil

**Waste Description:** This site receives radioactively contaminated oil and miscellaneous hazardous process chemicals in drums and containers. The amounts received are variable based on operations.

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**Site Code:** 118-N-1 **Classification:** Accepted  
**Site Names:** 118-N-1, 100-N Area Silos, 100-N Area Spacer Silos, 118-N, 1303-N Spacer Silos, 1303-N Radioactive Dummy Burial Facility **ReClassification:**  
**Site Type:** Silo **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1995

**Site Description:** The site was a temporary storage facility for contaminated fuel spacers. The silos are partially underground with a approximately 1.5 meter (5 foot) of the structures above ground covered with soil. The soil mound had scant vegetation growing on it and a single vent stack protruded from the mound. A chain link fence surrounded the site on three sides and was posted with "Contamination Area, Underground Radioactivity and Soil Contamination Area" signs. The western side is barricaded with a 2.1-meter (7-foot) concrete wall. Following surface stabilization in 1998, the site was posted with Underground Radioactive Material signs.

**Waste Type:** Equipment

**Waste Description:** This site received byproduct radioactive metallic fuel spacers from the reactor. Quantities were variable based upon reactor operation levels. The radioactively contaminated fuel spacers were temporarily stored in the underground silos and then shipped to the 200 Area Low-Level Burial Grounds for disposal. All spacers were removed from the silos in September 1995.

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<b>Site Code:</b>	120-N-1	<b>Classification:</b>	Accepted
<b>Site Names:</b>	120-N-1, 1324-NA Percolation Pond	<b>ReClassification:</b>	
<b>Site Type:</b>	Pond	<b>Start Date:</b>	1977
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1991
<b>Site Description:</b>	The site was remediated in September/October 2000 and is awaiting regulatory closure documentation. Washington State Ecology rejected the certification of closure from DOE. Ecology has revised the post-closure groundwater monitoring measures for the site as of 5/26/05. A post-closure groundwater plan must be submitted to ecology and approved prior to approval of the Certification of Closure documentation.		

**Waste Type:** Process Effluent

**Waste Description:** Until 1983, the percolation pond received corrosive wastes from the regeneration of the demineralizer column in the 163-N Demineralizer Plant and filter backwash water. It also received nonregulated neutralized waste from the 1324-N Surface Impoundment and non-regulated process and cooling water from the 163-N Plant. Discharge of dangerous wastes was discontinued in April 1986. After November 1988, the percolation pond received neutralized waste water with a pH range between 4 and 11. The percolation pond no longer receives wastes. Sampling and analysis data of surface soils and sediment are listed in DOE/RL-90-22.

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<b>Site Code:</b>	120-N-2	<b>Classification:</b>	Accepted
<b>Site Names:</b>	120-N-2, 1324-N Surface Impoundment	<b>ReClassification:</b>	
<b>Site Type:</b>	Surface Impoundment	<b>Start Date:</b>	1986
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1988
<b>Site Description:</b>	The site was remediated in September/October 2000 and is awaiting regulatory closure documentation. Washington State Ecology rejected the certification of closure from DOE. Ecology has revised the post-closure groundwater monitoring measures for the site as of 5/26/05. A post-closure groundwater plan must be submitted to ecology and approved prior to approval of the Certification of Closure documentation.		

**Waste Type:** Process Effluent

**Waste Description:** The 1324-N Surface Impoundment received corrosive regeneration effluent and process and cooling water from the 163-N Demineralization Plant. Analytical results from surface soils and sediment test pit sampling are reported in DOE/RL-90-22.

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<b>Site Code:</b>	120-N-3	<b>Classification:</b>	Accepted
<b>Site Names:</b>	120-N-3, 163-N Neutralization Pit and French Drain	<b>ReClassification:</b>	
<b>Site Type:</b>	French Drain	<b>Start Date:</b>	1963
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1988
<b>Site Description:</b>	The 163-N Neutralization Pit measures 10.2 meters (33.3 feet) by 2.8 meters (9 feet) and is 2.4 meters (8 feet) deep. It is covered with plywood covers. A portion of the 163-N Neutralization Pit is covered with a concrete slab and metal shed.		

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**Waste Type:** Chemicals

**Waste Description:** The unit received unknown amounts of corrosive liquids, such as sodium hydroxide and sulfuric acid.

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**Site Code:** 120-N-4 **Classification:** Accepted

**Site Names:** 120-N-4, 1310-N Hazardous Waste Storage Area, 1310-N Waste Oil Storage Pad, 1310-N Non-Hazardous Waste Pad **ReClassification:**

**Site Type:** Storage Pad (<90 day) **Start Date:** 1985

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

**Site Description:** The 1310-N Hazardous Waste Storage Area was a concrete pad approximately 20 by 25 meters (70 by 80 feet), surrounded with a concrete berm (curb) and locked chain-link fence. Outside the pad the ground surface is gravel. A small open shed is in the southwest corner of the pad. The site is posted as a Radioactive Materials Area, and is also posted "Contaminated Lead Storage Area (For Re-Use)." The area contain (April 12, 2000) several wrapped objects marked with radioactive warning signs.

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**Site Code:** 120-N-5 **Classification:** Accepted

**Site Names:** 120-N-5, 108-N/163-N Transfer Line and Neutralization Pit **ReClassification:** Rejected (9/11/2000)

**Site Type:** Product Piping **Start Date:** 1963

**Site Status:** Inactive **End Date:** 1990

**Site Description:** The Transfer Line and Neutralization Pit is a 220-meter (720-foot) long polymer lined concrete pipe trench (encasement) that contains two transfer lines that run between the 108-N and the 163-N Buildings. The trench has concrete bottom and sides and a metal plate cover. The enclosed lines are one 6.4-centimeter (2.5-inch) sodium hydroxide line and one 10.2-centimeter (4-inch) sulfuric acid line. The trench runs 50 meters (154 feet) south from the 163-N Building to a neutralization pit, east for 132 meters (433 feet), and then north for 26 meters (85 feet) to the 108-N Building. The 1.22-meter (4-foot) by 3.05-meter (10-foot) concrete neutralization pit, located at coordinates N149307 and E571120, is designed to receive waste spills from within the encasement. Its upper surface is a few inches above grade. The neutralization pit has two 61-centimeter (24-inch) steel manhole covers, one marked "acid" and the other "caustic", that provide pit access. DOE/RL-90-22 describes its internal dimensions as two vaults, each measuring 1.8 by 1.8 by 3.1 meters (6 by 6 by 10 feet) deep.

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**Waste Type:** Chemicals

**Waste Description:** The unit transferred sodium hydroxide and sulfuric acid reagents from a chemical unloading facility to the point-of-use at the 163-N Demineralization Plant via transfer pipes contained in a concrete trench. Several leaks to the soil resulted from corrosion of the transfer pipes and concrete trench by the concentrated solutions.

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**Site Code:** 120-N-6 **Classification:** Accepted

**Site Names:** 120-N-6, 108-N Acid Tank Vent French **ReClassification:** Rejected (9/11/2000)

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**Site Status:** Inactive **End Date:** 1987  
**Site Description:** The site is located inside an area that is posted as Contamination Area/Radiation Area.  
**Waste Type:** Sanitary Sewage  
**Waste Description:** The unit received approximately 136,400 liters/day (30,000 gallons/day) of sanitary sewage.

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**Site Code:** 124-N-5 **Classification:** Accepted  
**Site Names:** 124-N-5, 100-N Sanitary Sewer System **ReClassification:** Rejected (9/11/2000)  
 No. 5, 124-N-5 Septic Tank  
**Site Type:** Septic Tank **Start Date:** 1981  
**Site Status:** Inactive **End Date:** 1987  
**Site Description:** The site is in the middle of a large graveled lot, free of vegetation. When the tank was deactivated, it was covered with a layer of parking lot gravel and is no longer visible.  
**Waste Type:** Sanitary Sewage  
**Waste Description:** This unit received approximately 14,000 liters/day (3,800 gallons/day) of sanitary sewage.

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**Site Code:** 124-N-6 **Classification:** Accepted  
**Site Names:** 124-N-6, 100-N Sanitary Sewer System **ReClassification:** Rejected (9/11/2000)  
 No. 6, 124-N-6 Septic Tank  
**Site Type:** Septic Tank **Start Date:** 1979  
**Site Status:** Inactive **End Date:** 1987  
**Site Description:** A site visit in July 1999 was unable to visually locate this site. The site was covered with parking lot gravel and the exact location cannot be visually identified.  
**Waste Type:** Sanitary Sewage  
**Waste Description:** This unit received an unknown amount of sanitary sewage.

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**Site Code:** 124-N-7 **Classification:** Accepted  
**Site Names:** 124-N-7, 100-N Sanitary Sewer System **ReClassification:** Rejected (9/11/2000)  
 No. 7, 124-N-7 Septic Tank  
**Site Type:** Septic Tank **Start Date:** 1984  
**Site Status:** Inactive **End Date:** 1987  
**Site Description:** A site visit in July 1999 found a 0.61 meter (2 foot) diameter manhole and two 19.6 centimeter (8 inch) diameter access ports labeled "Sewer". No drain field was identified. However, the 100-N Facility Manager said (see Deford 1996 reference below) that when the tank was pumped and filled with sand, it was covered with a layer of parking lot gravel and can no longer be located.  
**Waste Type:** Sanitary Sewage

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**Waste Description:** This unit received approximately 19,700 liters/day (5,200 gallons/day) of sanitary sewage from office trailers.

**Site Code:** 124-N-8 **Classification:** Accepted  
**Site Names:** 124-N-8, 100-N Sanitary Sewer System No. 8, 124-N-8 Septic Tank **ReClassification:** Rejected (9/11/2000)  
**Site Type:** Septic Tank **Start Date:** 1983  
**Site Status:** Inactive **End Date:** 1987

**Site Description:** A site visit in July 1999 found two concrete pads (0.6 meters by 0.6 meters [2 X 2 feet]) with 19.6 centimeter (8 inch) lids marked "Sewer" in the general location of this site. It is not known if one of the markers is from the old system (124-N-8) or the replacement sewage system (124-N-10).

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit received approximately 3,400 liters/day (900 gallons/day) of sanitary sewage from office trailers. .

**Site Code:** 124-N-9 **Classification:** Accepted  
**Site Names:** 124-N-9, 124-N-9 Septic Tank, 100-N Sanitary Sewer System No. 9 **ReClassification:**  
**Site Type:** Septic Tank **Start Date:** 1985  
**Site Status:** Active **End Date:**

**Site Description:** The site is located inside an area that is delineated by light posts and chain.

**Waste Type:** Sanitary Sewage

**Waste Description:** This unit receives approximately 8,300 liters/day (2,200 gallons/day) of sanitary sewage.

**Site Code:** 124-N-10 **Classification:** Accepted  
**Site Names:** 124-N-10, 124-N-10 Sanitary Sewer System, 100-N Central Sewer System No. 10, Project H-677, 100-N Sewage Lagoon **ReClassification:**  
**Site Type:** Sewage Lagoon **Start Date:** 1987  
**Site Status:** Active **End Date:**

**Site Description:** Three sewer ponds (or lagoons) (identified in the drawings as the aeration pond, stabilization pond, and infiltration pond) with a total length of 822.75 ft by 220 ft wide with the long axis on a heading of 045 degrees true. The coordinates provided are taken from the drawing and represent the approximate centroid of the aeration pond. The site, which serves a minimum of 27 facilities or buildings, consists of a three pond sewage lagoon facility, a server trunk line and other pipelines, two lift stations, new manholes, and associated sewer system instrumentation and annunciation capability.

**Waste Type:** Sanitary Sewage

**Waste Description:** The maximum design flow for this septic system is 50,000 gallons per day. It is designed for a maximum of 2,500 employees. The site has received domestic wastewater sewage from the 100-N Area and domestic sewage pumped from septic tanks throughout the Hanford Site.

Incidental solids (rags, scum, and other debris) are removed from the system and disposed of as solid waste at an approved disposal site. The discharge from the infiltration pond percolates down to the groundwater.

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**Site Code:** 128-N-1 **Classification:** Accepted

**Site Names:** 128-N-1, 100-N Burning Pit, 128-N-1 Burning Pit **ReClassification:**

**Site Type:** Burn Pit **Start Date:** 1963

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

**Site Description:** The site shows evidence of burning, in the form of burnt trash and cans. Most of the site has been backfilled.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Combustible materials, such as nuisance vegetation and combustible wastes (office waste, tools and hardware, and potentially paints and solvents), have been burned at this site. The quantity of material burned at the site is unknown. Since the establishment of the Hanford Central Landfill (in the early 1970's), this unit has been used for burning nuisance vegetation only.

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**Site Code:** 130-N-1 **Classification:** Accepted

**Site Names:** 130-N-1, 183-N Backwash Discharge Pond, 126-N-1, 183-N Filter Backwash Pond **ReClassification:**

**Site Type:** Pond **Start Date:** 1983

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

**Site Description:** The site consists of a natural marsh-like pond which receives filter backwash from the 183-N Water Filter Plant.

**Waste Type:** Water

**Waste Description:** The unit receives filter backwash containing polyacrylamide and aluminum sulfate.

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**Site Code:** 1908-N **Classification:** Accepted

**Site Names:** 1908-N, 1908-N Outfall **ReClassification:**

**Site Type:** Outfall **Start Date:** 1963

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

**Site Description:** This site consisted of an open-topped, compartmentalized, reinforced concrete outfall structure. A 260 centimeter (102 inch) line discharged into the southeast face of the structure, and a 260 centimeter (102 inch) pipeline exited the northwest face to the Columbia River.

**Waste Type:** Construction Debris

**Waste Description:** The 1908-N Sealwell received raw river water used to cool the secondary cooling water for the N Reactor. The reported date was April 18, 1986.

An unknown level of radioactive contamination exists within the structure because the discharge lines were associated with the reactor's secondary steam system. Therefore, while no specific COPCs have been identified, the outfall structure has potential radioactive contamination.

**Site Code:** 1908-NE **Classification:** Accepted  
**Site Names:** 1908-NE, HGP Outfall, 1908-NE Building, HGP SWMU #7 **ReClassification:** Interim Closed Out (6/15/2004)  
**Site Type:** Outfall **Start Date:** 1966  
**Site Status:** Inactive **End Date:** 1988  
**Site Description:** The site has been interim closed out. The unit consisted of a an open-topped, compartmentalized, reinforced concrete outfall structure.

**Waste Type:** Construction Debris

**Waste Description:** The unit was designed to provide controlled waste water releases from the Hanford Generating Plant (HGP) facility. The unit was permitted under the National Pollutant Discharge Elimination System (NPDES). Releases to the outfall included coolant water, any releases from the HGP building sump prior to the late 1960s, and discharges from the HGP Settling Pond.

The contaminants of potential concern include Strontium-90, cobalt-60, cesium-137, arsenic, barium, cadmium, chromium, lead, selenium, silver, mercury, and PCBs.

**Site Code:** 2607-FSM **Classification:** Accepted  
**Site Names:** 2607-FSM, 609 Building Septic Tank 2607-FSM, 100 Area Fire Station Septic Tank, 1607-FSM, 6607-FSM **ReClassification:**  
**Site Type:** Septic Tank **Start Date:** 1960  
**Site Status:** Active **End Date:**  
**Site Description:** The 6607-FSM Septic Tank is a single-chamber, reinforced concrete tank. This unit includes a drainfield.

**Waste Type:** Sanitary Sewage

**Waste Description:** The 2607-FSM septic system receives sanitary wastewater at a rate of approximately 550 gallons (2,082 liters) per week.

**Site Code:** 600-32 **Classification:** Accepted  
**Site Names:** 600-32, N Area Landfill **ReClassification:** Rejected (6/30/2004)  
**Site Type:** Dumping Area **Start Date:**

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

**Site Description:** A field walkdown done in August 2000 compared the site to the area mapped in Arcview and found it to be a duplicate of 100-N-39 and 100-N-19 (it is contained within the much larger 100-N-19).

The site is a large area covering approximately 13 hectares (32 acres), consisting of an abandoned gravel pit and several other depressions which were used as dumping areas for 100-N Reactor and the Hanford Generating Plant (HGP). The main gravel pit depression is approximately 6 meters (20 feet) deep and is located southwest of the HGP facility fence. A steel casing, described as a well head, is located near the northern edge of the unit. Large concrete blocks, a burning area, broken glass, a sandblast material pile, and other debris is scattered across the bottom of the site.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Unit waste includes 19-liter (5-gallon) paint cans (one labeled SCC Portland 26 5 65, one labeled USS 5-28/26-65, one labeled ICC=37-76-80 NRC, others are crushed), sheet aluminum, steel pipes, rebar, transite, cans wood, two 208-liter (55-gallon) drums (one labeled Delvac 1330 SAE-30 motor oil), concrete, wire, cable and spools, bottles (soda pop and amber 3.8-liter [1-gallon] jugs), broken fluorescent and incandescent light bulbs, tires, grass clippings and miscellaneous construction debris.

**The Following Sites Were Consolidated With This Site:****Site Code:** 100-N-39**Site Names:** 100-N-39, Hanford Substation Construction Dump Area, SWMU #11**Reason:** Duplicate Site**Site Code:** 600-35**Classification:** Accepted**Site Names:** 600-35, Debris Area Between 100-N and 100-D Areas**ReClassification:****Site Type:** Dumping Area**Start Date:****Site Status:** Inactive**End Date:**

**Site Description:** This relatively flat site appears to be a former rock crushing/screening operation and borrow pit (on the northern edge). The ground is covered with fine gravel chips with little or no vegetation. A well-head (number 87-55) and the 100-N export water line were noted on the southern edge and along the east-west line of the site, respectively.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** Miscellaneous surface debris was the only waste identified at this site. This debris includes a ladder, an 20-centimeter (8-inch) diameter steel pipe, metal scrap wire rope, miscellaneous wood debris, pieces of aluminum, and a container lid (no markings). A deteriorated 12 volt lead-acid battery of the type used in heavy equipment. A 208-liter (55-gallon) drum (no marking) was observed approximately 76 meters (250 feet) west of the site.

**Site Code:** 600-339**Classification:** Accepted**Site Names:** 600-339, 100 Area Fire Station Dry Well**ReClassification:**



stressed vegetation are outside of the pit, to the south and west. Debris at the site includes charred wood, metal, electrical wiring and equipment, and roofing material. The vegetation in the area is primarily cheatgrass and bunch grasses with some sagebrush. There are some circular shaped areas with little or no vegetation. It is difficult to determine the extent of the site; the evidence of burning and stress is scattered and mixed with undisturbed areas. There is also scattered debris in surrounding areas that does not appear to have been subject to burning.

**Waste Type:** Chemicals

**Waste Description:** The waste site contains motor oil, diesel fuel, and toluene. Other chemicals were potentially burned at the site.

**Site Code:** UPR-100-N-1

**Classification:** Accepted

**Site Names:** UPR-100-N-1, 100-N 1304-N Dump Tank, UN-100-N-1, Emergency Dump Tank Inlet Valve Box Leak

**ReClassification:**

**Site Type:** Unplanned Release

**Start Date:** 1974

**Site Status:** Inactive

**End Date:** 1974

**Site Description:** The site is an unplanned release covering an area of ground estimated at 20,000 square feet (1,858 square meters).

**Waste Type:** Process Effluent

**Waste Description:** The leak consisted of filtered water in the estimated amount of 113,550 liters (30,000 gallons) containing 0.2 Curies of radioactive constituents.

**Site Code:** UPR-100-N-2

**Classification:** Accepted

**Site Names:** UPR-100-N-2, 100-N FLV-858 Valve Leak, UN-100-N-2

**ReClassification:**

**Site Type:** Unplanned Release

**Start Date:** 1980

**Site Status:** Inactive

**End Date:** 1980

**Site Description:** The site is on area of ground estimated at 28 square meters (300 square feet).

**Waste Type:** Process Effluent

**Waste Description:** The release consisted of primary coolant water containing less than 1 curie of beta/gamma.

**Site Code:** UPR-100-N-3

**Classification:** Accepted

**Site Names:** UPR-100-N-3, Dummy Fuel Transfer Line, UN-100-N-3, Spacer Disposal System Transport Line Leak, UN-116-N-3

**ReClassification:**

**Site Type:** Unplanned Release

**Start Date:** 1978

**Site Status:** Inactive

**End Date:** 1978

**Site Description:** The site began as a 1.2-meter (4-foot) diameter and 0.8-meter (2.5-foot) deep sink hole. Currently, the spill site is within a radiation control zone.

**Waste Type:** Water

**Waste Description:** The release consisted of storage basin water with an estimated radionuclide release of 0.07 curies of cobalt-60, 0.8 curies of strontium-90, 0.25 curies of cesium-137, 0.14 curies of cerium/praseodymium-144, 0.0004 curies of plutonium-239, and 1.0 curies of tritium (assumed).

**Site Code:** UPR-100-N-4 **Classification:** Accepted

**Site Names:** UPR-100-N-4, 1322-A Sump Overflow, UN-100-N-4 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1977

**Site Status:** Inactive **End Date:** 1977

**Site Description:** The original site of contamination was the 1322-NA (Effluent Water Pilot Plant) floor and ground by the front and rear doors on outside the site also includes the drainage tank in Building 1322-N (Waste Treatment Pilot Plant Facility).

**Waste Type:** Water

**Waste Description:** The site received low-level radioactive water. The total activity was 0.5 millicuries.

**Site Code:** UPR-100-N-5 **Classification:** Accepted

**Site Names:** UPR-100-N-5, 1310-N Chemical Waste Storage Tank Leak, UN-100-N-5, 116-N-2 Radioactive Chemical Waste Treatment Storage Facility **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1972

**Site Description:** The release occurred in the 1310-N Radioactive Chemical Waste Handling Facility on the recirculation pump discharge line.

**Waste Type:** Water

**Waste Description:** The leak consisted of 340,650 liters (90,000 gallons) of radioactive wastewater containing decontaminated chemicals. The waste contained approximately 35 curies of activity, of which 26 curies were cobalt-60. The solution had a pH of approximately 9.

