DOE/RL-2014-43
Revision 0

Mixed Waste Disposed of in the Low-level Burial Grounds

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

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Richland, Washington 99352

Approved for Public Release;
Further Dissemination Unlimited

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Contents

1 Background 1-1

1.1 200-SW-2 Operable Unit Landfills Overview 1-1

1.2 Mixed Waste Management 1-1

1.2.1 Regulatory Requirements for Mixed Waste Disposed Before August 19, 1987 1-1

1.2.2 Regulatory Requirements for Mixed Waste Disposed After August 19, 1987 1-2

2 Treatment, Storage and/or Disposal Unit Landfills 2-1

2.1 218-E-10 Landfill 2-1

2.2 218-W-3A Landfill 2-3

2.3 218-W-3AE Landfill 2-7

2.4 218-W-4C Landfill 2-10

2.5 218-W-5 Landfill 2-10

3 Green Islands 3-1

3.1 Designation of Green Island Waste 3-1

3.2 Redesignation of select Green Island Waste 3-1

3.3 Green Island Waste Disposition 3-1

3.4 Regulatory Path Forward 3-2

3.4.1 Regulatory Alternatives 3-2

3.4.2 Alternative B: Permit Deferral to Past Practice 3-4

3.4.3 Recommended Alternative 3-5

4 References 4-1

Appendices

A 218-E-10 Green Island Waste Burial Records ..... A-i

B 218-W-3A Green Island Waste Burial Records ..... B-i

C 218-W-3AE Green Island Waste Burial Records ..... C-i

D 218-W-4C Green Island Waste Burial Records ..... D-i

E 218-W-5 Green Island Waste Burial Records ..... E-i

F Regulatory Citations Supporting Redesignation of Waste ..... F-i

G Summary of Green Island Contents and Key Background Information ..... G-i

Figures

Figure 2-1. 218-E-10 Landfill 2-4
Figure 2-2. 218-W-3A Landfill 2-8
Figure 2-3. 218-W-3AE Landfill 2-11
Figure 2-4. 218-W-4C Landfill 2-14
Figure 2-5. 218-W-5 Landfill 2-15

Tables

Table 1-1. Landfills Containing Post August 19, 1987 Mixed Waste 1-2
Table 2-1. Green Island Container Summary for the 218-E-10 Landfill 2-1
Table 2-2. Green Island Container Summary for the 218-W-3A Landfill 2-5
Table 2-3. Green Island Container Summary for the 218-W-3AE Landfill 2-9
Table 2-4. Green Island Container Summary for the 218-W-4C Landfill 2-12
Table 2-5. Green Island Container Summary for the 218-W-5 Landfill 2-13

Terms

ARAR	applicable or relevant and appropriate requirement
CAS	Chemical Abstracts Service
CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
CWC	Central Waste Complex
DOE	U.S. Department of Energy
DOE-RL	U.S. Department of Energy, Richland Office
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
HEPA	high-efficiency particulate air
LBNL	Lawrence Berkeley National Laboratory
LLBG	low-level burial ground
LLW	low-level waste
MFP	mixed fission products
NC	Naval Reactor Compartment Trench
OU	operable unit
PFP	Plutonium Finishing Plant
ppm	parts per million
PUREX	plutonium-uranium extraction
RCRA	*Resource Conservation and Recovery Act of 1976*
RH	remote-handled
RI/FS	remedial investigation/feasibility study
RSW	retrievably stored waste
TPA	Tri-Party Agreement
Tri-Party Agreement	*Hanford Federal Facility Agreement and Consent Order* (Ecology et al., 1989)
TSD	treatment, storage, and/or disposal
WESF	Waste Encapsulation and Storage Facility

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1 Background

The 200-SW-2 Operable Unit (OU) landfills, also known as the low-level burial grounds (LLBGs), received about 450,000 m^3 (588,577 yd^3) of a heterogeneous mixture of solid waste during various operating periods that began in the mid-1940s and ended around 2005. All landfill waste included within the scope of the 200-SW-2 OU has been buried in trenches that were designed and constructed to varying lengths, widths, and depths to comply with U.S. Department of Energy (DOE) disposal requirements. Approximately 60 percent of the waste placed in these landfills was from the Hanford Site 200 Area processing facilities. Some waste came from the 100 and 300 Areas, and a smaller fraction came from other Hanford Site areas and various offsite generators.

1.1 200-SW-2 Operable Unit Landfills Overview

Sites included in the 200-SW-2 OU primarily consist of constructed (e.g., vertical pipe units and caissons) or excavated sites (landfills) that received either low-level waste (LLW) or mixed waste. the sites also were used for the storage of retrievably stored waste (RSW). Large landfills, each consisting of a number of trenches, were used in the 200 East and 200 West Areas. While storage and retrieval activities are ongoing in multiple trenches, only three trenches continue to be used for disposal—the lined Trenches 31 and 34 in the 218-W-5 Landfill and Trench 94 in the 218-E-12B Landfill. The landfills received wastes such as contaminated equipment, solid laboratory or process waste, and clothing. Before 1970, LLW was disposed to the same landfill trenches as waste that would have contained transuranic elements and/or mixed fission products (MFP). After 1970, waste that was designated as RSW was segregated in either specified landfill trenches or underground concrete caissons in the 200-SW-2 OU landfills. Wastes were largely solid materials and mostly from onsite, but offsite and small quantities of liquid wastes (tightly packed, generally absorbed, and sealed in drums) are known to have been placed in the landfills. The 200-SW-2 OU landfills are among the largest waste sites at the Hanford Site, and some cover many acres.

1.2 Mixed Waste Management

Mixed waste is defined as low level radioactive waste that also contains dangerous and/or hazardous constituents. In anticipation of the potential for mixed waste to be subject to the *Resource Conservation and Recovery Act of 1976* (RCRA), radioactive waste disposal operations undertook the practice of segregating LLW from mixed waste in July 1986.

1.2.1 Regulatory Requirements for Mixed Waste Disposed Before August 19, 1987

Based on 52 FR 15937, “Radioactive Waste, Byproducts Material Final Rule, the radiological constituents of mixed waste are governed by the *Atomic Energy Act of 1954*, and the chemical and hazardous constituents are governed by RCRA. The Washington State Department of Ecology (Ecology) is authorized by the U.S. Environmental Protection Agency (EPA) to implement the federal hazardous waste rules in Washington State. This is done through WAC 173-303, “Dangerous Waste Regulations,” which implements RCW 70.105, “Hazardous Waste Management,” as amended.

In order to obtain authorization for mixed waste from EPA, RCW 70.105 was amended in July 1987 to incorporate the definition of mixed waste.

In November 1987, EPA authorized Ecology to regulate mixed waste in lieu of federal regulation. Subsequently, representatives from the DOE Richland Operations Office (DOE-RL), Westinghouse Hanford Company, EPA Region X, and Ecology met to discuss the strategy needed to handle the mixed waste that was being generated at the Hanford Site. The resulting strategy, effective January 15, 1988, allowed all containerized mixed waste generated onsite (except for remote-handled [RH] waste and

ignitable waste) to be consolidated for temporary aboveground storage on retrievable storage pads. Mixed waste generated offsite could not be accepted for storage, except on a case-by-case basis with concurrence from EPA and Ecology, until the radioactive mixed waste storage buildings were in place. These new storage buildings were placed in service beginning in 1989 and are now part of the Central Waste Complex (CWC).

Finally, in September 1996, agreement was reached with the U.S. Attorney General that the effective date of regulation[1] for mixed waste in Washington State is August 19, 1987. Land disposal restrictions to mixed waste became applicable over time as the national capacity variance for a treatment standard expired. Today, all land disposal restrictions apply to mixed waste in Washington State.

1.2.2 Regulatory Requirements for Mixed Waste Disposed After August 19, 1987

Mixed wastes that were disposed after the effective date, in accordance with all applicable standards, should be regulated in the same manner as other treatment, storage, and/or disposal (TSD) unit landfills (i.e., there is no requirement to remove wastes at closure). However, post-effective date wastes that were disposed in a manner inconsistent with regulatory requirements applicable at the time of disposal potentially are subject to enforcement action, possibly including investigation and cleanup to standards that exceed TSD unit landfill closure standards. In other words, mixed waste disposed after the effective date of regulation are required to comply with standards that are applicable at the time of disposal (e.g., land disposal restrictions and minimum technical requirements).

There are five unlined LLW landfills in the central part of the Hanford Facility (200 East and West Areas) where mixed waste was disposed to trenches within the landfills after the effective date of mixed waste (August 19, 1987). Table 1-1 identifies the landfills and trenches where the mixed waste was disposed.

Table 1-1. Landfills Containing Post August 19, 1987 Mixed Waste

Landfill	Trench Number(s)
218-E-10	9[a]
218-W-3A	6S, 19
218-W-3AE	8, 5
218-W-4C	NC, 14[b], 58[b]
218-W-5	22

a. This trench has two containers that are recommended to be redesignated as LLW by this report.

b. Trenches 14 and 58 contain waste that is recommended to be redesignated as LLW by this report.

LLW = low-level waste

NC = Naval Reactor Compartment Trench

[1] The State of Washington has informed the U.S. Department of Energy via letter (Ecology, 1996, “Concerning the Effective Date for Mixed-Waste Regulation”) that the effective date for mixed waste regulation in the State of Washington is August 19, 1987.

2 Treatment, Storage and/or Disposal Unit Landfills

This chapter describes each of the landfills that, based on a review of burial records and associated container inventories, are considered to be potentially regulated under RCRA. These disposal locations have been referred to as "Green Islands."

2.1 218-E-10 Landfill

The 218-E-10 Landfill (Figure 2-1) began service in 1955 and ended service in 2000. The landfill covers 22 ha (56 ac) and contains RH, contact-handled unsegregated waste, and LLW. These dimensions include an unused annex. The 218-E-10 Landfill is located approximately 610 m (2,000 ft) northwest of the B-Plant and directly west of the 218-E-5A Landfill. The landfill received waste, mostly from the Plutonium-Uranium Extraction (PUREX) Plant, B Plant, T Plant, offsite (mainly Formerly Utilized Sites Remedial Action Program waste), and the 100 Area (mainly N Reactor waste). The 218-E-10 Landfill consists of 13 trenches running north-south, and one trench running east-west.

Waste forms include failed equipment and mixed industrial wastes (e.g., concrete canyon cover blocks, centrifuge blocks, tubing bundles, jumper vessels, pumps, columns, and filters). The trenches contain LLW, mixed waste, and unsegregated RH waste.

Trench 9 currently is identified as containing some mixed waste disposed after the effective date of mixed waste regulation. These containers are detailed in Table 2-1.

Table 2-1. Green Island Container Summary for the 218-E-10 Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
01	218-E-10-T09	Hanford PUREX/202 A	202A-87-0211S (202A-WHC-87-1)	Standard concrete burial box 22' 7" × 11' 8" × 10' 76,000 lb	• Contains paper products, plastic, cloth, stainless steel, other metal, and lead • Container designates as mixed waste due to 240 lb (>100 ppm total concentration) of lead waste • Curie content: 37 Ci Sr-90, 37.5 Ci Cs-137, and other MFP for 150 Ci total • Dose rate: 90 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix A
02	218-E-10-T09	Hanford B Plant/221B	221B-87-0100S) (221B-WHC-87-2)	Standard concrete burial box 22' 7" × 11' 8" × 10' 68,000 lb	• Contains paper products, plastic, cloth, stainless steel, other metal, and lead • Container originally designated as mixed waste due to lead; redesignated as low level only waste due to small quantity (4.8 lb) of lead (<100 ppm total concentration) • Curie content: 1,000 Ci MFP total • Dose rate: 10 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix A

Table 2-1. Green Island Container Summary for the 218-E-10 Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
03	218-E-10-T09	Hanford PUREX/202 A	(202A-87-0232S) (202A-WHC-87-3)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 77,500 lb	• Contains stainless steel, concrete debris, other metal, and lead • Container designates as mixed waste due to a 270 lb lead (>100 ppm total concentration) counterweight • Curie content: 22.5 Ci Sr-90, 22.5 Ci Cs-137, and other MFP for 90 Ci total • Dose rate: 12 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix A
04	218-E-10-T09	Hanford B Plant/221B	221B-87-0118S (221B-WHC-87-3)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 77,500 lb	• Contains paper, plastic, cloth, wood, concrete, asbestos, stainless steel, other metal, and lead • Container originally designated as mixed waste due to lead; redesignated as low level only waste due to small quantity (2.2 lb) of lead (<100 ppm total concentration) • Curie content: 3,750 Ci Sr-90, 3,750 Ci Cs-137, and other MFP for 15,000 Ci total • Dose rate: 3,000 mR/hr at 3 m (10 ft) at time of burial • Additional information is provided in the burial record(s) in Appendix A
05	218-E-10-T09	Hanford B Plant/221B	221B-87-0133S (221B-WHC-87-4)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 80,000 lb	• Contains paper, plastic, cloth, stainless steel, other metal, and lead • Container designates as mixed waste due to 40 lb lead (>100 ppm total concentration) wool and wiring • Curie content: 5 Ci Sr-90, 5 Ci Cs-137, and other MFP for >20 Ci total • Dose rate: >5 R/hr at contact at time of burial • Additional information is provided in the burial record(s) in Appendix A
06	218-E-10-T09	Hanford B Plant/225B (WESF)/271 B Support Building	271B-91-000289	Burial box made of plastic and fiberboard placed in trench and grouted. 19’8” × 7’ 8” × 10’ 8” 148,000 lb including added grout	• Contains HEPA filters, rags, paper, plywood, plastic, rubber, grout, and stainless steel • Originally designated as mixed waste due to the presence of Di-octyl Phthalate (CAS# 117-84-0) as a Washington State carcinogen. The regulatory status of this chemical has changed since the carcinogenic criteria was removed from WAC 173-303, “Dangerous Waste Regulations,” and is now regulated as a toxic constituent (Toxic B). The weight percent of this constituent (6.53 kg [0.0097 wt%]) falls below regulatory levels as a Washington State toxic and, therefore, no longer designates as mixed waste. • Curie content: 204 Ci Cs-137 and 333 Ci Sr-90 for 537 Ci total.

Table 2-1. Green Island Container Summary for the 218-E-10 Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
					• Dose rate : 5 R/hr at 1 m (3.28 ft) • Additional information is provided in the burial record(s) in Appendix A
07	218-E-10-T09	Hanford B Plant/225B (WESF)/271 B Support Building	271B-91-000290	Burial box made of plastic and fiberboard placed in trench and grouted 19’8” × 7’ 8” × 10’ 8” 148,000 lb including added grout	• Contains HEPA filters, rags, paper, plywood, plastic, rubber, grout, and stainless steel • Originally designated as mixed waste due to the presence of Di-octyl Phthalate (CAS# 117-84-0) as a Washington state carcinogen. The regulatory status of this chemical has changed since the carcinogenic criteria was removed from WAC 173-303 and is now regulated as a toxic constituent (Toxic B). The weight percent of this constituent (6.53 kg [0.0097 wt%]) falls below regulatory levels as a Washington State toxic and, therefore, no longer designates as mixed waste. • Curie content: 152 Ci Cs-137 and 248 Ci Sr-90 for 400 Ci total • Dose rate : <3 R/hr at 1 m (3.28 ft) • Additional information is provided in the burial record(s) in Appendix A

CAS = Chemical Abstracts Service
HEPA = high-efficiency particulate air
MFP = mixed fission products
ppm = parts per million
PUREX = plutonium-uranium extraction
WESF = Waste Encapsulation and Storage Facility

2.2 218-W-3A Landfill

The 218-W-3A Landfill (Figure 2-2) was placed in service in 1970 with a reported end date of 1998. The 218-W-3A Landfill covers 22 ha (54 ac), and contains unsegregated waste, LLW, mixed waste, and RSW (Solid Waste Information and Tracking System database). This landfill is west of the 221-T Building and immediately north of the 218-W-3 Landfill. The landfill consists of 57 trenches of varying sizes. Portions of 13 trenches contain RSW, which is out of the scope of this report because it will be removed under Tri-Party Agreement (TPA) (Ecology, EPA, and DOE, 1989a, *Hanford Federal Facility Agreement and Consent Order*) Milestone M-91-40/41.

Most of the waste in this unit is from the 100 Area, various facilities in the 200 West Area, the 300 Area, and the tank farms. A small portion is from offsite facilities, and the remaining portion is from Hanford Site facilities in the 200 East Area and other miscellaneous site locations.

Trenches 6 and 19 currently are identified as containing some mixed waste disposed after the effective date of mixed waste regulation. These containers are detailed in Table 2-2.

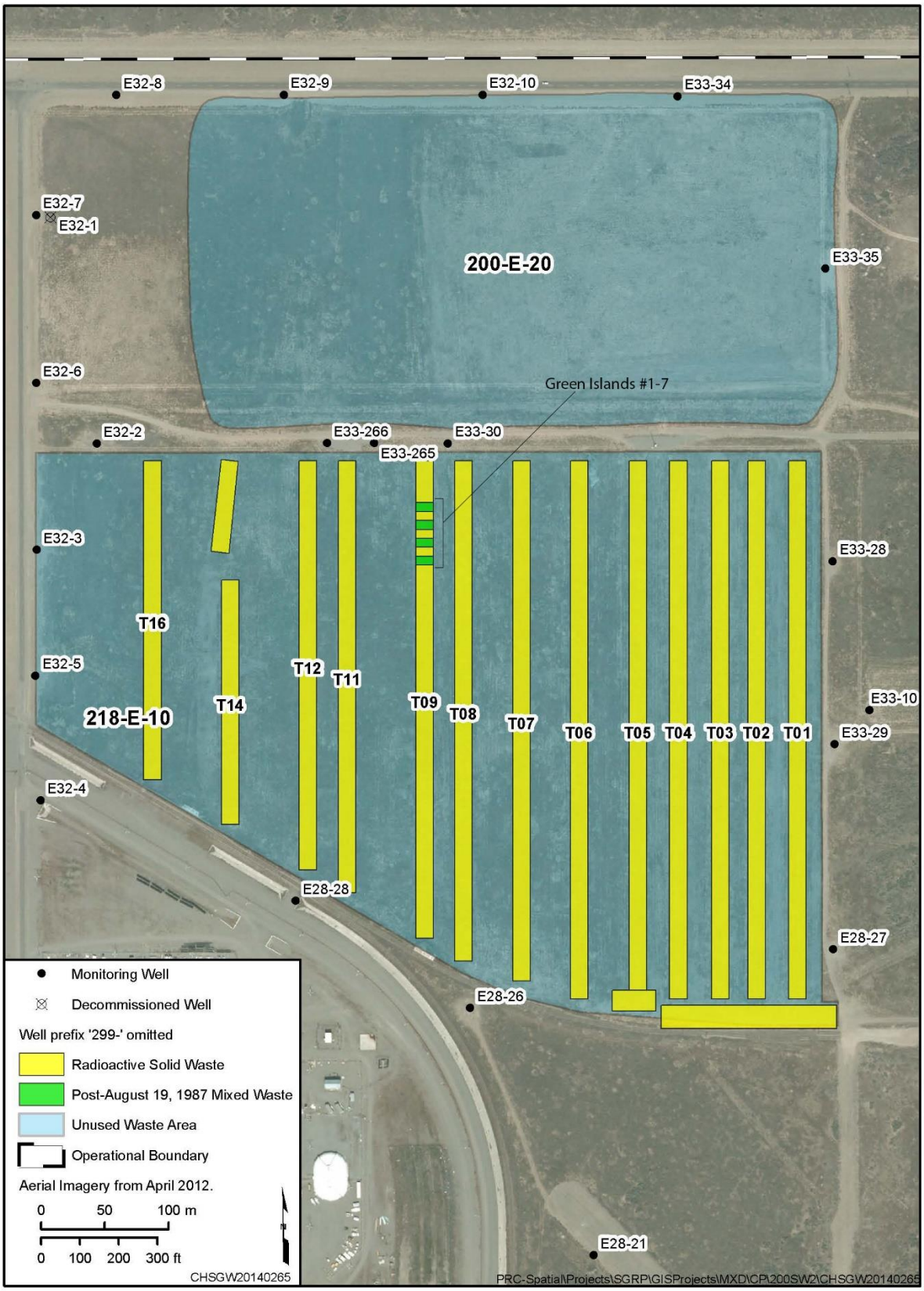

Figure 2-1. 218-E-10 Landfill

Table 2-2. Green Island Container Summary for the 218-W-3A Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
08	218-W-3A-TS6	Bettis Atomic Power Lab	BETTS-MIN-87-1 (6511-4)	Metal box 10’4” × 5’ 4” × 5’ 9” 9,775 lb	• Contains dry coolant pump, filters, metal tubing, asbestos, vent screens, fission chambers, wood bracing, and uncontaminated lead (730 lb) as shielding • Originally designated as mixed waste due to the presence of lead. However, the lead is used for its intended purpose as radiological shielding; therefore, this container is no longer designated as mixed waste • Curie content: 1.57E-02 Ci total • Dose rate: 45 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix B
09	218-W-3A-TS6	Hanford 300 Area/340	340-87-0199S	Five 55-gal drums 1,500 lb total weight (individual container weights are not recorded on burial records)	• Each of the 5 containers holds conwed pads, iron, galvanized sheet, paper/cardboard, and sorbed liquid • Containers are designated as mixed waste due to the presence of toluene • Curie content: MFP 5 mCi • Dose rate: 1 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix B
10	218-W-3A-TS6	Hanford 1608D	1608D-87-0004S	Fifteen 90-gal fiberglass drums 15,000 lb total weight (individual container weights are not recorded on burial records)	• Each of the 15 drums contains sludge contaminated with heavy metals, absorbent, and plastic • Containers are designated as mixed waste due to the presence of heavy metals, including barium, cadmium, chromium, lead, mercury, and silver • Curie content: MFP 43.8 mCi total • Dose rate: 30 mR/hr on contact at time of burial
11	218-W-3A-TS6	Hanford 300 Area/340	340-87-0222S 340-87-0223S 340-87-0224S	Three 55-gal drums 357 lb 297 lb 71 lb	• Each of the 3 drums contains absorbent, glass, and sorbed liquids • Containers are designated as mixed waste due to the presence of dioxane and naphthalene (340-87-0222S), toluene (340-87-0223S), and hydraulic oil (340-87-0224S) • Curie content: each container has MFP 5 mCi • 0.5 mR/hr at contact at time of burial
12	218-W-3A-TS6	Hanford 1608H	1608H-87-0004S	Nineteen 90-gal fiberglass	• Each of the 19 drums contains sludge contaminated with heavy metals, absorbent, and plastic

Table 2-2. Green Island Container Summary for the 218-W-3A Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
				drums 19,000 lb total weight (individual container weights are not recorded on burial records)	• Containers are designated as mixed waste due to the presence of heavy metals, including barium, cadmium, chromium, lead, mercury, and silver • Curie content: MFP 4.40E-02 Ci • Dose rate: 20 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix B
13	218-W-3A-TS6	Hanford PFP	2345Z-87-0026S	55-gal drum 90 lb	• Contains paper, plastic, metal, and amalgamated mercury contained in commercial spill kit • Container is designated as mixed waste due to the presence of mercury (1 lb) • Curie content: MFP 1 mCi total • Dose rate: 1 mR/hr on contact at time of burial • Additional information is provided in the burial record(s) in Appendix B
14	218-W-3A-TS6	Hanford 222-S	222-86-13 222-86-14 222-86-16 222-86-17 222-86-23 222-86-24 222-86-25 222-86-26 222-86-27 222-86-28 222-86-32 222-86-33	Twelve 55-gal drums Drums range in weight from 180 lb to 264 lb	• Each container holds plastic, conwed pads, and sorbed liquid organics, including acetonitrile, xylene, and miscellaneous organics • Containers are designated as mixed waste due to the presence of sorbed organic liquids • Curie content: MFP 1.0 E-07 per container • Dose rate: 0.1 to 3 mR/hr at time of burial • Additional information is provided in the burial record(s) in Appendix B
15	218-W-3A-TS6	Hanford 300 Area/340	340-87-0236S 340-87-0237S 340-87-0238S 340-87-0239S 340-87-0240S 340-87-0241S 340-87-0242S 340-87-0243S	Eight 55-gal drums Drums range in weight from 325 lb to 1,000 lb	• Drums -236S and -237S contain plastic, assorted metal, and lead; all other drums contain glass, conwed pads, and sorbed liquid • Drums are designated as mixed waste due to the presence of lead (>100 ppm total concentration) and sorbed pseudocumene • Curie content: Drums -236S and -237S have 0.1 m Ci Co-60; all others contain 0.1 m Ci MFP • Dose rate: 1 mrem/hr at contact at time of burial • Additional information is provided in the burial record(s) in Appendix B

Table 2-2. Green Island Container Summary for the 218-W-3A Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
16	218-W-3A-T19	LBNL	9002-1 Series (see Appendix B for individual container identification numbers)	Thirty 55-gal drums Drums range in weight from 277 lb to 381 lb	• Each of the drums contains silica gel, asphalt, blacktop, metal, tar, plastic, and dirt contaminated with tritium • Containers are designated as mixed waste due to the presence of tar and asphalt • Curie content: 800-1,000 Ci tritium per drum • Dose rate: 0.03 mrem/hr at 1 m (3.28 ft) at the time of burial • Additional information is provided in the burial record(s) in Appendix B

LBNL = Lawrence Berkeley National Laboratory
MFP = mixed fission products
PFP = Plutonium Finishing Plant
ppm = parts per million

2.3 218-W-3AE Landfill

The 218-W-3AE Landfill (Figure 2-3) covers approximately 23 ha (57 ac), began receiving waste in 1981, and stopped receiving waste in 2004. The landfill contains mixed waste and LLW, including large contaminated equipment. The 218-W-3AE Landfill is located directly east of and adjacent to the 218-W-3A Landfill in the 200 West Area. The location designated as the 218-W-3AE Landfill includes an area that previously had been used as a portion of the 216-T-4B Seepage Ponds for T-Plant condensate effluent. The pond area often was dry, because the majority of the effluent was absorbed in the 216-T-4-2 Ditch.