**Site Code:** UPR-100-N-6 **Classification:** Accepted

**Site Names:** UPR-100-N-6, 1 1/2 Inch Chemical Decontam. Waste Drain Line Leaks, UN-100-N-6, UN-116-N-6, Chemical Decontamination Waste Drain Line Leak **ReClassification:**

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

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

**Site Description:** A site visit in August 2000 found a roped area east of 1714-N. The area was posted Underground Radioactive Material and Controlled Area. A soil mound was inside the roped area.

**Waste Type:** Process Effluent

**Waste Description:** The release consisted of approximately 6,813 liters (1,800 gallons) of radiologically contaminated water containing an estimated 0.2 curies cobalt-60, 0.04 curies manganese-54, 0.003 curies ruthenium-103, and 0.003 curies of cesium-137.

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**Site Code:** UPR-100-N-7 **Classification:** Accepted

**Site Names:** UPR-100-N-7, Ten-Inch Radioactive Drain Return Line Leak, UN-116-N-7, UN-100-N-7 **ReClassification:**

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

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

**Site Description:** A leak occurred in a buried 25.4-centimeter (10-inch) drain line between the 109-N Building and the 1909-N Valve Pit.

**Waste Type:** Process Effluent

**Waste Description:** The release consisted of approximately 1,907,042 liters (504,053 gallons) of radiologically contaminated N-Reactor cooling water containing an estimated 1.0 curies sodium-24, 0.5 curies cobalt-60, 0.09 curies ruthenium-103, 0.4 curies chromium-51, 0.2 curies zirconium-95, 0.3 curies tellurium-132, 0.30 curies manganese-54, 0.1 curies niobium-95, 0.5 curies iodine-131, 1.2 curies iron-59, 0.2 curies cerium-141, 0.2 curies cerium-144, and 0.8 curies technetium-99.

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**Site Code:** UPR-100-N-8 **Classification:** Accepted

**Site Names:** UPR-100-N-8, 1322-A Sump Overflow, UN-100-N-8 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1975

**Site Status:** Inactive **End Date:** 1975

**Site Description:** The original site of contamination was the 1322-NA (Effluent Water Pilot Plant) including the area surrounding the sump, floor, various pieces of equipment, and the ground just outside the rear door (south door).

**Waste Type:** Water

**Waste Description:** The release contained up to 379 liters (100 gallons) of radioactive water contaminated with mixed fission and activation products to a level of 1,000,000 picocuries/liter. The total activity was 0.5 millicuries.

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**Site Code:** UPR-100-N-9 **Classification:** Accepted

**Site Names:** UPR-100-N-9, 119-N Cooling Water Drain Line Leak, UN-100-N-9 **ReClassification:**

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**Site Type:** Unplanned Release **Start Date:** 1974  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is an excavation site (backhoe) greater than 1.2 meters (4 feet) below grade and includes a 5-centimeter (2-inch) valve on a drain line.  
**Waste Type:** Water  
**Waste Description:** The release of 8,327 liters (2,200 gallons) of low-level radioactive contaminated water contained about 500,000 picocuries. The water was released from the 119-N cooling water drain line.

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**Site Code:** UPR-100-N-10 **Classification:** Accepted  
**Site Names:** UPR-100-N-10, 100-N Area 105-N Check Valve, UN-100-N-10, Lift Station Gravity Drain Line Leak **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1975  
**Site Status:** Inactive **End Date:** 1975  
**Site Description:** The leak occurred in an area previously marked as a radiation zone.  
**Waste Type:** Water  
**Waste Description:** The release contained 0.001 curies of mixed fission and activation products.

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**Site Code:** UPR-100-N-11 **Classification:** Accepted  
**Site Names:** UPR-100-N-11, Five Hundred Pound Valve Bonnet Contamination in Uncontrolled Area, 100-N Area Valve Bonnet, UN-100-N-11 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1975  
**Site Status:** Inactive **End Date:** 1975  
**Site Description:** The contaminated site consisted of asphalt road, shoulder/roadside, and field area.  
**Waste Type:** Equipment  
**Waste Description:** Five to 10 rads per hour were measured where the valve bonnet came to rest in the field. Measurements of 1,000 millirads per hour were taken where it hit the road; 20,000 to 5,000 counts per minute on 18.6 square meters (200 square feet) of road; and 25,000 to 50,000 on the surface of the field adjacent to the valve bonnet.

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**Site Code:** UPR-100-N-12 **Classification:** Accepted  
**Site Names:** UPR-100-N-12, Spacer Transport Line Leak, UN-100-N-12 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**

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

**Site Description:** The site began as a 0.6 by 0.9-meter (2 by 3-foot) diameter and 0.46-meter (1.5-foot) deep sink hole. The dimensional limits of the extent of contamination are not provided in reference material. The dimensions for the observed sink hole have been reported. The extent of contamination migration to groundwater is assumed.

**Waste Type:** Water

**Waste Description:** The release consisted of 946,000 liters (250,000 gallons) of storage basin water containing 0.19 curies of cobalt-60, 0.4 curies of cesium-137, and 0.00057 curies of plutonium-239/240. The water was originally from the fuel storage basin and had been used to help dislodge fuel spacers through the spacer transport line. Excavated soil was checked for radioactivity and read 50 to 100 millirem per hour.

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**Site Code:** UPR-100-N-13 **Classification:** Accepted

**Site Names:** UPR-100-N-13, 1314-N Loading Station, 1314-N Drywell Overflow, UN-100-N-13 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1973

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

**Site Description:** The 1314-N Liquid Waste Loadout Station is a transfer station consisting of numerous valves, pumps, underground/overhead piping and couplings, and underground tanks.

**Waste Type:** Water

**Waste Description:** The release consisted of 289 liters (75 gallons) of spent decontamination solution containing 0.011 curies.

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**Site Code:** UPR-100-N-14 **Classification:** Accepted

**Site Names:** UPR-100-N-14, 119-N Drain System Leak, UN-100-N-14 **ReClassification:**

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

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

**Site Description:** Soil near the 119-N Sample Building was contaminated during the release.

**Waste Type:** Process Effluent

**Waste Description:** The release consisted of effluent water containing 0.0008 curies of beta/gamma activity.

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**Site Code:** UPR-100-N-15 **Classification:** Accepted

**Site Names:** UPR-100-N-15, 108-N Neutralization Sump Spill, UN-116-N-15, UN-100-N-15, Acid Spill at 108-N **ReClassification:** Rejected (9/11/2000)

**Site Type:** Unplanned Release **Start Date:** 1981

**Site Status:** Inactive **End Date:** 1981

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**Site Description:** The release site is concrete structures and a graveled field. There is no evidence of the spill at the site.

**Waste Type:** Chemicals

**Waste Description:** The release consisted of sulfuric acid.

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**Site Code:** UPR-100-N-17 **Classification:** Accepted

**Site Names:** UPR-100-N-17, 166-N Diesel Oil Supply Line Leak, UN-100-N-17 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1966

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

**Site Description:** The site is an unplanned release that occurred at the 166-N Tank Farm.

**Waste Type:** Oil

**Waste Description:** The leak consisted of diesel oil.

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**Site Code:** UPR-100-N-18 **Classification:** Accepted

**Site Names:** UPR-100-N-18, 166-N Four-Inch Diesel Oil Supply Line to 184-N Leak, UN-100-N-18 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1973

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

**Site Description:**

**Waste Type:** Oil

**Waste Description:** The leak consisted of diesel oil.

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**Site Code:** UPR-100-N-19 **Classification:** Accepted

**Site Names:** UPR-100-N-19, 184-N Day Tank Fuel Oil Spill, UN-116-N-19, UN-100-N-19 **ReClassification:**

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

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

**Site Description:** A site visit in July 1999 found that the Day Tanks have been removed. The tank foundations are located inside an area surrounded by light post and chain.

**Waste Type:** Oil

**Waste Description:** The release consisted of No. 6 fuel oil.

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**Site Code:** UPR-100-N-20 **Classification:** Accepted

**Site Names:** UPR-100-N-20, 166-N Two-Inch Diesel Oil Return Line Leak, UN-116-N-20, UN-100-N-20 **ReClassification:**

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

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

**Site Description:**

**Waste Type:** Oil

**Waste Description:** The release consisted of Number 2 diesel oil.

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**Site Code:** UPR-100-N-21 **Classification:** Accepted

**Site Names:** UPR-100-N-21, 184-N Diesel Oil Day Tank Overflow, UN-116-N-21, UN-100-N-21 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1986

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

**Site Description:** The Day Tanks have been removed. The tank foundations are located inside a chained area marked 184-ND.

**Waste Type:** Oil

**Waste Description:** The release consisted of Number 2 diesel oil.

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**Site Code:** UPR-100-N-22 **Classification:** Accepted

**Site Names:** UPR-100-N-22, 184-N Diesel Oil Supply Line Leak No. 1, UN-100-N-22, UN-116-N-22 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1986

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

**Site Description:**

**Waste Type:** Oil

**Waste Description:** The release consisted of Number 2 diesel oil.

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**Site Code:** UPR-100-N-23 **Classification:** Accepted

**Site Names:** UPR-100-N-23, 184-N Diesel Oil Supply Line Leak No. 2, UN-100-N-23, UN-116-N-23 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1987

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

**Site Description:**

**Waste Type:** Oil

**Waste Description:** The release consisted of Number 2 diesel oil.

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**Site Code:** UPR-100-N-24 **Classification:** Accepted

**Site Names:** UPR-100-N-24, 166-N Fuel Oil Supply Line Leak, UN-116-N-24, UN-100-N-24 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1987

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

**Site Description:**

**Waste Type:** Oil

**Waste Description:** An unknown amount of Number 6 fuel oil.

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**Site Code:** UPR-100-N-25 **Classification:** Accepted

**Site Names:** UPR-100-N-25, Uncontrolled Venting of 1310-N Tank, UN-100-N-25 **ReClassification:**

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

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

**Site Description:** There is no visual evidence of this release.

**Waste Type:** Chemicals

**Waste Description:** The release consisted of primary loop water and decontamination solution containing phosphoric acid and diethylthiourea. Radiological surveys found a maximum of 20,000 counts per minute after the release.

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**Site Code:** UPR-100-N-26 **Classification:** Accepted

**Site Names:** UPR-100-N-26, Backflow of Radioactive Waste in 1314-N Facility, UN-100-N-26 **ReClassification:**

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

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

**Site Description:**

**Waste Type:** Chemicals

**Waste Description:** The release consisted of reactor decontamination solution containing phosphoric acid and diethylthiourea.

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**Site Code:** UPR-100-N-29 **Classification:** Accepted  
**Site Names:** UPR-100-N-29, 1304-N Dump Tank, Emergency Dump Tank Bypass Line Leak, UN-100-N-29 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:**  
**Waste Type:** Water  
**Waste Description:** The leak consisted of primary coolant water containing radioactive fission and activation products, mostly manganese-56 and sodium-24.

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**Site Code:** UPR-100-N-30 **Classification:** Accepted  
**Site Names:** UPR-100-N-30, 1304-N Dump Tank, Emergency Dump Tank Overflow, UN-100-N-30 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site includes the ground surrounding the 1304-N Emergency Dump Tank. There is no visual evidence of this release.  
**Waste Type:** Water  
**Waste Description:** The release consisted of primary coolant water containing fission and activation products contaminating the area to a maximum of 500 counts/minute.

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**Site Code:** UPR-100-N-31 **Classification:** Accepted  
**Site Names:** UPR-100-N-31, Radioactive Effluent Water Spill Near 116-N-1 (1301-N), UN-100-N-31 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1974  
**Site Status:** Inactive **End Date:**  
**Site Description:** The release site is not currently marked or posted.  
**Waste Type:** Water  
**Waste Description:** The release consisted of radioactive effluent containing fission and activation products. The gross beta/gamma concentration of the spilled water was 700 disintegrations/minute/milliliter.

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**Site Code:** UPR-100-N-32 **Classification:** Accepted  
**Site Names:** UPR-100-N-32, 1304-N Dump Tank, **ReClassification:**

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Emergency Dump Tank Bypass Line Leak,  
UN-100-N-32

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

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

**Site Description:**

**Waste Type:** Water

**Waste Description:** The release consisted of radioactive effluent water containing fission and activation products. A mud sample read 20,000 counts/minute. The water was analyzed for gross activity. It was estimated that less than 10 millicuries of radioactive material remained on the ground.

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**Site Code:** UPR-100-N-33                                      **Classification:** Accepted

**Site Names:** UPR-100-N-33, 108-N Acid Transfer Spill, UN-116-N-33, UN-100-N-33      **ReClassification:** Rejected (9/11/2000)

**Site Type:** Unplanned Release                                      **Start Date:** 1981

**Site Status:** Inactive    **End Date:** 1981

**Site Description:** The location of this release is a graveled lot at the 108-N Chemical Unloading Facility (CUF). There is no evidence of the spill at the site.

**Waste Type:** Chemicals

**Waste Description:** The spill consisted of a solution containing 97% sulfuric acid.

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**Site Code:** UPR-100-N-34                                      **Classification:** Accepted

**Site Names:** UPR-100-N-34, 108-N Tank Transfer, Sulfuric Acid Line Break, UN-100-N-34      **ReClassification:** Rejected (9/11/2000)

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

**Site Status:** Inactive    **End Date:** 1980

**Site Description:** The release occurred in a concrete trench in a graveled lot. There is no evidence of the spill at the site.

**Waste Type:** Chemicals

**Waste Description:** The release was a solution containing 94% sulfuric acid.

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**Site Code:** UPR-100-N-35                                      **Classification:** Accepted

**Site Names:** UPR-100-N-35, 100-N Fuel Basin Drainage System Leak, UN-116-N-35, 105-N Fuel Storage Basin Drainage System Leak, UN-100-N-35      **ReClassification:**

**Site Type:** Unplanned Release                                      **Start Date:** 1986

**Site Status:** Inactive    **End Date:** 1986



**Site Description:** The site is level and graveled. A pipe is present that carried sodium hydroxide from the tankers to the 1310-N Facility (116-N-2). The site is located in a radiation zone, but the sodium hydroxide should not have been radioactively contaminated. The 116-N-2 Facility complex consists of piping, pumps, a transfer tank (commonly referred to as the silo) and a large, spherical storage tank (commonly referred to as the golf ball). The site was used as a collection tank for N Reactor primary piping decontamination wastes. The 3.4E+06-liter (9.0E+05-gallon) spherical tank is partially buried in the ground. A compacted soil radiation barrier, 7.6 meters (25 feet) high, borders the tank on three sides.

**Waste Type:** Chemicals

**Waste Description:** Three hundred eighty liters, (100 gallons) of sodium hydroxide was spilled to the ground during offloading operations in a radiation zone.

**Site Code:** UPR-100-N-39 **Classification:** Accepted

**Site Names:** UPR-100-N-39, Corridor 22 Suspect Liquid Unplanned Release (Cleaned Up) **ReClassification:**

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

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

**Site Description:** The site consists of a concrete slab and hatch cover posted "Surface Contamination." The surrounding area is gravel.

**Waste Type:** Water

**Waste Description:** Several hundred liters of radioactively contaminated water from the Fission Product Filter Trap overflowed and discharged to the ground.

**Site Code:** UPR-100-N-40 **Classification:** Not Accepted (5/14/2004)

**Site Names:** UPR-100-N-40, Regeneration Waste Transport System Liquid UPR 1 (06/14/86, Cleaned Up), 6/14/86 163-N Cation/Anion Regeneration Waste Spill, UN-116-N-27 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1986

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

**Site Description:** The surface of the area is graveled.

**Waste Type:** Process Effluent

**Waste Description:** The 120-N-1 and 120-N-2 disposal sites received waste from the 163N Plant, the same waste that was involved in these unplanned releases. The liquid released was regeneration waste from ion exchange columns in the 163-N Facility, consisting of sulfuric acid and sodium hydroxide.

**Site Code:** UPR-100-N-41 **Classification:** Not Accepted (5/14/2004)

**Site Names:** UPR-100-N-41, Regeneration Waste Transport System Liquid UPR 2, 163-N **ReClassification:**

Regeneration, Waste Spill

**Site Type:** Unplanned Release      **Start Date:** 1986

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

**Site Description:** The spill occurred at the 163-N Regeneration Waste Sump near the northwest corner of the 163-N Building and formed a small pond in this area.

**Waste Type:** Water

**Waste Description:** The liquid released was regeneration waste consisting of sulfuric acid from ion exchange columns in the 163-H Facility. Soda ash was added to the spill to help neutralize the liquid.

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**Site Code:** UPR-100-N-42      **Classification:** Accepted

**Site Names:** UPR-100-N-42, 184-N Day Tank Area      **ReClassification:**  
Liquid Unplanned Release, 10/9/87 184-N,  
Day Tank Diesel Oil Spill

**Site Type:** Unplanned Release      **Start Date:** 1987

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

**Site Description:** The 184-N Day Tank Area is surrounded by a 1.5-meter (4.8-foot) concrete wall that is 25 meters (85 feet) long by 12.8 meters (42 feet) wide, has a sand floor, and contains two 130,000 liters (35,000 gallons) Number 6 fuel oil tanks and one 30,000 liter (8,000 gallon) diesel oil tank.

**Waste Type:** Oil

**Waste Description:** The site received diesel oil.

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**Site Code:** UPR-100-N-43      **Classification:** Accepted

**Site Names:** UPR-100-N-43, 166-N / 184-N Pipelines      **ReClassification:**  
Liquid Unplanned Release 2 (4/26/89,  
Cleaned Up)

**Site Type:** Unplanned Release      **Start Date:** 1989

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

**Site Description:** The release site occurred at the oil supply piping from the 166-N to 184-N Buildings.

**Waste Type:** Oil

**Waste Description:** The spill was diesel oil from the diesel oil supply line to the 184-N Day Tank.

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**Site Code:** UPR-600-17      **Classification:** Accepted

**Site Names:** UPR-600-17, 600 Area Patrol Boat Spill,      **ReClassification:** Rejected (9/11/2000)  
UN-600-17

**Site Type:** Unplanned Release      **Start Date:** 1986

**Site Status:** Inactive      **End Date:** 1986

**Site Description:** The site of the release is a concrete boat ramp and the shoreline, periodically flooded as the Columbia River rises daily and seasonally.

**Waste Type:** Oil

**Waste Description:** The release consisted of 268.4 liters (70.9 gallons) of gasoline.

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**200-BC-1**

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**Site Code:** 216-B-14 **Classification:** Accepted  
**Site Names:** 216-B-14, 216-BC-1 Crib **ReClassification:**  
**Site Type:** Crib **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1956  
**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs and the 216-BC-201 siphon tank were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. The area has been covered with clean soil and posted as an Underground Radioactive Material area. There are concrete AC 540 markers to identify the site.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building during uranium recovery operations. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-15 **Classification:** Accepted  
**Site Names:** 216-B-15, 216-BC-2 Crib **ReClassification:**  
**Site Type:** Crib **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1957  
**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. The area has been covered with clean soil and posted as an Underground Radioactive Material area. There are concrete AC 540 markers to identify the site.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building during uranium recovery operations. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-16 **Classification:** Accepted  
**Site Names:** 216-B-16, 216-BC-3 Crib **ReClassification:**  
**Site Type:** Crib **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1956  
**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. The area has been covered with clean soil and posted as an Underground Radioactive Material area. There are concrete AC 540 markers to identify the site.  
**Waste Type:** Process Effluent

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**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-17 **Classification:** Accepted

**Site Names:** 216-B-17, 216-BC-4 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. The area has been covered with clean soil and posted as an Underground Radioactive Material area. There are concrete AC 540 markers to identify the site.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate. Curren (1972) states that the 216-B-17 crib received tank farm first cycle scavenged waste in January 1956.

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**Site Code:** 216-B-18 **Classification:** Accepted

**Site Names:** 216-B-18, 216-BC-5 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. The area has been covered with clean soil and posted as an Underground Radioactive Material area. There are concrete AC 540 markers to identify the site.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant from 221-U Building. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-19 **Classification:** Accepted

**Site Names:** 216-B-19, 216-BC-6 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1957

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

**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. The area has been covered with clean soil and posted as an Underground Radioactive Material area. There are concrete AC 540 markers to identify the site.

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**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate. Curren (1972) states that the 216-B-19 crib received both U Plant and Tank Farm scavenged waste.

**Site Code:** 216-B-20 **Classification:** Accepted

**Site Names:** 216-B-20, 216-BC-7 Trench, 216-B-20 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations.

**Waste Type:** Process Effluent

**Waste Description:** The site received scavenged waste from uranium recovery (tributyl phosphate [TBP] solvent extraction from the 221-U Building). The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate.

**Site Code:** 216-B-21 **Classification:** Accepted

**Site Names:** 216-B-21, 216-BC-8 Trench, 216-B-21 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. The waste includes inorganic compounds such as ferrocyanide, nitrate and phosphate.

**Site Code:** 216-B-22 **Classification:** Accepted

**Site Names:** 216-B-22, 216-BC-9 Trench, 216-B-22 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers

outline the area where the trenches are located, but do not identify specific trench locations. The trench was divided into 19 meters (62.5 foot) sections by 0.6-meter (2 foot) high earth dams. The side slope is 1:1.5. The depth was designed to be 3.7 meters (12 feet), but some documents report approximately 1.8 meters (6 feet).

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate

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**Site Code:** 216-B-23 **Classification:** Accepted

**Site Names:** 216-B-23, 216-BC-10 Trench, 216-B-23 **ReClassification:**

**Site Type:** Trench **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench is divided into eight 19-meter (62.5-foot) sections by 1.2-meter (4-foot) high earth dams. The unit has a 1:1.5 side slope.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate

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**Site Code:** 216-B-24 **Classification:** Accepted

**Site Names:** 216-B-24, 216-BC-11 Trench, 216-B-24 **ReClassification:**

**Site Type:** Trench **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench is divided into eight 19-meter (62.5-foot) sections by 1.2-meter (4-foot) high earthen dams. It has a 1.5:1 side slope.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant from 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-25 **Classification:** Accepted

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**Site Names:** 216-B-25, 216-BC-12 Trench, 216-B-25 Trench  
**ReClassification:**  
**Site Type:** Trench  
**Start Date:** 1956  
**Site Status:** Inactive  
**End Date:** 1956  
**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench is divided into eight 19-meter (62.5-foot) sections by 1.2-meter (4-foot) high earthen dams. It has a 1.5:1 side slope.