The irregularly shaped landfill consists of eight trenches of varying sizes. Trenches 5 and 8 are wide-bottom stacking trenches and contain large equipment, such as portions of rail cars. Trench 26 was dug with a wide bottom to dispose of large tanks. The landfill received miscellaneous wastes such as rags, paper, rubber gloves, disposable supplies, and broken tools as well as industrial waste such as failed equipment, tanks, pumps, ovens, agitators, heaters, hoods, jumpers, and accessories. All trenches received RH LLW.

The waste is mainly from the 100 Area, 200 East and West Areas, 300 Area, and other miscellaneous Hanford Site areas and facilities, such as the tank farms and the 1100 Area. The remaining portion is from offsite generators, the major contributors being Energy Systems Group, Argonne National Laboratory, Fermi National Accelerator Laboratory, and Battelle Columbus.

Portions of Trenches 5 and 8 contain mixed waste, as detailed in Table 2-3. A small amount of RH RSW is stored at this landfill. The RSW will be removed and repackaged for disposal.

Figure 2-2. 218-W-3A Landfill

Table 2-3. Green Island Container Summary for the 218-W-3AE Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
17	218-W-3AE-T08	LBNL	RTL0194 Series (see Appendix C for individual container identification numbers)	Sixty-three 55-gal drums Drums range in weight from 200 lb to 284 lb	• Drums contain absorbents, plastic, and metal cans contaminated with tritium • The debris was accepted as low-level only waste, but later declared mixed waste by the generator • Curie content: 80-200 Ci tritium per drum at time of burial • Dose rate: <0.02 mrem/hr at contact at time of burial • Additional information is provided in the burial record(s) in Appendix C
18	218-W-3AE-T05	TRW, Inc.	6803-1 Series (see Appendix C for individual container identification numbers)	Forty-three 55-gal drums 6,985 lb total weight (individual container weights are not recorded on burial records)	• Drums contain natural uranium, depleted uranium, cloth, metal, paper and plastic debris, and silver • Containers designate as mixed waste due to the presence of silver • Curie content: 255 mCi U • Dose rate: 1.2 mR/hr at surface at time of burial • Additional information is provided in the burial record(s) in Appendix C
19	218-W-3AE-T05	Hanford PFP	2345Z-87-027S	55-gal drum 190 lb	• Drum contains plastic, diatomaceous earth, and aluminum nitrate • Container designates as mixed waste due to the presence of aluminum nitrate (20 lb) • Curie content: <2 nCi Pu • Dose rate: 1 mR/hr at surface at time of burial • Additional information is provided in the burial record(s) in Appendix C
20	218-W-3AE-T05	Hanford 300 Area/340	340-87-0246S 340-87-0247S	Two 55 gal drums 250 lb 300 lb	• Drums contain plastic, lead, absorbent material, beryllium, and absorbed/neutralized hydrochloric acid • Drums are designated as mixed waste due to the presence of lead (>100 ppm total concentration) and beryllium (WT02) • Curie content: 5mCi MFP in each container • Dose rate: 0.5 mR/hr on contact at time of burial per container • Additional information is provided in the burial record(s) in Appendix C

LBNL = Lawrence Berkeley National Laboratory
MFP = mixed fission products
PFP = Plutonium Finishing Plant
ppm = parts per million

2.4 218-W-4C Landfill

The 218-W-4C Landfill (Figure 2-4) started receiving waste in 1978 and stopped receiving waste in 2005. The landfill covers approximately 18.6 ha (46 ac) and contains RSW (some combustible) and test reactor fuel waste (DOE REG-0271, *Low-Level Burial Grounds Fact Sheet*). The largest portion of the 218-W-4C Landfill is located west and southwest of the Plutonium Finishing Plant. A smaller unused section (218-W-4C Annex) is located directly south of the plant, and north of 16th Street. The 218-W-4C Landfill contains LLW, RSW, and mixed waste. Fifteen trenches have been used for waste storage and/or disposal.

Trenches 1, 4, 7, 20, 29, and the east end of Trench 24 contained RSW waste. Trenches NC, 14, 19, 23, 28, 33, 48, 53, and 58 and the remainder of Trench 24 received LLW. In addition, some wastes in Trenches Naval Reactor Compartment Trench (NC), 14, and 58 currently are identified as containing mixed waste, as detailed in Table 2-4.

The northernmost trench (Trench NC) contains a number of core barrels originating from the U.S. Department of the Navy. Trench 1 contains drums generated from mining the 216-Z-9 Crib and approximately 500 cans of ash received in the early 1980s. The ash was generated by the 232-Z Waste Incinerator Facility, which incinerated miscellaneous waste (e.g., rubber gloves, rags, paper, spent solvent, and cutting oils).

2.5 218-W-5 Landfill

In 1979, a large area adjacent to the northwest corner of the 200 West Area was annexed and designated the CWC (also known as the 218-W-5 Landfill) (Figure 2-5). The landfills stopped receiving waste in 2004. The landfill is at the southwest corner of the intersection of 27th Street and Dayton Avenue. This landfill began receiving waste in 1985 and covers 38.5 ha (95 ac). Within the large annex, 38 ha (94 ac) currently are permitted as a LLW landfill. Original plans called for the area to contain 18 LLW trenches and 4 mixed waste trenches. The landfill was expanded by annexing land to the west and north and was designed to contain 56 trenches, all oriented east-west. Of these, only 11 LLW trenches were constructed and received waste.

Trenches 31 and 34 are large rectangular excavations in the southwest corner of the 218-W-5 Landfill, currently operated as disposal units for mixed waste. They are out of the scope of this report, as both are RCRA TSD landfills. The trenches are constructed with polyethylene liners and leachate collection systems.

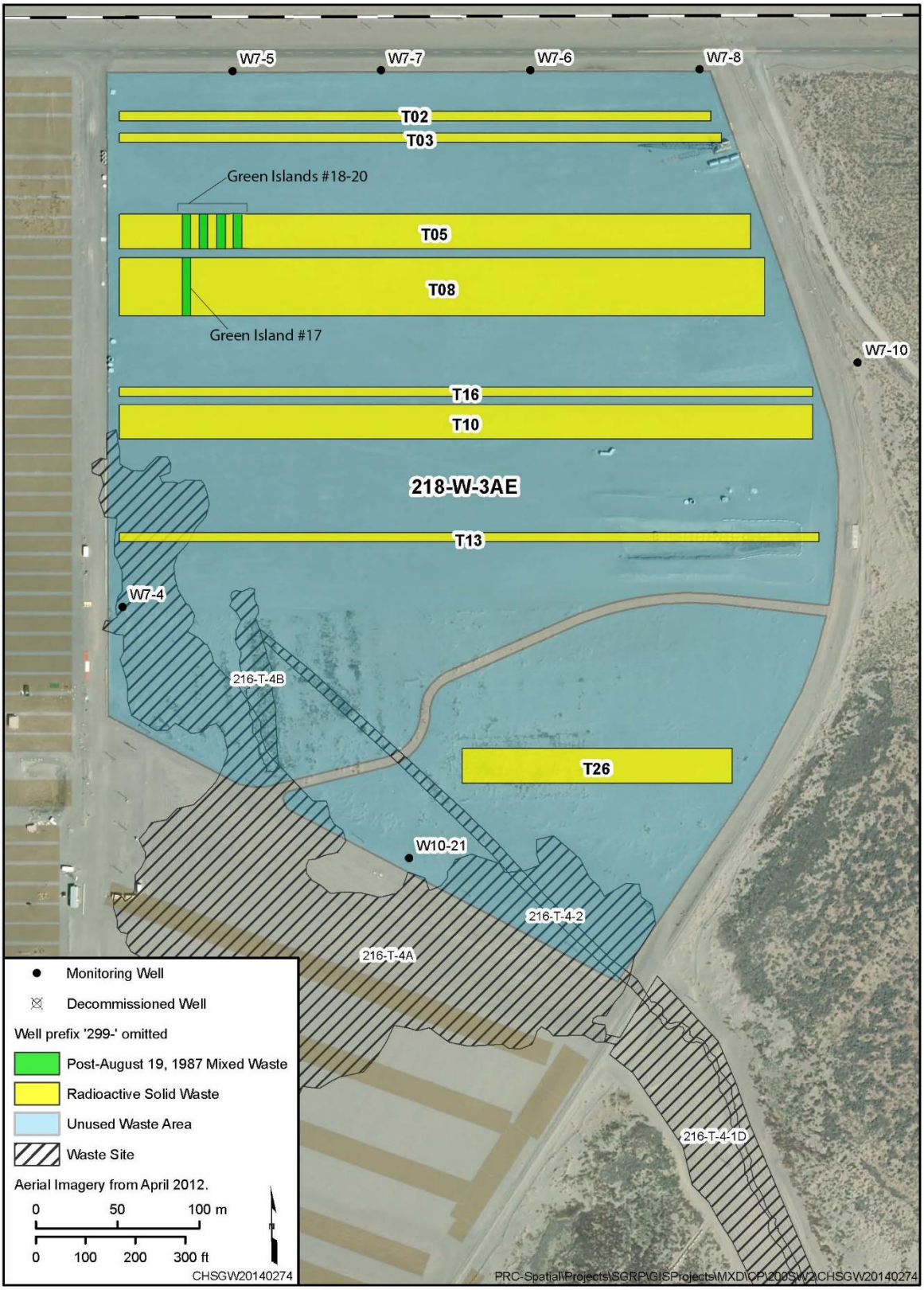

Figure 2-3. 218-W-3AE Landfill

Table 2-4. Green Island Container Summary for the 218-W-4C Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
21	218-W-4C-T14	Shipping Port	8901-02-1	17’ × 40’ – non containerized equipment 1.8M lb	• The waste is a non-containerized reactor pressure vessel containing lead shielding (8,000 lb) • Originally designated as mixed waste due to the presence of lead. However, the lead is used for its intended purpose as radiological shielding; therefore, this container is no longer designated as mixed waste • Curie content: 1.65E+04 Ci MFP at burial including Co-60, Ni-63, Fe-55, Ni-59 • Dose rate: 6 mR/hr at contact at time of burial • Additional information is provided in the burial record(s) in Appendix D
22	218-W-4C-T58	Hanford 300 Area/324	324-88-0010S	Lead shielded box with carbon steel 11’6” × 5’1” × 5’2”	• Box contains rubber, mild steel, stainless steel, carbon steel, and lead (15,800 lb) • Originally designated as mixed waste due to the presence of lead; however, the lead is used for its intended purpose as radiological shielding (therefore, this container is no longer designated as mixed waste) • Curie content: 1,250 Ci Cs-137 at time of burial • Dose rate: 35,000 mR/hr contact dose rate at time of burial • Additional information is provided in the burial record(s) in Appendix D
23	218-W-4C-TNC	LBNL	RTL- and RTH- Series (see Appendix D for individual container identification numbers)	Nine 55-gal drums Twenty-three 150-gal Enduropaks Weight ranges from 264 lb to 613 lb	• All containers hold pyrofoam, absorbents, plastic, and metal contaminated with tritium • The debris was accepted as LLW, but later declared mixed waste by the generator • Curie content: 1,000 Ci tritium per container at time of burial • Dose rate: <2 mrem/hr at contact at time of burial • Additional information is provided in the burial record(s) in Appendix D

LBNL = Lawrence Berkeley National Laboratory

LLW = low-level waste

MFP = mixed fission products

A small portion of Trench 22 is currently identified as containing mixed waste, as detailed in Table 2-5.

Table 2-5. Green Island Container Summary for the 218-W-5 Landfill

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste and Radionuclide Information
24	218-W-5-T22	LBNL	9002-02 Series (see Appendix E for individual container identification numbers)	Twenty-four 55 gal drums Weight ranges from 253 lb to 375 lb	• All containers hold paper, tar, diatomite, silica gel, steel, and plastic • The debris was accepted as LLW, but later declared mixed waste by the generator. • Curie content: 800-1,000 Ci tritium per drum • Dose rate: 0.03 mrem/hr at contact at time of burial • Additional information is provided in the burial record(s) in Appendix E

LBNL = Lawrence Berkeley National Laboratory

LLW = low-level waste

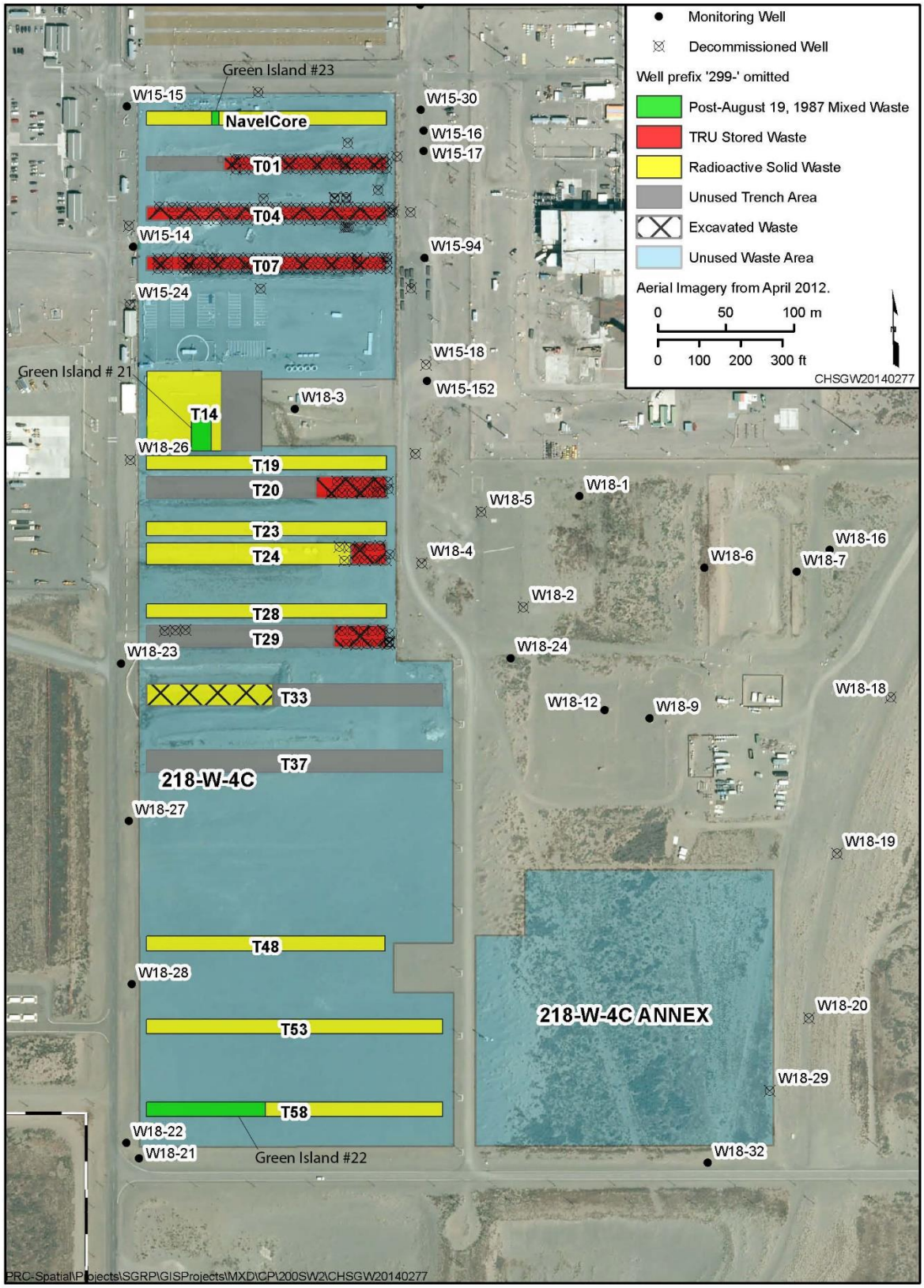

Figure 2-4. 218-W-4C Landfill

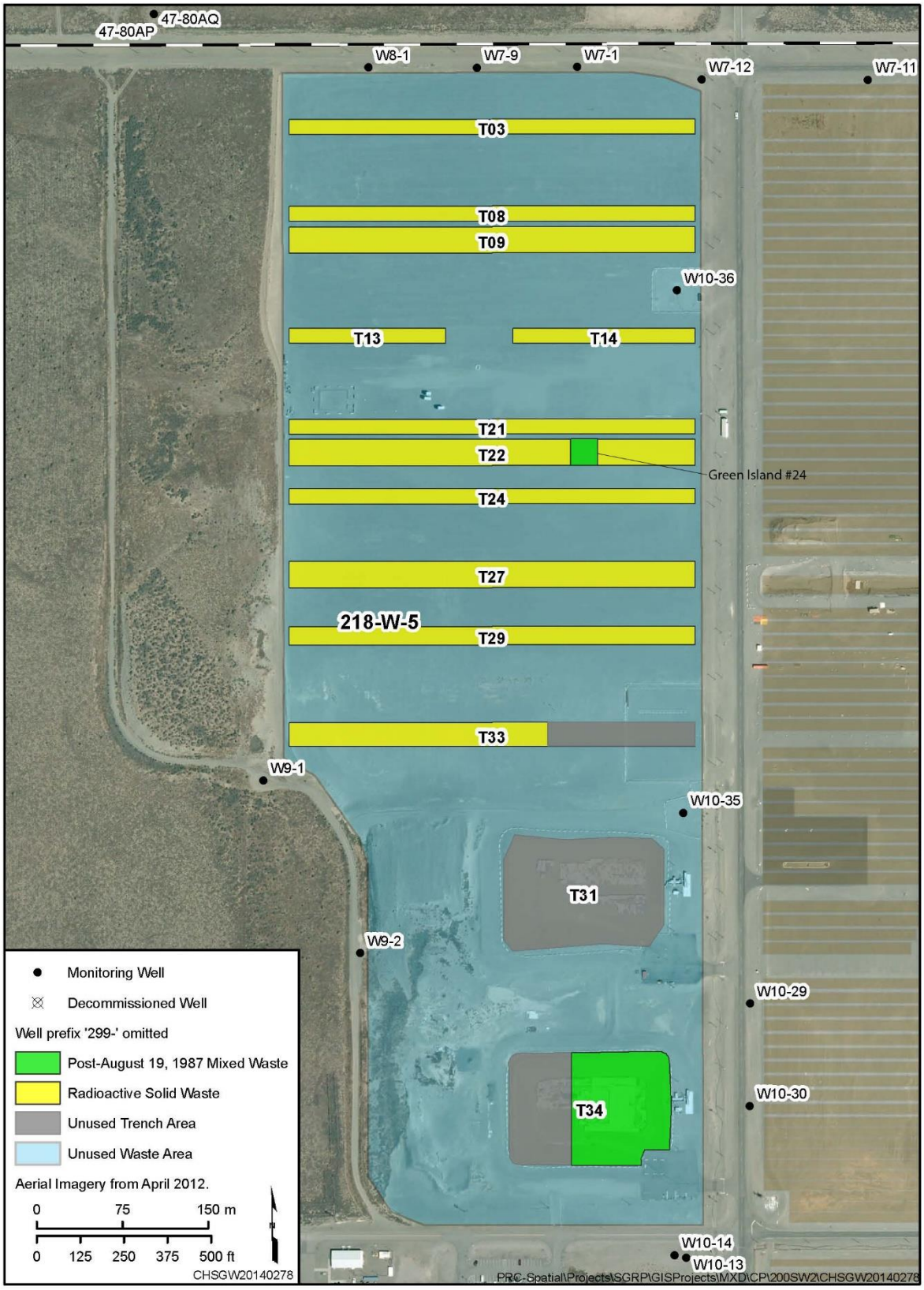

Figure 2-5. 218-W-5 Landfill

3 Green Islands

This chapter describes a reevalution of each of the Green Islands that were initially considered to be regulated under RCRA, This section provides the results of this evaluation and proposes the redesignation of several of the landfills and the regulatory rationale.

3.1 Designation of Green Island Waste

Mixed waste disposed after August 19, 1987, is subject to the RCRA TSD standards. Mixed waste disposed to the RCRA landfills after the effective date of regulation historically have been coded on RCRA Part A Permit application maps with the color green. These disposal locations have been referred to as "Green Islands." Technically, "Green Islands" are subject to regulation as RCRA landfills.

The area where waste was disposed is referred to as Green Islands. These unlined trenches of the landfills were originally designated as containing LLW. After burial, the waste was reclassified as mixed waste for the following reasons:

- Certain waste that was disposed during a three-month period in 1987. The effective date of mixed waste regulation was changed from November 23, 1987 to August 19, 1987. The waste disposed during this period was deemed mixed waste by the U.S. Attorney General's Office on September 24, 1996.
- Mixed waste was disposed to unlined trenches in the landfills in 1988, 1989, and 1993. This practice was administratively discontinued on January 11, 1996, when DOE informed Ecology that mixed waste disposal would comply with all applicable requirements.
- Certain Lawrence Berkeley National Laboratory (LBNL) waste was disposed as LLW in 1990, 1994, and 1995. Subsequent to burial, LBNL informed DOE that additional process knowledge resulted in a mixed waste designation.

3.2 Redesignation of select Green Island Waste

A review of burial records and associated container inventories was performed in an attempt to ensure that containers associated with Green Island waste are, in fact, regulated under RCRA. This review identified several containers of Green Island waste that will be redesignated as non-mixed, low-level only waste. These containers and the associated regulatory justification for redesignation are presented in Table G-1 in Appendix G.

3.3 Green Island Waste Disposition

As noted in Table G-1, seven waste containers associated with the Green Islands will have their status changed from mixed waste to LLW. DOE-RL will submit a letter to Ecology stating that the containers are no longer considered RCRA waste and will not be managed as such.

For the remaining Green Island containers, the information in Table G-1 will be used to evaluate costs associated with continued RCRA monitoring versus full retrieval of the waste and storage in the CWC pending treatment and final disposal. A regulatory path forward for disposition of the Green Islands is provided in Section 3.4.

Container inventory and burial coordinates were obtained from a review of burial records generated upon receipt of the waste at each of the five landfills. These records are provided in Appendices A through F.

3.4 Regulatory Path Forward

In support for the revision of the Hanford Facility RCRA Permit (WA7890008967, *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*), the current Part A Form for LLBGs will be changed to two Part A Forms: one will include the three operating trenches (Trenches 31 and 34 in 200-W-5 and Trench 94 in 200-E-12B), and the other one will be for the Green Islands. The burial grounds and trenches will be considered part practice units.

3.4.1 Regulatory Alternatives

Two alternatives have been evaluated to address a regulatory path for closure or remediation of the mixed wastes placed in the unlined trenches of the LLBGs. Alternative A evaluated the ability to reclassify the mixed waste buried in the unlined trenches from TSD units to past-practice units via Article IV Section 19 of the TPA (Ecology et al., 1989a). This alternative would allow the mixed waste buried in the unlined trenches to be managed under the RCRA corrective action provisions in WAC 173-303-64620, "Requirements," via an applicable or relevant and appropriate requirement (ARAR) in the 200-SW-2 OU *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) activity.

3.4.1.1 Alternative B evaluated RCRA permitting the TSD units identified in the unlined trenches but deferring the closure and post-closure requirements to the past-practice remedial action for the 200-SW-2 OU as an ARAR in accordance with WAC 173-303-610(1)(e), "Closure and Post-Closure."Alternative A: Corrective Action

Under this alternative, DOE will obtain formal agreement with EPA and Ecology to unify corrective action of the LLBGs by addressing all mixed waste disposal under Article IV Section 19 of the TPA (Ecology et al., 1989a). This action would remove the existing designation, as TSD units, of the several limited LLBG segments where mixed wastes were disposed after August 19, 1987. All of the past-practice trenches, including these segments, would be governed under the corrective action provisions of the TPA (Ecology et al., 1989a).

- Article 1, paragraph 2 of the TPA (Ecology et al., 1989a) states that Ecology is responsible for implementing RCRA at the Hanford Site and allows for Ecology and DOE to determine the best approach for dangerous waste management either through establishment of TSD units or past-practice units subject to corrective action. Section 5.2 of the TPA Action Plan (Ecology et al., 1989b, *Hanford Federal Facility Agreement and Consent Order Action Plan*) allows for the establishment of TSD units and past-practice units.

- Section 7.4 of the TPA Action Plan (Ecology et al., 1989b) provides the process for corrective action of past-practice units. Corrective Action for the area of the LLBGs in which regulated waste was disposed post-August 19, 1987 would be processed in accordance with this section.

- Section 7.5 of the TPA Action Plan (Ecology et al., 1989b), "Cleanup Requirements," requires DOE to comply with identified ARARs during the cleanup or remediation activities. For the area of the LLBGs in which regulated waste was disposed post-August 19, 1987, the substantive requirements of the RCRA Corrective Action Program will be integrated under the CERCLA activity (i.e., 200-SW-2) OU CERCLA remedial investigation/feasibility study (RI/FS) process.

- Hanford Facility Dangerous Waste Permit (WA7890008967), Condition II.Y.2 includes the allowance for corrective action to be addressed under other cleanup authorities or programs under the TPA (Ecology et al., 1989a), provided that alternative is protective of human health and the environment.

- Section 7.5 of the TPA Action Plan (Ecology et al., 1989b), "Cleanup Requirements," requires DOE to comply with identified ARARs during the cleanup or remediation activities. For the area of the LLBGs in which regulated waste was disposed post-August 19, 1987, the substantive requirements of the RCRA Corrective Action Program will be integrated under the CERCLA activity (i.e., 200-SW-2) OU CERCLA RI/FS process.
- Hanford Facility Dangerous Waste Permit (WA7890008967), Condition II.Y.2 includes the allowance for corrective action to be addressed under other cleanup authorities or programs under the TPA (Ecology et al., 1989a), provided that alternative is protective of human health and the environment.

3.4.1.2 Implementation Path for Alternative A

1. DOE would submit a formal letter to Ecology and EPA that in accordance with the TPA (Ecology et al., 1989a), DOE is requesting the subject LLBGs past-practice trenches, including all former TSD unit segments, be addressed as past-practice units under the corrective action requirements in accordance with Permit (WA7890008967) Condition II.Y.2. The corrective action would be accomplished via Section 7.4 of the TPA Action Plan (Ecology et al., 1989b) and would require the substantive requirements of the RCRA corrective action program in WAC 173-303-64620 to be integrated under the CERCLA activity as an ARAR.
2. Ecology and EPA would agree to the DOE request to address the subject LLBGs trenches and segments as past-practice units as a CERCLA remedial action using the substantive requirements of the RCRA corrective action program integrated as an ARAR.
3. A TPA (Ecology et al., 1989a) change request would be prepared, submitted, and approved to modify Appendix B and Appendix C of the TPA Action Plan (Ecology et al., 1989b) to reclassify the respective LLBGs from TSD units to past-practice units.
   - Appendix B, Group Number D-2-9 (LLBG) would be revised by removing 218-E-10, 218-W-3AE, 218-W-3A, and 218-W-4C as TSD units. Note that 218-W-5 and 218-E-12B would remain since they have current operating mixed waste unit trenches.
   - Appendix C would be revised by removing the "**" reference in the 200-SW-2 OU on waste unit names 218-E-10, 218-W-3AE, 218-W-3A, and 218-W-4C. The "**" reference for the 218-W-5 and 218-E-12B would remain since Trench 94 is still an operating TSD unit. Additionally, the "**" on 218-W-4B would be removed from the 200-SW-2 OU listing. 218-W-4B was originally identified as a TSD unit based on a protective filing due to the uncertainty of the waste placed in the trenches. Since then, it has been determined that there were no mixed wastes placed in the trenches after the effective date of the mixed waste regulations, August 19, 1987.
4. The LLBG RCRA Part A forms, or portions thereof, would be modified to eliminate the subject LLBGs as TSD units.
5. The 200-SW-2 OU CERCLA RI/FS documentation would be updated to reflect the classifying the entire trench as past-practice.
6. The substantive requirements of the RCRA corrective action program (WAC 173-303-64620) would continue to be used the 200-SW-2 OU CERCLA RI/FS process as an ARAR.

3.4.1.3 Draft Language into the Permit and/or TPA to Implement

No additional draft language is needed for the Hanford Facility Permit RCRA Permit (WA7890008967). No draft language is needed for the TPA (Ecology et al., 1989a). Current TPA (Ecology et al., 1989a) milestones for the 200-SW-2 OU are adequate.

3.4.2 Alternative B: Permit Deferral to Past Practice

Continue to maintain the subject areas in the LLBGs in which regulated wastes were disposed post-August 19, 1987 as a TSD unit under the RCRA. Closure/post-closure plans would be developed and incorporated into the reissued Hanford Facility Dangerous Waste Permit (WA7890008967). Since the subject trench segments as TSD units are small as compared with the entire trench past-practice units, the closure/post-closure plans for the trench segments TSD units would defer to the past-practice remedial action for the 200-SW-2 OU past-practice trenches using WAC 173-303-610(1)(e) as a basis for implementation. The substantive portions of the RCRA closure and post-closure activities would be included as ARARs, including substantive RCRA final status landfill closure and post-closure requirements, and would be included in the 200-SW-2 OU remedial action documentation.

3.4.2.1 Regulatory Basis

Because waste disposed post-August 19, 1987, is of limited extent and dispersed within areas of past-practice disposal, alternative closure and post-closure requirements may be applied in accordance with WAC 173-303-610(1)(e). Deferral by the closure and post-closure plans to the 200-SW-2 OU CERCLA remedial action documentation would be consistent with WAC 173-303-610(3)(a)(ix) and WAC 173-303-610(8)(b)(iv). Regulatory citations are provided in the following bullets.

- WAC 173-303-610(1)(e), Applicability, states in part; "(e) Except for subsection (2)(a) of this section, the director may, in an enforceable document, replace all or part of the requirements of this section and the unit-specific requirements referenced in subsection (2)(b) of this section with alternative requirements when he or she determines:
  - A dangerous waste unit is situated among other solid waste management units or areas of concern, a release has occurred, and both the dangerous waste unit and one or more of the solid waste management units or areas of concern are likely to have contributed to the release; and
  - It is not necessary to apply the requirements of this section (or the unit-specific requirements referenced in subsection (2)(b) of this section) because the alternative requirements will protect human health and the environment."
- WAC 173-303-610(3)(a)(ix), Closure of Plan; Amendment of Plan, states in part; "(ix) For facilities where the director has applied alternative requirements under subsection (1) (e) of this section, WAC 173-303-645 (1)(e), or 173-303-620 (8)(d), the closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements."
- WAC 173-303-610(8)(b)(iv), Post-closure Plan; Amendment of Plan, states in part; "(iv) And, for facilities where the director has applied alternative requirements under subsection (1) (e) of this section, WAC 173-303-645 (1)(e) or 173-303-620 (8)(d), the post-closure plan must include either the alternative requirements or a reference to the enforceable document that contains the alternative requirements."
- The TPA Action Plan (Ecology et al., 1989b) acknowledges the fact that minor TSD units may be part of the larger past-practice OU. Section 5.4 "Management of Past-Practice Units" of the TPA Action Plan (Ecology et al., 1989b) states in part, "If an operable unit consists primarily of past-practice units (i.e., no TSD units or relatively insignificant TSD units), CERCLA authority will generally be used for those past-practice units." The subject areas of the LLBGs that mixed waste was disposed of post-August 19, 1987 are insignificant to the total area of the past-practice units.

3.4.2.2 Implementation Path for Alternative B

1. Closure and post-closure plans would be developed and would specifically defer to the 200-SW-2 OU CERCLA remedy as alternative requirements in accordance with WAC 173-303-610(1)(e).
2. The Hanford Facility RCRA Permit (WA7890008967), Part V and Part VI would be modified to add the closure/post-closure plans for these TSD units incorporating the deferral under WAC 173-303-610(1)(e) to the 200-SW-2 OU remedial action documentation.
3. The 200-SW-2 OU RI/FS documentation would be updated to reflect this closure approach for the TSD unit trench segments.
4. The substantive requirements of the RCRA landfill closure, WAC 173-303-610 and WAC 173-303-665(6), "Landfills," would be integrated in the 200-SW-2 OU CERCLA remedial action process as an ARAR.

3.4.2.3 Draft Language into the Permit and/or TPA to Implement

No additional draft language is needed for the Hanford Facility Permit RCRA Permit (WA7890008967). No draft language is needed for the TPA (Ecology et al., 1989a). Current TPA (Ecology et al., 1989a) milestones for the 200-SW-2 OU are adequate.

3.4.3 Recommended Alternative

Although both alternatives provide legitimate and defensible regulatory paths, Alternative B is recommended for implementation based on the higher probability of Ecology's acceptance of the approach.

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4 References

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RCW 70.105, "Hazardous Waste Management," *Revised Code of Washington*, Olympia, Washington. Available at: http://apps.leg.wa.gov/RCW/default.aspx?cite=70.105.

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WAC 173-303, "Dangerous Waste Regulations," *Washington Administrative Code*, Olympia, Washington. Available at: http://apps.leg.wa.gov/WAC/default.aspx?cite=173-303.

303-610, "Closure and Post-Closure."

303-645, "Releases from Regulated Units."

303-665, "Landfills."

303-64620, "Requirements."

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Appendix A

218-E-10 Green Island Waste Burial Records

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START

3rd QUARTER 1987

202A -WHC IND 200E 010 T09 (87)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
091587	0001	2632.80	IN	1	KP	76000.00	SR	37.50000	T09	I	010	WHC
							CS	37.50000				
							CI	150.00000				

202A-87-02115

...TOTALS... 2632.80 76000.00

0 0 3 2 0 9 2 0 1 9 3

202A-87-02115 202A-WHC-87-1 (87)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. WA789-000 8967
Manifest Document No. WH-A-87-306
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
T.H. Kervin
202A 200E RM100
4. Generator's Phone ( ) 373 2323

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name
WHC Train Crew
6. US EPA ID Number WA 789-000-8967
C. State Transporter's ID
D. Transporter's Phone 3-1881

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
200 East Area
Burial Grounds
10. US EPA ID Number WA 789-000-8967
G. State Facility's ID
H. Facility's Phone 3-3360

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Radioactive N.O.S.		1		76,000		D008 WT01
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
General purpose burial box with 2x6 lbs. of Lead.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: Thomas H Kervin
Signature: Thomas H Kervin
Month Day Year: 9 15 87

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: MARIO MORON
Signature: Mario Moron
Month Day Year: 9 15 87

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: DR TYZEL
Signature: DR Tyzel
Month Day Year: 9 15 87

Style F15R-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete.

ORIGINAL-RETURN TO GENERATOR

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (89)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. 221 B-WHC-87 2 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200 EAST
Burial Ground No.: 218 E - 108
Trench No.: 9
Caisson No.: N/A
Beginning Coordinates: N 45676 W 55725
Ending Coordinates: N 456336 W 55725
Remarks:

Signature - Acceptance: Bruce A. Rogers — Date: 9-28-87
Signature - Burial: — Date:

WASTE GENERATOR: B-plant
Charge Code: WD536
DOE Authorization No. (RRM): N/A
Address/Phone: 271-B/2-E 3-2781

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: W. Wingfield — Date: 9-28-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	15 %	Glass	%
Plastic	5 %	Concrete	%
Cloth	60 %	Stainless Steel	9 %
Rubber	%	Other Metals	10 %
	%	Lead	1 %
	%		%
	%		%
	%		%
Total	80 %	Total	20 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Lead Ref. 271-B-87-2	2.17

CONTAINER INFORMATION

Quantity & Name: — 55 Gallon Drums; — Hanford Standard Fiberboard Boxes (18" x 18" x 24")
ONE Other: General Purpose Burial Box
BCC Approval Number: 1-2A-1CM-0
Dose Rate - Package: 10 mr mrem/hr at Contact
Diameter or Length x Width: 22'7" x 11'8"
Height: x 10'-0"
Material of Construction: Concrete
Nuclear Transaction No.: N/A
Property Disposal Request No.: N/A
Total Volume: 24716 ft3
Waste Weight Gross Weight: 20,000 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☒ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: ~~48,000~~ pounds
68,000 pounds gross weight
221B-87-01005
Container weight
Per telephone conversation with Art Lee 271B/200E taken by Dan McCann

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
N/A	NONE	N/A	MFP	1000 ci
Totals		NA		1000 ci

Measurement Method: Est.
Determined By: W. Wingfield

DISTRIBUTION: White - SWPDU 2750-E/200 E; Canary - TFS 272-W/200 W; Pink - Return to Shipper 200-W

54-3000-581 (7-85)

202A-87-02523

Tank Farms

(I)

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

ARR No. 202A-87-02523 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE

Area: 200 East
Burial Ground: 218-E-10
Cassion No.: N/A
Northing Coordinates: 45636
Easting Coordinates: 45587
Northing Coordinates: 55725
Easting Coordinates: 55725
Remarks:

Signature: Bruce A. Rogue
Date: 10-15-87

WASTE GENERATOR: WHC

Facility: KPGPD
DOE Authorization (RRM): N/A
202A 200E 3 2723

I certify that: 1. No capital property is included in this burial and gas documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO MA 222 and the approved Burial Ground Characterization (BGC).

Signature: T.H. Keerin
Date: 10-15-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products		Glass	
Plastics		Ceramics	
Cloth		Structural Steel	50
Rubber		Other Metals	50
Total	0	Total	100

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity
Lead	270 lbs

CONTAINER INFORMATION

Container & Number: 1 SN — 55 Gallon Drums — Hanford Standard Fiberboard Boxes (48 x 48 x 24)
Other: General Purpose burial box
Dose Rate Package: 1-2C-1CM-01 12 mrem/hr at contact
Dimensions (Length x Width): 22'7" x 11'8"
Height: 10'
Material of Construction: steel & concrete
Number of Packages: N/A
Property Disposal Request No.: N/A
Total Volume: 2632.8 cu ft
Gross Weight: 77,500 Pounds
WASTE CATEGORIES: LS / DS / LE / NE / DE / SC
Thermal Power: ☑ 0.1 w/ft³ or less — Other
Remarks: Canyon burial From PUREX.

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution	Curies	Isotope	Curies
None	None	N/A	MFP's	< 90 Curies
Total		N/A		< 90 Curies

Measurement Method: Estimated
Signature: T.H. Keerin

DISTRIBUTION: White - SWRO, 218-E-10 B; Canary - TFS, 212 W 200 A; Pink - Return to Shipper, 202A

4th QUARTER 1987

202A -WHC IND 200E 010 T09 (87)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
101587	0002	2632.80	IN	1	KPKA2	77500.00	SR	22.50000	T09	I	010	WHC
							CS	22.50000				
							CI	90.00000				
...TOTALS...		2632.80				77500.00						

202A-87-02325

202A-87-02325 DOE/A-WHC-87-2 (87)

Please print or type (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 3-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789-000-8967 | Manifest Document No: WH-A-88-30

2 Page 1 of 1 | Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address: T H Kervin WHC 202A 200E ~~375~~ 7R

4 Generator's Phone: 372 2327

5 Transporter 1 Company Name: Westinghouse Hanford Company | 6 US EPA ID Number: WA 789 000 8967

7 Transporter 2 Company Name | 8 US EPA ID Number

9 Designated Facility Name and Site Address: 200 East Burial Ground | 10 US EPA ID Number: WA 789 000 8967

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone: 3-1881

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone: 3-3360

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12 Containers No.	Type	13 Total Quantity	14 Unit WT/Vol	I Waste No
a.	X Radioactive Material NOS UN 2982 Hazardous Radioactive	1	Wooden Box	775000	lbs	D008 WT01
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above: Lead weight ~ 270 lbs. used as counter weight.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16 **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: Thomas H Kervin | Signature: Thomas H Kervin | Month 10 Day 8 Year 87

17 Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: J.E. Mills | Signature: J.E. Mills | Month 10 Day 15 Year 87

18 Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19 Discrepancy Indication Space

20 Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name | Signature | Month Day Year

Style F15R-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 Rev. 3-85 Previous editions are obsolete

TRANSPORTER - 1

START

4th QUARTER 1987

221B -WHC IND 200E 010 T09 (89)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
101987	0003	2476.00	IN	1	WD21W	68000.00	SR	3750.00000	T09	I	010	WHC
							CS	3750.00000				
							CI	15000.00000				
111787	0004	2476.00	IN	1	WD21W	80000.00	SR	5.00000	T09	I	010	WHC
							CS	5.00000				
							CI	20.00000				
...TOTALS...		4952.00				148000.00						

221B-87-01188

221B-87-01338

2218-87-01183/RSR 53188

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 50-B-WM-87-3 (89)

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200-E
Burial Ground No.: 218 E 10
Trench No.: 9
Caisson No.: NA
Beginning Coordinates: W 55725 N 45587
Ending Coordinates: W 55725 N 45557
Remarks: None
Signature Acceptance: F. Tiliano
Date: 10-19-87
Signature Burial:
Date:

WASTE GENERATOR: B-plant
Charge Code: WO 5316
DOE Authorization No. (RRM): N/A
Address Phone: 271-B / 200-E 3-2781

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: W. Winfield
Date: 10-19-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	10 %	Glass	%
Plastic	20 %	Concrete	10 %
Cloth	20 %	Stainless Steel	20 %
Rubber	3 %	Other Metals	10 %
Wood	4 %	Lead	2 %
	%	Asbestos	1 %
	%		%
	%		%
Total	57 %	Total	43 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (lb or Kg)
Asbestos	45 lb
Lead	30 lb

CONTAINER INFORMATION

Quantity & Name: 1 — 55 Gallon Drum — Hanford Standard Fiberboard Box (18" x 18" x 24") — Other: General Purpose Burial Box

BCC Approval Number: 1-2A-1CM-1
Dose Rate Package: 3000 mrem/hr @ 10'
Diameter or Length x Width: 22'.7" x 11'.8"
Height: x 10'
Material of Construction: Concrete
Nuclear Transaction No.: N/A
Property Disposal Request No.: N/A
Total Volume: 2476 ft3
Gross Weight: 20000 lb (Pounds) ☒ / Kilograms ☐
Waste weight

WASTE CATEGORIES: ☐ BW ☐ DS ☒ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: 48,000 container wt. 68,000 gross weight
MANIFEST #2218-87-3

per telephone conversation with Art Lee 2718/200E taken by Ron McCann

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
N/A	None	N/A	MFP	15,000 Ci
Totals		N/A		15,000 Ci

Measurement Method: Est
Determined By: W. Winfield

DISTRIBUTION: White - SWPDU 2750-E/200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 7 85

2218-87-01185

2218-WHC-87-3 (89)

Please print or type (Form designed for use on elite (12-pitch) typewriter) Form Approved OMB No 2000-0404 (Expires 7-31-86)

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967 | Manifest Document No: 2218-87-3 | 2 Page 1 of 1 | Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address
E. A. Porter
2718/200E
4 Generator's Phone (509) 373-4380

A. State Manifest Document Number
B. State Generator's ID

5 Transporter 1 Company Name: Westinghouse Hanford Company | 6 US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone (509) 376-1420

7 Transporter 2 Company Name | 8 US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9 Designated Facility Name and Site Address
Burial Grounds
200 East Area
10 US EPA ID Number: WA 789 000 8967
G. State Facility's ID
H. Facility's Phone (509) 373-5187

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	I. Waste No.
a.	X RQ Waste Radioactive Material, n.o.s. (MFP, Lead, DOE-E Asbestos DOE-E) Radioactive Material UN 2982	1	Con-crete Box	8,680	K	D008, MT01
b.	See Onsite Radioactive Shipment Record 53188 dated 10-19-87 for additional information.					
c.						
d.						

J. Additional Descriptions for Materials Listed Above
Approximately 1K leadin jumper counterweights from Canyon.
Approximately .01 Cu. ft. asbestos in gaskets on jumpers.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: E. A. Porter | Signature | Month 10 Day 19 Year 87

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charles Slater | Signature: Charles Slater | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: N. L. Hatfield | Signature: N. L. Hatfield | Month 10 Day 19 Year 87

Style F159-6 Labelmaster Div. of American Labelmark Co. Inc. 60646 | EPA Form 8700-22 (Rev. 4-84) Previous editions are obsolete.

TRANSPORTER 2

2410-81-01100

221B-WM-87-3

ASBESTOS DISPOSAL REQUEST

The Industrial Hygiene & Safety Department (IH&S) of Rockwell Hanford Operations has control of asbestos management at Hanford. Accordingly, IH&S has established the following disposal requirements for asbestos at the XXXXXXXXXXXXXXXXXXXXXXXXXXXX: **200E Burial Grounds**

1. A radiation release must be obtained for any asbestos eminating from a Radiation Zone. **N/A**

2. All asbestos material packaged for disposal must be thoroughly wetted to eliminate any airborne asbestos particles during transportation, handling, or burial.

3. All asbestos material must be doubled plastic bagged or wrapped (6 mil or equivalent) to eliminate any airborne asbestos particles. A seal to preclude environmental or personnel exposure should be provided.

4. An accurate estimate of the asbestos volume must be provided along with the following information:

Generator's Name: **E. A. Porter, B-Plant Operations**

Phone Number: **3-4380**

Contractor Contracted By: **Westinghouse Hanford Company**

Location: **271B/200E** Estimated Volume (ft^3): **.01**

I have read and accept responsibility for the above outlined requirements for disposal of asbestos material.

Generator Name: Emily Porter

Date: **10-19-87**

The above requirements have been met and the estimated volume appears correct.

200E Burial Grounds
XXXXXX Operator:

Date:

WHITE - Generator Canary - Landfill Pink - IH&S SC 6700 194

221B-87-01335

Rockwell Hanford Operations

SOLID WASTE BURIAL RECORD – LOW LEVEL

RSR 23761

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 221B-WTC-87-4 (89)

DISPOSAL SITE This portion of form to be completed by Rockwell Representative at Disposal site.

Area	Burial Ground No	Trench No
200 E	218-E-10	9

Caisson No: NA

Beginning Coordinates: N 45514 W 55725

Ending Coordinates: N 45539 W 55725

Remarks:

Signature Acceptance: Debbie Chulos — Date: 11-17-87

Signature Burial — Date:

WASTE GENERATOR: WD536

Charge Code: WD536 — DOE Authorization No (ARM): N/A

Address Phone: 271-B/200E 3-2781

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature — Date: 11/17/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	4 %	Glass	%
Plastic	5 %	Concrete	%
Cloth	20 %	Stainless Steel	50 %
Rubber	%	Other Metals	20 %
	%	Lead	1 %
	%		%
	%		%
	%		%
Total	29 %	Total	71 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Lead	40 lb.

CONTAINER INFORMATION

Quantity & Name: N/A 55 Gallon Drum; N/A Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 1 Other: General Purpose Burial Box

BCC Approval Number: 1-2A-1CM-0 — Dose Rate: 75R — Package: Contact Reg

Diameter or Length x Width: 22'-7" x 11'-8" — Height: 10'

Material of Construction: concrete and steel

Nuclear Transaction No: N/A — Property Disposal Request No: 88-4065

Total Volume: 2476 ft³ — Gross Weight: 80,000 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: BV ☐ DS ☒ CE ☐ SS ☐ DO ☐ NC ☐

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks:

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
N/A	None	N/A	MFP	>20
Totals		N/A		>20

Measurement Method: estimate — Determined By:

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54-3000 581 (7 85)

2218-81-01330

2218-CWMC-87-4

Please print or type (Form designed for use on elite (12-pitch) typewriter)

Form Approved OMB No 2000-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967

Manifest Document No: 2718-87-4

2 Page 1 of 1

Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address: K. A. Artz, 2718/200E

4 Generator's Phone: (509) 373-5333

A. State Manifest Document Number

B. State Generator's ID

5 Transporter 1 Company Name: Westinghouse Hanford Company

6 US EPA ID Number: WA 789 000 8967

C. State Transporter's ID

D. Transporter's Phone: (509) 376-1420

7 Transporter 2 Company Name

8 US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9 Designated Facility Name and Site Address: Burial Grounds, 200 East Area

10 US EPA ID Number: WA 789 000 8967

G. State Facility's ID

H. Facility's Phone: (509) 373-5187

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	I. Waste No.
GENERATOR a.	RQ Waste Radioactive Material, n.o.s. (HFP, Lead ORM-E) Radioactive Material UN 2982	X	1	Con-crete Box	18.2	K	D008
b.	See Onsite Radioactice Shipment Record 23761 dated 11-17-87 for additional information.						
c.							
d.							