**Waste Type:** Process Effluent  
**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-26  
**Classification:** Accepted  
**Site Names:** 216-B-26, 216-BC-13 Trench, 216-B-26 Trench  
**ReClassification:**  
**Site Type:** Trench  
**Start Date:** 1956  
**Site Status:** Inactive  
**End Date:** 1957  
**Site Description:** A portion of this trench was excavated in 2008. The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations.

**Waste Type:** Process Effluent  
**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, phosphate and nitrate

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**Site Code:** 216-B-27  
**Classification:** Accepted  
**Site Names:** 216-B-27, 216-BC-14 Trench, 216-B-27 Trench  
**ReClassification:**  
**Site Type:** Trench  
**Start Date:** 1957  
**Site Status:** Inactive  
**End Date:** 1957  
**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench is divided into eight 19-meter (62.5-foot) sections, separated by 1.2-meter (4-foot) high earthen dams. It has a 1.5:1 side slope.

**Waste Type:** Process Effluent

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**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate

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**Site Code:** 216-B-28 **Classification:** Accepted

**Site Names:** 216-B-28, 216-BC-15 Trench, 216-B-28 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1957

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

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench construction divided it into eight 19-meter (62.5-foot) sections, separated by 1.2-meter (4-foot) high earthen dams. It has a 1.5:1 side slope.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. The waste contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-29 **Classification:** Accepted

**Site Names:** 216-B-29, 216-BC-16 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1957

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

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The site is a trench that was used for disposal of medium-activity liquid waste. The trench has been backfilled and the area has been surface stabilized.

The trench was a long narrow excavation with a 1:1.75 side slope. It was divided crosswise into two equal sections by an earthen dam. The dam was 1.5 meters (5 feet) high and 1.5 meters (5 feet) wide at the top. A 10.2 centimeter (4 inch) Schedule 40 pipe ran along the top edge of the trench. Four 7.62-centimeter (3-inch) Schedule 40 pipe sections extended laterally from the 10.2-centimeter (4-inch) pipe, down the side slope into the trench. Liquid discharge into the trench was controlled by gate valves located at the top of the lateral lines. A cover, constructed of 1 by 6 and 2 by 4 wood framing and sisalkraft paper, extended the length of the trench. The vertical distance from the cover to the trench bottom was a minimum of 1.5 meters (5 feet).

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-30 **Classification:** Accepted  
**Site Names:** 216-B-30, 216-BC-17 Trench, 216-B-30 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1957  
**Site Status:** Inactive **End Date:** 1957

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The site is a trench that was used for disposal of medium-activity liquid waste. The trench has been backfilled and the area has been surface stabilized.

The trench was a long narrow excavation with a 1:1.75 side slope. It was divided crosswise into two equal sections by an earthen dam. The dam was 1.5 meters (5 feet) high and 1.5 meters (5 feet) wide at the top. A 10.2 centimeter (4 inch) Schedule 40 pipe ran along the top edge of the trench. Four 7.62-centimeter (3-inch) Schedule 40 pipe sections extended laterally from the 10.2-centimeter (4-inch) pipe, down the side slope into the trench. Liquid discharge into the trench was controlled by gate valves located at the top of the lateral lines. A cover, constructed of 1 by 6 and 2 by 4 wood framing and sisalkraft paper, extended the length of the trench. The vertical distance from the cover to the trench bottom was a minimum of 1.5 meters (5 feet).

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-31 **Classification:** Accepted  
**Site Names:** 216-B-31, 216-BC-18 Trench, 216-B-31 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1957  
**Site Status:** Inactive **End Date:** 1957

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The site is a trench that was used for disposal of medium-activity liquid waste. The trench has been backfilled and the area has been surface stabilized.

The trench was a long narrow excavation with a 1:1.75 side slope. It was divided crosswise into two equal sections by an earthen dam. The dam was 1.5 meters (5 feet) high and 1.5 meters (5 feet) wide at the top. A 10.2 centimeter (4 inch) Schedule 40 pipe ran along the top edge of the trench. Four 7.62-centimeter (3-inch) Schedule 40 pipe sections extended laterally from the 10.2-centimeter (4-inch) pipe, down the side slope into the trench. Liquid discharge into the trench was controlled by gate valves located at the top of the lateral lines. A cover, constructed of 1 by 6 and 2 by 4 wood framing and sisalkraft paper, extended the length of the trench. The vertical distance from the cover to the trench bottom was a minimum of 1.5 meters (5 feet).

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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<b>Site Code:</b>	216-B-32	<b>Classification:</b>	Accepted
<b>Site Names:</b>	216-B-32, 216-BC-19 Trench, 216-B-32 Trench	<b>ReClassification:</b>	
<b>Site Type:</b>	Trench	<b>Start Date:</b>	1957
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1957

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The site is a trench that was used for disposal of medium-activity liquid waste. The trench has been backfilled and the area has been surface stabilized.

The trench was a long narrow excavation with a 1:1.75 side slope. It was divided crosswise into two equal sections by an earthen dam. The dam was 1.5 meters (5 feet) high and 1.5 meters (5 feet) wide at the top. A 10.2 centimeter (4 inch) Schedule 40 pipe ran along the top edge of the trench. Four 7.62-centimeter (3-inch) Schedule 40 pipe sections extended laterally from the 10.2-centimeter (4-inch) pipe, down the side slope into the trench. Liquid discharge into the trench was controlled by gate valves located at the top of the lateral lines. A cover, constructed of 1 by 6 and 2 by 4 wood framing and sisalkraft paper, extended the length of the trench. The vertical distance from the cover to the trench bottom was a minimum of 1.5 meters (5 feet).

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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<b>Site Code:</b>	216-B-33	<b>Classification:</b>	Accepted
<b>Site Names:</b>	216-B-33, 216-BC-20 Trench, 216-B-33 Trench	<b>ReClassification:</b>	
<b>Site Type:</b>	Trench	<b>Start Date:</b>	1957
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1957

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The site is a trench that was used for disposal of medium-activity liquid waste. The trench has been backfilled and the area has been surface stabilized.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-34 **Classification:** Accepted  
**Site Names:** 216-B-34, 216-BC-21 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1957  
**Site Status:** Inactive **End Date:** 1957  
**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The site is a trench that was used for disposal of medium-activity liquid waste. The trench has been backfilled and the area has been surface stabilized.

**Waste Type:** Process Effluent  
**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building. The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-52 **Classification:** Accepted  
**Site Names:** 216-B-52, 216-B-52 Trench, 216-BC-22 **ReClassification:**  
**Site Type:** Trench **Start Date:** 1957  
**Site Status:** Inactive **End Date:** 1958  
**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations.

**Waste Type:** Process Effluent  
**Waste Description:** The site received scavenged waste from the uranium recovery process in 221-U (tributyl phosphate [TBP] solvent extraction). The waste is high in salt and is neutral to basic. It contained inorganic compounds such as ferrocyanide, nitrate and phosphate.

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**Site Code:** 216-B-53A **Classification:** Accepted  
**Site Names:** 216-B-53A, 216-B-53A Trench, PRTR **ReClassification:**  
**Site Type:** Trench **Start Date:** 1965  
**Site Status:** Inactive **End Date:** 1965  
**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations.

**Waste Type:** Process Effluent  
**Waste Description:** The site received waste from the Plutonium Recycle Test Reactor in the 300 Area. The waste is neutral to basic. This trench received 100 grams of plutonium.

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**Site Code:** 216-B-53B **Classification:** Accepted

**Site Names:** 216-B-53B, 216-B-53 Trench, 216-B-53B Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1962

**Site Status:** Inactive **End Date:** 1963

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The BC Cribs and Trenches are located inside the radiologically controlled area known as the BC Controlled Area (UPR-200-E-83).

The trench is divided into two sections by an earthen dam at the center. The dam is 1.5 meters (5 feet) high and 12.7 centimeter (5 inch) wide at the top. The side slope is 1.75:1.

**Waste Type:** Process Effluent

**Waste Description:** The site received liquid waste from the 300 Area Hanford Laboratory Operations. The waste is low in salt and is neutral to basic.

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**Site Code:** 216-B-54 **Classification:** Accepted

**Site Names:** 216-B-54, 216-B-54 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1963

**Site Status:** Inactive **End Date:** 1963

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench is located inside the Radiologically Controlled Area boundaries known as the BC Controlled Area (UPR-200-E-83).

**Waste Type:** Process Effluent

**Waste Description:** The site received waste from the Hanford Laboratory Operations (BNWL) in the 300 Area. The waste is low in salt and is neutral to basic.

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**Site Code:** 216-B-58 **Classification:** Accepted

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

**Site Type:** Trench **Start Date:** 1965

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

**Site Description:** The BC trenches were surface stabilized as a unit. The backfilled trenches have been covered with clean soil and posted as Underground Radioactive Material. Concrete AC 540 markers outline the area where the trenches are located, but do not identify specific trench locations. The trench is within the posted Radiologically Controlled Area known as the BC Controlled Area (UPR-200-E-83).

The trench was divided into 7.6-meter (25-foot) sections by 1.2-meter (4-foot) high earthen

dams. Each section had a wooden cover. A 1.22-meter (48-inch) diameter pipe was placed along the bottom. The pipe was corrugated with five 10.16-centimeter (4-inch) diameter holes around the bottom half.

**Waste Type:** Process Effluent

**Waste Description:** The site received Batelle Northwest laboratory (BNWL) waste from the 300 Area. The waste is low in salt and is neutral to basic.

**Site Code:** 200-E-14 **Classification:** Accepted

**Site Names:** 200-E-14, 216-BC-201 Siphon Tank, 216-B-201, IMUST, Inactive Miscellaneous Underground Storage Tank **ReClassification:**

**Site Type:** Storage Tank **Start Date:** 1956

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

**Site Description:** The 216-B-14, 216-B-15, 216-B-16, 216-B-17, 216-B-18 and 216-B-19 cribs and the 216-BC-201 siphon tank were surface stabilized as a single area. All the surface structures (risers and vents) have been removed. There are concrete AC 540 markers to identify the site. The vents were visible until 1981 when the area was surface stabilized. The vent risers were removed at ground level and the area was covered with at least 0.6 meters (2 feet) of additional top soil. The area is posted as Underground Radioactive Material.

**Waste Type:** Process Effluent

**Waste Description:** Most of the liquid waste dispersed through this tank originated from the Uranium Recovery Process in 221-U (U-Plant). The process reclaimed the uranium metal from the tank farm waste derived from the bismuth phosphate fuel processing activities. Curren (1972) states that 216-B-17 and 216-B-19 also received scavenged tank farm waste. The waste includes ferrocyanide, phosphate, cesium, strontium, uranium, cobalt and ruthenium. The total effluent to the six cribs that passed through the 216-BC-201 Siphon Tank was 3.896E+07 liters (1.032E+07 gallons). At the time of discharge (1956), the total radionuclide activity for all six cribs equaled 26 curies of cobalt-60, 1,840 curies of cesium-137, 1,850 curies of strontium-90, 70 grams of plutonium and 1,410 kilograms (640 pounds) of uranium.

**Site Code:** 200-E-114-PL **Classification:** Accepted

**Site Names:** 200-E-114-PL, Pipeline from 241-BY Tank Farm to 241-C Tank Farm and BC Cribs Trenches, 2805-E1, 2805-E2, 2805-E3, 2805-E4, 216-BC-2805, Pipeline from 216-BY-201 to 216-BC-201 (See Subsites) **ReClassification:**

**Site Type:** Radioactive Process Sewer **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1954

**Site Description:** The two parallel underground pipelines are marked with metal posts and Underground Radioactive Material - Pipeline signs. (see subsites)

**Waste Type:** Soil

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**Waste Description:** The waste is the pipeline and adjacent soil contaminated from pipeline leaks. The pipeline carried scavenged uranium recovery process waste (tri-butyl phosphate solvent extraction).

**SubSites:**

**SubSite Code:** 200-E-114-PL:1

**SubSite Name:** 200-E-114-PL:1, North/South Pipeline

**Classification:** Accepted

**ReClassification:**

**Description:** Subsite 1 is the north-south portion of the pipeline that runs from 216-BY-201 Flush Tank to 216-BC-201 Flush Tank. It runs through the 200-E-223 Valve Pit. The pipeline is constructed of two parallel, 10 centimeter (4 inch) diameter pipes buried in the same soil trench.

**SubSite Code:** 200-E-114-PL:2

**SubSite Name:** 200-E-114-PL:2, East/West Pipeline

**Classification:** Accepted

**ReClassification:**

**Description:** Subsite 2 is the east-west portion of the pipeline that extends from the 200-E-223 Valve Pit to the 241-C Tank Farm. The pipeline is constructed of two parallel, 10 centimeter (4 inch) diameter pipes buried in the same soil trench.

**SubSite Code:** 200-E-114-PL:3

**SubSite Name:** 200-E-114-PL:3, Underground Steel Line from Gate Valve (North of 216-BC-201 Siphon Tank) to 216-B-20 Trench

**Classification:** Accepted

**ReClassification:**

**Description:** Four inch diameter underground steel line from gate valve (north of 216-BC-201 siphon tank) to 216-B-20 trench. A Notice of Radiological Problem was issued in January 2007. Wind had uncovered a portion of this old radioactive underground line. The maximum dose rate on the line was 60 mr/hr at contact. No removable contamination was identified.

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**200-CB-1**

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**Site Code:** 216-B-4 **Classification:** Accepted

**Site Names:** 216-B-4, 216-B-4 French Drain, 216-B-4 Dry Well, 216-B-4 Reverse Well **ReClassification:**

**Site Type:** Injection/Reverse Well **Start Date:** 1945

**Site Status:** Inactive **End Date:** 1949

**Site Description:** The site is marked with a single concrete AC-540 marker post, with an Underground Radioactive Material sign attached to the post. The top of the well extends 0.6 meters (2 feet) above ground.

**Waste Type:** Water

**Waste Description:** Before August 1947, the site received 291-B Stack drainage. After August 1947, the site received floor drainage from the 292-B Building. The waste is neutral to basic and low salt with less than one curie of total beta contaminants. The B Plant AAMS Report also mentions transuranic fission products.

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**Site Code:** 216-B-13 **Classification:** Accepted

**Site Names:** 216-B-13, 216-B-13 French Drain, 291-B Crib, 216-B-B, 216-B-13 Crib **ReClassification:**

**Site Type:** French Drain **Start Date:** 1945

**Site Status:** Inactive **End Date:** 1976

**Site Description:** A single, concrete AC-540 marker is the only site identifier. There an Underground Radioactive Material sign attached to the concrete post.

**Waste Type:** Process Effluent

**Waste Description:** The site received the 291-B-1 Stack drainage. In 6/76, the stack drainage was rerouted to a catch tank, jetted to the wind tunnel, drained to a sump, and then pumped to a cell drainage sample tank. The waste is low in salt and is neutral to basic.

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**Site Code:** 216-B-60 **Classification:** Accepted

**Site Names:** 216-B-60, 216-B-60 Crib **ReClassification:**

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

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

**Site Description:** The crib is not visible because the 225-B Building was built on top of the crib site in 1975. There is a sign posted on the south wall of the 225-B building indicating where the 216-B-60 crib is located.

**Waste Type:** Process Effluent

**Waste Description:** The site received the cell cleanout solid and liquid waste from the 61 centimeter (24 inch) 221-B Building cell cleanout drain line. The waste was low in salt and was neutral to basic. Composite sample results indicated 715.5 kilograms of uranium, 0.08 grams of plutonium, 777 curies of Ce-144, 8 curies of Cs-137 and 5 curies of Eu-154.

**Site Code:** 221-B **Classification:** Discovery  
**Site Names:** 221-B, B Plant Facility, B Plant Canyon **ReClassification:**  
**Site Type:** Process Unit/Plant **Start Date:** 1945  
**Site Status:** Inactive **End Date:**

**Site Description:** The B Plant facility is one of the original Hanford chemical processing buildings. The 221-B Process Canyon is a large, reinforced concrete building. It consists of twenty sections (two cells per section) with expansion joints between each section. The building is divided lengthwise into the gallery side and the canyon chemical processing side by a thick, concrete shielding wall running the full length of the building.

**Site Code:** 200-E-6 **Classification:** Accepted  
**Site Names:** 200-E-6, Septic Tank, Sanitary Sewer Repair and Replacement 2607-E4 **ReClassification:**  
**Site Type:** Septic Tank **Start Date:** 1981  
**Site Status:** Inactive **End Date:** 1998

**Site Description:** The septic tank is surrounded by chain with four steel posts painted yellow. The tank is posted with a septic tank sign. The tank has two 10 centimeter (4-inch) PVC pipes which protrude vertically from the ground. The sanitary tile field is surrounded with a steel post and chain barricade and is posted with Caution Underground Radioactive Material signs.

**Waste Type:** Sanitary Sewage

**Waste Description:** The site received sewage from lavatory facilities within the 221-B Building.

**Site Code:** 200-E-55 **Classification:** Accepted  
**Site Names:** 200-E-55, Effluent Drain East of 291-B Sand Filter, Miscellaneous Stream #322 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1948  
**Site Status:** Inactive **End Date:** 1997

**Site Description:** There are no visual surface features for this drain. It has been marked with a single steel post. The drain is below grade and east of the B-Plant Sand Filter. The french drain consists of a hole 1.83 meters (6 feet ) in diameter, 0.9 meters (3 feet) deep backfilled with gravel.

**Waste Type:** Process Effluent

**Waste Description:** The drain received condensate from the B-Plant canyon sand filter and rain water that leaked through the sand filter roof. An auger drill sample of the sand filter french drain was collected in September 1994. A spilt spoon sample was collected at 4.8 meters (16 feet) below ground surface. Maximum contamination levels in the soil read 20,000 disintegrations per minute beta/gamma and 2100 disintegrations per minute alpha with hand held instruments. The sample was shipped to a mobile laboratory for analysis.

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**Site Code:** 2607-E4 **Classification:** Accepted  
**Site Names:** 2607-E4, 2607-E4 Septic Tank and Tile Field **ReClassification:**  
**Site Type:** Septic Tank **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1998  
**Site Description:** The septic tank and tile field are marked with a Sanitary Sewer/Drain Field sign and lie with a posted Underground Radioactive Material area. The 2607-E4 Septic Tank is constructed of reinforced concrete that drains to an adjacent tile field.  
**Waste Type:** Sanitary Sewage  
**Waste Description:** This septic tank received sanitary wastewater and sewage from B Plant facilities at an estimated rate of 0.24 cubic meters (8.5 cubic feet) per day. The tank was abandoned in 1998. No information was provided related to sampling.

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**Site Code:** UPR-200-E-1 **Classification:** Accepted  
**Site Names:** UPR-200-E-1, Waste Line Failure on South Side of 221-B **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1946  
**Site Status:** Inactive **End Date:** 1946  
**Site Description:** The unplanned release is not separately marked or posted.  
**Waste Type:** Process Effluent  
**Waste Description:** The original line break (metal waste line) had dose rates up to 400 rad per hour.

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**Site Code:** UPR-200-E-2 **Classification:** Accepted  
**Site Names:** UPR-200-E-2, UN-200-E-2, Spotty Contamination Around the B and T Plant Stacks **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1947  
**Site Status:** Inactive **End Date:**  
**Site Description:** This unplanned release is not physically posted or marked.  
**Waste Type:** Chemicals  
**Waste Description:** Spotty ground contamination around the B Plant stack. Most stack releases consisted of ruthenium.

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**Site Code:** UPR-200-E-44 **Classification:** Accepted  
**Site Names:** UPR-200-E-44, UN-200-E-44, BCS Waste Line Leak South of 221-B **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1972

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

**Site Description:** The release site is not separately marked or posted. There is no visual evidence of the area that caved in.

**Waste Type:** Process Effluent

**Waste Description:** The leaking effluent from the BCS crib line caused the ground to cave in. The dirt was contaminated with readings of 10,000 to 20,000 counts per minute. The pipe was contaminated with readings up to 20 millirem per hour.

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**Site Code:** UPR-200-E-52 **Classification:** Accepted

**Site Names:** UPR-200-E-52, UN-200-E-52, Contamination Spread Outside the North Side of 221-B **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1975

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

**Site Description:** In 2008, an area approximately 4 meters (13 feet) wide by 9 meters (30 feet) was posted with a WIDS sign and Underground Radioactive Material Area signs (see photos).

**Waste Type:** Process Effluent

**Waste Description:** Beta/gamma with readings up to 20,000 counts per minute were found in the soil under the steam pressure relief discharge pipe from the E-5-2 Strontium Concentrator. Another area on the north side of 221-B was contaminated up to 100,000 counts per minute.

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**Site Code:** UPR-200-E-54 **Classification:** Accepted

**Site Names:** UPR-200-E-54, UN-200-E-54, Contamination Outside 225-B Doorway **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1977

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

**Site Description:** There is a sign posted on the south wall of 225-B, next to Door 130, that reads UPR-200-E-54. There is no radiological posting around the doorway or in the soil adjacent to the concrete door pad.

**Waste Type:** Water

**Waste Description:** Water seeping under an exit door caused beta/gamma with readings of 25 millirads/hour direct and 20,000 counts per minute smearable on the concrete pad outside the door at 225-B. Contamination readings in the soil were 10,000 counts per minute. The contaminated liquid was from a manipulator decontamination activity.