J. Additional Descriptions for Materials Listed Above: Approximately 18.2K lead in lead wool and wiring.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed Typed Name: K. A. Artz — Signature: K A Artz — Month 11 Day 17 Year 87

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed Typed Name — Signature — Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed Typed Name: D. A. Fyfe — Signature — Month 11 Day 17 Year 87

Style F15R-6 Latem asler D. of American Latem mark Co. Inc. 60646

EPA Form 8700-22 (Rev. 4-85) Previous editions obsolete

TRANSPORTER #2

SWITS LOG SHEETS 1993

Cmpy	Bldg	Area	Waste Type	P W Type	Facility	Unit	Accept Date	PIN Number	Volume
WHC	225B	200E	2A	M	218E10	T09	09/02/93	271B-91-000289	38.740

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD
(Rev 0, 9/1/91)

8. Page 1 of 2

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature-Acceptance BO Windsor Date 9-2-93

3. Area 2-W 4. Facility 218E-108 5. Unit TR-9

6. Storage Location (SO1)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 45145 W 55725

Ending Coordinates N 45180 W 55725

REFERENCES

16. RSR No. 53601 17. SDAR No. 05-90-1EM-030A

18. DOE/NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THE SPACE)

9. PIN 271B-91-~~0289~~ KS. 000289

10. Waste Generator WESTINGHOUSE HANFORD COMPANY

11. Charge Code, SO No., or MPO No. D6AMT

12. WRM No. N/A

13. Name of Contact KENNETH D. STRONG

14. Address/Phone No. 271B/200E S6-60 372-0303

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature Kenneth D Strong Date 9-1-93

20. Waste Designation ☐ Category 1 ☒ Category 3 ☐ >Category 3 ☒ RMW ☐ Classified

21. Point of Origin 225B/200E

22. Container Type K-3 FILTER BOX 23. LxWxH or DxL 19'8X 7'8X 10'8

24. Container Volume (m^3) 38.74 25. Tare Weight (kg) 17252

26. Date Packaged ~~10 08/02~~ 09/93 27. Gross Weight (kg) 84519.8

28. Thermal Power N/A ☒ <0.1 W/ft^3 29. Dose Rate (mrem/h) 5000 at 1 meter 32. Seal No. N/A

30. Waste Category (Check one)

☐ BW ☐ DD
☒ CE ☐ NC
☐ DS ☐ SS

31. Waste Category (Check one)

☐ CL ☐ GL ☐ PA ☐ SO
☐ CM ☐ HM ☐ PB ☐ TW
☐ DM ☐ LM ☐ SL ☐ WD
☒ FW ☐ NC

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume (%)	35. Estimated Weight (kg)	36. Radionuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
12 HEPA FILTERS	3.30	217.70	Cs-137	204	
DI-OCTYL PTHALATE	0.02	6.50	Ba-137	204	
RAGS,PAPER,PLYWOOD,PLASTIC,AND RUBBER	0.28	122.00	Sr-90	333	
STAINLESS STEEL	44.5	2601.70	Y-90	333	
GROUT (TO BE ADDED AT BURIAL TRENCH)	51.9	64319.9			
39. Total	100	67267.8	Total	1074	

A-6000-840 (11/91)

RADIOACTIVE MIXED WASTE ATTACHMENT SHEET (REV 0, 9/1/91)

1. Page 2 of 2

2. PIN 271B-91-~~0289~~ 000289 KQ3. 9-1-93

3. Manifest No. 21412

4. Manifest Date 08-28-93

5. ☐ Land Disposal Restricted Source of Restriction ☐ RCRA, ☐ F-Listed, ☐ EHW N/A

6. Waste Designation ☐ EHW ☒ DW

7. Waste numbers that apply to this package: WC02

WASTE DESCRIPTION

8. Hazardous Constituent	9. Weight (kg)	10. Physical Properties
Di-Octyl Pthalate	6.53	Di-Octyl Pthalate is a clear liquid oil in it's original state. In use it is vaporized & blown through HEPA filters. A significant Amount remains in the filter media. Di-octyl pthalate is specifically allowed in S.D.A.R. # 05-9Q-1EM-030A.
TOTAL WEIGHT (Kg)	6.53	

11. Estimated Liquid Volume (Liters) No Free Liquid

THB 99

SWITS LOG SHEETS 1993

Cmpy	Bldg	Area	Waste Type	P W Type	Facility	Unit	Accept Date	PIN Number	Volume
WHC	225B	200E	2A	M	218E10	T09	09/25/93	27IB-91-000290	46.310

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD
(Rev 0, 9/1/91)

8. Page 1 of 2

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature-Acceptance R. A. Morlo — Date 9/23/93

3. Area 200E — 4. Facility 218E/10 — 5. Unit TR-9

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates	N 45105	W 55725
Ending Coordinates	N 45140	W 55725

REFERENCES

16. RSR No. 53611 — 17. SDAR No. 05-90-1EM-030A

18. DOE/NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THE SPACE)

9. PIN 271B-91-000290

10. Waste Generator WESTINGHOUSE HANFORD COMPANY

11. Charge Code, SO No., or MPO No. D6AMT

12. WRM No. N/A

13. Name of Contact KENNETH D. STRONG

14. Address/Phone No. 271B/200E S6-60 372-0303

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature Kenneth D Strong — Date 9-20-93

20. Waste Designation ☐ Category 1 ☒ Category 3 ☐ >Category 3 ☒ RMW ☐ Classified

21. Point of Origin 225B/200E

22. Container Type K-3 FILTER BOX — 23. LxWxH or DxL 19'8X 7'8X 10'8

24. Container Volume (m^3) 46.31 — 25. Tare Weight (kg) 17252

26. Date Packaged 08/25/93 — 27. Gross Weight (kg) 84519.8

30. Waste Category (Check one): ☐ BW ☐ DD ☒ CE ☐ NC ☐ DS ☐ SS

31. Waste Category (Check one): ☐ CL ☐ GL ☐ PA ☐ SO ☐ CM ☐ HM ☐ PB ☐ TW ☐ DM ☐ LM ☐ SL ☐ WD ☒ FW ☐ NC

28. Thermal Power N/A ☒ <0.1 W/ft^3 — 29. Dose Rate (mrem/h) <3000 at 1 m. — 32. Seal No. N/A

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume (%)	35. Estimated Weight (kg)	36. Radionuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
12 HEPA FILTERS	3.30	217.70	Cs-137	152	
DI-OCTYL PTHALATE	0.02	6.50	Ba-137	152	
RAGS,PAPER,PLYWOOD,PLASTIC,AND RUBBER	0.28	122.00	Sr-90	248	
STAINLESS STEEL	44.5	2601.70	Y-90	248	
GROUT (TO BE ADDED AT BURIAL TRENCH)	51.9	64319.9			
39. Total	100	67267.8	Total	800	

A-6000-840 (11/91)

RADIOACTIVE MIXED WASTE ATTACHMENT SHEET (REV 0, 9/1/91)

1. Page ___ of ___

2. PIN 271B-91-000290

3. Manifest No.

4. Manifest Date

5. ☐ Land Disposal Restricted Source of Restriction ☐ RCRA, ☐ F-Listed, ☐ EHW N/A

6. Waste Designation ☐ EHW ☒ DW

7. Waste numbers that apply to this package: WC02

WASTE DESCRIPTION

8. Hazardous Constituent	9. Weight (kg)	10. Physical Properties
Di-Octyl Pthalate	6.53	Di-Octyl Pthalate is a clear liquid oil in it's original state. In use it is vaporized & blown through HEPA Filters. A significant amount remains in the filter media. Di-Octyl Pthalate is specifically allowed in SDAR # 05-90-1EM-030A
TOTAL WEIGHT (Kg)	6.53	

11. Estimated Liquid Volume (Liters) No Free Liquids

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA7890008967 Manifest Document No. 22994

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
DEPARTMENT OF ENERGY, FIELD OFFICE, HIGHLAND, 2716/200E
P.O. BOX 550, 2355 STEVENS DR., RICHLAND, WA 99352

4. Generator's Phone (509) 372-0303 ATT: K.L. Strong S6-60

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: WESTINGHOUSE TRANSPORTATION

6. US EPA ID Number: WA7890008937

C. State Transporter's ID

D. Transporter's Phone (509)376-0971

7. Transporter 2 Company Name: NONE

8. US EPA ID Number: N/A

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Hanford Site, Burial Grounds
200E area
ATTN: Jeff Schorzman

10. US EPA ID Number: WA7890008967

G. State Facility's ID

H. Facility's Phone (509)373-5722

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	RQ	Radioactive material, n.o.s. Radioactive material UN 2982 (Cs-137, Sr-90) (contains Di-octyl pthalate)	1	N/A	2949	K	WC02
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
11a. #271B-91-000290 K-3 Filter packaged in a 19'8"x7'8"x10'8" concrete box.

K. Handling Codes for Wastes Listed Above
11a. Store at 218-E-010 Burial Grounds Trench #9

15. Special Handling Instructions and Additional Information
Reference SBAR # 03-DG-1EN-030A
EMERGENCY CONTACT 911 OR 373-3800
HPT: B. Sandell
SURVEY: 132591
DATE: 9/23/93

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. "ON BEHALF OF DOE-RL"

Printed/Typed Name: Kenneth D. Strong
Signature: Kenneth D Strong
Month Day Year: 09 29 93

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Richard A Morlux
Signature: Richard A Morlux
Month Day Year: 09 27 93

Style LI 15 REV 6 LABELMASTER, Div. of AMERICAN LABEL MARK CO. CHICAGO, IL 60640 (800) 621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

TRANSPORTER #1

Appendix B

218-W-3A Green Island Waste Burial Records

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START

3rd QUARTER 1987

BETTS-MIN MFP 200W 03A TS6 (114)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
082187	0001	317.00	TG	1	MI	9755.00	C060	0.00680	TS6	NO	03A	MIN
							CI	0.01570				
							UE	1.23000				
							C14	0.00014				
TOTALS...		317.00				9755.00						

6511-4

0 0 5 2 0 9 1 4 5 1

6511-4

Rockwell Hanford Operations

SOLID WASTE BURIAL RECORD – LOW LEVEL 114

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. BETR-MIN-87-1 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200-W | Burial Ground No.: 218-W-3A | Trench No.: 65

Caisson No.:

Beginning Coordinates: N 44140 W 77854

Ending Coordinates: N 44140 W 77860

Remarks:

Signature - Acceptance: B.D. Windsor | Date: 8-21-87

Signature - Burial: | Date:

WASTE GENERATOR: MARE ISLAND NAVAL SHIPYARD

Charge Code: N/A | DOE Authorization No. (RAM): 6511-4

Address/Phone: MARE ISLAND NAVAL SHIPYARD, CODE 500R, BLDG. 483-4 M/S P-28, VALLEJO, CA 94592-5100 (707) 646-3455

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-232 and the approved Burial Compliance Checklist (BCC). 3. The charge code is correct.

Signature: M. J. PALMAFRO | Date: 8/20/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	19.44%	Glass	%
Plastic	.01%	Concrete	%
Cloth	%	Stainless Steel	57.0%
Rubber	2.33%	Other Metals	1.5%
WOOD	1.00%	ASBESTOS	15.5%
	%	LEAD	3.1%
	%		%
	%		%
Total	22.78%	Total	77.22%

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
ELEMENTAL LEAD	730 LB.

CONTAINER INFORMATION

Quantity & Name: 55 Gallon Drums: 0; Hanford Standard Fiberboard Boxes (18" x 18" x 24"): 0; TG 1 Other: METAL SHIPPING CONTAINER

BCC Approval Number: 25-3X-IAM-0 | Dose Rate - Package: 45 mrem/hr at SURFACE

Diameter or Length x Width: 124" L X 64" W | Height: 69" H

Material of Construction: ASTM A569 LOW CARBON STEEL

Nuclear Transaction No.: N/A | Property Disposal Request No.: N/A

Total Volume: 317 | Gross Weight: 9775 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☒ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☐ 0.1 w/ft³ or less N/A Other

Remarks: BAGGED ASBESTOS LAGGING MATERIALS WERE USED AS VOID SPACE FILLER MATERIAL.

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC		
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	~~Grams~~ or Curies	
U235	100%	1.23 gm.	Co60	6.8E-03	= 13
			Fe55	6.8E-03	= 51
			Mn54	1.2E-03	= 54
			Co58	3.4E-04	= 12
			Ni63	3.4E-04	= 50
			C14	1.36E-04	= 34
			U235	3.0E-06	
Totals		1.23 gm.		1.5619E-02	

Measurement Method: CALCULATED | Determined By: S. BRAYE

DISTRIBUTION: White - SWPDU 2750-E/200 E; Canary - TFS 272-W/200 W; Pink - Return to Shipper 200-W

54-3000-581 (7-85)

6511-4

California—Health and Welfare Agency

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

BETTS-MIN-87-1

(114)

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CA7170024775 — Manifest Document No.

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
MARE ISLAND NAVAL SHIPYARD
CODE 500R STOP P-28
VALLEJO, CA 94592-5100

4. Generator's Phone (707) 646-4222 (707-646-3455)

A. State Manifest Document Number: 86083961

B. State Generator's ID: CA7170024775

5. Transporter 1 Company Name: WELLS CARGO — 6. US EPA ID Number: NVD031491710 2

C. State Transporter's ID: 702246

7. Transporter 2 Company Name: NONE — 8. US EPA ID Number:

D. Transporter's Phone: 1-800-648-3713

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
U.S. DEPARTMENT OF ENERGY
C/O ROCKWELL HANFORD OPERATIONS
2401 STEVENS DRIVE, 1167 BLDG. 1100 AREA
RICHLAND, WA 99352 — 10. US EPA ID Number: WA7890008967

G. State Facility's ID: WA7890008967

H. Facility's Phone: 1-509-373-3800

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. X RADIOACTIVE MATERIAL, n.o.s., RADIOACTIVE MATERIAL, UN2982.	001	CM	09775	P	D008, WT01
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
"ELEMENTAL LEAD ALSO CONTAINED IN ITEM 11a AS SHIELDING MATERIAL."

K. Handling Codes for Wastes Listed Above
D99

15. Special Handling Instructions and Additional Information
MATERIAL IS BEING SHIPPED IN ACCORDANCE WITH INSTRUCTIONS PROVIDED ON ROCKWELL HANFORD OPERATIONS BURIAL COMPLIANCE CHECKLIST 25-3X-1AM-0 UNDER DEPARTMENT OF ENERGY AUTHORIZATION NO. RRM-6511-4. CONSIGNEE TO UNLOAD

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

GENERATOR — Printed/Typed Name: M. J. PALMAFFY — Signature: — Month Day Year

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: JAY HUNGERFORD — Signature: Jay Hungerford — Month Day Year: 5 12 87

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name: NONE — Signature: — Month Day Year

FACILITY — 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: F. Tiliano — Signature: F. Tiliano — Month Day Year: 1 8 8 7

DHS 8022 A (11/85)
(EPA 8700—22)

YELLOW: TSDF SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS

86083961 1 4 5 3

0052091454

SHIPPING CONTAINER TALLY

REQUISITION AND INVOICE/SHIPPING DOCUMENT

1 FROM: MARE ISLAND NAVAL SHIPYARD, VALLEJO, CA 94592-5100

2 TO

3 SHIP TO - MARK FOR
U.S. DEPARTMENT OF ENERGY
C/O ROCKWELL HANFORD OPERATIONS
2401 STEVENS DRIVE, 1167 BLDG., 1100 AREA
RICHLAND, WA 99352
ATTN: B. F. WEAVER, MANAGER

"These materials are being shipped in accordance with applicable Federal regulations by/for the U.S. Govt for military or national security purposes or are related to national defense. Any questions concerning this shipment shall be referred to Commander, Mare Island Naval Shipyard, (Code 300R) 707-648-3400."

1 SHEET NO.	1
2 SUBSHEET NO.	0
3 REQUISITION DATE	7181
4 REQUISITION NUMBER	N00221-7181-4823
7 DATE MATERIAL REQUIRED	8/21/87
8 PRIORITY	N/A
9 AUTHORITY FOR PURCHASE	NAVSEA ltr Ser 09H/323 of 15 Aug 84
10 SIGNATURE OF AUTHORIZED OFFICIAL	M Stratton
11a VOUCHER NUMBER AND DATE	N/A
12 DATE SHIPPED	8/20/87
	GOV'T EXPENSE
13 MODE OF SHIPMENT	SURFACE ONLY (TRUCK)
14 BILL OF LADING NUMBER	N/A
15 AIR MOVEMENT DESIGNATOR OR PORT REFERENCE NO.	AIR MOVEMENT NOT AUTHORIZED

6 APPROPRIATION AND SUBHEAD	OBJ. CL.	SUB. CONT. NO.	SUBAL. LOT	AUTHORIZATION ACCT'G ACTIVITY	TRANS TYPE	PROPERTY ACCT'G ACTIVITY	COUNTRY	COST CODE	AMOUNT
PURCHASE ORDER: N00221-87-M-R028		WELLS CARGO							

RADIOLOGICAL CONTROLS REQUIRED FOR UNPACKAGING

ITEM NO. (a)	FEDERAL STOCK NUMBER, DESCRIPTION, AND CODING OF MATERIAL AND/OR SERVICES (b)	UNIT OF ISSUE (c)	QUANTITY REQUESTED (d)	SUPPLY ACTION (e)	TYPE CONTAINER (f)	CONTAINER NO. (g)	UNIT PRICE (h)	TOTAL COST (i)
1	RADIOACTIVE MATERIAL, n.o.s., UN2982. FISSILE EXEMPT. TOTAL ACTIVITY: 15.619 MILLICURIES. SOLID, METAL CORROSION PRODUCTS. PRIMARY ISOTOPES: Co-60, Fe-55, Mn-54, Co-58, Ni-63, C-14, U-235. DOT 7A TYPE A METAL SHIPPING CONTAINER, S/N 0088 CONTAINING: PUMP (DRY), FILTERS, METAL TUBING/PIPING, RUBBER, ASBESTOS LAGGING, VENT SCREENS, USED FISSION CHAMBERS, UNCONTAMINATED ELEMENTAL LEAD SHIELDING AND WOOD BRACING. CONTAINER SEALS APPLIED, S/N DOE/SNR ~~3321~~ 3322 AND DOE/SNR ~~3323~~ 3324. RADIOACTIVE YELLOW III LABELS APPLIED. T.I. 2.2. EPA HAZARDOUS WASTE STICKER (EPA CODE D008, WT01, APPLIED.) VEHICLE PLACARDING REQUIRED. EXCLUSIVE USE, DUAL DRIVERS, DOD CONSTANT SURVEILLANCE REQUIRED. SHIPPER SEALS APPLIED. DO NOT BREAK SEALS EXCEPT IN CASE OF EMERGENCY OR UPON PRIOR APPROVAL OF THE CONSIGNOR OR CONSIGNEE. IF FOUND BROKEN, OR IF BROKEN FOR EMERGENCY REASONS, CARRIER TO APPLY SEALS	EA	01					

DRIVER SIGNATURE/DATE [illegible] 8-20-87
TRUCK S/N [illegible]
TRAILER S/N [illegible]
SEALS S/N C/500R-NINSY-USN 00201, 00202

THIS IS TO CERTIFY THAT THE HEREIN-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

M Stratton 8/10/87
(SIGNATURE AND DATE)

8-21-87

16 TRANSPORTATION VIA MATS OR MSTS CHARGEABLE TO

18 RECONSIGNMENT OR DIVERSION	TOTAL CONTAINER	TYPE CONTAINER	DESCRIPTION	POUNDS TOTAL WEIGHT	TOTAL CUBE
ISSUED BY	1	METAL	DOT 7A TYPE A SHIPPING CONT	9775	317
CHECKED BY					
PACKED BY					
	1		← TOTAL →	9775	317

17 SPECIAL HANDLING

18 RECEIPT: CONTAINERS RECEIVED EXCEPT AS NOTED — DATE — BY — SHEET TOTAL; CONTAINERS RECEIVED EXCEPT AS NOTED; POSTES

THESE MATERIALS SHALL NOT BE SENT BY AIR OR BY MAIL. RADIOACTIVE MATERIAL AND CLASS EXPLOSIVES IN SAME VEHICLE ARE PROHIBITED.

DD FORM 1149 (9-PT) REPLACES EDITION OF 1 MAY 58 WHICH MAY BE USED

6511-4

SHIPPING CONTAINER TALLY → 0 0 5 2 0 9 0 1 4 5 5

REQUISITION AND INVOICE/SHIPPING DOCUMENT

SHEET NO. 2 / SHEETS 2

5. REQUISITION DATE: 7181

6. REQUISITION NUMBER: N00221-7181-4623

1. FROM: MARE ISLAND NAVAL SHIPYARD, VALLEJO, CA 94592-5100

7. DATE MATERIAL REQUIRED: 8/21/87

8. PRIORITY: N/A

2. TO:

9. AUTHORITY OR PURPOSE: NAVSEA ltr Ser 08H/323 of 15 Aug 84

10. SIGNATURE: M Scrutton

11. VOUCHER NUMBER AND DATE: N/A

3. SHIP TO - MARK FOR
U.S. DEPARTMENT OF ENERGY
C/O ROCKWELL HANFORD OPERATIONS
2401 STEVENS DRIVE, 1167 BLDG., 1100 AREA
RICHLAND, WA 99352
ATTN: B. F. WEAVER, MANAGER

12. DATE SHIPPED: 8/20/87

13. MODE OF SHIPMENT: SURFACE ONLY (TRUCK)

14. BILL OF LADING NUMBER

15. AIR MOVEMENT DESIGNATOR OR PORT REFERENCE NO.: AIR MOVEMENT NOT AUTHORIZED

GOV'T EXPENSE

4. APPROPRIATION AND SUBHEAD	OBJ. CL.	SUB. CONT. NO.	SUBAL. LOT	AUTHORIZATION ACCT'G ACTIVITY	TRANS TYPE	PROPERTY ACCT'G ACTIVITY	COUN-TRY	COST CODE	AMOUNT

RADIOLOGICAL CONTROLS REQUIRED FOR UNPACKAGING

ITEM NO (a)	FEDERAL STOCK NUMBER, DESCRIPTION, AND CODING OF MATERIAL AND/OR SERVICES (b)	UNIT OF ISSUE (c)	QUANTITY REQUESTED (d)	SUPPLY ACTION (e)	TYPE CON-TAINER (f)	CON-TAINER NOS. (g)	UNIT PRICE (h)	TOTAL COST (i)
	AS SOON AS POSSIBLE AND IMMEDIATELY NOTIFY BOTH THE CONSIGNOR AND CONSIGNEE. 24 HOUR EMERGENCY PHONE NUMBERS: ORIGIN: (707) 646-4222 DESTINATION: (509) 373-3800 EXCLUSIVE USE OF EQUIPMENT INSTRUCTIONS PROVIDED TO CARRIER (COPY ATTACHED). SIGNATURE AND TALLEY RECORD (DD1907) FURNISHED TO CARRIER.					BDW	8-21-87	

16. TRANSPORTATION VIA MATS OR MSTS CHARGEABLE TO

17. SPECIAL HANDLING

18.		TOTAL CONTAINERS	TYPE CON-TAINER	DESCRIPTION	TOTAL WEIGHT	TOTAL CUBE
RECAPITULATION OF CONTENTS	ISSUED BY	1	METAL	DOT 7A TYPE A SHIPPING CONT POUNDS	9775	317
	CHECKED BY					
	PACKED BY					
		1		← TOTAL →	9775	317

19. RECEIPT: CONTAINERS RECEIVED EXCEPT AS NOTED; QUANTITIES RECEIVED EXCEPT AS NOTED; POSTED; DATE; BY; SHEET TOTAL; GRAND TOTAL

THESE MATERIALS SHALL NOT BE SENT BY AIR OR BY U.S. MAIL. RADIOACTIVE MATERIAL AND CLASS A EXPLOSIVES IN SAME VEHICLE ARE PROHIBITED.

DD FORM 1149 (9-PT) REPLACES EDITION OF 1 MAY 68 WHICH MAY BE USED

BETTS-MIN 87-4

6511-4

6511-4

BETTS-MIN-87-1 (114)

RADIOACTIVE MATERIAL RECEIPT

SERIAL NO. 500R-RR-46-87(N)

FROM: ROCKWELL HANFORD OPERATIONS, RICHLAND, WA 99352

TO: RADIOACTIVE MATERIAL MANAGER
CODE 500R, MARE ISLAND NAVAL SHIPYARD, VALLEJO, CA 94592-5100 STOP P-28

Regulations require the confirmation of receipt of RADIOACTIVE MATERIALS. The following RADIOACTIVE MATERIAL has been received. (See certification below.)

RECEIVED/SHIPPED MATERIAL

QUANTITY	DESCRIPTION	SERIAL NO.
1	METAL BOX CONTAINING: 1 MAIN COOLANT PUMP, 3 FISSION CHAMBERS AND OTHER MISCELLANEOUS WASTE.	0088

SHIPMENT CONTAINS RADIOACTIVE MATERIAL

TOTAL ACTIVITY: 15.619 milliCurie/s

CONTAINER TYPE	PACKING METHOD	CONTAINER CONDITION
METAL BOX	MATERIAL BRACED WITH WOOD. VOID SPACES FILLED WITH MISC. NON-COMPRESSABLE MATERIAL.	GOOD

REMARKS: INCOMING
RECEIVED ON N/A
TCN: N/A
GBL: N/A

REMARKS: OUTGOING
DATE SHIPPED 8/20/87
TCN: N00221-7181-4623
GBL: N/A

CERTIFICATION OF RECEIPT
(Fill in and Return)

I certify that I received the subject radioactive equipment and that I am authorized to receive this shipment in accordance with (CHECK ONE)

- [ ] NAVSEA INST 9210.12
- [ ] NRC License No.
- [ ] State License No.
- [ ] NAVELEX INST 9675.5
- [X] Other authority: DOE/HANFORD CONTRACT DE-AC06-77RL01030

SIGNATURE: B.D. Wendorf

TITLE:

DATE RECEIVED: 8-21-87

ACTIVITY:

COPY TO:

COMPLETE ONE COPY OF THE FORM AND RETURN TO
RADIOACTIVE MATERIAL MANAGER
CODE 500R, BLDG 483, STOP P-28
MARE ISLAND NAVAL SHIPYARD
VALLEJO, CA 94592-5100

NIRS 5100/19 (REV. 4-85)

0052091456

REPRODUCED AT GOVERNMENT EXPENSE

BETTS-MIN-87-1 6511-4 (114)

SPECIAL NUCLEAR MATERIAL RECEIPT DOCUMENT

NAVSEA 9210/4 (11-78)

NAVSEAINST 9210.10A
13 February 1981

DATE 8/20/87

From: COMMANDER, MARE ISLAND NAVAL SHIPYARD, VALLEJO, CA.
(Senior Official Transferring Acitivty)

To: MR. P.F. SHAW , ROCKWELL HANFORD OPERATIONS, RICHLAND, WA.
(Senior Official Receiving Activity)

Subj: Special Nuclear Material; transfer of accountability

Ref: (a) NAVSEAINST 9210.10A

1. I have transferred to your custody the special nuclear material listed below: IRRADIATED FISSION CHAMBERS, MODEL WL 6941A, THREE EACH:

Item serial number(s)		
CHAMBER	CONTAINER	SEAL NO.
83907	0088	DOE/SNR 3231 & 3233
605201	0088	N/A
743505	0088	N/A

2. To satisfy the requirements of reference (a), you are hereby requested to complete the endorsement below which will effect transfer of accountability.

M.J. PALMAFFY, MANAGER
RADIOACTIVE MATERIAL DIVISION
(Signature) By direction

DATE

FIRST ENDORSEMENT

From: (Senior Official Receiving Activity)

To: Commander, Naval Sea Systems Command (NAVSEA 08)

1. I hereby accept accountability for the special nuclear material listed below:

Item serial number(s)

(Signature)

Copy to:
COMMANDER, MARE ISLAND NAVAL SHIPYARD
ATTN: CODE 500R, VALLEJO, CA 94592-5100
(Transferring Activity)

MANAGER, PITTSBURG NAVAL REACTORS OFFICE
P.O.BOX 109
WEST MIFFLIN, PA 15122

Enclosure (2)

6511-4

BETTS-MIN-87-1

(114)

Rockwell Hanford Operations
P.O. Box 800
Richland, WA 99352

Rockwell International

In reply, refer to letter 33730,R1

JUN 03 1987

Mr. J. D. White, Director
Waste Management Division
Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear Mr. White:

DISPOSAL OF WASTE FROM MARE ISLAND NAVAL SHIPYARD
(Contract DE-AC06-77RL01030)

Reference: Letter, May 6, 1987, M. J. Palmaffy to L. R. Ogletree, no subject

Rockwell Hanford Operations (Rockwell) has reviewed the information in the reference letter regarding the disposal of low-level reactor components and other miscellaneous waste from Mare Island Naval Shipyard. Rockwell will accept the waste for disposal at Hanford provided it is packaged in accordance with the attached Burial Compliance Checksheet 25-3X-1AM-0.

Scheduling for disposal of this waste should be coordinated with Mr. R. J. Fuquay on 373-1881. If you require additional information, please contact Mr. S. J. Amir on 373-2491.

Done 8/13/87

Very truly yours,

M A Cahill

M. A. Cahill, Manager
Waste Management Operations

MAC:SJA:ljg

Att.

cc: A. W. Kellogg - DOE-RL
M. J. Palmaffy - Mare Island Naval Shipyard

6511-4

BETTS-MIN-87-1

(114)

BURIAL COMPLIANCE CHECKSHEET
FOR RADIOACTIVE SOLID WASTE MATERIAL

25-3X-1AM-0
Rockwell Storage & Disposal Approval Number

5/18/87
Date

Rockwell Solid Waste Processing &/Disposal Unit Approval Signature

Waste Generator: U.S. NAVY, Mare Island Naval Shipyard
Reference Letter # 33730 Dated 4/30/87 File # 2-37

Waste Title: Low Level Reactor Components, Mixed Solid Waste

Storage/Disposal Container: DOT 7A, Type A Steel Shipping Container

References: (a) RHO-MA-222, Rev.3 (Unclassified), August, 1985, T. R. Pauly, "Hanford Radioactive Solid Waste Packaging, Storage and Disposal Requirements"
(b) Letter, February 3, 1987, L. R. Ogletree to Distibution, "RHO-MA-222, Revision 3A, Amendment" .

Waste Type: [ ] Transuranic [X] Low Level
[ ] Unclassified [X] Classified (Internals only)

Disposal Type: [ ] Burial [X] Retrievable Storage
[X] Scheduled [X] Contact Handled
[ ] Routine [ ] Remote Handled
[ ] One-Time Only

Transport Approval: [X] U.S.Department of Transportation
[ ] Waste Generator
[ ] Rockwell Transport Approval Number: _____

Transport Category: [ ] Low Specific Activity [ ] Limited Quantity
[X] Type A [ ] Type B [ ] Highway Route Controlled Quantity

0 9 5 2 0 9 1 4 5 9

BETTS-MIN-87-1 6511-4 (114)

A. WASTE DESCRIPTION

25-3X-1AM-0
Rockwell Storage & Disposal Approval Number

1. Waste Contents Included:

Yes	No		Yes	No	
[X]	[ ]	Miscellaneous Solid Waste	[ ]	[X]	Tritium (>20 mCi/cu. M)
[ ]	[X]	Animal Carcasses	[ ]	[X]	Alkali Metals
[ ]	[X]	Unabsorbed Liquid Organics	[X]	[ ]	Asbestos
[ ]	[X]	Ion Exchange Resins	[X]	[ ]	Lead
[ ]	[X]	Significant Concentrations of C-14, Kr-85, Tc-99, I-129	[ ]	[X]	Gas Generating Potential
[ ]	[X]	Heat Generating Potential (Greater than 0.1 watts/cu ft)	[X]	[ ]	Radioactive Mixed Waste
[ ]	[ ]	Other: _____			

Note: The following are prohibited: Free inorganic liquids, incompatible materials, pyrophorics, explosives, unreacted alkali metals, and unvented gas cylinders.

2. Physical Description of Waste:
Low Level waste containing metallic reactor components, 3 fission chambers, pump and other miscellaneous solid waste including lead and asbestos.

3. Radioactive Material Description

Non-Transuranic: Up to and including DOT Type A quantities of solid metal corrosion products, primarily Co-60 and U-235(maximum of 5 grams).

Transuranic: Less than 100 nCi/gram.

4. Radioactive Mixed Waste Hazardous Constituent Description: Lead.

5. Maximum Allowable Fissile Quantity: Less than 15 gram/container.

6. Void Space Filler Material: Diatomaceous earth or vermiculite.

6511-4

BETTS-MIN-87-1

(114)

B. WASTE PACKAGING SYSTEM

25-3X-1AM-0
Rockwell Storage & Disposal Approval Number

page 3 of 4

1. Container Name: Metal Box, Container Products Corp. S-245-10 7A Type A

2. Drawing or Specification Number: CPC #15-4700-1-00 (COC # QCOP 3001)

3. External Dimensions: 124"L x 64"W x 69"H

4. Disposal Volume: 317 cu. ft.

5. Maximum Gross Weight: 9775 lbs.

6. General Description: 124" x 64" x 69" container of 12 ga. ASTM A569 low carbon hot rolled steel. Containers and lids use Seal-Loc positive closure system. Container is equipped with risers to allow for forklift operation. Crane lifting devices are not installed. Container contains one used main pump, three used fission chambers, and miscellaneous non-compressible bagged waste.

7. Required Internal Packaging: The main coolant pump is braced with 4" x 6" timbers around the bottom. The remaining portion is packed with non-compressible waste. The fission chambers are wrapped in lead, placed inside wooden boxes and placed on top of the non-compressible waste. Asbestos bearing waste is bagged in 4 mil thick (minimum) polyethylene.

8. Closure Mechanism: Seal-Loc positive closure system clips are welded in place.

9. Maximum Allowable Radiation Levels: Less than 200 mR/hr (Contact)
N/A (Other)

10. Maximum Allowable Surface Contamination: Less than 220 dpm/100 sq cm alpha
Less than 2200 dpm/100 sq cm beta-gamma

11. Required Labels/Marking:
Top and Sides: RRM number
Top and Sides: Gross Weight (eg, GW XXX lbs.)
Two Sides: "RMW, EHW, Lead"
Two Sides: Container ID number
Two Sides: EPA Hazardous Waste sticker with the following:
Waste code No.: "D008, WT01"
(Manifest Document Number: use unique RRM #)

Other Labels and Marking per DOT requirements

6511-4

BETTS-MIN-87-1

(114)

B. WASTE PACKAGING SYSTEM (Continued)

25-3X-1AM-0
Rockwell Storage &
Disposal Approval
Number

11. Required Labels (continued):
Two Sides: If asbestos is present affix the following warning:

CAUTION
CONTAINS ASBESTOS
AVOID OPENING
OR BREAKING CONTAINER
BREATHING ASBESTOS IS HAZARDOUS
TO YOUR HEALTH

12. Returnable Transport Overpacks: None

C. OTHER REQUIREMENTS

1. Administrative Controls:
(1) An individual Solid Waste Burial Record-Low Level form (Rockwell form 54-3000-581) is required with each container.
(2) Record the weight of lead and fissile content on the Solid Waste Burial Record.
(3) A Hazardous Waste Manifest form (Environmental Protection Agency form 8700-22) is required with each container.
(4) The generator is responsible to ensure that waste packages are properly labeled and marked.
(5) DOE/NRC 741 form or equivalent if waste contains accountable nuclear material (U-235).

T/P Low

2. Rockwell Storage/Disposal Information:
(1) Waste may be handled by forklift
(2) Place in retrievable storage in RMW trench.

6511-4 FORM DOE/NRC-741 EQUIVALENT BETTS-MIN-87-1 (114)

DEPARTMENT OF THE NAVY
MARE ISLAND NAVAL SHIPYARD
VALLEJO, CALIFORNIA 94592

IN REPLY REFER TO:
9200
Ser 500R/100
AUG 17 1987

PER PHONCON 8/13/87: ANDERSON (HANFORD) PALMAFFY (MIMS)
THIS LETTER TAKES PLACE OF DOE/NRC-741 SUBMITTED
ON BCC-25-3X-1AM-0

From: Commander Mare Island Naval Shipyard
To: Mr. P. F. Shaw, Program Manager, Rockwell Hanford Operations

Subj: TRANSFER PLANNING LETTER FOR TRANSFER OF SPECIAL NUCLEAR MATERIAL

Ref: (a) NAVSEA ltr Ser 08H/84-323 of 15 Aug 84
(b) NAVSEAINST 9210.10A

Encl: (1) Copy of NAVSEA ltr Ser 08H/84-323 of 15 Aug 84
(2) Special Nuclear Material Three-Way Verification Form NAVSEA 9210/3 (11-78)

1. This letter outlines the planning and precautions to be taken to effect the transfer of three Model WL6941A irradiated fission chambers, serial numbers 83907, 605201, and 743505, from Mare Island Naval Shipyard, Vallejo, California, to Rockwell International, Rockwell Hanford Operations, Richland, Washington, for disposal as waste.

2. Authorization to transfer, for disposal as waste, Model WL6941A irradiated fission chambers, serial numbers 83907, 605201, and 743505, has been granted by reference (a). Copy enclosed as enclosure (1).

3. The accountability and three-way verification procedures for the transfer of special nuclear material, outlined in paragraphs 8(b) through 8(d) and paragraph 9 of reference (b), will be complied with at the time of transfer.

4. The three Model WL6941A irradiated fission chambers, serial numbers 83907, 605201, and 743505, have been packed inside of a DOT 7A, Type A metal shipping container, serial number 0088, with security seals DOE/SNR 3231 and DOE/SNR 3233 applied to the container. The container weighs 9775 pounds and has a volume of 317 cubic feet.

5. The container serial number and seal numbers identified above will be accessible in the ready-for-transfer condition and will be used for the three-way verification procedure at time of transfer.

6. The special nuclear material will move via commercial truck under signature security service requirements and you will be notified of carrier assigned prior to transfer.

7. The shipment is scheduled to depart Mare Island Naval Shipyard, Vallejo, California, on or about 20 August 1987 and arrive at Rockwell Hanford Operations, Richland, Washington, on or about 21 August 1987.

8. Transfer of accountability will be accomplished by means of the special nuclear material receipt document, enclosure (2), of reference (b), which will be provided with the shipping documents simultaneously with release of physical custody of the special nuclear material. Upon receipt of the special nuclear material, specified in paragraph 4, you are requested to complete the special nuclear material receipt document and forward it to

65117

BETTS-MIN-A7-1

(119)

Subj: TRANSFER PLANNING LETTER FOR TRANSFER OF SPECIAL NUCLEAR MATERIAL

Commander, Naval Sea Systems Command (NAVSEA 08), Washington, DC 20362, with a copy to Manager, Pittsburgh Naval Reactors Office, P.O. Box 109, West Mifflin, PA 15122.

9. In addition, you are requested to complete enclosure (2) and forward copies (within five working days) to:

Commander, Naval Sea Systems Command, (NAVSEA 08H)
Washington, DC 20362

Commander, Mare Island Naval Shipyard
ATTN: M. J. Palmaffy, Radioactive Material Manager
Code 500R, Bldg 483, Mail Stop P-28
Vallejo, CA 94592-5100

M. J. PALMAFFY
By direction of
the Shipyard Commander

Copy to:
COMNAVSEASYSCOM (NAVSEA 08)
MANAGER, PNRO
DOE, RICHLAND, WA (A. W. KELLOGG)
BRMO MARE
NRRO MARE (2)

2

6511-4

BETTS-MIN-87-1 (114)

DEPARTMENT OF THE NAVY
MARE ISLAND NAVAL SHIPYARD
VALLEJO, CALIFORNIA 94592

IN REPLY REFER TO:
9200
Ser 500R/103
AUG 20 1987

From: Commander, Mare Island Naval Shipyard
To: Mr. P. F. Shaw, Program Manager, Rockwell Hanford Operations

Subj: MODIFICATION TO TRANSFER PLANNING LETTER

Ref: (a) Mare Island Naval Shipyard Transfer Planning Letter Ser 500R/100 of 17 Aug 87

1. Reference (a) outlined the planning and precautions to be taken to effect the transfer of special nuclear material to your facility. Reference (a) also outlined procedures to be accomplished for the accountability and verification, upon receipt, of the special nuclear material.

2. This letter modifies the requirements of reference (a) and deletes the requirements set forth in paragraph 9 of reference (a).

3. Transfer of accountability will be accomplished in accordance with the requirements set forth in paragraph 8 of reference (a).

M. J. PALMAFRY
By direction of
the Shipyard Commander

Copy to:
COMNAVSEASYSCOM (NAVSEA 08)
MANAGER, PNRO
DOE, RICHLAND, WA (A. W. KELLOGG)
BRMO MARE
NRRO MARE (2)

6511-4

BETTS-MIN-87-1 (114)

Rockwell Hanford Operations
P.O. Box 800
Richland, WA 99352

Rockwell International

JUN 03 1987

In reply, refer to letter 33730,R1

Mr. J. D. White, Director
Waste Management Division
Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear Mr. White:

DISPOSAL OF WASTE FROM MARE ISLAND NAVAL SHIPYARD
(Contract DE-AC06-77RL01030)

Reference: Letter, May 6, 1987, M. J. Palmaffy to L. R. Ogletree, no subject

Rockwell Hanford Operations (Rockwell) has reviewed the information in the reference letter regarding the disposal of low-level reactor components and other miscellaneous waste from Mare Island Naval Shipyard. Rockwell will accept the waste for disposal at Hanford provided it is packaged in accordance with the attached Burial Compliance Checksheet 25-3X-1AM-0.

Scheduling for disposal of this waste should be coordinated with Mr. B. J. Fuquay on 373-1881. If you require additional information, please contact Mr. S. J. Amir on 373-2491. (2445)

Done 8/13/87

Very truly yours,

M A Cahill

M. A. Cahill, Manager
Waste Management Operations

MAC:SJA:ljg

Att.

cc: A. W. Kellogg - DOE-RL
M. J. Palmaffy - Mare Island Naval Shipyard

START

3rd QUARTER 1987

340 -PNL MFP 200W 03A TS6 (17)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
080787	0001	7.50	CB	1	PN	300.00	CI	0.00100	TS6	N	03A	PNL
080787	0002	7.50	CB	1	PN	300.00	CI	0.00100	TS6	N	03A	PNL
090987	0003	37.50	CB	5	PN	1500.00	CI	0.00500	TS6	N	03A	PNL
...TOTALS...		52.50				2100.00						

340-87-0199S

0051092053

340-87-01998 RBR 23267

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. 340-PNL-87-3 (17)

DISPOSAL SITE This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200-W
Burial Ground No.: 218W3A
Trench No.: 65
Caisson No.:
Beginning Coordinates: N 44140 W 77832
Ending Coordinates: N 44140 W 77828
Remarks: N/A

Signature - Acceptance: F. Tiliano Date: 9-9-87
Signature - Burial: N/A Date:

WASTE GENERATOR: B0064

Charge Code: VE 4610
DOE Authorization No. (RRM): N/A
Address/Phone: 340/300/6 3012

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC).
3. The charge code is correct.

Signature: Gregory L. Bash Date: 9-9-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	5 %	Glass	%
Plastic	%	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	45 %
CONWEB	50 %	CONWEB	50 %
	%		%
	%		%
	%		%
Total	55 %	Total	45 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Toluene	675 Kg

CONTAINER INFORMATION

Quantity & Name: 5 55 Gallon Drums; N/A Hanford Standard Fiberboard Boxes (18" x 18" x 24")
N/A Other:
BCC Approval Number: 2-18-9AM-1
Dose Rate - Package: 1 mrem/hr at Contact
Diameter or Length x Width: N/A
Height: N/A
Material of Construction: N/A
Nuclear Transaction No.: N/A
Property Disposal Request No.: N/A
Total Volume: 37.5 ft³
Gross Weight: 1500 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☒ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ____ Other

Remarks:

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
N/A			MAP	5 mc!
Totals		N/A		5 mc!

Measurement Method: ESTIMATED By C.P.
Determined By: G.L. BASH

DISTRIBUTION: White - SWPDU 2750-E/200 E
Canary - TFS 272-W/200 W
Pink - Return to Shipper 200-W

54-3000-5R1 (7-85)

370-01-01173

340-PNL-87-3 (17)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. WA 789 000 8967
Manifest Document No 28-7015
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
M. W. McCoy, PNL
306-T6/300

4. Generator's Phone (509) 376-1483

5. Transporter 1 Company Name: Westinghouse Hanford Company
6. US EPA ID Number: WA 789 000 8967

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Burial Ground
200W
Westinghouse Hanford Company
10. US EPA ID Number: WA 789 000 8967

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone: 376-1420
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 373 3187

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Flammable Liquid n.o.s. UN1993	✓	5	DM	675	K	F005, W101, D001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
Scintillation vials contain toluene and water.
Flash point 40°F.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 5 55-gal DOT 17H drums.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Gerald J. Powers
Signature: Gerald J. Powers
Month Day Year: 09 03 87

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: JEFFREY EWERT
Signature: Jeffrey Ewert
Month Day Year: 09 04 87

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: F. Tiliano
Signature: F. Tiliano
Month Day Year: 9 9 87

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 9/86) Previous editions are obsolete.

TRANSPORTER #2

START

3rd QUARTER 1987

1608D-WHC MFP 200W 03A TS6 (28)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
093087	0001	180.00	HE	15	UJ	15000.00	CS	0.01010	TS6	N	03A	WHC
							CO60	0.00910				
							CI	0.04380				
							EU154	0.00270				
...TOTALS...		180.00				15000.00						

1608D-87-00048

1608D-87-00045 RSR# 49928

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. 1608D- WHC- 87-1 (28)
DO NOT WRITE IN THIS SPACE

DISPOSAL SITE This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200W
Burial Ground No.: 218 3A
Trench No.: 65
Caisson No.: —
Beginning Coordinates: N 44140 W 77824
Ending Coordinates: N 44140 W 77812
Remarks: N/A
Signature - Acceptance: MC Miller Date: 9/30/87
Signature - Burial: N/A Date: —

WASTE GENERATOR: WHC
Charge Code: UJ
DOE Authorization No. (RRM): N/A
Address/Phone: 1608DR 100-D 3-1461

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC).
3. The charge code is correct.

Signature: Glenora A. Apple Date: 9/30/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	%
Plastic	2 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	1 %
	%	SLUDGE	60 %
	%	ABSORBENT	37 %
	%		%
	%		%
Total	2 %	Total	98 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb ~~or Kg~~)
WT01 – EHW	~~[illegible]~~
D005 – BARIUM	15.0
D006 – CADMIUM	<.5
D007 – CHROMIUM	6.0
D008 – LEAD	16.5
D009 – MERCURY	1.5
D011 – SILVER	3.8

CONTAINER INFORMATION

Quantity & Name: — 55 Gallon Drums; — Hanford Standard Fiberboard Boxes (18" x 18" x 24")
HE 15 Other: 90 GAL BONDICO OVERPAK DRUMS
BCC Approval Number: 3-1R-7KM-X
Dose Rate - Package: 30 mrem/hr at CONTACT
Diameter or Length x Width: 28 1/3" DIA.
Height: 38 1/4"
Material of Construction: FIBERGLASS/POLYETHYLENE
Nuclear Transaction No.: N/A
Property Disposal Request No.: N/A
Total Volume: 180 ft³
Gross Weight: 15,000 ☑ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☑ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☑ 0.1 w/ft³ or less ____ Other

Remarks: DED 87-D-4 RMW

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC		
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	~~Grams or~~ Curies	
NONE	NONE	NONE	Co^{60}	.0091	13
			Cs^{137}	.0101	08
			Eu^{152}	.0111	54
			Eu^{154}	.0027	40
			Eu^{155}	.0007	31
Totals				.0337	19

Measurement Method: Survey/Calculation
Determined By: G. Apple

DISTRIBUTION: White - SWPDU 2750-E/200 E
Canary - TFS 272-W/200 W
Pink - Return to Shipper 200-W

54-3000-581 (7-85)

16080-87-0004S 1000D-WMC-887-1 (28)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039. Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: WA 789 000 8967
Manifest Document No.: 3-1R-7KM-X
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
V. D. Apple
1720K/5/K3/100K
4. Generator's Phone (509) 373-1461

5. Transporter 1 Company Name: Westinghouse Hanford Company
6. US EPA ID Number: WA 789 000 8967

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Low Level Solid Waste Burial Ground
272WA 200W Area
10. US EPA ID Number: WA 789 000 8967

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone: 373-3656
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone: 373-2128

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste Radioactive Material N.O.S UN 2982	X	Radioactive Material	15	DM	6818	K	D001, D005, D006, D007, D008, D009, D011
b.								
c.								
d.								

J. Additional Descriptions for Materials Listed Above
Contaminated Sludge Material
pH 7.6

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Vernon D. Apple
Signature
Month / Day / Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month / Day / Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month / Day / Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month / Day / Year

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. Inc.

EPA Form 8700-22 (Rev. 9/86) Previous editions are obsolete.

GENERATOR COPY

START

4th QUARTER 1987

340 -PNL MFP 200W 03A TS6 (17)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
100987	0004	7.50	CB	1	PNL340	357.00	CI	0.00500	TS6	N	03A	PNL
					340-87-0222S							
100987	0005	7.50	CB	1	PNL340	297.00	CI	0.00500	TS6	N	03A	PNL
					340-87-0223S							
100987	0006	7.50	CB	1	PNL340	71.00	CI	0.00500	TS6	N	03A	PNL
					340-87-0224S							
103087	0007	7.50	CB	1	PNL340	650.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0236S							
103087	0008	7.50	CB	1	PNL340	1000.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0237S							
103087	0009	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0238S							
103087	0010	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0239S							
103087	0011	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0240S							
103087	0012	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0241S							
103087	0013	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0242S							
103087	0014	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0243S							
...TOTALS...		82.50				4320.00						

(N) 340-87-0222S

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (17)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. T-[illegible]-4 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE

This portion of form to be completed by Rockwell Representative at Disposal Site

Area: 200-W

Burial Ground No.: 218-W-2A

Trench No.: 6-5 (TS6)

Caisson No.: —

Beginning Coordinates: N 44140 W 79688

Ending Coordinates: N 44140 W 78686

Remarks:

Signature, Acceptance: M L Hatfield

Date: 10-9-87

WASTE GENERATOR: 30004

Generator No.: 13220 WB4K20

DOE Authorization No. (RRM): WB4K-2

Address Phone: 340/3044/6-3012

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet: BCC-. 3. The charge code is correct.

Signature: Gregory Z Neal

Date: 10-8-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	30
Plastic	%	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
Dioxane	20 %	KITTY LITTER	50
Naphthalene	%		
	%		
	%		
Total	20 %	Total	50 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity, lb or kg
DIOXANE, Naphthalene	135 Kg
[illegible]	

CONTAINER INFORMATION

Quantity & Name: CB1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other

BCC Approved Number: 2-1B-9AM-1

Dose Rate Package: .5 mrem/hr at CONTACT

Diameter or Length x Width: NA

Height: NA

Material of Construction: NA

Nuclear Transaction No.: NA

Property Disposal Request No.: NA

Total Volume: 7.5

Gross Weight: 357 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☒ DS ☐ CE ☐ SE ☐ OD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks:

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	% Total Element Weight	Isotope	Grams or Curies
	NA		MFP	.5mCi
Totals		NA		.5mCi

Measurement Method: ESTIMATED BY CP

Prepared By: C L BASH

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3

340-87-02225

340-[illegible]-87-4

(17)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039 Expires 9-30-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: PNL-287022
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
M. W. McCoy, PNL
306-T6/300 Area

4. Generator's Phone (509) 376-[redacted] 1483

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
Westinghouse Hanford Company

6. US EPA ID Number
WA 789 000 8967

C. State Transporter's ID

D. Transporter's Phone 376-1420

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Burial Ground
200 W
Westinghouse Hanford Company

10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone 2-1151

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	~~Flammable Liquid~~ ~~UN1165~~ ~~No. 6.~~	X	1	DM	135	K	D001, WT01
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
Scintillation vials contain dioxane and naphthalene.
Flash point 65°F

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 1 55-gal DOT 17H drum.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Lois Abbey
Signature:
Month / Day / Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month 4 Day 7 Year 7

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month / Day / Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name:
Signature:
Month / Day / Year

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

340-87-0223S

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

SWBR No. 340-87-0223S (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE

This portion of form to be completed by Rockwell Representative at disposal site

Area: 200-W

Burial Ground No.: 218-W-3A

Trench No.: 6-S

Caisson No.:

Beginning Coordinates: N 44141 W 77668

Ending Coordinates: N 44141 W 77668

Remarks:

Signature Authorized: M L Hatfield

Date: 10-9-87

Signature Burial:

Date:

WASTE GENERATOR: B0004

Charge Code No.: 13220 ~~WB HK 20~~

DOE Authorization No.: RPM-N7-42-2

Accounting Code: 300/340 16-3012

I certify that: 1. No capital property is included in this burial unless documented on a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checklist (BCC). 3. The waste code is correct.

Signature: Gregory T. Hale

Date: 10-8-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products		Glass	30
Plastic		Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	
Toluene	20	KITTY LITTER	50
Total	20	Total	80

CONTAINER INFORMATION

Quantity & Type: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other

BCC Assembly Number: 2-1B-9AM-1

Dose Rate at Package: .5 mrem/hr at CONTACT

Diameter or Length x Width: N/A

Height: N/A

Material of Construction: N/A

Number of Transportation Cycles: N/A

Property Disposal Request No.: N/A

Total Volume: 7.5

Gross Weight: ~~150~~ 297 ☒ Pounds ☐ Kilograms

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Pounds)
Toluene	135 Kg

WASTE CATEGORIES: ☐ BW ☒ CS ☐ CE ☐ CS ☐ OD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks:

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NON TRANSURANIC	
Element	Isotopic Distribution Wt %	Total Element Weight	Isotope	Grams or Curies
	N/A		MFP	.5mCi
Totals		N/A		.5mCi

Measurement Method: ESTIMATED BY GP.

Determined By: G.L. BASH

DISTRIBUTION: White - SWPOU 2760 E 200 E; Copy - TFS 272 W 200 W; Pink - Return to Shipper 200 W

94 1000 581

340-87-02235

340-PNL-87-5 (17)

Please print or type (Form designed for use on elite (12-pitch) typewriter) Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: 287020
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
H. W. McCoy, PNL
306-T6/300 Area
4. Generator's Phone (509) 376-1483

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: Westinghouse Hanford Company
6. US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone: 376-1420

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Burial Ground
200W
Westinghouse Hanford Company
10. US EPA ID Number: WA 789 000 8967
G. State Facility's ID
H. Facility's Phone: 2-1181

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	~~Flammable Liquid n.o.s.~~ ~~UN1993~~	X	1	DM	135	K	F005, WT01, D001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
Scintillation vials contain toluene and waste water.
Flash point 40°F

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 1 55-gal DOT 17H drum.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Jerry Powers
Signature
Month / Day / Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: D F Mc[illegible]
Signature
Month / Day / Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month / Day / Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month / Day / Year

Style F15REV-6 Labelmaster Div of American Labelmark Co Inc 60646 EPA Form 8700-22 (Rev 9/86) Previous editions are obsolete

340-87-0224S

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

WBR No. 3

DO NOT WRITE IN THIS SPACE

DISPOSAL SITE

Area: 200 W | Trench No.: 218-W-3A | Tier No.: 6-5

Caisson No.: NA

Coordinates: N 44140 W 19688

Existing Coordinates: N 44140 W 19686

Remarks: NA

Signature of Certifier: M L Hatfield | Date: 10-9-87

Signature of Burial | Date

WASTE GENERATOR: B 0004

Charge Code: ~~13220 WB 4K0 9~~ | DOE Authorization No.: ~~K-BRM~~ K R 4K 2

Address Point: 340-300 | 6-2012 JC

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO WA-222 and the approved Burial Compliance Checklist (BCC). 3. The charge code is correct.