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**Site Code:** UPR-200-E-55 **Classification:** Accepted

**Site Names:** UPR-200-E-55, UN-200-E-55, Contamination Spread South of B Plant **ReClassification:**



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**Site Code:** UPR-200-E-87 **Classification:** Accepted  
**Site Names:** UPR-200-E-87, UN-216-E-15, 224-B **ReClassification:**  
South Side Plutonium Ground  
Contamination, UN-200-E-87, 216-E-15  
**Site Type:** Unplanned Release **Start Date:** 1945  
**Site Status:** Inactive **End Date:** 1953  
**Site Description:** Some areas on the south side of 224-B are posted with Underground Radioactive Material signs.  
The release site is not specifically marked.  
**Waste Type:** Process Effluent  
**Waste Description:** Approximately 75 grams (3 ounces) of plutonium-239 may have leaked into the soil at 224-B,  
based on an actual excavation that found contaminated soil at 224-T in 200 West Area.

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**Site Code:** UPR-200-E-103 **Classification:** Accepted  
**Site Names:** UPR-200-E-103, UN-200-E-103, BCS **ReClassification:**  
Line Leak South of R-17 at 221-B  
**Site Type:** Unplanned Release **Start Date:** 1972  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The release site is not marked or posted. The change house structure has been removed.  
**Waste Type:** Process Effluent  
**Waste Description:** The release consisted of contaminated liquid from the BCS crib line, with radiation levels up to  
1,500 counts per minute at the surface of the depression and 100,000 counts per minute inside  
the excavation.

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**200-CP-1**

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**Site Code:** 202-A **Classification:** Discovery  
**Site Names:** 202-A, PUREX Facility, PUREX Canyon **ReClassification:**  
**Site Type:** Process Unit/Plant **Start Date:** 1955  
**Site Status:** Inactive **End Date:**  
**Site Description:** The 202-A facility is a large, reinforced concrete structure that includes a concrete canyon with below grade cells that contain the equipment used for chemical separation.

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**Site Code:** 216-A-11 **Classification:** Accepted  
**Site Names:** 216-A-11 French Drain, Miscellaneous Stream #465 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The site is inside a small area delineated by steel posts and chain. It is posted as an Underground Radioactive Material area. A 0.76 meter (2.5 foot) diameter, circular metal cover is visible. One concrete AC-540 marker identifies the site.

The unit is composed of two reinforced concrete pipes placed vertically end to end. The excavation is 3.0 meters (10 feet) in diameter and extends to a depth of 1.5 meters (5 feet) below the bottom. Both the drain and the excavation are filled with 8-centimeter (3-inch) rock to the top and are backfilled over.

**Waste Type:** Steam Condensate  
**Waste Description:** The site received the Trap Pit #1 drainage from the 202-A Building. The waste was low in salt and was neutral to basic. The site contains less than 50 curies total beta activity.

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**Site Code:** 216-A-12 **Classification:** Accepted  
**Site Names:** 216-A-12, Miscellaneous Stream #463 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The site is not marked or posted. There are no visible surface features for this drain. The wall of the trap pit includes a "French Drain" label. The unit is composed of two reinforced concrete tile pipes placed vertically end to end. The excavation is 3.0 meters (10 feet) in diameter and extends 1.5 meters (5 feet) below the bottom. Both the drain and the excavation are filled with gravel to the top of the unit and backfilled over. This site cannot be visually located.

**Waste Type:** Steam Condensate  
**Waste Description:** The site received the Steam Trap Pit #3 drainage from the 202-A Building. The waste was low in salt and was neutral to basic. The site contains less than 50 curies total beta activity. It is possible that more than one Trap Pit drained to this french drain.

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**Site Code:** 216-A-13 **Classification:** Accepted  
**Site Names:** 216-A-13, 216-A-13 French Drain, Miscellaneous Stream #460 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1962

**Site Description:** The site is not marked or posted. A 1.2 meter (45 inch) diameter metal cover is visible over the drain. The drain is constructed of two lengths of concrete pipe placed vertically end to end. The unit is filled to a depth of 0.9 meters (3 feet) with 5 to 8 centimeters (2 to 3 inches) of rock. This unit has a bed of gravel around the lower section of pipe extending a minimum of 0.3 meters (1 foot) away from the pipe in all directions.

**Waste Type:** Water

**Waste Description:** The site received the seal water from the air sampler vacuum pumps in the 202-A Building. The waste is low in salt, neutral to basic, and contains less than 1 curie total beta activity.

The 1993 PUREX AAMS Report lists the total volume released as 100,000 liters (30,000 gallons), but does not give the reference for this discrepancy from the original Stenner report. It is assumed that the original number is correct, and the AAMS report added an extra "0" in error.

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**Site Code:** 216-A-14 **Classification:** Accepted  
**Site Names:** 216-A-14, French Drain - Vacuum Cleaner Filter Pit, Miscellaneous Stream #462 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1972

**Site Description:** The drain is not marked or posted. There are no visible surface features for this french drain. The Vacuum Cleaner Filter Pit is a concrete box with approximately 0.6 meters (2 feet) above grade. The sump is inside the pit and drains through an underground pipe to the buried french drain. The drain is composed of two reinforced concrete pipes placed vertically end to end. The excavation is 3.0 meters (10 feet) in diameter and extends to a depth of 1.5 meters (5 feet) below the bottom. Both the drain and the excavation are filled with 8-centimeter (3-inch) rock to the top and backfilled over.

The filter pit access is labeled Contamination Area, Radiation Area, Airborne Contamination and Confined Space.

A 10 centimeter (4 inch) M23b-UD inlet pipe, approximately 1.5 meters (5 feet) long, extends horizontally into the unit, 7.9 meters (26 feet) below grade. The site has a 1.3 centimeter (0.5 inch) thick steel cover.

**Waste Type:** Steam Condensate

**Waste Description:** The site received the vacuum cleaner filter and blower pit drainage from the 202-A Building. The waste was low in salt, neutral to basic, and contains less than 1 curie total beta activity.

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**Site Code:** 216-A-32 **Classification:** Accepted  
**Site Names:** 216-A-32, 216-A-32 Crib **ReClassification:**

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**Site Type:** Crib **Start Date:** 1959  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The site is currently surrounded with cement posts with Underground Radioactive Material signs. There had been an inner area marked with steel posts, chains and Surface Contamination signs. The area was surface stabilized in 2001 and is now covered with clean gravel.

**Waste Type:** Water  
**Waste Description:** The site received the 202-A canyon crane maintenance facility floor, sink, and shower drainage. The site contains less than 1 curie total beta activity. In a letter (Walsar 1966), Isochem Corporation indicates the intent to dispose of 24,600 liters (6,500 gallons) of approximately 50% Soltrol (a brand of purified kerosene) diluent in this crib. BHI-00178 (1995) reports that investigators were unable to verify if the proposed disposal took place.

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**Site Code:** 216-A-35 **Classification:** Accepted  
**Site Names:** 216-A-35, 216-A-35 French Drain, 216-A-35 Dry Well **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1963  
**Site Status:** Inactive **End Date:** 1966  
**Site Description:** The drain is a raised cement structure, painted yellow and surrounded with Underground Radioactive Material signs. The top cover is marked Confined Space.

**Waste Type:** Water  
**Waste Description:** The site received the seal cooling water from the air sampler vacuum pumps in the 202-A Building. The waste is low in salt, neutral to basic, and contains less than 1 curie of total beta activity.

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**Site Code:** 200-E-65 **Classification:** Accepted  
**Site Names:** 200-E-65, 202A Building Steam Condensate, Miscellaneous Stream #466 Injection Well (R) **ReClassification:**  
**Site Type:** Injection/Reverse Well **Start Date:**  
**Site Status:** Inactive **End Date:** 1996  
**Site Description:** The site is a 1.2 meter (4 foot) diameter concrete drain with a metal plate cover. It is flush with the ground surface. On October 15, 1998, the inside of the drain was dry.

**Waste Type:** Steam Condensate  
**Waste Description:** The site received non-contaminated steam condensate. However, the drain is located within an area that had been posted as a Radiological Contamination Area (see sitecode 200-E-107). A radiation survey done in October 1998 did not detect any contamination.

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**Site Code:** 200-E-67 **Classification:** Accepted

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**Site Names:** 200-E-67, 202A Building Steam Condensate, Miscellaneous Stream #494      **ReClassification:**

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

**Site Status:** Inactive      **End Date:** 1996

**Site Description:** The drain is located inside a dome shaped caisson. The dome shaped caisson is surrounded by post and chain and posted with Contamination Area signs. The dome is labeled 202-A-417.

**Waste Type:** Steam Condensate

**Waste Description:** The drain is located inside a caisson that is posted as a Contamination Area.

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**Site Code:** 200-E-70      **Classification:** Accepted

**Site Names:** 200-E-70, Line #8801 Steam Condensate, Miscellaneous Stream #64, Injection Well (Q)      **ReClassification:**

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

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

**Site Description:** The site is a 0.9 meter (3 foot) diameter drain with four holes in the cover located 2.1 meters (7 feet) east of the steam line. There are several open-ended, cut pipes. It is assumed these pipes once were connected to the drain cover. The cover is posted with Confined Space signs. On May 18, 2000, it was located inside a posted Contamination Area.

**Waste Type:** Steam Condensate

**Waste Description:** The drain received non-contaminated steam condensate. However, the drain had been located within a large Soil Contamination Area (200-E-107). During a site walkdown in 1998, the RCT found 10,000 disintegration per minute beta/gamma on the steam pipes and in the gravel using a hand held instrument.

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**Site Code:** 200-E-71      **Classification:** Accepted

**Site Names:** 200-E-71, Line #8801 Steam Condensate, Miscellaneous Stream #63, Injection Well (O)      **ReClassification:**

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

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

**Site Description:** The site is a man-made hole under the steam line. It is approximately 0.9 meters (3 feet) deep and 0.61 meters (2 feet) wide. There is no drain structure. The steam vented directly into the soil.

**Waste Type:** Steam Condensate

**Waste Description:** The site received non-contaminated steam condensate. However, it had been located inside a larger area that was posted as a Soil Contamination Area (see sitecode 200-E-103).

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**Site Code:** 200-E-73      **Classification:** Accepted

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**Site Names:** 200-E-73, Line #8801 Steam Condensate, Miscellaneous Stream #61, Injection Well (M) **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1996

**Site Description:** The site is a 0.9 meter (3 foot) diameter concrete structure with a rusty metal cover.

**Waste Type:** Steam Condensate

**Waste Description:** The drain received non-contaminated steam condensate, but the drain is located within the boundaries 200-E-103. This area had been a Soil Contamination Area prior to being surface stabilized in 1999.

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**Site Code:** 200-E-74 **Classification:** Accepted

**Site Names:** 200-E-74, Line #8801 Steam Condensate, Miscellaneous Stream #62, Injection Well (N) **ReClassification:**

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

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

**Site Description:** The site is a 0.9 meter (3 foot) diameter drain with a rusty metal cover. On October 15, 1998, the inside of the covered drain was inspected. The drain was dry, but rust stained.

**Waste Type:** Steam Condensate

**Waste Description:** The site received non-contaminated steam condensate, but is located within an area that had been posted as a Soil Contamination Area (200-E-103).

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**Site Code:** 200-E-77 **Classification:** Accepted

**Site Names:** 200-E-77, Line #8801 Steam Condensate, Miscellaneous Stream #65, Injection Well (S) **ReClassification:**

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

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

**Site Description:** The site is a 1.2 meter (4 foot) diameter concrete structure with a metal cover. The structure is slightly above grade and is filled with rocks. On October 15, 1998, the inside of drain was dry.

**Waste Type:** Steam Condensate

**Waste Description:** The site received non-contaminated steam condensate, but is located within an area that had been posted as a Contamination Area (200-E-107).

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**Site Code:** 200-E-79 **Classification:** Accepted

**Site Names:** 200-E-79, Line #8801 Steam Condensate, Miscellaneous Stream #66, Injection Well **ReClassification:**

(T)

**Site Type:** Injection/Reverse Well

**Start Date:**

**Site Status:** Inactive

**End Date:** 1997

**Site Description:** The site is a 0.9 meter (3 foot) diameter concrete drain under a steam line with a metal cover. There is a rusty pipe going into the drain. On October 15, 1998, the inside of the drain was dry. It was inside a posted Contamination Area.

**Waste Type:** Steam Condensate

**Waste Description:** Although the drain received non-contaminated steam condensate, it is located inside and area that had been a posted Contamination Area (200-E-107).

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**Site Code:** 200-E-84

**Classification:** Accepted

**Site Names:** 200-E-84, 202A Building Steam Condensate, Miscellaneous Stream #58, Injection Well (C)

**ReClassification:**

**Site Type:** Injection/Reverse Well

**Start Date:**

**Site Status:** Inactive

**End Date:** 1996

**Site Description:** The site is a 0.9 meter (3 foot) diameter, gravel filled french drain that received steam condensate. The drain is flush with the surrounding gravel surface except for a small lip on one side. A steel drain pipe extends over the french drain.

**Waste Type:** Steam Condensate

**Waste Description:** The drain was installed to receive steam condensate. The Inventory of Miscellaneous Streams Report states the steam source has been eliminated and that it is a gravel filled french drain with no cover, that has a potential to receive stormwater runoff. A site walkdown in 1998 determined the pipe above the drain is a pressure relief valve associated with the PUREX building steam system. The walkdown team believes the drain is not physically located in a location that would collect stormwater run off.

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**Site Code:** 200-E-107

**Classification:** Accepted

**Site Names:** 200-E-107, Contamination Area East of PUREX, PUREX E Field

**ReClassification:**

**Site Type:** Unplanned Release

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site was a large, irregularly shaped, posted Contamination Area. The posted contamination east of the tunnels (218-E-14 and 218-E-15) extended into the double security fence. The area east of the Railroad Cut included the 216-A-32 Crib and the 2607-EE Sanitary Septic Tank and Tile Field, but ended at the inner security fence. In May 2000, a narrow corridor was considered a Radiological Buffer Area and separated the northern portion of the Contamination Area from the southern portion. Both sections are considered to be one waste site. The entire area was stabilized and reposted an Underground Radioactive Material Area in 2001.

**Waste Type:** Soil

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

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

**Site Names:** 2607-EE, 2607-EE Septic System **ReClassification:**

**Site Type:** Septic Tank **Start Date:** 1956

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

**Site Description:** The site is a septic tank with a drain field extending northeast of the septic tank. The area is surrounded with light duty posts and chain. One riser pipe is visible.

**Waste Type:** Sanitary Sewage

**Waste Description:** The unit received sanitary wastewater and sewage from the PUREX facility. The source area is in a potentially contaminated zone; therefore, the waste has the potential of being contaminated.

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**Site Code:** UPR-200-E-28 **Classification:** Accepted

**Site Names:** UPR-200-E-28, Contamination Release Inside the PUREX Exclusion Area, UN-200-E-28 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1961

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

**Site Description:** This release occurred in the eastern half of the PUREX exclusion area. The exclusion area is posted as a Contamination Area. The release can not be individually distinguished within the zone.

**Waste Type:** Process Effluent

**Waste Description:** Fission product specks were released from a PUREX trap pit due to process vessel steam coil failures.

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**Site Code:** UPR-200-E-39 **Classification:** Accepted

**Site Names:** UPR-200-E-39, Release from 216-A-36B Crib Sampler (295-A), UN-200-E-39 **ReClassification:**

**Site Type:** Unplanned Release **Start Date:** 1968

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

**Site Description:** The release site is not separately marked or posted. It is located inside a large surface stabilized area known as 200-E-103 that is posted as an Underground Radioactive Material area.

**Waste Type:** Process Effluent

**Waste Description:** The site received pressurized PUREX ammonia scrubber waste containing fission products. The readings were 20 to 450 millirad/hour.

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**Site Code:** UPR-200-E-96 **Classification:** Accepted

**Site Names:** UPR-200-E-96, Ground Contamination SE of PUREX, UN-216-E-24, UN-200-E-96 **ReClassification:**

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

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

**Site Description:** The site was described in 1980 as an area measuring approximately 1.0 hectare (2.5 acres) located adjacent to the east and south sides of 202-A (PUREX). These areas are now covered with gravel and posted as Underground Radioactive Material areas.

**Waste Type:** Process Effluent

**Waste Description:** The release consisted of low-level radioactive particles resulting from PUREX operations, most likely fall out from the 291-A stack and diversion box activities.

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**200-CR-1**

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**Site Code:** 202-S **Classification:** Accepted**Site Names:** 202-S, 202-S REDOX, S Plant (See Subsites) **ReClassification:****Site Type:** Process Unit/Plant **Start Date:** 1952**Site Status:** Inactive **End Date:** 1967**Site Description:** The 202-S Building is one of the five canyon buildings. The inactive waste management unit is a large reinforced concrete structure. The canyon's processing areas and equipment are contained in small rooms called cells. The nine cells are arranged in rows that are spanned by a large crane. Each cell is topped by a thick, concrete cover. This cover is removed by the crane, allowing access to the underlying cells. The gallery above the cell cover is the same height as the cell, allowing process equipment to be manipulated during maintenance and operations.**Waste Type:** Equipment**Waste Description:** The unit contains solid radioactive waste.**The Following Sites Were Consolidated With This Site:****Site Code:** 296-S-1**Site Names:** 296-S-1, 296-S-1 Stack**Reason:** Within Boundary Of Larger Site**Site Code:** 296-S-2**Site Names:** 296-S-2, REDOX North Sample Gallery, Hoods Ventilation and PR Cage, 296-S-2 Stack**Reason:** Within Boundary Of Larger Site**Site Code:** 296-S-4**Site Names:** 296-S-4, REDOX Decontamination Room, Regulated Shop, Regulated Tool Room, Low-Level Decontamination Sink and Special Work Permit Lobby Vent**Reason:** Within Boundary Of Larger Site**Site Code:** 296-S-6**Site Names:** 296-S-6, 296-S-6 Stack, REDOX Silo Ventilation**Reason:** Within Boundary Of Larger Site**SubSites:****SubSite Code:** 202-S:1**SubSite Name:** 202-S:1, 211-S Tank Farm**Classification:** Accepted**ReClassification:****Description:** The 211-S Tank Farm is located west of the 202-S canyon building. It was a liquid chemical storage area. The tank farm consists of eight above ground steel storage tanks ranging from

16,430 liters (4300 gallons) to 186,200 liters (49,000 gallons). The tanks held nitric nonahydrate, nitric acid, sodium dichromate and sodium hydroxide. All of the tanks, pumps and piping were flushed and emptied when the REDOX facility was deactivated. The area had been posted as a Contamination Area due to migration of contamination from nearby contaminated processes and Surface Contamination Areas. The 211-S Tank Farm was covered with a minimum of 15.24 centimeters of clean gravel in November 2002. The area was downposted as an Underground Radioactive Material Area.

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**Site Code:** 2904-S-170 **Classification:** Accepted

**Site Names:** 2904-S-170, 2904-S-170 Weir Box, 2904-S-170 Control Structure **ReClassification:**

**Site Type:** Control Structure **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1976

**Site Description:** The 2904-S-170 Control Structure is an inactive, below grade concrete structure. From the surface it can be identified by four metal posts surrounding the site. It is posted with Underground Radioactive Material signs. Two 76 centimeter (30 inch) diameter vitrified clay pipes provided inlet and outlet underground access to the structure. The 2904-SA sample building is located over the south end of the weir structure. A manhole and a riser are visible adjacent to the 2904-SA building.

**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 is beta/gamma smearable contamination and penetrating radiation present. Contamination was derived from the effluents traveling through the unit.

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**Site Code:** 218-W-7 **Classification:** Accepted

**Site Names:** 218-W-7, 222-S Vault **ReClassification:**

**Site Type:** Burial Vault **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1960

**Site Description:** The waste site is a carbon steel burial vault. The outer surface of the vault is coated with a layer of hot coal tar enamel to prevent corrosion, 4.3 meters (14 feet) deep, resting on a 0.3-meter (1-foot) concrete foundation. The vault has a dome and vent structure that extends 3.2 meters (10.5 feet) to the surface. The ground surface is graveled, and the vent is protected by yellow metal poles and a chain with radiation zone signs.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** This vault received dry, packaged laboratory and sampler waste from the 222-S Laboratory.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** UPR-200-W-137

**Site Names:** UPR-200-W-137, 218-W-7, UN-200-W-137

**Reason:** Duplicate Site

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**Site Code:** UPR-200-W-43 **Classification:** Accepted  
**Site Names:** UPR-200-W-43, Contaminated Blacktop East of 233-S, UN-200-W-43 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1957  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is no longer marked or posted. The 233-S building was demolished in 2003 and 2004.  
**Waste Type:** Soil  
**Waste Description:** Alpha with readings up to 2,000 disintegrations per minute was found on the black top north of REDOX and east of 233-S.

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**Site Code:** UPR-200-W-56 **Classification:** Accepted  
**Site Names:** UPR-200-W-56, Contamination at the REDOX Column Carrier Trench, UN-200-W-56 **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1961  
**Site Status:** Inactive **End Date:**  
**Site Description:** The site is located inside the REDOX facility fence. It is not separately marked or posted.  
**Waste Type:** Chemicals  
**Waste Description:** Beta/gamma contamination was measured at the site with readings at 30,000 counts/minute on the gravel and 80,000 counts/minute on the blacktop.

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**Site Code:** UPR-200-W-57 **Classification:** Accepted  
**Site Names:** UPR-200-W-57, UPR-200-E-120 (error in area number assignment), UN-200-W-57, 233-S Fire **ReClassification:**  
**Site Type:** Unplanned Release **Start Date:** 1963  
**Site Status:** Inactive **End Date:**  
**Site Description:** A fire, which started in the 233-S Building, spread plutonium contamination throughout the building and to a small degree outside of the building. The release site is not physically marked or posted.  
**Waste Type:** Ash  
**Waste Description:** Alpha radiation levels in plutonium-contaminated materials in the soot, ashes, and in the air greater than 5 million disintegrations per minute.