Signature | Date: 10-8-87

WASTE DESCRIPTION

COMBUSTIBLE WASTE		NONCOMBUSTIBLE MATERIALS	
Paper Products		Glass	
Plastic		Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	
WASTE OIL	15	~~WASTE OIL~~	~~15~~
ABSORBENT	85	~~ABSO~~	~~B~~
Total	15 TOT	Total	85

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity, Lb/Kg
HYD. OIL	5 Kg

CONTAINER INFORMATION

Quantity & Type: 55 Gallon Drums ~~(1)~~ | Hanford Standard Fiberboard Boxes (18" x 18" x 24") | ~~(1)~~ Other

DOE Approval Number: 2-1K-3M-1 | Dose Rate Package: .5 mrem hr at Contact

Diameter or Length x Width: NA | Height: NA

Number of Containers: NA

Nuclear Transaction No.: NA | Property Disposal Request No.: NA

Tare Weight: 7.5 | Gross Weight: 71 | ~~Pounds~~ Kilograms

WASTE CATEGORIES: ☐ BW ~~☒~~ OS ☐ CE ☐ SS ☐ SD ☐ NC

Thermal Power: ~~☒~~ 0.1 w/ft³ or less ☐ Other

Remarks:

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotope Concentration (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NA		MFP	.5mCi
Totals		NA		.5mCi

Measurement Method: ESTIMATED By C.P. | Determined By: C L BAGY

DISTRIBUTION: Waste Engr. 1750-E 200 E; Generator 272-W 200 W; Rad. Safety 200-W

54 3000 (R1 ...)

340-87-02245

340-PNL-87-6

(17)

*Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: PNL-287021
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
M. W. McCou, PNL
306-T6/300 Area

4. Generator's Phone (509) 376-1483

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: Westinghouse Hanford Company
6. US EPA ID Number: WA 789 000 8967

C. State Transporter's ID

D. Transporter's Phone: 376-1420

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Burial Ground
200W
Westinghouse Hanford Company
10. US EPA ID Number: WA 789 000 8967

G. State Facility's ID

H. Facility's Phone: 3-1181

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	~~Flammable Liquid~~ ~~n.o.s.~~ ~~UN1270~~	X	1	DM	5	K	D001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
Solution contains oil colbatt-60, cesium, uranium, and radium.
Flashpoint 358°F

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 1 55-gal DOT 17H drum

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Joe Webb
Signature
Month / Day / Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month / Day / Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month / Day / Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month / Day / Year

Style F15REV-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

4th QUARTER 1987

1608H-WHC MFP 200W 03A TS6 (45)

DISPOSE

DATE	LOGN	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
102887	0001	216.00	HE	19	U10C3	19000.00	CI	0.04400	TS6	N	03A	WHC
...TOTALS...		216.00				19000.00						

1608H-87-00045

1608H-87-0045 D&D-88-D-22

Rockwell Hanford Operations

SOLID WASTE BURIAL RECORD – LOW LEVEL

RSR 49979

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 1608H-WHC-87-1 45

DISPOSAL SITE This portion of form to be completed by Rockwell Representative at Disposal site

Area	Burial Ground No	Trench No
200W	3-A	65

Caisson No: NA

Beginning Coordinates: N 44140 W 77588

Ending Coordinates: N 44140 W 77618

Remarks:

Signature Acceptance: L. Matthieu Date: 10-28-87

Signature Burial: Date:

WASTE GENERATOR: WHC

Charge Code: ~~UW~~ UG

DOE Authorization No (RRM): N/A

Address Phone: 1608H 100H 3-1461

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: [illegible] Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	%
Plastic	2 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	1 %
	%	Sludge	57 %
	%	Absorbent	40 %
	%		%
	%		%
Total	2 %	Total	98 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or ~~Kg~~)
D005 - Barium	20.0
D006 - Cadmium	0.8
D007 - Chromium	8.0
D008 - Lead	22.0
D009 - Mercury	2.0
D011 - Silver	5.0

CONTAINER INFORMATION

Quantity/Volume: ~~20~~ 19 Other: 90 Gal. Bondico Overpack Drums

55 Gallon Drums: --

Hanford Standard Fiberboard Boxes (18" x 18" x 24"): --

BCC Approval Number: 3-1R-7KM-X

Dose Rate Package: 20 mrem/hr Contact

Diameter or Length x Width: 28 1/3" Dia.

Height: 38 1/4"

Material of Construction: Fiberglass/Polyethylene

Nuclear Transaction No: N/A

Property Disposal Request No: N/A

Total Volume: ~~240~~ 216 3 Ft³

Gross Weight: ~~20,000~~ 19,000 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☒ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks:

D&D 88-D-22

RMW

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	~~Grams~~ Curies
None	None	None	Co^{60}	.0119
			Cs^{137}	.0132
			Eu^{152}	.0145
			Eu^{154}	.0035
			Eu^{155}	.0009
Totals		None		.0440

Measurement Method: Survey/Calculation

Determined By: [illegible]

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 (7 85)

1608H-87-0004S

1608H-WMC-87-1

Please print or type (Form designed for use on elite (12-pitch) typewriter) Form Approved OMB No 2050-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967

Manifest Document No: 3-1R-7KM-X

2 Page 1 of 1 — Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address
Decontamination & Decommissioning Function
1720K/100K
V. D. Apple

4 Generator's Phone ( ) 373-1461

5 Transporter 1 Company Name: Westinghouse Hanford Company

6 US EPA ID Number: WA 789 000 8967

7 Transporter 2 Company Name

8 US EPA ID Number

9 Designated Facility Name and Site Address
Low-Level Solid Waste Burial Ground
272WA 200W Area
Westinghouse Hanford Company

10 US EPA ID Number: WA 789 000 8967

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone 373-3666
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 373-2128

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	I Waste No
a. X	Waste Radioactive Material n.o.s. UN2982 Radioactive MATERIAL	19 ~~20~~	DM	3100 ~~9990~~	K	WT01, D006, D006, D007, D008, D009, D011
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
Contaminated Sludge Material
pH 7.6

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: V.D. Apple — Signature — Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name — Signature — Month Day Year

Style F15R-6 Labelmaster Div. of American Label Mark Co. Inc. 60646

EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete

TRANSPORTER - 2

4th QUARTER 1987

2345Z-WHC MFP 200W 03A TS6 (65)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
102887	0001	7.40	CB	1	K310K	90.00	CI	0.00100	TS6	N	03A	WHC
2345Z-87-00265												
...TOTALS...		7.40				90.00						

23452-87-00265

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 3-5-57-1-87-1 (DO NOT WRITE IN THIS BLOCK)

DISPOSAL SITE

Area: 200W

Burial Ground No: 218 W3A

Trench No: 65

Caisson No: NA

Beginning Coordinates: N 44140 W 77778

Ending Coordinates: N 44140 W 77768

Remarks: NA

Signature Acceptance: L.B. Mathlick Date: 10-28-87

Signature Burial: Date:

WASTE GENERATOR: WHC

Charge Code: E16532

DOE Authorization No (RRM): NA

Address Phone: 234-5 3-2337

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO MA 222 and the approved Burial Compliance Checklist (BCC). 3. The charge code is correct.

Signature: D.W. Faulk Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	10	Glass	
Plastic	85	Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	5
Total	95	Total	5

HAZARDOUS-CORROSIVE CONSTITUENTS

Name	Quantity, Lb or Kg
AMALGAMATED MERCURY	1LB

CONTAINER INFORMATION

Quantity & Type: 1 55 Gal Drum; 0 Hanford Standard Fiberboard Boxes (16" x 18" x 24"); 0 Other

BCC Approval No: 1-1K-7BM-0

Dose Rate Range: <1 mrem/hr SURFACE

Diameter or Length x Width: 24" O.D.

Height: 35"

Material of Construction: GALV. DOT 17C STEEL DRUM

Nuclear Transaction No: NA

Property Disposal Request No: NA

Total Volume: 7.4 FT³

Gross Weight: 90 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☒ DS ☐ CE ☐ SS ☐ DD ☐ TC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: CONTAMINATED MERCURY IN COMMERCIAL SPILL KIT, DRUM HAS 20 MIL HDPE LINER.

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
Pu 239	94	0	—	—
Totals		0		0

Measurement Method: ~~UNKNOWN~~ neutron counting

Determined By: PNL / 300 AREA

DISTRIBUTION: White - SWPDL 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581

23452-87-0026S

23457-WMC-87-1 (65)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: [redacted] Multi
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
D. W. Faulk
234-5Z/ 200 West
4. Generator's Phone: 509) 373-2337

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: Westinghouse Hanford
6. US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone: 373-2583

7. Transporter 2 Company Name: N/A
8. US EPA ID Number:
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
[redacted] RWL Low Level Waste Burial
272 WA/200 West
10. US EPA ID Number: 7 WA 789 000 8967
G. State Facility's ID
H. Facility's Phone: 373-1181

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. X	Radioacvtive Material, Low Specific Activity — Radioactive Material UN2912	1	DM	90 [redacted]	P N	[illegible]
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
Radioactive Mixed Waste. Secondary hazard: amalgamated mercury. D009, 1 pound.
Drum No. RHZ-211-A17361

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: D. W. Faulk
Signature: D. W. Faulk
Month 10 Day 20 Year 87

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Pete Alvarado Jr
Signature: Pete Alvarado Jr
Month 10 Day 20 Year 87

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: D L Isaac
Signature: [illegible]
Month 10 Day 20 Year 87

Style F15R-6 Labelmaster Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 Rev. 9-85 Previous editions are obsolete.

TRANSPORTER 2

4th QUARTER 1987

222S -WHC MFP 200W 03A TS6 (63)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
102987	0001	7.40	CB	1	WL27H	180.78	CI	0.00001	TS6	N	03A	WHC
					222-86-28							
102987	0002	7.40	CB	1	WL27H	180.78	CI	0.05800	TS6	N	03A	WHC
					222-86-27							
102987	0003	7.40	CB	1	WL27H	180.78	CI	0.00000	TS6	N	03A	WHC
					222-86-13							
102987	0004	7.40	CB	1	WL27H	264.56	CI	0.00000	TS6	N	03A	WHC
					222-86-32							
102987	0005	7.40	CB	1	WL27H	220.46	CI	0.00000	TS6	N	03A	WHC
					222-86-33							
102987	0006	7.40	CB	1	WL27H	246.92	CI	0.00000	TS6	N	03A	WHC
					222-86-17							
102987	0007	7.40	CB	1	WL27H	249.12	CI	0.00000	TS6	N	03A	WHC
					222-86-16							
102987	0008	7.40	CB	1	WL27H	244.71	CI	0.00000	TS6	N	03A	WHC
					222-86-23							
102987	0009	7.40	CB	1	WL27H	238.10	CI	0.00000	TS6	N	03A	WHC
					222-86-24							
102987	0010	7.40	CB	1	WL27H	246.92	CI	0.00000	TS6	N	03A	WHC
					222-86-25							
102987	0011	7.40	CB	1	WL27H	187.39	CI	0.01490	TS6	N	03A	WHC
					222-86-26							
102987	0012	7.40	CB	1	WL27H	180.78	CI	0.01500	TS6	N	03A	WHC
					222-86-14							
...TOTALS...		88.80				2621.31						

222 - 86 - 28

515 65

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-S-WM-87-1 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site

Area: 200W
Burial Ground No.: 218W3A
Trench No.: 6S
Caisson No.: NA
Beginning Coordinates: N 44140 W 22778
Ending Coordinates: N 44140 W 22768
Remarks: NA
Signature - Acceptance: L L Matthews — Date: 10-29-87
Signature - Burial: — Date:

WASTE GENERATOR: WESTINGHOUSE
Charge Code: WL 63A
DOE Authorization No. (RRM):
Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D. S. Blevins — Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	%
Plastic	10 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	52 %	Other Metals	%
	%	CONFINED PADS	38 %
	%		%
	%		%
	%		%
Total	62 %	Total	38 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
ACETONITRILE	26 KG

CONTAINER INFORMATION

Quantity & Name: 1 55 Gal. Drum; 0 Standard Fiberboard Boxes (14" x 18" x 24"); 0 Other
BCC Approval Number: 1-1K-9DM-X
Dose Rate Points: 1 (mrem/hr) C
Diameter or Length x Width: —
Height: —
Material of Construction: —
Nuclear Transaction No.: NA
Property Disposal Request No.: NA
Total Volume: 74 FT³
Gross Weight: 82 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: Barrel # 222-86-28 Manifest # 222-S-87-003-10

Inspected by JC 10-22-87

Item B

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	None 0	0	MFP	6.80-6
Totals		0		6.80-6

Measurement Method: TOTAL ALPHA/BETA
Determined By: M.J. HALL

DISTRIBUTION: White - SWPDO 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 85

222-86-27

RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-S-WP-87-2

DISPOSAL SITE (This portion of form to be completed by Rockwell Representative at Disposal site)

Area: 200W
Burial Ground No: 218 W3A
Trench No: 65
Cassion No: NA
Beginning Coordinates: N 44140 W 77778
Ending Coordinates: N 44140 W 77768
Remarks: NA
Signature Acceptance: L.L. Matthews Date: 10-29-87
Signature Burial: Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL63A
DOE Authorization No RRM: NA
Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package descriptor below is complete and the waste package conforms to RHO MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D.S. Blevins Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	%
Plastic	10 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
ORGANIC LIQUID	52 %	CONWED PADS	38 %
	%		%
	%		%
	%		%
Total	62 %	Total	38 %

HAZARDOUS-CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
ACETONITRILE	26 KG

CONTAINER INFORMATION

Quantity & Name: 1 55 Gal Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other
BCC Approval Number: 1-1K-90M-X
Gross Rate Package: 1 Number of Pieces: 6
Diameter or Length x Width: — Height: —
Material of Construction: —
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: 7.463
Gross Weight: 82 ☐ Pounds ☒ Kilograms
WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☐ NC
Thermal Power: ☐ 0.1 w/ft³ or less ☐ Other

Remarks: Barrel # 222-86-27
Manifest # 222-S-87-003-9

Inspected by J C 10-22-87

Item-B

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	0	MFP	5.8 x 10⁻²
Totals		0		5.8 x 10⁻² → 5.8 x 10⁻²

Measurement Method: TOTAL ALPHA/BETA
Determined By: M.J. HALL

DISTRIBUTION: White - SWPDL 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 ... 85

222-86-13

RSR51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-S-WMC-87-3 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200W
Burial Ground No: 218W3A
Trench No: 6S
Caisson No: NA
Beginning Coordinates: N 44140 W 77768
Ending Coordinates: N 44140 W 77778
Remarks: NA
Signature Acceptance: L L Matthews — Date: 10-29-87
Signature Burial: — Date:

WASTE GENERATOR: WESTINGHOUSE
Charge Code: WL63A
DOE Author Station (IRAM):
Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: R. S. Blevins — Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	34 %
Plastic	5 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	9 %
ORGANIC LIQUID	32 %	CONTAMED PADS	20 %
	%		%
	%		%
	%		%
Total	37 %	Total	63 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Xylene	36 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other
BCC Approval Number: 1-1K-9DM-X
Dose Rate Range: <1 mrem/hr at C
Diameter or Length x Width: — Height: —
Material of Construction: —
Nuclear Transaction No: N/A
Property Disposal Request No: N/A
Total Volume: 7.4 Ft³
Gross Weight: 82 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: BARREL # 222-86-13
MANIFEST # 222-S-87-003-1 ITEM-A
Inspected by [illegible] 10-27-87

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	0	MFP	1X10⁻⁷
Totals		0		1X10⁻⁷

Measurement Method: LIQUID SCINTILLATION
Determined By: M. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200 W

54 3000 531 (2 85)

222-86-32

RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-S-WMC-87-4 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE (This portion of form to be completed by Rockwell Representative at Disposal site)

Area: 200W
Burial Ground No: 218W3A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 27778
Ending Coordinates: N 44140 W 27768
Remarks: NA
Signature Acceptance: [signature] Date: 10-29-87
Signature Burial: Date:

WASTE GENERATOR: WESTINGHOUSE
Charge Code: WL 63A
DOE Authorization No. RAM: NA
Address Phone: 222-S 200W 3-5449

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.
Signature: [signature] Date: 10/29/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	35 %
Plastic	5 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	10 %
ORGANIC LIQUID	38 %	CONWED PADS	12 %
	%		%
	%		%
	%		%
Total	43 %	Total	57 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Xylene	33 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gal Drum; 0 Hanford Standard Fiberboard Boxes (14" x 18" x 24"); 0 Other:
BCC Approval Number: 1-1K-9DM-X
Dose Rate Reading: <1 mrem/hr
Diameter or Length x Width: —
Height: —
Material of Construction: —
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: 7.4 ft³
Gross Weight: 120 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: Barrel # 222-86-32 Manifest # 222-S-87-003-11 Item-A

Inspected by DC 10-22-87

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams Or Curies
	None	0	MFP	1.0×10^{-7}
Totals		0		1×10^{-7}

Measurement Method: LIQUID SCINTILLATION
Determined By: M J HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

SA 3000 581 (7-85)

222-86-33

RSR51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO [illegible]

DISPOSAL SITE (This portion of form to be completed by Receiving Representative at Disposal Site)

Area: 200W
Burial Ground No: 218W3A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 77768
Ending Coordinates: N 44140 W 77778
Remarks: NA
Signature Acceptance: [illegible] Date: 10-29-87
Signature Burial: Date:

WASTE GENERATOR: WESTINGHOUSE
Charge Code: WL65A
DOE Authorization No. RRM: NA
Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: [illegible] Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products		Glass	34
Plastic	5	Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	10
ORGANIC LIQUID	31	CONTAMED PADS	20
Total	36	Total	64

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Xylene	21 KG

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; 0 Hanford Standard Fiberboard Box; 0 Other:
BCC Approval Number: 1-1K-9DM-X
Shipping Package: 1 Drum; C
Diameter or Length x Width: —
Height: —
Material of Construction: —
Nuclear Transaction No.: NA
Property Disposal Request No.: NA
Total Volume: 7.4 ft³
Gross Weight: 100 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: Barrel # 222-86-33 Manifest # 222-S-87-003-12 ~~Item~~ A Inspected by DC 10-22-87

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	None	0	MFP	1×10^{-7}
Totals		0		1×10^{-7}

Measurement Method: LIQUID SCINTILLATION
Determined By: MJ HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 (7 85)

222-86-17

RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE — SWBR NO 222-86-87-6

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site

Area: 200W — Burial Ground No: 218W3A — Trench No: 6S

Caisson No: NA — Beginning Coordinates: N 44140 W 77768 — Ending Coordinates: N 44140 W 77778

Remarks: NA

Signature Acceptance: [signature] — Date: 10-29-87

Signature Burial: — Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL-63A — DOE Authorization No. RRM: N/A

Address Phone: 222-S, 200W 3-5449

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package descriptor below is complete and the waste package conforms to RHO-MA-222 and the applicable Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: [signature] — Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	34 %
Plastic	5 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	9 %
ORGANIC LIQUID	32 %	CONTAMINATED PADS	20 %
	%		%
	%		%
	%		%
Total	37 %	Total	63 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Xylene	26 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum — 0 Hanford Standard Fiberboard Box (1X1 x 15 x 24) — 0 Other:

BCC Approval Number: 1-1K-9DM-X — Dose Rate Factor: .1 — Shielding: C

Diameter or Length x Width: — Height: —

Material of Construction: —

Nuclear Transaction No.: N/A — Property Disposal Request No.: N/A

Total Volume: 7.4 ft³ — Gross Weight: 112 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: BARREL # 222-86-17 MANIFEST # 222-S-87-003-4 Item-A

Inspected by [illegible] 10-22-87

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams (Curies)
	NONE 0	0	MFP	1×10^{-7}
Totals		0		1×10^{-7}

Measurement Method: LIQUID SCINTILLATION — Determined By: M.J. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

HA 3000 (3/81) 7-85

222-86-16

RSR51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-86-87-7

DISPOSAL SITE (This portion of form to be completed by Rockwell Representative at Disposal Site)

Area: 200 W
Burial Ground No: 218 W 3 A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 77768
Ending Coordinates: N 44140 W 77778
Remarks: NA
Signature - Acceptance: L L Rockhill
Date: 10-29-87
Signature - Burial:
Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: W463A
DOE Authorization No (BRM): N/A
Address Phone: 222-S 200W 3-5449

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC).
3. The charge code is correct.

Signature: D. G. Blevins
Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products		Glass	34
Plastic	5	Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	9
ORGANIC LIQUID	33	CONTAMINATED PADS	20
Total	38	Total	63

HAZARDOUS-CORROSIVE CONSTITUENTS

Name	Quantity, Lb or Kg
XYLENE	26 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; 0 Hanford Standard Fiberboard Box (18" x 18" x 24"); 0 Other:

BCC Approval Number: 1-1K-9DM-X
Dose Rate - Pal-Pak: 1 mrem/hr C
Diameter or Length x Width: —
Height: —
Material of Construction: —
Nuclear Transaction No.: N/A
Property Disposal Request No.: N/A
Total Volume: 7.4 ft³
Gross Weight: 113 ☐ Pounds ☒ Kilogram

WASTE CATEGORIES: BW, CE, DD, DS, SS, X LC

Thermal Power: ☒ 0.1 w/ft³ or less; Other

Remarks: BARREL # 222-86-16
MANIFEST # 222-S-87-003-3
Item-A
Inspected by [illegible]
10-27-87

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	Ø	MFP	1×10^{-7}
Totals		Ø		1×10^{-7}

Measurement Method: LIQUID SCINTILLATION
Determined By: M. J. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

DA 3000 581 (1-85)

222-86-23

RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 87-8

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal Site

Area: 200 W
Burial Ground No: 218 W3A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 77768
Ending Coordinates: N 44140 W 77778
Remarks: NA
Signature Acceptance: [signature] Date: 10-29-87
Signature Burial: — Date: —

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL63A
DOE Authorization No (RRMI): NA
Address Phone: 222-S 200W 3-5449

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below
2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC).
3. The charge code is correct

Signature: D. H. Blevins Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	34 %
Plastic	5 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	9 %
ORGANIC LIQUID	32 %	CONTAMED PADS	20 %
	%		%
	%		%
	%		%
Total	37 %	Total	63 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity Lb or Kg
Xylene	26 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; 0 Hanford Standard Fiberboard Boxes (18" x 24"); 0 Other:
BCC Approval Number: 1-1K-9DM-X
Dose Rate Package: .1 mrem/hr at C
Diameter or Length x Width: —
Height: —
Material of Construction: —
Nuclear Transaction No.: NA
Property Disposal Request No.: NA
Total Volume: 7.4 ft³
Gross Weight: 111 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: BARREL # 222-86-23 MANIFEST # 222-S-87-003-5 ITEM-A

Inspected by DC 10-22-87

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	0	MFP	1×10^{-7}
Totals		0		1×10^{-7}

Measurement Method: LIQUID SCINTILLATION
Determined By: M. L. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3090 581 125

222-86-24 RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** 163

USE BLACK BALL POINT PEN OR TYPE

SWBR NO (DO NOT WRITE IN THIS SPACE) 222-S-WM-87-9

DISPOSAL SITE (This portion of form to be completed by Rockwell Representative at Disposal Site)

Area: 200W's
Burial Ground No: 218W3A
Trench No: 6S
Caisson No: NA
Beginning Coordinates: N 44140 W 77278
Ending Coordinates: N 44140 W 77268
Remarks: NA
Signature Acceptance: [signature] Date: 10-29-87
Signature Burial: Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL 63A
DOE Authorization No (IRRM): N/A
Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: [signature] Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	34
Plastic	5 %	Concrete	
Cloth	%	Stainless Steel	
Rubber	%	Other Metals	9
ORGANIC LIQUID	34 %	CONTAMINATED PADS	18
	%		
	%		
	%		
Total	39 %	Total	61

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Xylene	26 KG

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; Other:
BCC Approval Number: 1-1K-90M-X
Dose Rate Package: 1 mrem/hr at C
Diameter or Length x Width: Height:
Material of Construction:
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: 7.4 ft³
Gross Weight: 108 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: BW, CE, DD, DS, SS, SC

Thermal Power: ☒ 0.1 w/ft³ or less; Other

Remarks: Barrel # 222-86-24 Manifest # 222-S-87-003-6

Inspected by [illegible] 10-22-87

Item-A

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	None	0	MFP	1×10^{-7}
Totals		0		1×10^{-7}

Measurement Method: LIQUID SCINTILLATION
Determined By: M J HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

222-86-25

RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO SSS-WHC-87-10

DISPOSAL SITE This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200W
Burial Ground No: 218 W 3A
Trench No.: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 77768
Ending Coordinates: N 44140 W 77778
Remarks: NA
Signature Acceptance: L L Matthews
Date: 10-29-87
Signature Burial:
Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL63A
DOE Authorization No (RRM): N/A
Address Phone: 222-S 200W 3-5449

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO MA-222 and the approved Burial Compliance Checksheet (BCC)
3. The charge code is correct

D. L. Blevins 10/28/87
Signature Date

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	34 %
Plastic	5 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	9 %
ORGANIC LIQUID	32 %	CONTAMED PADS	20 %
	%		%
	%		%
	%		%
Total	37 %	Total	63 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Xylene	26 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other:

BCC Approval Number: 1-1K-9DM-X
Dose Rate: .1 mr/hr at 6
Diameter or Length x Width:
Height:
Material of Construction:
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: 7.4 ft³
Gross Weight: 112 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: Barrel # 222-86-25 Manifest # 222-S-87-003-7

Inspected by JC 11-22-87

Item-A

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	0	MFP	1X10⁻⁷
Totals				1X10⁻⁷

Measurement Method: LIQUID SCINTILLATION
Determined By: M. J. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 - 85