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**Site Code:** UPR-200-W-61 **Classification:** Accepted  
**Site Names:** UPR-200-W-61, REDOX Ground Contamination, UN-200-W-61 **ReClassification:**



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## 200-CU-1

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**Site Code:** 221-U **Classification:** Accepted

**Site Names:** 221-U, 221-U Canyon Building, 221-U Building, U Plant, 276-U (See Subsites) **ReClassification:**

**Site Type:** Process Unit/Plant **Start Date:** 1952

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

**Site Description:** The 221-U Process Canyon is a large, reinforced concrete building. It consists of twenty sections (two cells per section) with expansion joints between each section. The building is divided lengthwise into the gallery side and the canyon chemical processing side by a thick, concrete shielding wall running the full length of the building. The building contains processing equipment and tanks that supported the uranium recovery process. The canyon deck currently is used to store radioactively contaminated surplus/spare equipment. The 221-U facility is accessed through the 271-U annex, which is attached to the west side of the 221-U building.

**Waste Type:** Process Effluent

**Waste Description:** Processing areas and equipment are contaminated with uranium and fission products. Residual chemicals remain from the uranium recovery and equipment decontamination activities.

### SubSites:

**SubSite Code:** 221-U:1

**SubSite Name:** 221-U:1, 211-U Tank Farm, Chemical Storage Tanks

**Classification:** Accepted

### **ReClassification:**

**Description:** The 211-U Tank Farm was a bulk liquid storage area, consisting of nine aboveground storage tanks. The tanks are located on the west side of the 221-U building. Six tanks are horizontal tanks, 2.7 meter diameter, 11 meters long ( 9 foot diameter, 36 feet long). Three of the horizontal tanks were sodium hydroxide storage tanks, one was a demineralized water storage tank and two were considered spare tanks. Three tanks are vertical tanks, 3 meter diameter, 4.2 meters high (10 foot diameter, 14 feet high). One was a demineralized water storage tank and two were chemical make-up tanks. The bulk liquid was transferred to the 211-U tanks from rail cars or trucks.

In 2002, only four horizontal tanks and one vertical tank remained. The area had been posted with Radiological Buffer Area/Radioactive Material Area signs. The area around the tanks was covered with clean gravel and reposted with Underground Radioactive Material signs.

**SubSite Code:** 221-U:2

**SubSite Name:** 221-U:2, 211-UA, 211-AU Tank Farm, Chemical Storage Tanks

**Classification:** Accepted

### **ReClassification:**

**Description:** The 211-UA (alias 211-AU) Tank Farm consists of sixteen aboveground storage tanks. Thirteen tanks have a capacity of 380,000 liters (100,000 gallons) each. The tanks are located on the west side of the 221-U building. Nine of these tanks were nitric acid storage tanks and four were sodium hydroxide storage tanks. Three smaller tanks 2.7 meters in

diameter and 2.7 meters tall (9 feet diameter, 9 feet tall) were nitric acid sample tanks. The bulk liquid was transported to the tanks in railcars or trucks.

The Uranium Recovery Process at 224-U received uranyl nitrate from REDOX and PUREX. After the uranium was removed, the "reclaimed" nitric acid was stored in the 211-UA tanks. It was transferred from 224-U to 211-UA via overhead lines. The slightly radioactive nitric acid was recycled back to REDOX and PUREX. In the 1960's and 1970's it was returned to the separations facilities in railcars. It was pumped out of the 211-UA tanks into the railcars via underground lined and a pump pit. Some leakage was associated with the pumping process and caused low level radioactive contamination around the area.

The reclaimed nitric acid storage was moved from 211-UA to a holding tank within the 224-U facility in the 1980's and the railcar unloading platform was abandoned. Some residual acid and waste water, contaminated above crib release limits, continued to be stored in the 211-UA tanks. All the acid and waste water was removed from the tanks prior to being transitioned to the new Environmental Restoration Contractor in 1994. Although the tanks were emptied, the acid pump pit and underground lines had not been flushed. Leaking valves and seals and residual contamination in the pump pit caused low level radioactive contamination to spread around the tanks and railcar unloading platform. The area was posted as a Contamination Area again in the early 1990's. The lines and pump pit were flushed in 1998 and the surface contamination was covered with gravel. The area was changed to an Underground Radioactive Material Area.

In 2002, only ten tanks remained. They had been posted with Contamination Area signs. The area surrounding the tanks was covered with clean gravel and reposted with Underground Radioactive Material signs.

**SubSite Code:** 221-U:3

**SubSite Name:** 221-U:3, 276-U Tank Farm, Solvent Storage Tanks

**Classification:** Accepted

**ReClassification:**

**Description:** The 276-U Solvent storage area consists of six tanks mounted inside a cement basin, located on the south end of the 221-U building. Tank leakage was collected in a sump that could be returned to the tanks, sent to a drum out facility or discharged to cribs. The 276-U tanks are connected to the 221-U building by the hot pipe trench in the 221-U pipe gallery. Organic make-up solutions of tributyl phosphate and diluent were stored and treated and routed to the 221-U vessels via the pipe gallery. The diluent storage tank has a (29,000 gallon) capacity. The tributyl phosphate storage tank has a (6,000 gallon) capacity. The organic receiver storage tank has a (10,000 gallon) capacity. The organic treatment storage tank has a (10,000 gallon) capacity. The organic treatment sample storage tank has a (1,300 gallon) capacity. The RAX feed storage tank has a (10,000 gallon) capacity.

**Site Code:** 271-U **Classification:** Accepted

**Site Names:** 271-U, 271-U Office Building, 271-U Building **ReClassification:**

**Site Type:** Office **Start Date:** 1952

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

**Site Description:** The 271-U Office Building was the office/service building constructed of a reinforced concrete foundation, floors, and pillars with pumice block walls. The four story structure (including the basement) is physically attached to the gallery side of the 221-U Canyon.

**Waste Type:** Chemicals

**Waste Description:** Residual chemicals and radionuclides may be present in some portions of this building. The contamination may be related to vermin intrusion or from processes that were conducted in this unit.

**Site Code:** 291-U **Classification:** Accepted

**Site Names:** 291-U, 291-U Fan Control House **ReClassification:**

**Site Type:** Process Unit/Plant **Start Date:** 1945

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

**Site Description:** The building is constructed of reinforced concrete foundation and floor, concrete and block walls, and a concrete slab roof covered with asphalt and gravel, trimmed in wood. It is a one-story, one-room building with wooden doors containing the ventilation system instrumentation. Two electric fans are located outside, adjacent to the building. The fan control house is located within a larger, posted Underground Radioactive Material area, although the 291-U building and exhaust fans remain posted as Contamination Areas.

**Waste Type:** Equipment

**Waste Description:** The instrument house has likely become contaminated from exhaust from 221-U.

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

**Site Names:** 291-U-1, 291-U-1 Stack, 291-U Stack **ReClassification:**

**Site Type:** Stack **Start Date:** 1945

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

**Site Description:** The unit consists of a reinforced concrete stack, lined with acid-resistant brick resting on an octagonal, two-tiered foundation of brick and concrete. The stack is 61 meters (200 feet) high and 4.3 meters (14 feet) in diameter at the base. The stack is located within a larger Underground Radioactive Material area, although the 291-U building and exhaust fans remain posted as Contamination Areas.

**Waste Type:** Chemicals

**Waste Description:** The air exhaust system was contaminated with radioactive particulates.

**Site Code:** 292-U **Classification:** Discovery

**Site Names:** 292-U, 292-U Stack Monitoring Station, 291-U Stack Exhaust Monitoring Building **ReClassification:**

**Site Type:** Process Unit/Plant **Start Date:**

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

**Site Description:** The 292-U building is a cement block structure.

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**200-CW-1**

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**Site Code:** 216-A-25 **Classification:** Accepted

**Site Names:** 216-A-25, Gable Pond, Gable Mountain Swamp, 216-A-25 Swamp, Gable Mountain Pond **ReClassification:**

**Site Type:** Pond **Start Date:** 1957

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

**Site Description:** The site was a large, water-filled pond that received cooling water from the Plutonium Uranium Extraction (PUREX) and B-Plant operations. The pond had a total surface area of 32 hectares (82 acres), 28 hectares (71 acres) in the main pond and a 4.4-hectare (11-acre) overflow pond. The average depth of the unit was 1.5 meters (5 feet), with a maximum depth of 3 meters (9 feet). The pond has been backfilled and surface stabilized. The backfilled pond is delineated with concrete markers and posted as Underground Radioactive Material. An additional area of soil contamination was identified in 1996, north of the west end of the overflow pond. This area was given the Waste Information Data System (WIDS) Site Code number 600-118. In 1997, the area was surface stabilized and reposted as Underground Radioactive Material, adding 3.3 hectares (8.2 acres) to the total radiologically posted area.

**Waste Type:** Water

**Waste Description:** Until May 1958, the unit received the process cooling water from 202-A Building (Plutonium Uranium Extraction [PUREX] Plant). From May 1958 to 1960, the unit received the above plus cooling water from the contact condenser in the 241-A-431 Building. In 1960, the unit received the above plus the surface condensator cooling water in the 241-A-401 Building (A Tank Farm). From November 1967 to January 1968, the unit received the above plus the wastewater from the 284-E Powerhouse. From January 1968 to March 1969, the unit received the above plus the cooling water and steam condensate from the 244-AR Vault. In March 1969, the pipeline to the contact condenser cooling system from the 241-A-431 Building Vault was valved out. After March 1977, the unit received the above plus the 242-A Evaporator steam condensate cooling water. (RHO-CD-798 shows a valve at the east end of the 216-B-2-3 Ditch connecting to PUREX Cooling Water Line to Gable Pond. The graphic is labeled "Effluent Pipelines and Transfer Capabilities for Gable Mountain and B Ponds". The B-Plant Aggregate Area Management Study Report [AAMSR] does not list B-Plant as a contributor to the Gable Pond inventory. However, WHC-SD-DD-TI-036 states that Gable Pond later served B-Plant.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** 600-118

**Site Names:** 600-118, Hot Spot Northwest of Gable Mountain Pond, Contaminated Soil Northwest of Gable Mountain Pond

**Reason:** This site is an overflow from Gable Mountain Pond.

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**Site Code:** 216-B-3 **Classification:** Accepted

**Site Names:** 216-B-3, B Pond, B-3 Pond, 216-B-3 Main Pond, B Swamp, 216-B-3 Swamp, B Plant Swamp **ReClassification:**

**Site Type:** Pond **Start Date:** 1945

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**Site Status:** Inactive **End Date:** 1994

**Site Description:** The 216-B-3 Pond has been backfilled and surface stabilized. It is marked and posted with Underground Radioactive Material Area signs. The main pond was roughly rectangular, with a surface area of 14 hectares (35 acres). The pond was expanded to include three additional lobes, 216-B-3A, 216-B-3B, and 216-B-3C, with areas of 4 hectares (10 acres), 4 hectares (10 acres), and 17 hectares (41 acres), respectively. The three expansion lobes are considered three separate waste sites. Collectively, the expansion ponds are also a separate RCRA treatment, storage and disposal (TSD) unit.

**Waste Type:** Process Effluent

**Waste Description:** Waste streams flowed from the 216-A-29 and 216-B-3-3 Ditches into the 216-B-3 Pond. Discharges to 216-B-3 via 216-B-3-3 included: 221-B Building steam condensate and process cooling water; 284-E Powerhouse water; 244-CR Vault cooling water; 244-AR Vault and 242-A Evaporator cooling water; 202-A process cooling water, condenser cooling water, and air sampler vacuum pumps seal cooling water; 241-BY Tank Farm condenser cooling water; and Waste Encapsulation Storage Facility cooling water. Discharges to 216-B-3 via 216-A-29 included 202-A chemical sewer and acid fractionator condensate. The main pond received corrosive and toxic dangerous waste from two primary sources: the regeneration of the Plutonium Uranium Extraction (PUREX) plant demineralizer columns and from spills of dangerous or mixed waste from PUREX. The spills included hydrazine, cadmium nitrate, and ammonium fluoride/ ammonium nitrate. The backwash from the regeneration of the demineralizer columns included nitric acid, sulphuric acid, sodium hydroxide, and potassium hydroxide.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** UPR-200-E-34

**Site Names:** UPR-200-E-34, Liquid Release to B-Pond and Gable Pond, UN-200-E-34

**Reason:** Within Boundary Of Larger Site

**Site Code:** 216-B-3A RAD **Classification:** Accepted

**Site Names:** 216-B-3A RAD, 216-B-3A Expansion Lobe Residual Radioactive Waste, 216-B-3 1st Overflow Pond, West Expansion Lobe **ReClassification:**

**Site Type:** Pond **Start Date:** 1983

**Site Status:** Inactive **End Date:** 1984

**Site Description:** This site is the residual radioactive contamination that remains in the 216-B-3A Pond. The site was closed out as a RCRA Treatment, Storage and Disposal Unit following cleanup of chemical contamination. The unit is roughly rectangular with approximately 4.5 hectares (11 acres) of surface area. It is inactive and dry. It was sampled and released from radiological controls with the exception of the percolation trench that is posted as a Soil Contamination Area. The pond was approximately 5.5 meters (18 feet) lower than the 216-B-3 Main Pond elevation. 8-millimeter (0.3-inch) plastic was placed along the slope of the pond banks and covered with gravel.

**Waste Type:** Process Effluent

**Waste Description:** 216-B-3A received overflow from the 216-B-3 Main Pond. Potential sources include 221-B steam condensate and process cooling water, 284-E Powerhouse water, 244-CR, 244-AR and

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242-A cooling water, 202-A process, condenser, and air sampler vacuum pump cooling water, 202-A chemical sewer, fractionator condensate, and WESF cooling water.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** UPR-200-E-14  
**Site Names:** UPR-200-E-14, UN-200-E-14, 216-B-3 Pond Dike Break  
**Reason:** Within Boundary Of Larger Site

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**Site Code:** 216-B-3B RAD **Classification:** Accepted  
**Site Names:** 216-B-3B RAD, 216-B-3B Expansion **ReClassification:**  
Lobe Residual Radioactive Waste, East  
Expansion Lobe  
**Site Type:** Pond **Start Date:** 1984  
**Site Status:** Inactive **End Date:** 1985

**Site Description:** The unit is roughly rectangular with approximately 4.4 hectares (11 acres) of surface area. It is dry with a small radiologically posted area (Surface Contamination) in the northwest corner of the pond. The 216-3A, 3B and 3C Expansion ponds make up a separate RCRA TSD Unit.

**Waste Type:** Process Effluent

**Waste Description:** With the exception of the 216-B-3A dike failure incident, the 216-B-3B Pond Lobe was never used. In 1991, a characterization borehole was drilled through the 216-B-3B Pond (well # 699-42-41B). It was drilled to a depth of 124 feet with a cable tool rig and split tube sampling. The casing was later pulled and the well was abandoned. Twenty six samples were analyzed for radionuclides (Sample numbers B00GV6 - B00GV9, B00GW0 -B00GW9, B00GX2 -B00GX8, B00GY0- B00GY2, B00GY9, B00GZ2-B00GZ8). No radioactive field readings were noted. Aliquots submitted to the onsite laboratory found no evidence of radioactive contamination. Samples were taken at intervals from depths of 1.5 to 37 meters (5 to 122 feet).

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**Site Code:** 216-B-3C RAD **Classification:** Accepted  
**Site Names:** 216-B-3C RAD, 216-B-3C Expansion **ReClassification:**  
Lobe Residual Radioactive Waste  
**Site Type:** Pond **Start Date:** 1985  
**Site Status:** Active **End Date:** 1997

**Site Description:** The unit is rectangular pond with approximately 17 hectares (41 acres) of surface area. It was excavated into a very coarse gravel layer with a very high percolation rate. The pond was constructed with eight parallel north-south trenches and one east-west trench at the spillway.

**Waste Type:** Process Effluent

**Waste Description:** The 216-B-3C received effluent from the 216-B-3A Overflow Pond from 1985 to 1994. In 1994, the effluent from the 216-B-3-3 Ditch was routed directly to the 216-B-3C. Effluent included water from the 200 East Powerhouse Ditch. The flow to 216-B-3C was permanently isolated on August 18, 1997.

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**Site Code:** 200-E-118 **Classification:** Accepted

**Site Names:** 200-E-118, 216-B-3 Diverter Station and Shack, Main Diverter Structure #3, Diverter Station #3 **ReClassification:**

**Site Type:** Control Structure **Start Date:**

**Site Status:** Inactive **End Date:** 1994

**Site Description:** The site is a small building (shack) that is labeled Main Diverter Structure #3. Inside the shack, the floor is made of metal grating. Below grade pipes and valves are visible through the grate. A section of the floor is open to the pipes below, and has a radiation rope across the opening. The rope had been posted with an old Surface Contamination Area sign. There had been a posted Contamination Area around a portion of the outside of the shack. In April 2007, the contamination was backfilled with clean dirt and the area posting was changed to Underground Radioactive Material. Just outside of the posted Contamination Area is a valve, labeled 216-B-3-3 Diverter Valve. Two concrete manholes are present, one on each side of the diverter valve.

**Waste Type:** Equipment

**Waste Description:** The site is an abandoned shed posted with Contamination Area signs.

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**Site Code:** 216-S-16P **Classification:** Accepted

**Site Names:** 216-S-16P, 202-S Swamp and Ditch, 202-S Swamp #1, REDOX Pond #2 **ReClassification:**

**Site Type:** Pond **Start Date:** 1957

**Site Status:** Inactive **End Date:** 1975

**Site Description:** The pond consisted of four lobes separated by dikes and a leach trench that extended east from Lobe #2 toward the 216-S-17 Pond. The pond has been backfilled and surface stabilized. It is surrounded by concrete markers and 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 until June 1967. Only lobe #1 received REDOX process effluent. The 202-S Building process (REDOX) was put on standby in July 1967. After July 1967, the site received condenser and vessel cooling water from concentrator boil-down operations in the 202-S Building via the 216-S-16 Ditch and overflow from the 216-U-10 Pond via the 216-U-9 Ditch.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** UPR-200-W-47

**Site Names:** UPR-200-W-47, 216-S-16P Dike Release, UN-200-W-47

**Reason:** Within Boundary Of Larger Site

**Site Code:** UPR-200-W-59

**Site Names:** UPR-200-W-59, Contaminated Liquid Released to 216-S-16P

**Reason:** Within Boundary Of Larger Site

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**Site Code:** 216-S-17 **Classification:** Accepted  
**Site Names:** 216-S-17, 202-S Swamp, 202-S REDOX Swamp, 216-S-1 REDOX Pond No. 1, REDOX Swamp, 216-S-1 **ReClassification:**  
**Site Type:** Pond **Start Date:** 1951  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** This site consists of a 6.9 to 8.5 hectare (17 to 21 acre) pond. The site was interim stabilized in 1984 and posted as "Underground Radioactive Material".

The original pond site was formed by creating an earthen dike approximately one meter (3.3 feet) high on the north and west sides of the site. The designated use area was approximately 23 hectares (57 acres), but photographs indicated that only 8 hectares (20 acres) were inundated at any time. The pond averaged about 0.3 meters (1 foot) deep with a maximum depth of 0.6 meters (2 feet).

**Waste Type:** Process Effluent

**Waste Description:** Until January 1953, the site received process cooling water and steam condensate from the 202-S Building. After January 1953, the site received the 202-S Building effluent and the overflow from the 216-U-10 Pond via the 216-U-9 Ditch. During April and May of 1953, solvent naphtha was utilized to kill the vegetation, but it did not work. During July 1953, copper sulfate, 2-4-D, and sodium chlorate were also used to kill vegetation.

In October 1952, a steam coil failure (UPR-200-W-15) in the REDOX D-12 Waste Concentrator caused gross contamination of process cooling water, the 207-S Retention Basin and the 216-S-17 Swamp. During November 1952, another unplanned release (UPR-200-W-13) caused further contamination at the 207-S Retention Basin and the 216-S-17 Swamp.

The major potential radiological contaminants of concern are cesium-137, strontium-90, and uranium-238.

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**Site Code:** 216-U-9 **Classification:** Accepted  
**Site Names:** 216-U-9, U Swamp-S Swamp Ditch, 216-U-6 **ReClassification:**  
**Site Type:** Ditch **Start Date:** 1952  
**Site Status:** Inactive **End Date:** 1975  
**Site Description:** The site currently appears as a dry, V shaped depression. It is not marked or radiologically posted. It appears on drawing H-2-44510 as a "Y" shaped ditch. The east fork lead to 216-S-17 Pond and the west fork lead to 216-S-16 Pond. Although historical documentation indicates the fork to the 216-S-17 pond was backfilled, a 1999 site visit noted that both forks of the ditch appear to be dry, "V" shaped excavation

**Waste Type:** Process Effluent

**Waste Description:** The site received the overflow from the 216-U-10 Pond.

**The Following Sites Were Consolidated With This Site:**

**Site Code:** UPR-200-W-18

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**Site Names:** UPR-200-W-18, Liquid Release to 216-U-9  
**Reason:** UPR-200-W-18 is a duplicate of UPR-200-W-139 which was consolidated into 216-U-9.  
**Site Code:** UPR-200-W-139  
**Site Names:** UPR-200-W-139, Liquid Release to the 216-U-9 Ditch, UN-200-W-139, UPR-200-W-18  
**Reason:** Within Boundary Of Larger Site

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**Site Code:** 216-U-10 **Classification:** Accepted  
**Site Names:** 216-U-10, U Swamp, 216-U-1, 216-U-10 Pond, 231 Swamp **ReClassification:**  
**Site Type:** Pond **Start Date:** 1944  
**Site Status:** Inactive **End Date:** 1985  
**Site Description:** This site is a 12 hectare (30 acre), backfilled, surface stabilized pond. It is posted with Underground Radioactive Material signs.

**Waste Type:** Process Effluent  
**Waste Description:** The large volumes of low-level wastewater and occasional isolated releases of considerably higher level, non-routine discharges have resulted in the accumulation of transuranic, fission product and activation product inventories. It is estimated that 90% of the plutonium introduced to the waste stream from Z Plant was retained in the ditches (216-Z-1, 216-Z-11 and 216-Z-19).

**The Following Sites Were Consolidated With This Site:**

**Site Code:** UPR-200-W-104  
**Site Names:** UPR-200-W-104, UN-216-W-14, 216-U-10 Pond Leach Trench, U Pond Fingers  
**Reason:** Within Boundary Of Larger Site

**Site Code:** UPR-200-W-105  
**Site Names:** UPR-200-W-105, UN-216-W-15, 216-U-10 Pond Leach Trench  
**Reason:** Within Boundary Of Larger Site

**Site Code:** UPR-200-W-106  
**Site Names:** UPR-200-W-106, UN-216-W-16, 216-U-10 Pond Leach Trench  
**Reason:** Within Boundary Of Larger Site

**Site Code:** UPR-200-W-107  
**Site Names:** UPR-200-W-107, UN-216-W-17, 216-U-10 Pond Flood Plain  
**Reason:** Within Boundary Of Larger Site

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**Site Code:** 216-U-11 **Classification:** Accepted  
**Site Names:** 216-U-11, U Swamp Extension Ditch, 216- **ReClassification:**

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U-12, 216-U-11 Trench, 216-U-11 Ditch,  
216-U-11 (Old Ditch), 216-U-11 (New  
Ditch)

**Site Type:** Ditch **Start Date:** 1944

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

**Site Description:** This site consists of a backfilled, interim stabilized ditch that is posted with "Underground Radioactive Material" signs.

**Waste Type:** Process Effluent

**Waste Description:** The ditch received overflow from the 216-U-10 Pond. A limited field investigation of high-priority waste units was conducted from August 1993 through August 1994. This investigation included the 216-U-11 Ditch. A special surface radiation survey was done with the MSCM II tractor and two surface soil samples were collected near the two outlet lines. Approximately 6% of the ditch surveyed with the tractor showed readings elevated above background. However, a recheck of these areas with hand-held instruments did not show elevated readings, so it is assumed the elevated readings were due to sub-surface contamination. The surface soil sample results were insignificant.

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**Site Code:** UPR-200-W-124 **Classification:** Accepted

**Site Names:** UPR-200-W-124, Dike Break at the REDOX Pond, UN-200-W-124 **ReClassification:**

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

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

**Site Description:** The historical documentation for this release is vague. It most likely occurred at the 216-S-17 Pond. The Sketch G in HW-60807 points to 216-S-17 but the location description text in HW-60807 could also indicate the 216-S-19 Pond.

**Waste Type:** Process Effluent

**Waste Description:** The waste was contaminated cooling water from the process tanks at the 202-S Building.

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**200-CW-3**

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**Site Code:** 200-N-3 **Classification:** Accepted  
**Site Names:** 200-N-3, Ballast Pits **ReClassification:** No Action (3/17/2010)  
**Site Type:** Depression/Pit (nonspecific) **Start Date:**  
**Site Status:** Inactive **End Date:**

**Site Description:** The remedial action chosen for this waste site is No Action. Several open pits are located southwest of the (demolished) 212-P building. Each pit is approximately 12 meters across. The soil contains a large amount of gravel sized rock. Debris in the form of metal pipes, wood, electrical insulators, metal cans and rusted drums were noted inside the pit during a site visit in May 2004.

**Waste Type:** Misc. Trash and Debris

**Waste Description:** A 1992 site visit indicated electrical conduit and mechanical parts were visible in the bottom of the pits. A 1996 site visit found only a small amount of metallic debris in the bottom of one pit. In 2004, metal piping, electrical insulators, wood, rusted 5 gallon cans and small rusted drums were identified in the pit. It is possible there were less tumbleweeds in the pit during this visits that may have obscured some of the debris during other site visits.

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**Site Code:** 216-N-1 **Classification:** Accepted  
**Site Names:** 216-N-1, 212-N Swamp, 216-N-1 Swamp, **ReClassification:**  
216-N-1 Covered Pond  
**Site Type:** Pond **Start Date:** 1944  
**Site Status:** Inactive **End Date:** 1952

**Site Description:** No chains or barriers delineate the boundaries of this site. A single permanent concrete monument marked the north end of the pond site. The concrete marker had one Underground Radioactive Material sign on it. All radiological postings were removed in 2010, following remediation of the pond.

**Waste Type:** Process Effluent

**Waste Description:** The site received the basin overflow from the 212-N Building . The waste type is low level radioactivity.

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**Site Code:** 216-N-2 **Classification:** Accepted  
**Site Names:** 216-N-2, 212-N Storage Basin Crib #1, **ReClassification:** No Action (7/30/2007)  
212-N #1 Trench, 216-N-1 Trench, 216-N-2 Trench  
**Site Type:** Trench **Start Date:** 1947  
**Site Status:** Inactive **End Date:** 1947

**Site Description:** The site has been reclassified to "No Action".  
The site was surrounded by a light weight chain barrier and concrete markers. It was posted with "Underground Radioactive Material" warning signs. A single chain enclosed both the 216-N-2

and 216-N-3 Waste Sites.

**Waste Type:** Process Effluent

**Waste Description:** The site received the basin water and sludge from the 212-N Fuel Storage Basin when it was drained for special tests. The site was deactivated by removing the overground piping and backfilling the unit with 1.8 meters (6 feet) of clean soil. Typically practice was to place the aboveground piping in the trench prior to backfilling. The waste type is low activity.

**Site Code:** 216-N-3 **Classification:** Accepted  
**Site Names:** 216-N-3, 212-N Storage Basin Crib #2, 212-N #2 Trench, 212-N #2 Grave, 212-N-2 Trench, 216-N-3 Trench **ReClassification:** No Action (7/30/2007)

**Site Type:** Trench **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1952

**Site Description:** The site has been reclassified to "No Acton".

The site was surrounded by a light weight chain barrier and concrete markers. It was posted with Underground Radioactive Material signs. Both the 216-N-2 and 216-N-3 trenches were located within the chained barrier.

**Waste Type:** Process Effluent

**Waste Description:** The site received fuel storage basin water and sludge from the 212-N Building when the facility was shut down in 1952. The site was deactivated by removing the overground piping and backfilling the unit with 1.8 meters (6 feet) of clean soil. Typically, the above ground pipe was placed into the trench prior to backfilling. The waste type is low activity.

**Site Code:** 216-N-4 **Classification:** Accepted

**Site Names:** 216-N-4, 216-N-2, 216-N-4 Swamp, 212-P Swamp **ReClassification:**

**Site Type:** Pond **Start Date:** 1944

**Site Status:** Inactive **End Date:** 1952

**Site Description:** The site had been marked by "Underground Radioactive Material" warning signs attached to concrete AC-540 marker posts that surround the site. The radiological posting was removed in September 2010.

**Waste Type:** Process Effluent

**Waste Description:** The site received the basin overflow waste from the 212-P Building. The waste is low activity.

**Site Code:** 216-N-5 **Classification:** Accepted

**Site Names:** 216-N-5, 212-P Storage Basin Crib, 212-P Trench, 212-P Grave, 216-N-5 Trench **ReClassification:** Interim Closed Out (7/19/2007)

**Site Type:** Trench **Start Date:** 1952

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**Site Status:** Inactive **End Date:** 1952

**Site Description:** The site has been remediated and "Interim Closed Out".  
Prior to remediation the site was surrounded by a light weight chain barrier and concrete markers. It was posted with "Underground Radioactive Material" warning signs.

**Waste Type:** Process Effluent

**Waste Description:** The site received the basin water and sludge cleanout from the 212-P Basin during shutdown of the area. Typically, the above ground piping was placed in the trench prior to backfilling. The waste type is low activity.

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**Site Code:** 216-N-6 **Classification:** Accepted

**Site Names:** 216-N-6, 212-R Swamp, 216-N-6 Swamp **ReClassification:**

**Site Type:** Pond **Start Date:** 1944

**Site Status:** Inactive **End Date:** 1952

**Site Description:** The site had been marked with "Underground Radioactive Material" warning signs attached to concrete AC-540 marker posts. The postings were removed after remedial activities were completed.

**Waste Type:** Process Effluent

**Waste Description:** The site received the normal overflow from the 212-R Fuel Storage Basin. The waste is low activity.

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**Site Code:** 216-N-7 **Classification:** Accepted

**Site Names:** 216-N-7, 212-R Storage Basin Crib, 212-R Trench, 212-R Grave, 216-N-7 Trench **ReClassification:** Interim Closed Out (9/11/2007)

**Site Type:** Trench **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1952

**Site Description:** This trench has been remediated. The trench was excavated and backfilled. It will be revegetated with native grasses.

Prior to remediation, the site had been delineated with light weight chain and concrete marker posts and posted with Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The site received the water and sludge from 212-R Fuel Storage Basin clean out. The site was retired when 212-R was shut down. The waste type is low activity.

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

**Site Names:** 2607-N, 2743-N Guard House Septic Tank and Tile Field **ReClassification:** Rejected (3/17/2010)



for this pipeline. Only a small portion of the clay pipeline was removed and pulverized for sampling.

A site visit in July 2010 observed the pipeline was posted with Underground Radioactive Material Pipeline signs.

**Waste Type:** Process Effluent

**Waste Description:** The contaminants of potential concern (COPCs) for the 600-285-PL, 600-286-PL and 600-287-PL waste sites were identified based on existing information for the site and the COPCs listed in the Remaining Sites ROD. The COPC list identified in the Sampling and Analysis Plan for Remediation of 200 North Area Waste Sites located in the 200-CW-3 Operable Unit (SAP) (DOE/RL-2007-54) includes americium-241, cobalt-60, cesium-137, europium-152, europium-154, europium-155, tritium, strontium-90, plutonium-238, plutonium-239 and 240, nickel-63, thorium-232, technetium-99, uranium-233/234, uranium-235, uranium-238, hexavalent chromium, mercury, lead, barium, trivalent chromium, cadmium, antimony, arsenic, manganese, zinc, and polychlorinated biphenyls.

<b>Site Code:</b>	600-286-PL	<b>Classification:</b>	Accepted
<b>Site Names:</b>	600-286-PL, Pipeline from 212-P to 216-N-4 Pond	<b>ReClassification:</b>	No Action (10/27/2009)
<b>Site Type:</b>	Radioactive Process Sewer	<b>Start Date:</b>	1945
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1952
<b>Site Description:</b>	The waste site is an underground, 46 centimeter (18 inch) diameter, vitrified clay pipe that fed the 216-N-4 pond. The Confirmatory Sampling/No Action remediation alternative was selected for this pipeline. Only a small portion of the clay pipeline was removed and pulverized for sampling.		

A site visit in July 2010 observed the pipeline was posted with Underground Radioactive Material Pipeline signs.

**Waste Type:** Process Effluent

**Waste Description:** The contaminants of potential concern (COPCs) for the 600-285-PL, 600-286-PL and 600-287-PL waste sites were identified based on existing information for the site and the COPCs listed in the Remaining Sites ROD. The COPC list identified in the Sampling and Analysis Plan for Remediation of 200 North Area Waste Sites located in the 200-CW-3 Operable Unit (SAP) (DOE/RL-2007-54) includes americium-241, cobalt-60, cesium-137, europium-152, europium-154, europium-155, tritium, strontium-90, plutonium-238, plutonium-239 and 240, nickel-63, thorium-232, technetium-99, uranium-233/234, uranium-235, uranium-238, hexavalent chromium, mercury, lead, barium, trivalent chromium, cadmium, antimony, arsenic, manganese, zinc, and polychlorinated biphenyls.

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**Site Code:** 600-287-PL **Classification:** Accepted  
**Site Names:** 600-287-PL, Pipeline from 212-R to 216-N-6 Pond **ReClassification:** No Action (10/27/2009)  
**Site Type:** Radioactive Process Sewer **Start Date:** 1945  
**Site Status:** Inactive **End Date:** 1952  
**Site Description:** The waste site is an underground, 46 centimeter (18 inch) diameter, vitrified clay pipe that fed the 216-N-6 pond. The Confirmatory Sampling/No Action remediation alternative was selected for this pipeline. Only a small portion of the clay pipeline was removed and pulverized for sampling.

A site visit in July 2010 observed the pipeline was posted with Underground Radioactive Material Pipeline signs.

**Waste Type:** Process Effluent

**Waste Description:** The contaminants of potential concern (COPCs) for the 600-285-PL, 600-286-PL and 600-287-PL waste sites were identified based on existing information for the site and the COPCs listed in the Remaining Sites ROD. The COPC list identified in the Sampling and Analysis Plan for Remediation of 200 North Area Waste Sites located in the 200-CW-3 Operable Unit (SAP) (DOE/RL-2007-54) includes americium-241, cobalt-60, cesium-137, europium-152, europium-154, europium-155, tritium, strontium-90, plutonium-238, plutonium-239 and 240, nickel-63, thorium-232, technetium-99, uranium-233/234, uranium-235, uranium-238, hexavalent chromium, mercury, lead, barium, trivalent chromium, cadmium, antimony, arsenic, manganese, zinc, and polychlorinated biphenyls.

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**Site Code:** UPR-200-N-1 **Classification:** Accepted  
**Site Names:** UPR-200-N-1, Unplanned Release at the 212-R Railroad Spur **ReClassification:** No Action (3/17/2010)  
**Site Type:** Unplanned Release **Start Date:**  
**Site Status:** Inactive **End Date:**  
**Site Description:** In 1992, the railroad track was delineated with light weight chain and posted with Surface Contamination signs and measured 91 meters (300 feet) in length. UPR-200-N-1 is this portion of the railroad track extending south from the demolished 212-R building. In 2009, the only postings at UPR-200-N-1 were Contamination Area and Radiation Area postings immediately around the rail cars that remain on the rail spur.

**Waste Type:** Equipment

**Waste Description:** Contaminated rail cars are stored on this railroad spur.

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**Site Code:** UPR-200-N-2 **Classification:** Accepted  
**Site Names:** UPR-200-N-2, 200-N-2, Unplanned Release Near Well Pumphouse No. 2, Well Pumphouse East of 212-R **ReClassification:** No Action (3/17/2010)

**Site Type:** Unplanned Release

**Start Date:**

**Site Status:** Inactive

**End Date:**

**Site Description:** The site was a 6.1 by 6.1-meter (20 by 20-foot) area surrounded by a lightweight chain barrier and Underground Radioactive Material warning signs. There were two open, wood lined holes with valves inside the posted area. They measured approximately 1 meter square and were approximately 1 meter deep.

A site visit in July 2010 observed an area adjacent to the pump house foundation posted with chain and Underground Radioactive Material signs. Another area nearby contained debris and was posted with Soil Contamination Area signs.

**Waste Type:** Soil

**Waste Description:** The contaminants of potential concern (COPCs) for the UPR-200-N-2 waste site were identified based on existing information for the site. COPCs are listed in the Remaining Sites ROD and carried forward to the Sampling and Analysis Plan for Remediation of 200 North Area Waste Sites located in the 200 CW 3 Operable Unit (SAP) (DOE/RL 2007-54) and include americium 241, cobalt 60, cesium 137, europium 152, europium 154, europium 155, tritium, strontium 90, plutonium 238, plutonium 239/240, nickel 63, thorium 232, technetium 99, uranium 233/234, uranium 235, uranium 238, hexavalent chromium, mercury, lead, barium, trivalent chromium, cadmium, antimony, arsenic, manganese, zinc, and polychlorinated biphenyls.

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## 200-CW-5

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<b>Site Code:</b>	216-Z-1D	<b>Classification:</b>	Accepted
<b>Site Names:</b>	216-Z-1D, 216-Z-1, Drainage Ditch to U Swamp, Z Plant Ditch	<b>ReClassification:</b>	
<b>Site Type:</b>	Ditch	<b>Start Date:</b>	1944
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1959
<b>Site Description:</b>	The 216-Z-1D Ditch is a backfilled, surface stabilized unit that runs from a point east of the 231-Z Building, curving southward to the 216-U-10 Pond. In 1949, the northern portion of the ditch was backfilled. The backfilled portion of the ditch was replaced with an underground pipeline (see sitecode 200-W-125) for 231-Z effluent. The southern portion of the ditch is co-located within a large Underground Radioactive Material area that also includes the 216-Z-11 and 216-Z-19 ditches.		

**Waste Type:** Process Effluent

**Waste Description:** The 216-Z-1D Ditch received process cooling water, steam condensate, and pump sealant waters from the 231-Z, 234-5Z, and 291-Z Buildings. It is classified as a transuranic contaminated soil site. Plutonium and americium are the dominant radionuclides present in the ditch. The majority of the plutonium was retained in the ditch sediments and did not flow into the 216-U-10 Pond. A comparison of annual plutonium discharges for the dates when the 216-Z-1 Ditch was active indicates that at least 1.4 Kilograms (3 pounds) of plutonium was released to the 216-Z-1 Ditch. The contamination burden includes 137 curies of Pu-239 and 37 curies of Pu-240.

Previously, in 1959, when the entire ditch was open from its original inlet from the 234-5Z Building (before the upper 526 meters were replaced with a pipeline), a mud sampling project took three samples of the ditch sediment every 100 feet from the inlet pipe to the outlet into 216-U-10 Pond (81 samples from the Z-1D ditch, plus others from 216-U-10 Pond shoreline). The levels of plutonium ranged up to 27.1 micrograms per gram plutonium (almost all plutonium 239) at 800 feet from the inlet. The levels at 485 meters (1600 feet) from the inlet were still at 1.7 micrograms per gram plutonium. The 1959 report concluded that there was between 3 and 10 kilograms of plutonium in the ditch.

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<b>Site Code:</b>	216-Z-11	<b>Classification:</b>	Accepted
<b>Site Names:</b>	216-Z-11, 216-Z-11 Ditch, Z Plant Ditch	<b>ReClassification:</b>	
<b>Site Type:</b>	Ditch	<b>Start Date:</b>	1959
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1971
<b>Site Description:</b>	The 216-Z-11 ditch is a backfilled, surface stabilized ditch that ran from the east side of the 234-5Z facility southward to the 216-U-10 Pond. The ditch is currently co-located within a large, posted Underground Radioactive Material area that also includes the 216-Z-1D and 216-Z-19 ditches. When active, the unit was a long narrow ditch with 2.5:1 sloped sides and a 0.05% grade.		

**Waste Type:** Process Effluent

**Waste Description:** The total volume discharged to this ditch is unknown. The ditch received process cooling water and steam condensate from the 234-5Z Building, cooling and seal water from the 291-Z Stack,

and laboratory waste from 231-Z. It also received storm water from an elevated tank located south to 234-5Z. The site is a transuranic contaminated soil site. During the 1960's, a special Space Nuclear Auxiliary Power program was operating in Z-Plant. The program isolated plutonium-238 and released plutonium 239/240 to the 216-Z-11 ditch as waste. Plutonium and americium were the dominant radionuclides in the effluent discharge. The ditch has been reported to contain 137 curies of plutonium 239 and 37 curies of plutonium 240.

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<b>Site Code:</b>	216-Z-19	<b>Classification:</b>	Accepted
<b>Site Names:</b>	216-Z-19, 216-U-10 Ditch, Z Plant Ditch, 216-Z-19 Ditch	<b>ReClassification:</b>	
<b>Site Type:</b>	Ditch	<b>Start Date:</b>	1971
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1981
<b>Site Description:</b>	The 216-Z-19 Ditch is a backfilled, surface stabilized site. The ditch is currently co-located within a large Underground Radioactive Material area that also includes the 216-Z-1D and 216-Z-11 ditches.		
<b>Waste Type:</b>	Process Effluent		
<b>Waste Description:</b>	The unit is considered a transuranic contaminated soil site. The effluents received by this ditch include process cooling water, steam condensate, pump seal waste from Plutonium Finishing Plant, and cooling water from the 231-Z Buildings. The dominant radionuclides present include plutonium, americium, strontium, and cesium. Approximately 60 grams of plutonium was released to the ditch in March 1976.		

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<b>Site Code:</b>	216-Z-20	<b>Classification:</b>	Accepted
<b>Site Names:</b>	216-Z-20, Z-19 Ditch Replacement Tile Field	<b>ReClassification:</b>	
<b>Site Type:</b>	Crib	<b>Start Date:</b>	1981
<b>Site Status:</b>	Inactive	<b>End Date:</b>	1995
<b>Site Description:</b>	The site is marked and posted as an Underground Radioactive Material area.		
<b>Waste Type:</b>	Steam Condensate		
<b>Waste Description:</b>	The site has received cooling water, steam condensate, storm sewer, building drains, Hanford Engineering and Development Laboratory Radioactive Acid Digestion Test Unit (HEDL RADTU) cooling water, and chemical drains waste from the 234-5Z Building; cooling water steam condensate and laboratory drains from the 231-Z Building; and miscellaneous drains waste from 291-Z, 232-Z, and 236-Z buildings. The unit also received wastes from 2736-Z Building, (Construction Project B-246). In 1987, 70 gallons per minute of non-radioactive, thermally warm (105 degrees F), water from Z Plant was permanently diverted from the 216-Z-20 to the 216-Z-21 Seepage Basin.		

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<b>Site Code:</b>	UPR-200-W-110	<b>Classification:</b>	Accepted
<b>Site Names:</b>	UPR-200-W-110, Contaminated Soil from 216-Z-1, UN-216-W-20 Spoil Trench	<b>ReClassification:</b>	

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**Site Type:** Trench **Start Date:** 1971

**Site Status:** Inactive **End Date:** 1971

**Site Description:** The site is a one-time use waste disposal trench. The trench is the location where backfill material from the north end of the 216-Z-1 Ditch was placed following excavation for a new ditch. During construction for the 216-Z-19 Replacement Ditch, workers placed the excavated material on a spoils pile. Later that material was found to be contaminated and it was moved to the disposal trench.

The ditches and the trench have been backfilled and are co-located within an "Underground Radioactive Material" (URM) zone. This area was surface stabilized in 1982. The area is marked with concrete posts and an intermittent light chain.

The site is vegetated with crested wheatgrass and Indian ricegrass over very sandy soil. There is evidence of rodent burrowing on and adjacent to the URM area. An air monitor is on the site at the north end.

**Waste Type:** Soil

**Waste Description:** Decayed vegetation matting from the bottom of the 216-Z-1 Ditch was found to contain alpha contamination to a maximum of 100,000 disintegrations per minute. The 216-Z-1 Ditch was contaminated with americium and plutonium originating from process leaks contaminating the Z Plant cooling water discharge system. The contamination subsequently settled out of the water or was absorbed by aquatic plant life growing on the sides and bottom of the ditch.

Radioactivity computed from soil samples taken from the spoil pile showed an alpha concentration of 0.34 nanocuries per gram of soil. This was 30 times less than the minimum 10 nanocuries per gram standard that required "packaging for recovery" plutonium burials.

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**200-DV-1**

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**Site Code:** 216-B-5 **Classification:** Accepted

**Site Names:** 216-B-5, 241-B-361 Reverse Well, 241-B-361 Dry Well, 241-B-5 Dry Well, 299-E28-29 **ReClassification:**

**Site Type:** Injection/Reverse Well **Start Date:** 1945

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

**Site Description:** The site is delineated with concrete AC-540 markers. It is posted with Underground Radioactive Material signs. The surface is covered with coarse rock.

**Waste Type:** Process Effluent

**Waste Description:** Until September 1946, the site received supernatant overflow from 241-B-361 Settling Tank waste via Tank 5-6 in 221-B Building and liquid waste from 224-B Building. From September 1946 to October 1947, the site received the cell drainage and other liquid waste via Tank 5-6 in 221-B. The 224-B effluent was rerouted to the new 216-B-7A Cribs. The waste was low in salt and was neutral to basic. Approximately 2.15 kilograms (4.7 pounds) of plutonium was discharged to the reverse well.

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**Site Code:** 216-B-7A&B **Classification:** Accepted

**Site Names:** 216-B-7A&B, 241-B-201 Crib, 216-B-7 Crib, 216-B-7A Sump, 216-B-7B Sump, 241-B-1 and 2 Cribs, 216-B-7A & B **ReClassification:**

**Site Type:** Crib **Start Date:** 1946

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

**Site Description:** The cribs are located beneath a larger area of scraped contaminated soil from the UPR-200-E-144 stabilization. The contaminated soil from the unplanned release area and the cribs were covered with clean backfill and posted with Underground Radioactive Material signs. The crib locations are identified with light post and chain with Cave-in Potential signs.

**Waste Type:** Process Effluent

**Waste Description:** The site received the liquid waste from 221-B and 224-B via overflow of 201-B Settling Tanks. From September 1946 through October 1947, the cribs received waste from 224-B. From October 1947 to August 1948, the site received the 224-B waste stream plus cell drainage (tank 5-6) and other liquid waste from 221-B. From August 1948 to July 1951, the site received liquid waste from 224-B. The tank 5-6 waste was diverted to the 216-B-9 Crib. From July 1951 through December 1954, the cribs continued to receive waste from 224-B. In December 1954 the cribs exceeded their infiltration capacity and the waste was diverted to the 216-B-8 Crib. From December 1954 to October 1961, the site received Cell 5-6 drainage and equipment cleanout waste from 224-B. From October 1961 to May 1967, the site received decontamination and construction waste from 221-B. In May 1967 it was determined that the cribs has reached their radionuclide capacity and were terminated. The B Plant effluent was rerouted to the 216-B-12 Crib. The waste is low in salt, neutral to basic, and contains transuranic (TRU) fission products.

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**Site Code:** 216-B-8 **Classification:** Accepted  
**Site Names:** 216-B-8, 241-B-3 Crib, 216-B-8, 216-B-8TF **ReClassification:**  
**Site Type:** Crib **Start Date:** 1948  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** The crib and tile field are identified with concrete AC-540 monuments and posted with Underground Radioactive Material signs. The crib is delineated with light post and chain with Cave-In Potential signs. The surface is covered with gravel.

**Waste Type:** Process Effluent

**Waste Description:** From February 1948 through July 1951, the site received second-cycle waste supernatant from 221-B Building. In August 1948, sludge from the 241-B-104 tank was inadvertently released to the crib and the crib became plugged. The sludge contained roughly 1000 times the amount of plutonium and 5000 times the fission products as would be found in the supernate usually discharged to cribs. Acid was added to the crib in an attempt to unplug the crib. The acid did not significantly improve the crib blockage so the tile field was added to receive crib overflow. From July 1951 to December 1951, the site received the second cycle waste plus cell drainage stored in Tank 5-6 and other liquid waste from in 221-B Building. From December 1951 to December 1952, the site received decontamination and cleanup waste generated during the shutdown of 221-B and 224-B. Some documents state the pipeline to the 216-B-8 Crib was blanked and the effluent routed to 216-B-7A in December 1954. However, H-2-2928 shows the effluent was rerouted to 216-B-11 A&B. The waste is high in salt, is neutral to basic, and contains transuranic (TRU) waste and fission products.

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**Site Code:** 216-B-9 **Classification:** Accepted  
**Site Names:** 216-B-9, 241-B-361 Crib, 5-6 Crib and Tile Field, 216-B-361 Crib, 216-B-9TF **ReClassification:**  
**Site Type:** Crib **Start Date:** 1948  
**Site Status:** Inactive **End Date:** 1951  
**Site Description:** The crib and tile field have been surface stabilized. It is marked and posted as an Underground Radioactive Material (URM) area. The crib is located in the south end of the posted URM area. It is separately marked and posted as a Radiologically Controlled Area, Cave-in Potential. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent

**Waste Description:** The site received cell drainage and other liquid waste via Tank 5-6 in 221-B Building. The waste is low in salt, neutral to basic, and contains transuranic (TRU) and fission products. A sample of the sediments collected in 1949 through a well casing revealed 1830 microcuries per kilogram of fission products and 14,800,000 disintegrations per minute per kilogram of alpha contamination.

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**Site Code:** 216-B-11A&B **Classification:** Accepted  
**Site Names:** 216-B-11A&B, 216-B-11 Crib, 242-B-1 Crib, 216-B-11A & B, 216-B-11B **ReClassification:**



**Site Code:** 216-B-37 **Classification:** Accepted

**Site Names:** 216-B-37, 241-BX-3 Grave, 216-BX-3 Trench, 216-B-37 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** The 216-B-35 through 216-B-42 trenches were surface stabilized as a unit. The area is marked with concrete AC-540 posts and Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent

**Waste Description:** The site received evaporator bottom waste from the 242-B Waste Evaporator after it had processed B Plant first cycle waste. The waste is high in salt and is neutral to basic.

**Site Code:** 216-B-38 **Classification:** Accepted

**Site Names:** 216-B-38, 241-BX-4 Grave, 216-BX-4 Trench, 216-B-38 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** The 216-B-35 through 216-B-42 trenches were surface stabilized as a unit. The area is marked with concrete AC-540 posts and Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent

**Waste Description:** The site received first-cycle supernatant waste from 221-B Building. The waste is high in salt and is neutral to basic.

**Site Code:** 216-B-39 **Classification:** Accepted

**Site Names:** 216-B-39, 241-BX-5 Grave, 216-BX-5 Trench, 216-B-39 Trench **ReClassification:**

**Site Type:** Trench **Start Date:** 1953

**Site Status:** Inactive **End Date:** 1954

**Site Description:** The 216-B-35 through 216-B-42 trenches were surface stabilized as a unit. The area is marked with concrete AC-540 posts and Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent

**Waste Description:** The site received first-cycle supernatant waste from 221-B Building. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-B-40 **Classification:** Accepted  
**Site Names:** 216-B-40, 241-BX-6 Grave, 241-BX-6 Trench, 216-B-40 Trench, 216-BX-6 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** The 216-B-35 through 216-B-42 trenches were surface stabilized as a unit. The area is marked with concrete AC-540 posts and Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent  
**Waste Description:** The site received first-cycle supernatant waste from the 221-B Building. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-B-41 **Classification:** Accepted  
**Site Names:** 216-B-41, 241-BX-7 Grave, 216-BX-7 Trench, 216-B-41 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** The 216-B-35 through 216-B-42 trenches were surface stabilized as a unit. The area is marked with concrete AC-540 posts and Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent  
**Waste Description:** The site received the first-cycle supernatant waste from the 221-B Building. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-B-42 **Classification:** Accepted  
**Site Names:** 216-B-42, 241-BX-8 Grave, 216-BX-8 Trench, 216-B-42 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The 216-B-35 through 216-B-42 trenches were surface stabilized as a unit. The area is marked with concrete AC-540 posts and Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent  
**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from the 221-U Building via the 241-BY tank farm. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-B-43 **Classification:** Accepted

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**Site Names:** 216-B-43, 216-BY-1 Crib, 216-BY-1 Cavern      **ReClassification:**

**Site Type:** Crib      **Start Date:** 1954

**Site Status:** Inactive      **End Date:** 1954

**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded concrete AC-540 markers and posted Underground Radioactive Material.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. (active in November 1954)

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**Site Code:** 216-B-44      **Classification:** Accepted

**Site Names:** 216-B-44, 216-BY-2 Crib, 216-BY-2 Cavern      **ReClassification:**

**Site Type:** Crib      **Start Date:** 1954

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

**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.

**Waste Type:** Process Effluent

**Waste Description:** The site received scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. (active December 1954 - March 1955)

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**Site Code:** 216-B-45      **Classification:** Accepted

**Site Names:** 216-B-45, 216-BY-3 Crib, 216-BY-3 Cavern      **ReClassification:**

**Site Type:** Crib      **Start Date:** 1955

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

**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.

**Waste Type:** Process Effluent

**Waste Description:** The site received the scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. (active April - June 1955)

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**Site Code:** 216-B-46      **Classification:** Accepted

**Site Names:** 216-B-46, 216-BY-4 Crib, 216-BY-4 Cavern      **ReClassification:**

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**Site Type:** Crib **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. (active September - December 1955)

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**Site Code:** 216-B-47 **Classification:** Accepted  
**Site Names:** 216-B-47, 216-BY-5 Crib, 216-BY-5 Cavern **ReClassification:**  
**Site Type:** Crib **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. (Active September 1955)

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**Site Code:** 216-B-48 **Classification:** Accepted  
**Site Names:** 216-B-48, 216-BY-6 Crib, 216-BY-6 Cavern **ReClassification:**  
**Site Type:** Crib **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. The pipeline to the unit was valved out when specific retention capacity was reached. Crib service duration discrepancies appear in historical documentation. ARH-947, HW-55176 and HW-83718 show November 1955 to February 1957 as the service duration. RHO-CD-673 shows November 1955 to July 1957 as the service duration. ARH-2806 shows November 1955 to November 1955 as the service duration. The start and end dates for adjacent cribs was 1955. In 1956 when a nearby groundwater monitoring well found elevated levels of cobalt-60 and cesium 137, effluent release in this area was discontinued. So the 1957 end date is questionable.

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**Site Code:** 216-B-49 **Classification:** Accepted  
**Site Names:** 216-B-49, 216-BY-7 Crib, 216-BY-7 Cavern **ReClassification:**  
**Site Type:** Crib **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received scavenged tributyl phosphate (TBP) supernatant waste from 221-U Building. The waste is high in salt and is neutral to basic. It included inorganic compounds such as ferrocyanide, nitrate and phosphate. (Active November-December 1955)

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**Site Code:** 216-B-50 **Classification:** Accepted  
**Site Names:** 216-B-50, 216-BY-8 Crib, 216-BY-8 Cavern **ReClassification:**  
**Site Type:** Crib **Start Date:** 1965  
**Site Status:** Inactive **End Date:** 1974  
**Site Description:** The 216-B-43 through 216-B-50 cribs were stabilized as a unit with gravel. The group of cribs are surrounded with light chain and posted Underground Radioactive Material.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received the waste storage tank intermediate level process condensate from the In Tank Solidification (ITS) #1 unit in the 241-BY Tank Farm.

Since startup of the #1 ITS in March, 1965, approximately five and one-half million gallons of condensate containing about 120 beta curies of activity, including about 70 curies of cesium-137, have been routed to the 216-B-50 crib (as of April 1968). The crib was originally constructed along with seven others in the same location to receive scavenged tributyl phosphate (TBP) waste. The other seven were used for this purpose, but the crib site was taken out of service when a cobalt-60 and cesium-137 breakthrough occurred. The decision to use the 216-B-50 crib for ITS condensate was made about 8 or 9 years later when it was known that the groundwater activity levels were definitely decreasing. It was recognized that the crib had limited use. 216-B-50 crib has a bottom area of 83.6 square meters (900 square feet), and its capacity had been adequate for the 5-6 gallons per minute flow of condensate. Now that the capacity of #1 ITS has been doubled (Project ICE-618), it is doubtful that the crib will have sufficient capacity without a significant rise in the level of water in the crib. This increase of water level could drive the condensate through the highly contaminated zone under the other seven cribs (216-B-43 through 49) that are located 15 to 76 meters (50 to 250 feet) from the 216-B-50 crib. Flow data obtained from the monitoring wells showed that condensate sent to the 216-B-50 crib tended to migrate under the highly contaminated cribs. To avoid potential flooding of 216-B-50, 216-B-61 crib was proposed. The #2 ITS Unit, also located in the 241-BY Tank Farm used crib 216-B-57, which was designed for receiving only the condensate flow from the #2 Unit. The 216-B-50 crib needed to be taken out of service because of its size limitations and because of the close proximity of the highly contaminated cribs (216-B-43 through 216-B-49) that had been used for scavenged TBP wastes. These seven cribs received over 400,000 curies of beta activity including about 13,000 and 4,000 curies of long lived

strontium and cesium, respectively. The groundwater under these cribs still contains detectable concentrations of cesium-137 and cobalt-60 (April 1968).

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**Site Code:** 216-B-57 **Classification:** Accepted

**Site Names:** 216-B-57, 216-B-57 Enclosed Trench, Hanford Prototype Barrier, 200-BP-1 Prototype Barrier **ReClassification:**

**Site Type:** Crib **Start Date:** 1968

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

**Site Description:** This crib was selected to be the site of the Hanford Prototype Barrier. The engineered barrier was constructed on top of the crib in 1994. The barrier is 105 meters (340 feet) long, 64 meters (210 feet) wide and 15 meters (49 feet) tall. It is posted Underground Radioactive Material.

**Waste Type:** Storage Tank

**Waste Description:** The site received the waste storage tank condensate from the In Tank Solidification (ITS) #2 Unit in 241-BY Tank Farm.

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**Site Code:** 216-B-62 **Classification:** Accepted

**Site Names:** 216-B-62, 216-B-62 Enclosed Trench, 216-B-62 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1973

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

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

**Waste Type:** Process Effluent

**Waste Description:** The site has received process condensate from the 221-B Building Separations Facilities. TPA milestone M-17-26 required all discharge to the Crib to be ceased by Sept. 1991.

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**Site Code:** 216-S-9 **Classification:** Accepted

**Site Names:** 216-S-9 Crib **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1969

**Site Description:** The unit is a gravel structure with a side slope of 1:1.5. Waste flowed into the unit through the distribution system, which consists of 177 meters (581 feet) of 15-centimeter (6-inch) Vitrified Clay Tile (VCT) perforated pipe in a U-shape, 4.6 meters (15 feet) by 89.9 meters (295 feet), and connected by 7.3 meters (24 feet) of 4.6-centimeter (3-inch) Schedule 10 pipe in a Y-shape. The entire distribution system is 6.4 meters (21 feet) below grade.

**Waste Type:** Process Effluent

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**Waste Description:** The site received process condensate from the D-2 Receiver Tank in the 202-S Building. The waste is acidic.

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**Site Code:** 216-S-13 **Classification:** Accepted

**Site Names:** 216-S-13, 276-S Crib, 216-S-6 **ReClassification:**

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

**Site Status:** Inactive **End Date:** 1972

**Site Description:** The crib is surrounded with steel posts and chain. It is posted with Underground Radioactive Material and Cave-In Potential signs. The unit is a square wooden crib box, with open bottom enclosed on four sides with sheathing. The crib box sits in a partially backfilled hole. The unit was then backfilled to grade. The crib box has a riser vent, and one inlet pipe near the top of the box.

**Waste Type:** Process Effluent

**Waste Description:** The site received mixed, organic waste containing nitrate, methyl isobutyl ketone, and sodium dichromate. Radionuclides include cobalt-60, strontium-90 and cesium-137. The waste was low in salt and is neutral to basic. A 1966 internal memo suggests that 25,000 gallons of hexone from the 276-S tanks 141 and 142 were discharged to the 216-S-13 crib over a three month time period.

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**Site Code:** 216-S-14 **Classification:** Accepted

**Site Names:** 216-S-14, Buried Contaminated Hexone, Cold Organic Trench or Grave, 216-S-4 Burial Contaminated Hexone **ReClassification:**

**Site Type:** Trench **Start Date:** 1952

**Site Status:** Inactive **End Date:** 1952

**Site Description:** The trench is not marked or posted. Some areas of distressed vegetation and bare ground are in the vicinity of the location indicated in historical documentation.

**Waste Type:** Chemicals

**Waste Description:** The site received approximately 76,000 liters (20,000 gallons) of hexone (methyl isobutyl ketone) contaminated with trace amounts of unirradiated uranium used in the initial testing of the 202-S Building (REDOX). The site was retired when discharge of hexone to the unit was completed. The radionuclide content is unknown, but it is assumed to be low-level contamination.

In 1971 core drillings were taken at this site. There was a strong odor of hexone from each of the sample cores and core holes. No radioactivity was found and the site was released from radiation zone status.

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**Site Code:** 216-S-21 **Classification:** Accepted

**Site Names:** 216-S-21, 216-SX-1, 216-SX-1 Cavern or Crib **ReClassification:**

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**Site Type:** Crib **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1970  
**Site Description:** The site was interim stabilized in 1991 and is posted "Underground Radioactive Material." The site consists of one wooden crib box with two vent risers and one test well going through the center of the box. This crib box sits in a gravel layer in the bottom of a square pit. The rest of the pit is backfilled.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received 241-SX condensate from the condensers in the 401-SX Condenser Facility via the 241-SX-206 Tank. The waste is low in salt and is neutral to basic. The waste contained sodium and ammonium nitrate.

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**Site Code:** 216-T-3 **Classification:** Accepted  
**Site Names:** 216-T-3, 241-T-361-A Reverse Well, 361-T Reverse Well **ReClassification:**  
**Site Type:** Injection/Reverse Well **Start Date:** 1945  
**Site Status:** Inactive **End Date:** 1946  
**Site Description:** The 216-T-3 identified with concrete AC-540 markers and Underground Radioactive Material signs. The reverse well is constructed of steel pipe extending deep into the ground. There are two wells inside the posted area. The one on the north side of the posted area has a cap with the remnants of a gauge. The one near the southwest side of the area has a plain well cap.  
**Waste Type:** Process Effluent  
**Waste Description:** The reverse well received 221-T and 224-T liquid waste via the 241-T-361 settling tank. The waste included cell drainage from tank 5-6 in 221-T and 224-T waste. The chemical inventory includes nitrate, potassium, sodium, ammonium nitrate, sodium oxalate, fluoride, sulfate and phosphate. The radionuclide inventory includes 3350 grams of plutonium and 2800 curies of fission products.

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**Site Code:** 216-T-5 **Classification:** Accepted  
**Site Names:** 216-T-5, 216-T-5 Grave, 216-T-12, 216-T-5 Trench, 241-T-5 Trench **ReClassification:**  
**Site Type:** Trench **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The 216-T-5 trench is marked and posted with Underground Radioactive Material signs.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received second cycle supernate waste that contained nitrate, sodium silicate, sodium, ammonium nitrate, fluoride, sulfate, and phosphate. Second cycle waste contained less than 0.1% fission products.

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**Site Code:** 216-T-6 **Classification:** Accepted

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**Site Names:** 216-T-6, 241-T-361 (1&2 Cribs), 216-T-5, **ReClassification:**  
361-T-1&2 Cribs

**Site Type:** Crib **Start Date:** 1946

**Site Status:** Inactive **End Date:** 1951

**Site Description:** The 216-T-6 Cribs are delineated with light post and chain and Cave-in Potential signs. The area is surrounded with concrete AC-540 markers and Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The cribs received waste from 221-T and 224-T that was low in salt, neutral to basic and contained nitrate, sodium, ammonium nitrate, sodium oxalate, fluoride, sulfate, and phosphate.

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**Site Code:** 216-T-7 **Classification:** Accepted

**Site Names:** 216-T-7, 216-T-7TF, 216-T-7 Tile Field, **ReClassification:**  
241-T-3 Tile Field

**Site Type:** Drain/Tile Field **Start Date:** 1948

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

**Site Description:** The 216-T-7 Tile Field is delineated with concrete AC-540 markers and posted with Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The site received second-cycle supernatant waste from the 221-T Building until June 1951 via the 241-T-110, 241-T-111 and 241-T-112 tanks. From June 1951 to June 1952, the site received the 221-T Building effluent plus cell drainage from Tank 5-6 in the 221-T Building. From June 1952 to November 1955, the site received the 221-T Building effluent plus waste from the 224-T Building. The waste is high in salt and is neutral to basic and contains nitrate, potassium, sodium, ammonium nitrate, sodium oxalate, fluoride, sulfate, and phosphate.

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**Site Code:** 216-T-14 **Classification:** Accepted

**Site Names:** 216-T-14, 241-T-1 Trench, 216-T-1 Grave, **ReClassification:**  
216-T-13

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** The 216-T-14, 216-T-15, 216-T-16 and 216-T-17 trenches were surface stabilized as a unit. The area is identified with concrete AC-540 markers and are posted with Underground Radioactive Material signs. The surface has been planted with wheat grass.

**Waste Type:** Process Effluent

**Waste Description:** The site received the first-cycle supernatant waste from the 221-T Building via the 241-T-104, 241-T-105 and 241-T-106 Tanks in the 241-T Tank Farm. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-T-15 **Classification:** Accepted  
**Site Names:** 216-T-15, 241-T-2 Trench, 241-T-2 Grave, 216-T-14, 216-T-15 Crib **ReClassification:**  
**Site Type:** Trench **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** The 216-T-14, 216-T-15, 216-T-16 and 216-T-17 trenches were surface stabilized as a unit. The area is identified with concrete AC-540 markers and are posted with Underground Radioactive Material signs. The surface has been planted with wheat grass.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received the first-cycle supernatant waste from the 221-T Building via the 241-T-104, 241-T-105 and 241-T-106 Tanks in the 241-T Tank Farm. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-T-16 **Classification:** Accepted  
**Site Names:** 216-T-16, 241-T-3 Trench, 241-T-3 Grave, 216-T-15, 216-T-16 Crib **ReClassification:**  
**Site Type:** Trench **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** The 216-T-14, 216-T-15, 216-T-16 and 216-T-17 trenches were surface stabilized as a unit. The area is identified with concrete AC-540 markers and are posted with Underground Radioactive Material signs. The surface has been planted with wheat grass.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received the first-cycle supernatant waste from the 221-T Building via the 241-T-104, 241-T-105 and 241-T-106 Tanks in the 241-T Tank Farm. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-T-17 **Classification:** Accepted  
**Site Names:** 216-T-17, 241-T-4 Trench, 216-T-4 Grave, 216-T-16 **ReClassification:**  
**Site Type:** Trench **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1954  
**Site Description:** The 216-T-14, 216-T-15, 216-T-16 and 216-T-17 trenches were surface stabilized as a unit. The area is identified with concrete AC-540 markers and are posted with Underground Radioactive Material signs. The surface has been planted with wheat grass.  
**Waste Type:** Process Effluent  
**Waste Description:** The site received the first-cycle supernatant waste from the 221-T Building via the 241-T-104, 241-T-105 and 241-T-106 Tanks in the 241-T Tank Farm. The waste is high in salt and is neutral to basic.

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**Site Code:** 216-T-18 **Classification:** Accepted  
**Site Names:** 216-T-18, Test Crib for 221-U Building, Scavenged TBP Waste, 216-T-17, 241-T-17 Crib **ReClassification:**  
**Site Type:** Crib **Start Date:** 1953  
**Site Status:** Inactive **End Date:** 1953  
**Site Description:** The site is marked with concrete AC-540 markers. The site is posted as an "Underground Radioactive Material" area. The surface is covered with gravel.

**Waste Type:** Process Effluent

**Waste Description:** There is a discrepancy in the historical documentation of the waste disposed to this crib. Some references state the site received a test batch of ferrocyanide scavenged tri-butyl phosphate waste from 221-U in December 1953. The waste was high in salt, neutral to basic, and contained nitrate, sodium silicate, sodium, sodium hydroxide, sodium aluminate, fluoride, sulfate, phosphate and nitrite. HW-33591 states that 256,000 gallons of waste was pumped from tank 241-T-101 to a hole in the ground located north of the 241-T-17 monitoring well. Maxfield (1979) states the crib received a million liters of first cycle waste from 221-T that included 1800 grams of plutonium.

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**Site Code:** 216-T-19 **Classification:** Accepted  
**Site Names:** 216-T-19, 241-TX-153 Crib and Tile Field, 216-TX-1, 241-TX-3, 216-T-19TF **ReClassification:**  
**Site Type:** Crib **Start Date:** 1951  
**Site Status:** Inactive **End Date:** 1980  
**Site Description:** The crib and tile field are enclosed within a chain barricade. The crib is enclosed within a second chain barricade that is posted with Cave-In Potential signs. The outer chain is posted with "Underground Radioactive Material" signs.

The site construction is wooden crib box with a riser, set into a square bottom pit with sloping sides. The crib has an inlet and outlet pipe. The outlet pipe connects to a tile field. The tile field consists of a central pipe running the length of a rectangular trench with sloping sides. Pipes branch off the main pipe over the length of the trench. After construction, the crib and tile field were backfilled to grade.

**Waste Type:** Process Effluent

**Waste Description:** The site received waste containing nitrate, sodium, ammonium nitrate, sulfate, and phosphate.

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**Site Code:** 216-T-21 **Classification:** Accepted  
**Site Names:** 216-T-21, 241-TX-1 Trench, 216-TX-1 Grave, 216-TX-3 **ReClassification:**  
**Site Type:** Trench **Start Date:** 1954  
**Site Status:** Inactive **End Date:** 1954

**Site Description:** This site consists of a backfilled trench. It is one of five specific retention trenches (216-T-21, 216-T-22, 216-T-23, 216-T-24 and 216-T-25) that was surface stabilized as one unit. The group of trenches is surrounded with concrete AC-540 markers and Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The trench received first cycle supernate from 221-T that was high in salt, neutral to basic, and contained fluoride, nitrate, nitrite, phosphate, sodium, sodium aluminate, sodium hydroxide, sodium silicate, and sulfate.

**Site Code:** 216-T-22 **Classification:** Accepted

**Site Names:** 216-T-22, 241-TX-2 Trench, 216-TX-2 Grave, 216-TX-4 **ReClassification:**

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** This site consists of a backfilled trench. It is one of five specific retention trenches (216-T-21, 216-T-22, 216-T-23, 216-T-24 and 216-T-25) that was surface stabilized as one unit. The group of trenches is surrounded with concrete AC-540 markers and Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The trench received first cycle supernate from 221-T that was high in salt, neutral to basic, and contained fluoride, nitrate, nitrite, phosphate, sodium, sodium aluminate, sodium hydroxide, sodium silicate, and sulfate.

**Site Code:** 216-T-23 **Classification:** Accepted

**Site Names:** 216-T-23, 241-TX-3 Trench, 216-TX-3 Grave, 216-TX-5, 241-TX-3 Grave **ReClassification:**

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** This site consists of a backfilled trench. It is one of five specific retention trenches (216-T-21, 216-T-22, 216-T-23, 216-T-24 and 216-T-25) that was surface stabilized as one unit. The group of trenches is surrounded with concrete AC-540 markers and Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The trench received first cycle supernate from 221-T that was high in salt, neutral to basic, and contained fluoride, nitrate, nitrite, phosphate, sodium, sodium aluminate, sodium hydroxide, sodium silicate, and sulfate.

**Site Code:** 216-T-24 **Classification:** Accepted

**Site Names:** 216-T-24, 241-TX-4 Trench, 216-TX-4 **ReClassification:**

Grave, 216-TX-6

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** This site consists of a backfilled trench. It is one of five specific retention trenches (216-T-21, 216-T-22, 216-T-23, 216-T-24 and 216-T-25) that was surface stabilized as one unit. The group of trenches is surrounded with concrete AC-540 markers and Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The trench received first cycle supernate that was high in salt, neutral to basic, and contained fluoride, nitrate, nitrite, phosphate, sodium, sodium aluminate, sodium hydroxide, sodium silicate, and sulfate.

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**Site Code:** 216-T-25 **Classification:** Accepted

**Site Names:** 216-T-25, 241-TX-5 Trench, 216-TX-5 Grave, 216-TX-7 **ReClassification:**

**Site Type:** Trench **Start Date:** 1954

**Site Status:** Inactive **End Date:** 1954

**Site Description:** This site consists of a backfilled trench. It is one of five specific retention trenches (216-T-21, 216-T-22, 216-T-23, 216-T-24 and 216-T-25) that was surface stabilized as one unit. The group of trenches is surrounded with concrete AC-540 markers and Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The trench received evaporator bottom waste consisting of sludge from condensing first cycle waste in the 242-T Evaporator. It was high in salt, neutral to basic, and contained fluoride, nitrate, nitrite, phosphate, sodium, sodium aluminate, sodium hydroxide, sodium silicate, and sulfate.

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**Site Code:** 216-T-26 **Classification:** Accepted

**Site Names:** 216-T-26, 216-TY-1 Cavern, 216-TY-1 Crib, 241-TX-1 Cavern, 216-TX-1 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1956

**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. Two small concrete pads are located east of the crib area.

**Waste Type:** Process Effluent

**Waste Description:** The site received first-cycle scavenged supernatant waste from T Plant containing ferrocyanide, fluoride, nitrate, nitrite, phosphate, sodium, sodium aluminate, sodium hydroxide, sodium silicate and sulfate.

**Site Code:** 216-T-32 **Classification:** Accepted

**Site Names:** 216-T-32, 241-T #1 & 2 Cribs, 216-T-6 **ReClassification:**

**Site Type:** Crib **Start Date:** 1946

**Site Status:** Inactive **End Date:** 1952

**Site Description:** The crib is located inside the 241-T Tank Farm fence. The fence is posted with Radiological Buffer Area/Underground Radioactive Material signs. The tank farm has a gravel surface. The crib is not separately identified.

**Waste Type:** Process Effluent

**Waste Description:** The site received waste from 224-T via the 241-T-201 Tank. The waste was high in salt, neutral to basic, and contained nitrate, sodium, ammonium nitrate, sodium oxalate, fluoride, sulfate, and phosphate.

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## 200-EA-1

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**Site Code:** 207-A-NORTH **Classification:** Accepted

**Site Names:** 207-A-NORTH, 207-A, 207-A Retention Basin, 207-A-NORTH Retention Basin, 207-A North **ReClassification:**

**Site Type:** Retention Basin **Start Date:** 1977

**Site Status:** Inactive **End Date:** 1999

**Site Description:** The 207-A North basins consist of three Hypalon lined, concrete basins. The basins are surrounded with posts and chain. There is no radiological posting on the north basins.

**Waste Type:** Steam Condensate

**Waste Description:** The basins have been receiving steam condensate from the 242-A Evaporator since 1977. Effluent was originally sent to the 216-A-25 (Gable Pond) and later to the B Pond system. When the B-Ponds became inactive, effluent was diverted to TEDF.

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

**Site Names:** 216-A-1, 216-A-1 Cavern, 216-A-1 Trench **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

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

**Site Description:** The 216-A-1 and 216-A-7 cribs are located within the same radiologically posted area. They are marked and posted with Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** The site received the depleted uranium waste from the cold startup run in the 202-A Building. Some cesium-137, cobalt-60 and strontium-90 is also present.

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**Site Code:** 216-A-2 **Classification:** Accepted

**Site Names:** 216-A-2, 216-A-2 Cavern, 216-A-2 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1963

**Site Description:** The crib is covered with gravel and marked with concrete AC-540 posts. The crib is located within a larger URM, known as 200-E-103.

The unit consists of 15-centimeter (6-inch) perforated vitrified clay pipe lines. Two 6.1-meter (20-foot) lengths form a cross pattern horizontally, 6.4 meters (21 feet) below grade. It has approximately 1.8 meters (6 feet) of coarse rock with a volume of 140 cubic meters (5,000 cubic feet) and is backfilled over. The side slope from grade to 6.4 meters (21 feet) is 1:1.5 and from 6.4 meters (21 feet) to 8.2 meters (27 feet) is 1:2.

**Waste Type:** Process Effluent

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**Waste Description:** The site received organic wastes from the 202-A Building. The waste is low in salt and is neutral to basic.

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**Site Code:** 216-A-3 **Classification:** Accepted

**Site Names:** 216-A-3, 216-A-3 Cavern, 216-A-3 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1981

**Site Description:** The crib is marked and posted with Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** Until November 1967, the site received wastes from the silica-gel regeneration in the 203-A Building, the uranyl nitrate hexahydrate (UNH) storage pit drainage, and the liquid waste from the 203-A Pump House. After November 1967, the site received UNH Storage Pit drainage, liquid drainage, liquid waste from the 203-A Building enclosure sumps, and the heating coil condensate from the P1 through P4 UNH tanks. Between 1967 and 1970, the site discontinued receiving discharge from silica-gel regeneration wastes. The above wastes are reworked through the uranium cycle and any resulting waste with low radioactivity are sent to 216-A-29. The waste included uranium, cesium-137, strontium-90 and ruthenium-106.

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**Site Code:** 216-A-4 **Classification:** Accepted

**Site Names:** 216-A-4, 216-A-4 Cavern **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

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

**Site Description:** The site is located within a large gravel area, known as the PUREX Stabilized Area (sitecode 200-E-103). A large green vent riser extends above the surface.

**Waste Type:** Process Effluent

**Waste Description:** The site received the laboratory cell drainage from the 202-A Building (the site was reported to have also received 291-A-1 Stack drainage, see the Site Comments section under the Summary tab). The waste is low in salt and is neutral to basic. The 216-A-4 Crib also received waste solution from the 216-A-2 waste collection tank, the U Cell U-3 and U-4 laboratory waste receiver tanks (located in the acid storage vault), the dissolver off-gas scrubbers and the 241-A-151 Diversion Box Catch Tank. 216-A-4 was intended to receive a maximum of (75 gallons per minute) low level radioactive liquid waste. Waste volume from the laboratory waste and cell drain was 52,990 liters (14,000 gallons).

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**Site Code:** 216-A-5 **Classification:** Accepted

**Site Names:** 216-A-5, 216-A-5 Cavern **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

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

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**Site Description:** The crib is marked and posted with Underground Radioactive Material signs.

**Waste Type:** Process Effluent

**Waste Description:** Until November 1961, the site received process condensate from the 202-A Building. From November 1961 to October 1966, the site was active but received no waste (backup for the 216-A-10 Crib). In October 1966, the site received process condensate from the 202-A Building. The waste is acidic.

**Site Code:** 216-A-6 **Classification:** Accepted

**Site Names:** 216-A-6, 216-A-6 Cavern **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

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

**Site Description:** The site is marked with AC-540 markers and posted with Underground Radioactive Material signs. The unit was constructed with a 38-centimeter (15-inch) Vitrified Clay Pipe (VCP) placed horizontally 3.7 meters (12 feet) below grade the length of the unit. Five 31-meter (100-foot) lengths of perforated 15-centimeter (6-inch) V.C.P. are placed perpendicularly to the first pipe at 6.1-meter (20-foot) intervals. The site contains approximately 2,580 cubic meters (91,000 cubic feet) of coarse gravel fill, backfilled over. The side slope from the surface to 2.1 meters (7 feet) is 1:1 and from 2.1 meters (7 feet) to the site bottom, 2:1.

**Waste Type:** Process Effluent

**Waste Description:** Until January 1961, the site received the steam condensate, the equipment disposal tunnel floor drainage, the water-filled door drainage and the slug storage basin overflow waste from the 202-A Building. From January 1961 to March 1966, the site was inactive. After March 1966, the site received the previously mentioned effluents again. The waste is low in salt and is neutral to basic.

**Site Code:** 216-A-9 **Classification:** Accepted

**Site Names:** 216-A-9, 216-A-9 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1956

**Site Status:** Inactive **End Date:** 1969

**Site Description:** The crib is a surface stabilized area, marked with light post and chain. It is posted as an Underground Radioactive Material area.

**Waste Type:** Process Effluent

**Waste Description:** Until February 1958, the site received the acid fractionator condensate and the condenser cooling water from the 202-A Building. From February 1958 to April 1966, the site was inactive. From April 1966 to October 1966, the site received N Reactor decontamination waste via a manhole at the truck unloading station. From October 1966 to August 1969, the site was inactive. In August 1969, the site received the acid fractionator condensate from the 202-A Building. The waste is acidic.

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**Site Code:** 216-A-10 **Classification:** Accepted  
**Site Names:** 216-A-10, 216-A-10 Crib **ReClassification:**  
**Site Type:** Crib **Start Date:** 1956  
**Site Status:** Inactive **End Date:** 1987  
**Site Description:** The site is covered with gravel with no vegetation growing on it. It is surrounded with light posts and chain and posted as Underground Radioactive Material.

**Waste Type:** Process Effluent

**Waste Description:** During 1956, the site was used only for testing purposes using nonradioactive water. From 1956 to November 1961, the site was inactive. From November 1961 to January 1978, the site received process condensate from the 202-A Building. From January 1978 to October 1981, the site was again inactive. From October 1981 to 1986, the site received the process condensate from the 202-A Building. The crib received Process Distillate Discharge (PDD), a corrosive/mixed waste, at an average flow rate of 227 liters/minute (60 gallon/minute). The discharge was an acidic waste stream generated from two product concentrators in the Plutonium Uranium Extraction (PUREX) process. The pH of this waste ranged from 1.0 to 2.5 standard units which makes it a corrosive mixed waste. Approximately 62.6 million kilograms (138 million pounds) of waste were disposed of in the crib in 1986. Characterization holes placed through the crib in 2003 found cesium-137 at depths ranging from 48 to 84 feet below ground surface and europium-154 at approximated 84 feet below ground surface.

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**Site Code:** 216-A-15 **Classification:** Accepted  
**Site Names:** 216-A-15, Miscellaneous Stream #461 **ReClassification:**  
**Site Type:** French Drain **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1972  
**Site Description:** The unit is composed of two, 1.2 meter (4 foot) diameter, 1.2 meter (4 foot) long bell-end, reinforced concrete sewer pipes placed vertically end to end. It is filled with 1.8 meters (6 feet) of stone. Approximately 11 meters (35 feet) of vent pipe extends from the grade surface to the concrete drain structure. 1.6 meters (5.5 feet) of vent pipe extends above grade.

**Waste Type:** Process Effluent

**Waste Description:** The site received the drainage from the 216-A-10 Process Condensate Sampler Pit #4. The waste is acidic. The site contains less than 50 curies total beta activity.

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**Site Code:** 216-A-18 **Classification:** Accepted  
**Site Names:** 216-A-18, 216-A-18 Excavation, 216-A-18 Grave, 216-A-18 Sump, 216-A-18 Crib **ReClassification:**  
**Site Type:** Trench **Start Date:** 1955  
**Site Status:** Inactive **End Date:** 1955  
**Site Description:** The site is marked and posted with Underground Radioactive Material signs.

**Waste Type:** Chemicals

**Waste Description:** The site received the depleted uranium waste from the cold start-up run at 202-A Building.

**Site Code:** 216-A-19 **Classification:** Accepted

**Site Names:** 216-A-19, 216-A-19 Test Hole, 216-A-19 Grave, 216-A-19 Sump, 216-A-19 Crib **ReClassification:**

**Site Type:** Trench **Start Date:** 1955

**Site Status:** Inactive **End Date:** 1956

**Site Description:** The site is marked and posted with Underground Radioactive Material signs. In February 2001, a narrow area posted with Soil Contamination Area signs extended between the 216-A-19 southern site boundary and northern boundary of 216-A-34.

**Waste Type:** Water

**Waste Description:** The site received the 241-A-431 Building contact condenser cooling water via the 216-A-34 Ditch and the depleted uranium waste from the cold start-up run at the 202-A Building.

HW-40763 states that in December 1955, the ditch received PUREX waste from "C-203 and C-204 tanks".

**Site Code:** 216-A-20 **Classification:** Accepted

**Site Names:** 216-A-20, 216-A-20 Test Hole, 216-A-20 Grave, 216-A-20 Sump, 216-A-20 Crib **ReClassification:**

**Site Type:** Trench **Start Date:** 1955

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

**Site Description:** The site is marked and posted with Underground Radioactive Material signs.

**Waste Type:** Water

**Waste Description:** The site received the 241-A-431 Building contact condenser cooling water via the 216-A-34 Ditch and the depleted uranium waste from the cold start-up run at the 202-A Building.

**Site Code:** 216-A-21 **Classification:** Accepted

**Site Names:** 216-A-21, 216-A-21 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1957

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

**Site Description:** The crib is covered with gravel. It is marked and posted with Underground Radioactive Material signs.

A 10-centimeter (4-inch) stainless steel distribution line runs horizontally through the length of the site, 2.1 meters (7 feet) below grade. Branching horizontally from this distribution line are four 1.2-meter (4-foot) sections of 10-centimeter (4-inch) tubing. Branching vertically at the same locations are four 2.4-meter (8-foot) sections of 10-centimeter (4-inch) schedule 40 perforated pipe running to the bottom of the site. The excavation is V-shaped in cross-section with a side slope of 1:1.5. The excavation has approximately 1.8 meters (6 feet) of gravel fill and

is backfilled over.

**Waste Type:** Process Effluent

**Waste Description:** Until June 1958, the site received sump waste from 293-A Building. From June 1958 to December 1958, the site was inactive. From December 1958 to June 1965, the site received the above effluent, laboratory cell drainage from the 202-A Building, and the 291-A-1 Stack drainage. The waste is low in salt and is neutral to basic.

**Site Code:** 216-A-22 **Classification:** Accepted

**Site Names:** 216-A-22, 216-A-22 French Drain, 216-A-22 Crib **ReClassification:**

**Site Type:** Crib **Start Date:** 1955

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

**Site Description:** The crib is marked with a single cement AC-540 marker and Underground Radioactive Material signs.

**Waste Type:** Stormwater Runoff

**Waste Description:** The site received the drainage from the 203-A Building truck loadout apron, the sump waste from the 203-A Building enclosure, and the heating coil condensate from the P-1 through P-4 uraynal nitrate hexahydrate (UNH) tanks. The waste is low in salt, neutral to basic, and contains less than 1 curie total beta activity. The site received some uranium from the discharges. In 1961, a release from a UNH truck spilled 1335 pounds of uranium on the truck apron. Some of this drained into the 216-A-22 crib.

**Site Code:** 216-A-26 **Classification:** Accepted

**Site Names:** 216-A-26, 216-A-26 French Drain, 216-A-26B, Miscellaneous Stream #464 **ReClassification:**

**Site Type:** French Drain **Start Date:** 1965

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

**Site Description:** There are no visible surface features for this drain. The unit is composed of three clay pipe (each 5 feet long) segments buried vertically. Some references state the clay pipe diameter is 3 feet and some state the diameter is 4 feet.

**Waste Type:** Water

**Waste Description:** The site received the floor drainage from the 291-A Fan Control House. The waste was low in salt, neutral to basic, and contains less than 1 curie of total beta activity. The quantity of discharge is unknown.

**Site Code:** 216-A-26A **Classification:** Accepted

**Site Names:** 216-A-26A, 216-A-25 Crib, 216-A-26 French Drain, 291-A French Drain **ReClassification:**

**Site Type:** French Drain **Start Date:** 1959