222-86-26

R5R51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-WMC-87-11 Page 1 of 2

DO NOT WRITE IN THIS SPACE

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal Site

Area	Burial Ground No	Trench No
200W	218 W3A	65

Caisson No: NA

Beginning Coordinates: N 44140 W 77778

Ending Coordinates: N 44140 W 77768

Remarks: NA

Signature Acceptance: L L Matthews — Date: 10-29-87

Signature Burial — Date:

WASTE GENERATOR: ~~WESTINGHOUSE~~

Charge Code: WL63A — DOE Authorization No. (ARM): NA

Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D. G. Blevins — Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	%
Plastic	10%	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
ORGANIC LIQUID	50%	CONTAMINATED PADS	40
	%		%
	%		%
	%		%
Total	60%	Total	40

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity Lb or Kg
METHANOL	16.25 KG
ETHANOL	.83 KG
TOLUENE	2.42 KG
DIBUTYL N,N DIETHYL CARBAMYL phosphate DDCP	.83 KG
Xylene	1.61 KG

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums — 0 Hanford Standard Fiberboard Boxes (12" x 18" x 24") — 0 Other

BCC Approval Number: 1-1K-90M-X — Dose Rate Per Unit: 3 mrem/hr — C

Diameter or Length x Width — Height

Material of Construction

Nuclear Transaction No.: NA — Property Disposal Request No.: NA

Total Volume: 7.4 ft³ — Gross Weight: 85 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: BW DS CE SS CD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less — Other

Remarks: Barrel # 222-86-26 Manifest # 222-S-87-003-8 Item C Inspected by [illegible] 10-22-87 Survey is continuous [illegible]

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	None	0	MFP	1.49-2
Totals		0		1.49-2

Measurement Method: TOTAL ALPHA/BETA — Determined By: M. J. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 [illegible]

222-86-26 RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (1-3)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. 222S-WHC-87-11 (DO NOT WRITE IN THIS BLOCK)

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal Site

Area: 200W
Burial Ground No: 218 W 3A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 77778
Ending Coordinates: N 44140 W 77768
Remarks: NA
Signature Acceptance: L L Mathieck — Date: 10-29-87
Signature - Burial: — Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL65A
DOE Authorization No (RRM): NA
Address Phone: 222-S 200W 3-5449

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D. L. Blevins — Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	%
Plastic	10 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
ORGANIC LIQUID	50 %	CONFINED PADS	40 %
	%		%
	%		%
	%		%
Total	60 %	Total	40 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity Lb or Kg
TRIBUTYL PHOSPHATE	.81 Kg
NORMAL PARAFFIN HYDROCARBON	.81 Kg
TRI OCTYL PHOSPHINE OXIDE IN CYCLOHEXANE	.83 Kg
ALIQUAT 336	.81 Kg
N-Butyl ACETATE	.80 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; 0 Hanford Standard Fiberboard Boxes (18 x 18 x 24); 0 Other:

BCC Approval Number: 1-1K-90M-X
Dose Rate Package: 3 mrem/hr at d
Diameter or Length x Width: —
Height: —
Material of Construction: —
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: 3 ft³
Gross Weight: ☒ Kg
WASTE CATEGORIES: BW, CE, DD, DS, SS, NC
Thermal Power: ☐ 0.1 w/ft³ or less; Other
Remarks: CONTINUATION OF Barrel # 222-86-26 Manifest # 222-S-87-003-E

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	0	MFP	1.49-2
Totals		0		1.49-2

Measurement Method: TOTAL ALPHA/BETA
Determined By: M.J. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 531

222-86-14 RSR51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 222-S-WESTINGHOUSE-87-12 Page 1 of 6

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site

Area: 200W
Burial Ground No: 218W3A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 27768
Ending Coordinates: N 44140 W 27728
Remarks: NA
Signature Acceptance: L.L. Mathieu Date: 10-29-87
Signature Burial: Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL63A
DOE Authorization No. (RRM): NA
Address Phone: 222-S 200W 3-5449

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D.G. Elwins Date: 10/28/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	%
Plastic	10 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
ORGANIC LIQUID	52 %	CONTAMINATED PADS	38 %
	%		%
	%		%
	%		%
Total	62 %	Total	38 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
ACETONITRILE	4.34 Kg
METHANOL	7.57 Kg
CYCLOHEXANONE	4.34 Kg
Xylene	3.25 Kg
Cyclohexane	1.04 Kg

~~ORGANIC PADS~~ NB

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other:

BCC Approval Number: 1-1K-9DM-X
Dose Rate Package: .6 mrem/hr at 6"
Diameter or Length x Width: —
Height: —
Material of Construction: —

Nuclear Transaction No.: NA
Property Disposal Request No.: NA

Total Volume: 74 ft³
Gross Weight: 82 ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ DD ☒ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: Barrel # 222-86-14 Manifest # 222-S-87-003-2

Inspected by [illegible] 10-27-87 [illegible] Kpg 2

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams Or Curies
	None	0	MFP	1.50^{-2}
Totals		0		1.50^{-2}

Measurement Method: TOTAL ALPHA/BETA
Determined By: M.J. Hall

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 (7 85)

222-86-14

RSR 51565

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** (63)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO [illegible]

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal Site

Area: 200W
Burial Ground No: 218W3A
Trench No: 65
Caisson No: NA
Beginning Coordinates: N 44140 W 77778
Ending Coordinates: N 44140 W 77768
Remarks: NA
Signature Acceptance: [illegible] Date: 10-29-87
Signature Burial: Date:

WASTE GENERATOR: WESTINGHOUSE

Charge Code: WL63A
DOE Authorization No (RRM): NA
Address Phone: 222-S 200W

I certify that 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checksheet (BCC)
3. The charge code is correct

D. G. Blevins 10/28/87
Signature Date

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	%
Plastic	10 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
ORGANIC LIQUID	52 %	CONTAMINATED PADS	38
	%		
	%		
	%		
Total	62 %	Total	38 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
NORMAL PARAFFIN HYDROCARBON	1.56 Kg
ISOPROPYL ALCOHOL	1.04 Kg
ETHANOLAMINE	1.04 Kg
TRI BUTYL PHOSPHATE	.26 Kg
N-BUTYL ACETATE	1.56 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drum; 6 Standard Fiberboard Boxes 16 x 16 x 24; 2 Other:
BCC Approval Number: 1-1K-9DM-X
Dose Rate Parallel: .6 mr/hr; 5
Diameter or Length x Width:
Height:
Material of Construction:
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: [illegible] ft³
Total Weight: [illegible] ☐ Pounds ☒ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☐ CE ☐ SS ☐ SD ☒ LC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: CONTINUATION OF BARREL # 222-86-14

Manifest # 222-S-87-0032

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE	0	MFP	1.50^{-2}
Totals		0		1.50^{-2}

Measurement Method: TOTAL ALPHA/BETA
Determined By: M. J. HALL

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

NA 3000 521 7 85

2225-WHC-87-1 Thru 12 (63)

Please print or type. Form designed for use on elite (12-pitch) typewriter.

Form Approved OMB No. 2050-0039 Expires 9-30-86

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967

Manifest Document No: 222-S-87-003

2 Page 1 of 2

Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address: D.G. Blevins/ 222S/ 200W/ WHC

4 Generator's Phone: 509 , 373-5449

5 Transporter 1 Company Name: Westinghouse Hanford Company

6 US EPA ID Number: WA 789 0008967

7 Transporter 2 Company Name

8 US EPA ID Number

9 Designated Facility Name and Site Address: 200 West Burial Ground, Westinghouse Hanford Company

10 US EPA ID Number: WA 789 0008967

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone: 376-1420

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone: 373-1181

GENERATOR

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	I. Waste No.
a.	X	Waste Radioactive Material,LSA,n.o.s. Radioactive Material UN2912	8	DM	210	K	F003, D001
b.	X	Waste Radioactive Material,LSA,n.o.s. Radioactive Material UN2912	2	DM	52	K	WT01,D001 D003
c.	X	Waste Radioactive Material,LSA,n.o.s. Radioactive Material UN2912	1	DM	26	K	F001,F003 F005,D001 D003,WT01
d.							WT02,[illegible] WP01,WC01

J. Additional Descriptions for Materials Listed Above: All drums contain Flammable Liquids

K. Handling Codes for Wastes Listed Above

Items. 8 drums xylene 100% (labpack with 1 gallon poly-bottles)
Item b. 2 drums acetonitrile 100% (labpack with 1 gallon poly-bottles)
Item c. 1 drum labpacked in poly-bottles containing: Methanol- 62.5%,Ethanol - 3.2%, Toluene-9.3%, Dibutyl n,n diethylcarbamyl phosphate-3.2%, xylene-5.2%, Tributylphosphate-2.1%

15. Special Handling Instructions and Additional Information
Normal paraffin hydrocarbon-3.1%, Trioctylphosphineoxide in cyclohexane-3.2%, Aliquat 336-3.6%, N-butyl acetate-3.1%, Carbon tetrachloride-1.0%

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: D.G. Blevins | Signature | Month | Day | Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name | Signature | Month | Day | Year

Style F15RE-6 Uniform Hazardous Waste Manifest © 1984 American Business Forms Co., Inc. 60646

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete.

TRANSPORTER 2

2225-WHC-87-1 thru 12 (6.3)

Form Approved OMB No. 2050-0039 Expires 9-30-86

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's US EPA ID No: WA 789 000 8967

Manifest Document No: 222-S-87-003

22. Page: 2 of 2

Information in the shaded areas is not required by Federal law.

23. Generator's Name: D.G. Blevins/ 222-S/ 200W/ WHC

L. State Manifest Document Number

M. State Generator's ID

24. Transporter 1 Company Name: Westinghouse Hanford Company

25. US EPA ID Number: WA 789 000 8967

N. State Transporter's ID

O. Transporter's Phone: 376-1420

26. Transporter ___ Company Name

27. US EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone

	28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		29. Containers No	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	X	Waste Radioactive Material,LSA,n.o.s. Radioactive Material UN2912	1	DM	26	K	F003,D001 D003,WT01 WT02
b.							
c.							
d.							
e.							
f.							
g.							
h.							
i.							

S. Additional Descriptions for Materials Listed Above

Item A. page 2. Acetonitrile-16.6%,Methanol-29.1%, Cyclohexanone-16.6%, Xylene-12.5%, cyclohexane-4.0%, Normal paraffin hydrocarbon-6.1%, Isopropyl alcohol-4.0%, Ethanolamine-4.0%, Tributylphosphate-1.0%, N-butyl acetate-6.1%

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

TRANSPORTER

33. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name: [illegible] | Signature: [illegible] | Date: Month Day Year

34. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name: [illegible] | Signature: [illegible] | Date: Month Day Year

FACILITY

35. Discrepancy Indication Space: None [illegible]

Style F166 Labelmaster Chicago IL 60646

EPA Form 8700-22A (3-84)

START

4th QUARTER 1987

340 -PNL MFP 200W 03A TS6 (17)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
100987	0004	7.50	CB	1	PNL340	357.00	CI	0.00500	TS6	N	03A	PNL
					340-87-0222S							
100987	0005	7.50	CB	1	PNL340	297.00	CI	0.00500	TS6	N	03A	PNL
					340-87-0223S							
100987	0006	7.50	CB	1	PNL340	71.00	CI	0.00500	TS6	N	03A	PNL
					340-87-0224S							
103087	0007	7.50	CB	1	PNL340	650.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0236S							
103087	0008	7.50	CB	1	PNL340	1000.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0237S							
103087	0009	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0238S							
103087	0010	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0239S							
103087	0011	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0240S							
103087	0012	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0241S							
103087	0013	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0242S							
103087	0014	7.50	CB	1	PNL340	325.00	CI	0.00100	TS6	N	03A	PNL
					340-87-0243S							
...TOTALS...		82.50				4322.00						

346-87-C236S RSR 23703

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** VA

USE BLACK BALL POINT PEN OR TYPE — SWBR NO. DO NOT WRITE IN THIS SPACE

DISPOSAL SITE

This copy of form is completed by Receiver. Receiver retains at Disposal Site.

Area: 200W
Burial Ground No.: 218W3A
Trench No.: 65
Cassion No.: NA
Beginning Coordinates: N 44140 W 77770
Ending Coordinates: N 44140 W 77762
Remarks: NA
Signature / Acceptance: L. Mathieck — Date: 10-30-87
Signature / Burial: — Date:

WASTE GENERATOR: B001
Charge Code: WB 47K — DOE Authorization No. RAM: NA
Address Phone: 308/340/8-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-272 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: Gregory [illegible] — Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products		Glass	
Plastic	20	Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	80
Total	20	Total	80

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
LEAD	292 kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other
BCC Authorization Number: 2-1A-3AM-0
Dose Rate Package: .2 mrem/hr at contact
Diameter or Length x Width: NA
Height: NA
Material of Construction: NA
Nuclear Transaction No.: NA
Property Disposal Request No.: NA
Total Volume: 7.5 ft³
Gross Weight: 650 Pounds / Kilograms

WASTE CATEGORIES: BW, CE, DD, DS, SS, NC
Thermal Power: ☒ 0.1 w/ft³ or less; Other
Remarks: Manifest Document No. PNL 287023 of 287029

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NONE		Co^{60}	1 MCi
Totals		NA		1 MCi

Measurement Method: ESTIMATED BY CP — Determined By: G. LIBASH

DISTRIBUTION: White - SWPOC 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 (7 83)

340-87-02375 RSR# 23703

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** JS

USE BLACK HALL POINT PEN OR TYPE — SWBR No. 340-87-8 (DO NOT WRITE IN THIS BLOCK)

DISPOSAL SITE

Area: 200W
Burial Ground No.: 218W3A
Trench No.: 65
Cassette No.: NA
Beginning Coordinates: 44140 N 77770
Ending Coordinates: 44140 N 77762
Remarks: NA
Signature Acceptable: L.D. Kathleen — Date: 10-30-87

WASTE GENERATOR: 300/1
Facility: WB47K
DOE Authorization No. (RRD): NA
Address Code: 300/340/6-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA 222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: Gregory [illegible] — Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products		Glass	
Plastic	20	Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	80
Total	20	Total	80

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Kilograms)
LEAD	450 kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gal. Drum; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other:
Box Serial Number: 2-1A-3AM-0
Box Part Number: 2 — Contact
Dimensions Length x Width: NA
Height: NA
Material of Construction: NA
Number Transaction No.: NA
Property Disposal Request No.: NA
Net Weight: 7.5 ft³
Gross Weight: 1000 Pounds (☒) Kilograms (☐)

WASTE CATEGORIES: ☑ DS; ☐ SS; ☐ NC
Thermal Power: ☑ 0.1 w/ft³ or less; ☐ Other

Remarks: Manifest Document No. ~~287023~~ 287029

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	NA		Co60	.1MCi
Totals		NA		.1MCi

Measurement Method: ESTIMATED BY CPL
Operator Name: C.L. BASH

DISTRIBUTION: White/Shipper 2750 E 200 E; Green TFE 272W 200 W; Pink Return to Shipper 200W

54 3000 581 (7/85)

340-PNL-87-748 (17)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967

Manifest Document No.: PNL-287029

2 Page 1 of 1

Information in the shaded areas is not required by Federal law.

3 Generator's Name and Mailing Address
M. W. McCoy, PNL
306-T6/300 Area

4 Generator's Phone (509) 376-1483

A. State Manifest Document Number

B. State Generator's ID

5 Transporter 1 Company Name: Westinghouse Hanford Company

6 US EPA ID Number: WA 789 000 8967

C. State Transporter's ID

D. Transporter's Phone: 376-1420

7 Transporter 2 Company Name

8 US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9 Designated Facility Name and Site Address
Burial Ground
200W/Westinghouse Hanford Company

10 US EPA ID Number: WA 789 000 8967

G. State Facility's ID

H. Facility's Phone: 2-1121

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	15 Waste No
a.	Radioactive Material, ~~Poison~~ LSA, n.o.s. UN2912	X	2	DM	593	Kg	D008, WT01
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
Drums contain contaminated lead wrapped in plastic.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 2 55-gal DOT 17H drums.

16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Jim Gose | Signature | Month Day Year

17 Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

18 Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19 Discrepancy Indication Space

20 Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

Style F15REV-6 Labelmaster Div. of American Labelmark Co. 60646

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete.

TRANSPORTER 2

340-87-02385

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

RSO# 23703

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 9 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE

Area: 200 W
Burial Ground: 218-W-3A
Cassette: 6-S
N/A
Beginning Coordinates: 44140 x 77770
Ending Coordinates: 44140 x 77762
Remarks:

Signature Acceptance: G. G. Wagley
Date: 10-30-87
Signature
Date

WASTE GENERATOR: B0007

Charge Code: WB47K
DOE Authorization No (RRM): NA
Address Phone: 309/3401 6-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet BCC: 3. The charge code is correct.

Signature: [illegible] 10-30-87
Date

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products		Glass	50
Plastic		Concrete	
Cloth		Stainless Steel	
Rubber		Other Metal	
		CONWEB	50
Total	0	Total	100

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity
Pseudocumene	25 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other

BCC Approval Number: 2-113-9AM-2
Dose Rate - Package: 1 mrem/hr at: CONTACT
Diameter or Length x Width: NA
Height: NA
Material of Construction: NA
Nuclear Transaction No.: NA
Property Disposal Request No.: NA
Tare Volume: 7.5
Gross Weight: 325 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☑ DS ☐ CE ☐ SS ☐ CD ☐ NC

Thermal Power: ☑ 0.1 w/ft³ or less ☐ Other

Remarks: Manifest Document No. PNL 287023

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotope Distribution (%)	Total Element Weight	Isotope	Grams or Curies
	NONE		MFP	1mci
Totals		NA		1mci

Measurement Method: ESTIMATED BY CP
Determined By: G.L. BASH

DISTRIBUTION: White - SWBR; 3750E-200 E; Canary - RPE 272 W-200 W; Pink - Return to Originator 200 W

54 3000 581 (7 85)

340-87-02398

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

RSR 23708

USE BLACK BALL POINT PEN FOR TYPE

Area No. 7-10

DISPOSAL SITE

Area: 200 W

Burial Ground No.: 218-W-3A

Grid No.: 6-S

Caisson No.: N/A

Beginning Coordinates: N 44140 E 77770

Ending Coordinates: N 44140 E 77762

Remarks:

Signature Acceptance: A.E. Aughey — Date: 10-30-87

Signature Burial: — Date:

WASTE GENERATOR: B0007

Generator Code: WB47K — DOE Authorization No. (RRM): NA

Accounting Group: 300/340/6-3420

Certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO WA 227 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: — Date: 10-29-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products		Glass	50
Plastic		Concrete	
Cloth		Stainless Steel	
Rubber		Other Metal	
		CONWEB	40 B 50
Total		Total	100

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Kilograms)
Pseudocumene	25 Kg

CONTAINER INFORMATION

Container Name: 1 55 Gal Drum; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other:

Container Number: 2-1B-9AM-2 — Dose Rate Package: 1 mrem hr at CONTACT

Dimension or Length x Width: NA — Height: NA

Type of Construction: NA

Source Jurisdiction No.: NA — Property Disposal Request No.: NA

Net Weight: 7.5 — Gross Weight: 325 Pounds / Kilograms

WASTE CATEGORIES: BA / BE / DD / DS / SS / NC

Thermal Power: ☑ 0.1 w/ft³ or less; Other

Remarks: Manifest Document No. PNL-287023

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (%)	Total Estimated Activity	Isotope	Grams or Curies
	NONE		MFP	1mci
Totals		NA		1mci

Measurement Method: ESTIMATED BY GP

Determined By: G.L. BASH

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200 E

340-87-0240S RSR 287703

Rockwell Hanford Operations

SOLID WASTE BURIAL RECORD – LOW LEVEL

1A

USE BLACK BALL P[illegible]

340-PNL-87-11

DISPOSAL SITE

Area: 200W

Caisson No: —

218 W3A

44140.77270

44140.77762

Remarks

Signature: L L Mathieu

Date: 10-30-87

WASTE GENERATOR: B0007

WB47K

300/340/6-3420

I hereby certify that I have control property is included in this burial unless documented by a Property Disposal Request and described below. The waste package description below is complete and the waste package conforms to RHO MA 222 and the approved Burial Compliance Document.

Signature: [illegible]

Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	NON-COMBUSTIBLE MATERIALS	
Paper Products		50
Plastic		
Cloth		
Rubber		
	Other Metals	CONWTS 50
Total		100

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity
Pseudocomene	25 Kg

CONTAINER INFORMATION

1 55 Gallon Drum

0 Fiberboard Boxes

0 Other

2-1B-9Am-2 1 Package CONTACT

Length × Width NA Height NA

NA

NA NA

7.5 ft³ Gross Weight 325 lbs

WASTE CATEGORIES

✓ DS

SA

NC

Thermal Power: ✓ 0.1 w/ft³ or less

Other

Remarks: Manifest Document No. PNL287023

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM

Element	Isotope	Grams
	NONE	
Totals		

CONTAMINANT RADIO

Isotope	Curies
MFP	1 mci
NA	1 mci

Measurement Method: ESTIMATED BY CP

Date: G.L. BASH

DISTRIBUTION: [illegible]

340-87-0241S

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

RSP# 23703

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 340-PNL-87-12 (DO NOT WRITE IN THIS SPACE) 17

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative

Area: 200 W
Burial Ground No: 218 W-3A
Trench No: 65
Casson No: N/A
Beginning Coordinates: N 44140 W 77770
Ending Coordinates: N 44140 W 77762
Remarks: N/A
Signature Acceptance: G.G. Aughey — Date: 10-30-87
Signature Burial: — Date:

WASTE GENERATOR: B0007
Charge Code: WB47K
DOE Authorization No (RRM): NA
Business Phone: 300/340/6-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO MA 222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: — Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	50
Plastic	%	Concrete	
Cloth	%	Stainless Steel	
Rubber	%	Other Metals	
	%	CONWEB	50
	%		
	%		
	%		
Total	0 %	Total	100

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity
Pseudocumene	25 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes 18" x 18" x 24"; 0 Other:
BCC Approval Number: 2-1B-9AM-2
Dose Rate Package: 1 mrem hr at CONTACT
Diameter or Length x Width: NA
Height: NA
Method of Construction: NA
Radioactive Transaction No: NA
Property Disposal Request No: NA
Volume: 7-5FT3
Gross Weight: 325 ☑ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ EW ☑ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☑ 0.1 w/ft³ or less ☐ Other

Remarks: Manifest # PNL 287023

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM

Element	Isotopic Distribution Wt %	Total Element Activity	Isotope	Grams or Curies
	NONE		MFP	1mci
Totals		NA		1mci

NONTRANSURANIC

Measurement Method: ESTIMATED By CP
Date: Signature: G.L. BASH

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200 W

84 3000 581 7 85

340-87-C2425 PSE# 23703

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK INK. PRINT PER CARD TYPE

SWBR No. [illegible] 87-13 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE

Area: 200W | Building: 218W3A | Trench: 6S

Coordinates: NA | Beginning: 44140 . 77270 | Ending: 44140 . 77262

Remarks: N/A

Signature Approving: L K Matthews | Date: 10-30-87

Signature Witness: — | Date: —

WASTE GENERATOR: B0007

Facility: WB47K | DOE Authorization No. (IRRM): N/A

300/340/6-3420

1. No capital property is included in this burial unless documented on a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO MA 222 and the approved Burial Compliance Characterization (BCC).
3. The waste code is correct.

Signature: [illegible] Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products		Glass	50
Plastic		Concrete	
Cloth		Metal Scrap	
Rubber		Other Metal	
		CONWEB	50
Total		Total	100

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity Lbs or Kg
Pseudo cumene	25 Kg

CONTAINER INFORMATION

Quantity of Containers: 1 | 55 Gallon Drums: 0 | Hanford Standard Fiberboard Boxes 118" x 18" x 24": 0

Dose Rate Package: 2-1B-9Am-2 | 1 mrem/hr at CONTACT

Dimensions Length x Width: N/A | Height: N/A

Number of Containers: N/A

Number Transport Cask: N/A | Property Disposal Request No.: N/A

Total Volume: 7.5 FT3 | Gross Weight: 325 Pounds / Kilograms

WASTE CATEGORIES: ☑ BN ☐ DS ☐ [illegible] ☐ [illegible] ☐ [illegible] ☐ [illegible] ☐ [illegible] ☐ [illegible] ☐ [illegible] ☐ NC

Thermal Power: ☑ 0.1 w/ft³ or less ☐ Other

Remarks: Manifest Document No. 287023

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution Wt %	Total Element Grams	Isotope	Grams or Curies
NONE			MCP	1 mCi
Total			NA	1 mCi

Measurement Method: ESTIMATED By CP | Determination Made: C.L. BASH

DISTRIBUTION: Original - SWBR; 2750 E 300 E; Copy - TFS 272 W 200 W; Pink - Return to Shipper 200 W

54-300U 521 7-85

340-87-02435

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

RSR# 23703

USE BLACK BALL POINT PEN OR TYPE

SWBR NO 340-PNL-87-14 (DO NOT WRITE IN THIS SPACE) (17) JJ

DISPOSAL SITE (This portion of form to be completed by Rockwell Representative at Disposal Site)

Area: 200 W
Burial Ground No.: 218-W-3A
Trench No.: 6-S
Cassette No.: N/A
Beginning Coordinates: N 44140 W 77270
Ending Coordinates: N 44140 W 77262
Remarks:

Signature Acceptance: A. E. Hughes — Date: 10-30-87
Signature Burial: — Date:

WASTE GENERATOR: B007

Charge Code: WB47K
DOE Authorization No. (ARM): NA
Address Phone: 300/340/ 6-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: [illegible] — Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products		Glass	50
Plastic		Concrete	
Cloth		Stainless Steel	
Rubber		Other Metals	
		CONWEB	50
Total	Ø	Total	100

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity Lb/Kg
Pseudocumene	25 Kg

CONTAINER INFORMATION

Quantity & Type: 1 55 Gallon Drums; Ø Hanford Standard Fiberboard Boxes (18" x 18" x 24"); Ø Other

BCS Identification Number: 2-1B-9AM-2
Dose Rate Package: 1 mrem/hr at CONTACT
Diameter or Length x Width: NA
Height: NA
Material of Construction: NA
Nuclear Transaction No.: N/A
Property Disposal Request No.: NA
Total Weight: 7.5 Pounds
Gross Weight: 7.25 Pounds

WASTE CATEGORIES: ☐ BA ☑ DS ☐ DE ☐ SS ☐ DD ☐ NC

Thermal Power: ☑ 0.1 w/ft³ or less ☐ Other

Remarks: Manifest Document No. PNL-287023

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotopes	Grams or Curies
	NONE		MFP	1 mCi
Totals		NA		1 mCi

Measurement Method: ESTIMATED BY CP
Determined By: M L BASH

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272 W 200 W; Pink - Return to Shipper 200 W

340-PNL-89-9 Rev 14

17

Please print or type. (Form designed for use on elite (12 pitch) typewriter.)

Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: PNL 287023
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
M. W. McCoy, PNL
306-T6/300 Area
4. Generator's Phone: 509 376-7688

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: Westinghouse Hanford Company
6. US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone: 376-1420

7. Transporter 2 Company Name: N/A
8. US EPA ID Number: N/A
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Burial Ground/200W
Westinghouse Hanford Company
10. US EPA ID Number: WA 789 000 8967
G. State Facility's ID
H. Facility's Phone: 3 1121

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X Radioactive Material, LSA, n.o.s. UN2912	6	DM	150	K	D001, WT01
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
Scintillation vials contain pseudocumene.
Flash point 49°F

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 6 55-gal DOT 17H drums.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Don Cataldo
Signature
Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Month Day Year

Style F15REV6 Made in the U.S.A. by American Labelmark Co., Inc. 60646

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

TRANSPORTER 2

218-W-3A
(pg 2 of 2)

Sutts
5/15/2001

Low-level Burial Grounds

Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment	Waste Code
218-W-3A	19	9002-1-C-2-88	1/16/90	LBL	– LLW
218-W-3A	19	9002-1-K-9-87	1/16/90	LBL	
218-W-3A	19	9002-1-C-1-88	1/16/90	LBL	
218-W-3A	19	9002-1-5-4-89	1/16/90	LBL	
218-W-3A	19	9002-1-K-7-87	1/16/90	LBL	
218-W-3A	19	9002-1-5-3-89	1/16/90	LBL	
218-W-3A	19	9002-1-K-6-87	1/16/90	LBL	
218-W-3A	19	9002-1-K-5-88	1/16/90	LBL	
218-W-3A	19	9002-1-K-3-88	1/16/90	LBL	
218-W-3A	19	9002-1-K-5-87	1/16/90	LBL	
218-W-3A	19	9002-1-K-2-88	1/16/90	LBL	
218-W-3A	19	9002-1-K-4-87	1/16/90	LBL	
218-W-3A	19	9002-1-K-1-88	1/16/90	LBL	
218-W-3A	19	9002-1-K-3-87	1/16/90	LBL	
218-W-3A	19	9002-1-K-2-87	1/16/90	LBL	
218-W-3A	19	9002-1-G-1-88	1/16/90	LBL	
218-W-3A	19	9002-1-E-5-88	1/16/90	LBL	
218-W-3A	19	9002-1-G-3-87	1/16/90	LBL	
218-W-3A	19	9002-1-E-4-88	1/16/90	LBL	
218-W-3A	19	9002-1-E-3-88	1/16/90	LBL	
218-W-3A	19	9002-1-E-2-88	1/16/90	LBL	
218-W-3A	19	9002-1-G-2-87	1/16/90	LBL	– coordinate blank
218-W-3A	19	9002-1-E-2-87	1/16/90	LBL	
218-W-3A	19	9002-1-E-1-88	1/16/90	LBL	
218-W-3A	19	9002-1-E-1-87	1/16/90	LBL	
218-W-3A	19	9002-1-D-1-88	1/16/90	LBL	
218-W-3A	19	9002-1-D-3-87	1/16/90	LBL	
218-W-3A	19	9002-1-D-1-87	1/16/90	LBL	
218-W-3A	19	9002-1-C-3-88	1/16/90	LBL	
218-W-3A	19	9002-1-G-2-88	1/16/90	LBL	

30

All Containers

N 45160 W 77435

N 45160 W 77450

9212891.0054

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

SDAR

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-45

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures.

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA [illegible] (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 1/17-89

SDAR Approval No: 23-1A-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-45).

PIN: C-2-88

CONTAINER: DOT 17H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ ft^3 ☐ m^3

LxWxH: N/A

GROSS WEIGHT: 143.6 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr.

AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/ft^3): < 0.1 W/ft^3

ORGANIC MATL. WT. (kg.): N/A

ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	55.0		45
☐ CE	Tar/asphalt	33.0	27	
☐ DD	Diatomaceous earth	19.6		16
☒ DS	Plastic	6.1	5	
☒ SS	Metal	8.6		7
☐ NC				
	TOTALS	122.3	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT. Ci	PU 239-FGE	PE-Ci	ALPHA Ci
H-3				919.128	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
TOTALS				919.128			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—621-879

9212683.0080

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-46

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☐ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W-3A Unit: TRU Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-M

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 1-17-87

SDAR Approval No: 23-1A-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-46)

PIN: K-9-87

CONTAINER: DOT 17H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³

LxWxH: N/A

GROSS WEIGHT: 156.8 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm: 0.03 mrem/hr. AT 1 m: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT³): < 0.1 W/ft3

ORGANIC MATL. WT. (kg): N/A

ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	1.4		1
☐ CE	Tar/asphalt	97.5	72	
☐ OD	Diatomaceous earth	28.5		21
☒ DS	Plastic	0		
☐ SS	Metal	6.7		5
☐ NC		1.9		1
	TOTALS	135.5	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

Isotope	Ci	Isotope	Ci	WT Ci	PU 239-FGE	PE-Ci	ALPHA-Ci
H-3				979	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				979			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—551-073

Westinghouse Hanford Company

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space): LBLAB-Ber-90-47

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location: ☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77425

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-17

Name of Contact: R.G. Aune B75B -115

Address/Phone: 1 Cyclotron Road, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No.: 23-1A-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-47)

PIN	C-1-88
CONTAINER	DOT 17H 55 gal drum
CONTAINER VOL.	7.4 ☐ ft³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	140 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, Tar, Dio. earth, metal, Plastic
THERMAL POWER (W/FT³)	<0.1 W/ft3
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	66.4		56
☐ CE	Tar/asphalt	21.3	18	
☐ DD	Diatomaceous earth	20.3		17
☐ DS	Metal	9.5		8
☐ SS	Plastic	1.2	1	
☐ NC				
	TOTALS	118.6	19	81

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

ISOTOPE	Ci	WT. Ci	PU 239 FGE	Pu Ci	ALPHA Ci
H-3	919.016		N/A	N/A	N/A
			N/A	N/A	N/A
			N/A	N/A	N/A
			N/A	N/A	N/A
			N/A	N/A	N/A
			N/A	N/A	N/A
		919.016			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E R1-51

GPO 1988-691-232/1003H

54-6000-226 (08/88)

9212681.0052

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-48

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☑ Disposal ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR Lawrence Berkeley Laboratory

Charge Code:

DOE Authorization No. (WRM): 9002-01

Name of Contact: R. G. Aune

Address/Phone: 1 Cyclotron Road, MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 1/5

SDAR Approval No.: 23-1A-3J-1

Uniform Haz. Waste Manifest No.:

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-48)

PIN: 5-4-89	CONTAINER: DOT 17H 55 gal. drum
CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³	L x W x H: N/A
	GROSS WEIGHT: 126.8 ☐ LBS ☒ KG
POINT OF ORIGIN: N/A	
DOSE RATE AT 1 cm.: 0.03 mrem/hr.	AT 1 m.: 0.03 mrem/hr.
DOE/NRC 741 NO.: LZA-VuC-3	PROPERTY DISPOSAL REQ. NO.: N/A
PHYSICAL DESCRIPTION: Silica gel, tar, dio. earth, plastic, Metal, glass	
THERMAL POWER (W/FT³): < 0.1 w/ft³	
ORGANIC MATL. WT. (kg.): N/A	ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	silica gel	59.2		56
☐ CE	tar/asphalt	19.0	18	
☐ DO	diatomaceous earth	17.9		17
☒ DS	metal	8.4		8
☐ SS	plastic	0.5	0.5	
☐ NC	glass	0.5	0.5	
	TOTALS	105.5	19	81

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
	TOTALS	

RADIOACTIVE MATERIAL CONTENT TRU only

ISOTOPE	Ci	DISTRIBUTION (wt%)	WT. Ci	PU 239-FGE	PU-Ci	ALPHA Ci
H-3	920.02			N/A	N/A	
				"	"	
				"	"	
				"	"	
				"	"	
				"	"	
TOTALS			920.02	"	"	

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—681-679

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 2

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-49

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W3A Unit: TR. 19 Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 11F)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1C1, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-85

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

Comments

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Ber-90-49)

PIN: K-7-87

CONTAINER: DOT 17 H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³

L x W x H: N/A

GROSS WEIGHT: 169.1 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr.

AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT³): < 0.1 W/ft³

ORGANIC MATL. WT. (kg.): N/A

ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg)	COMBUSTIBLE VOL.%	NON COMB. VOL.%
☐ BW	Silica gel	1.5		1
☐ CE	Tar/asphalt	106.3	72	
☐ DD	Diatomaceous earth	31.0		21
☒ DS	Plastic	0		
☐ SS	Metal	7.4		5
☐ NC	Glass	1.5		1
	TOTALS	147.7	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT. Ci	PU 239 FGE	PE Ci	ALPHA Ci
H-3				950	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				950			

Distribution: White - Site Solid Waste Engineering Support Unit, 2750E, R1-51 Canary - Tank Farms Scheduler, 272WA, T4-01
Pink - Return to Shipper ☆ GPO 1988-691-252/10031 Goldenrod - Acceptance Copy - Send to Site Solid Waste Engineering Support Unit, 2750E, R1-51

54-6000-226 (08/88)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 2

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB - Ber-90-50

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☒ Disposal ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TK#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

Comments:

WASTE GENERATOR Lawrence Berkeley Laboratory

Charge Code

DOE Authorization No (WRM) 9002-01

Name of Contact: R. G. Aune

Address/Phone: 1 Cyclotron Road, MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless [illegible] by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA [illegible] 303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 12/[illegible]-89

SDAR Approval No. 23-1A-3J-1

Uniform Haz Waste Manifest No.

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-50)

PIN	5-3-89	CONTAINER	DOT 17H 55 gal. drum
CONTAINER VOL	7.4 ☒ ft³ ☐ m³	L x W x H	N/A
		GROSS WEIGHT	129.1 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A		
DOSE RATE AT 1 cm =	0.03 mrem/hr	AT 1 m =	0.03 mrem/hr.
DOE-NRC 741 NO.	17A-VVC-3	PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, dio. earth, metal, plastic, glass		
THERMAL POWER (W/FT³)	0.1 W/ft3		
ORGANIC MATL WT. (kg.)	N/A	ORGANIC MTL. VOL %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL %	NON-COMB. VOL %
☐ BW	Silica gel	60.4		56
☐ CE	tar/asphalt	19.4	18	
☐ DD	diatomaceious earth	18.3		17
☒ MS	metal	8.6		8
☐ SS	plastic	0.5	0.5	
☐ NC	glass	0.5	0.5	
	TOTALS	107.7	19.0	81

HAZARDOUS CONSTITUENTS

WASTE NO	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
	TOTALS	

RADIOACTIVE MATERIAL CONTENT — TRU only

Isotope	Ci	DISTRIBUTION (wt%)	WT. Ci	PU 239+240	PE-Ci	ALPHA Ci
H-3	920.2			N/A	N/A	N/A
				"	"	"
				"	"	"
				"	"	"
				"	"	"
				"	"	"
			920.2	"	"	"

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6010-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—401-878

9212693.0078

Westinghouse Hanford Company

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space): LBLAB-Ber-90-51

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location: ☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W-3A Unit: TR. #79 Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1C, berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-IP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No: 231A-3J-1

Uniform Haz. Waste Manifest No: N/A

Comments

WASTE PACKAGE INFORMATION

SWSDR: LBLAB-Ber-90-51

PIN	K-6-87
CONTAINER	DOT 17 H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	140 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 w/ft3
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	1.2		1
☐ CE	Tar/asphalt	85.4	72	
☐ DD	Diatomaceous earth	24.9		21
☒ DS	Plastic	0		
☐ SS	Metal	5.9		5
☐ NC	Glass	1.2		1
	TOTALS	118.6	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

ISOTOPE	Ci	DISTINGUISHING	Ci	WT. Ci	PU 239-FGE	PE-Ci	ALPHA Ci
H-3				997	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				997			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆U.S. GOVERNMENT PRINTING OFFICE: 1989—681-072

9212689.0077

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-52

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 7-17-90

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-52)

PIN	K-5-88
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
CONTAINER	DOT 17 H 55-gal. drum
LxWxH	N/A
GROSS WEIGHT	146 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 W/ft³
ORGANIC MATL. WT. (kg)	N/A
ORGANIC MTL. VOL. %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg)	COMBUSTIBLE VOL. %	NON-COMB. VOL. %
☐ BW	Silica gel	56.0		45
☐ CE	Tar/asphalt	33.6	27	
☐ DD	Diatomaceous earth	19.9		16
☒ DS	Plastic	6.3	5	
☐ SS	Metal	8.7		7
☐ NC				
	TOTALS	124.5	32	68

HAZARDOUS CONSTITUENTS

WASTE NO	ITEM DESCRIPTION	WT. (kg)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

~~ISOTOPE SEGMENT~~	Ci	~~ISOTOPE DISTRIBUTION (%)~~	Ci	WT. Ci	PU 239-241	PE-Ci	ALPHA Ci
H-3				920.02	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				920.02			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—601-073

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-53

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☑ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200 W	218-W3A	TR #19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1 Q, Berkeley, [redacted]
(415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-IP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless [redacted] as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-[redacted], or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 7/17-89

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-53)

PIN	K-3-88
CONTAINER	DOT 17H 55-gal. drum
CONTAINER VOL.	7.4 ☒ ft³ ☐ m³
LxWxH	N/A
GROSS WEIGHT	140.5 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE-NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/ft³)	< 0.1 w/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	53.5		45
☐ CE	Tar/asphalt	32.2	27	
☐ DD	Diatomaceous earth	19.1		16
☒ DS	Plastic	6.0	5	
☐ SS	Metal	8.3		7
☐ NC				
	TOTALS	119.1	32	68

HAZARDOUS CONSTITUENTS

WASTE NO	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

~~ISOTOPIC~~ ELEMENT	Ci	~~ISOTOPIC~~ DISTRIBUTION (mole%)	Ci	WT. Ci	PU 239 FGE	PE-Ci	ALPHA Ci
H-3				920.02	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				920.02			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—691-873

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLnB-Ber-90-54

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☐ Disposal ☐ Compaction

Area: 2-W Facility: 218-W3A Unit: TR 19 Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1C1, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No. 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLnB-Ber-90-54)

PIN: K-5-87

CONTAINER: DOT 17 H 55-gal drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³

LxWxH: N/A

GROSS WEIGHT: 173.2 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr. AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT³): < 0.1 W/ft³

ORGANIC MATL. WT. (kg.): N/A

ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON COMB. VOL.%
☐ BW	Silica gel	1.5		1
☐ CE	Tar/asphalt	109.3	72	
☐ OD	Diatomaceous earth	31.9		21
☒ DS	Plastic	0		
☐ SS	Metal	7.6		5
☐ NC	Glass	1.5		1
	TOTALS	151.8	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT Ci	PU 239 EQ	PE Ci	ALPHA Ci
H-3				997	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				997			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Support Unit, 2750E, R1-51

☆ GPO 1988-691-232/10031

54-6000-226 (08/88)

9212589.0072

500

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 2

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBL-B-Ber-90-55

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: J T Nelson — Date: 7-16-90

Temporary Storage Location: ☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building storage ☑ Disposal ☐ Composition

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates	Ending Coordinates
N 45160 W 77435	N 45160 W 77450

Signature-Storage/Disposal: J T Nelson — Date: 7-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A — DOE Authorization No (WRM): 7002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless authorized by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, [illegible], or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [illegible] — Date: 10/17-89

SDAR Approval No: 23-1A-[illegible]-1 — Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION — SWSDR (LBL-B-Ber-90-55)

PIN: K-2-88	CONTAINER: DOT 17 H 55-gal. drum
CONTAINER VOL.: 7.4 ☒ ft³ ☐ m³	LxWxH: N/A
	GROSS WEIGHT: 136.4 ☐ LBS ☒ KG
POINT OF ORIGIN: N/A	
DOSE RATE AT 1 cm.: 0.03 mrem/hr.	AT 1 m.: 0.03 mrem/hr.
DOE/NRC 741 NO.: LZA-VUC-3	PROPERTY DISPOSAL REQ. NO.: N/A
PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite	
THERMAL POWER (W/FT³): < 0.1 W/ft³	
ORGANIC MATL. WT. (kg.): N/A	ORGANIC MTL. VOL. %: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	51.7		45
☐ CE	Tar/asphalt	31.0	27	
☐ DD	Diatomaceous earth	18.4		16
☒ DS	Plastic	5.8	5	
☐ SS	Metal	8.1		7
☐ NC				
	TOTALS	115.	32	68

HAZARDOUS CONSTITUENTS

WASTE NO	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT. Ci	PU 239 FGE	Pu Ci	ALPHA Ci
H-3				919.032	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				919.032			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (06/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—591-073

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-56

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature/Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☐ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W3A Unit: TR #7 Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature/Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1 Cl, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless otherwise specified as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10-17-89

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-56)

PIN: K-4-87

CONTAINER: DOT 17 H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³

LxWxH: N/A

GROSS WEIGHT: 163.2 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr.

AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LBA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT³): < 0.1 W/ft³

ORGANIC MATL. WT. (kg.): N/A

ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT (kg)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	1.4		1
☐ CE	Tar/asphalt	102.1	72	
☐ DD	Diatomaceous earth	29.8		21
☒ DS	Plastic	0		
☐ SS	Metal	7.1		5
☐ NC	Glass	1.4		1
	TOTALS	141.8	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT Ci	PU 239 FGI	PE-Ci	ALPHA Ci
H-3				992	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				TOTAL 992			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51 Canary – Tank Farms Scheduler, 272WA 14 01
Pink – Return to Shipper Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Support Unit, 2750E, R1-51

GPO 1958-691-252/1003H 54-6000-226 (08/88)

9212689.0070

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-BCF-90-57

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☑ Disposal ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA [redacted] (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-[illegible]-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless [illegible] MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-[illegible], or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-85

SDAR Approval No. 23-1A-3J-1

Uniform Haz. Waste Manifest No. N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-BCF-90-57)

PIN: K-1-88

CONTAINER: DOT 17H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³

L x W x H: N/A

GROSS WEIGHT: 148.6 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr. AT 1 m.: 0.03 mrem/hr.

DOE-NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT³): < 0.1 w/ft³

ORGANIC MATL. WT. (kg.): N/A

ORGANIC MTL. VOL. %: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	57.3		45
☐ CE	Tar/asphalt	34.4	27	
☐ DD	Diatomaceous earth	20.4		16
☒ DS	Plastic	6.3	5	
☐ SS	Metal	8.9		7
☐ NC	Glass			
	TOTALS	127.3	32	68

HAZARDOUS CONSTITUENTS

WASTE NO	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT. Ci	PU 239 FGE	PE-Ci	ALPHA Ci
H-3				911.064	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				911.064			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/86)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1986—681-073

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBL-AB-Ber90-58

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W3A Unit: TR-19 Tier: N/A

Beginning Coordinates: N 45160 W 77435 Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1(1, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-90

SDAR Approval No: 23-1A-3J-1 Uniform Haz Waste Manifest No: N/A

Comments

WASTE PACKAGE INFORMATION

SWSDR (LBL-AB-Ber-90-58)

PIN: K-3-87 CONTAINER: DOT 17H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³ LxWxH: N/A

GROSS WEIGHT: 166.4 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm: 0.03 mrem/hr. AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3 PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT³): < 0.1 W/ft³

ORGANIC MATL. WT. (kg.): N/A ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ SW	Silica gel	1.5		1.0
☐ CE	Tar/asphalt	104.4	72	
☐ DD	Diatomaceous earth	30.4		21.0
☒ DS	Plastic	[illegible]		
☐ SS	Metal	7.2		5.0
☐ NC	Glass	1.5		1.0
	TOTALS	145	72.0	28.0

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

~~160 TRUE~~ ELEMENT	Ci	~~Contam~~ Distribution	Ci	WT Ci	PU 239 FGE	Pu-Ci	ALPHA Ci
H-3				999	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
TOTALS				999			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

SA-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—691-071

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-59

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location:

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W3,4 Unit: TR #19 Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No. (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1 01, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, state, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-88

SDAR Approval No.: 28-1A-3J-1

Uniform Haz Waste Manifest No.: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-59)

PIN: K-2-87

CONTAINER: DOT 17 H 55-gal. drum

CONTAINER VOL.: 7.4 ☒ FT^3 ☐ M^3

LxWxH: N/A

GROSS WEIGHT: 170 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr.

AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite

THERMAL POWER (W/FT^3): < 0.1 W/ft^3

ORGANIC MATL. WT. (kg): N/A

ORGANIC MTL. VOL. %: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL. %	NON-COMB. VOL. %
☐ BW	Silica gel	1.5		1
☐ CE	Tar/asphalt	107.0	72	
☐ DD	Diatomaceous earth	31.2		21
☒ DS	Plastic	0		
☐ SS	Metal	7.4		5
☐ NC	Glass	1.5		1
	TOTALS	148.6	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

~~Isotope~~ Nuclide	Curies	~~Isotope~~ Nuclide	Curies	WT. Ci	PU 239 FGE	PF-Ci	ALPHA Ci
H-3				984	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				984			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—681-873

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Westinghouse Hanford Company

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-60

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location: ☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☑ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR # 19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-87

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Ber-90-60)

PIN	G-1-88
CONTAINER	DOT 17 H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	140 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 w/ft3
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL. %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	53.4		45
☐ CE	Tar/asphalt	32.0	27	
☐ DD	Diatomaceous earth	19.0		16
☒ DS	Plastic	5.9	5	
☐ SS	Metal	8.3		7
☐ NC				
	TOTALS	118.6	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

ISOTOPE	Ci	ISOTOPE	Ci	WT. Ci	PU 239-FGE	PE-Ci	ALPHA Ci
H-3				920.032	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				920.032			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆U.S. GOVERNMENT PRINTING OFFICE: 1989—691-973

9212661.0065

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 2

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-61

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location: ☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☒ Pad/trench storage ☐ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR #19	N/A

Beginning Coordinates	Ending Coordinates
N 45160 W 77435	N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1C1, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless [redacted] by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, [redacted], or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No: 23-1[illegible]-[illegible]U-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-61)

PIN	E-5-88
CONTAINER	DOT 17H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	154.1 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	L2A-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	<0.1 W/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	59.7		45
☐ CE	Tar/asphalt	35.8	27	
☐ DO	Diatomaceous earth	21.3		16
☒ DS	Plastic	6.6	5	
☐ SS	Metal	9.3		7
☐ NC				
	TOTALS	132.7	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

~~ISOTOPE~~	Ci	~~ISOTOPE~~	Ci	WT. Ci	PU 239 FGE	PE-Ci	ALPHA Ci
H-3				920.032	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				920.032			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, 14-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

S4-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—591-070

9217681.3059

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Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-BES-90-62

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☑ Disposal ☐ Compaction

Area: 2-W Facility: 218-W3A Unit: 7A ~~7~~ 19 Tier: N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1 01, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC, 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10-17-89

SDAR Approval No: 231A-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-BES-90-62)

PIN	G-3-87
CONTAINER	DOT 17 H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	169.5 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr
AT 1 m.	0.03 mrem/hr.
DOE-NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 w/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL. %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL. %	NON-COMB. VOL. %
☐ BW	Silica gel	1.5		1
☐ CE	Tar/asphalt	106.7	72	
☐ DD	Diatomaceous earth	31.1		21
☒ DS	Plastic	0		
☐ SS	Metal	7.4		5
☐ NC		1.5		1
	TOTALS	148.2	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

Isotope	Ci	Isotope	Ci	WT Ci	PU 239-FGE	PE-Ci	ALPHA Ci
H-3				979	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
TOTALS				979			

Distribution: White - Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary - Tank Farms Scheduler, 272WA, 14-01; Pink - Return to Shipper; Goldenrod - Acceptance Copy - Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—601-073

9212651.0064

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Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-63

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location: ☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☑ Disposal ☐ Compaction

Area	Facility	Unit	Tier
200 W	218-W3A	TR #19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA [redacted]720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless do[redacted] by a Property Disposal Request and described below. (2) The waste package desc[redacted] below is complete and accurate, and the waste package meets the requirements o[redacted] 0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated [redacted] MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-30[redacted] or other state or federal regulation. (4) I have been trained in procedure[redacted] identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 1-17-85

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Ber-90-63)

PIN: E-4-88	CONTAINER: DOT 17 H 55-gal. drum
CONTAINER VOL.: 7.4 ☒ ft³ ☐ M³	L x W x H: N/A
	GROSS WEIGHT: 141.8 ☐ LBS ☒ KG
POINT OF ORIGIN: N/A	
DOSE RATE AT 1 cm.: 0.03 mrem/hr.	AT 1 m.: 0.03 mrem/hr.
DOE/NRC 741 NO.: LEA-VVC-3	PROPERTY DISPOSAL REQ. NO.: N/A
PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite	
THERMAL POWER (W/FT³): <0.1 W/ft³	
ORGANIC MATL. WT. (kg.): N/A	ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	54.3		45
☐ CC	Tar/asphalt	32.5	27	
☐ DD	Diatomaceous earth	19.3		16
☒ DS	Plastic	6.1	5	
☐ SS	Metal	8.4		7
☐ NC				
	TOTALS	120.5	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

Isotope	Ci	Isotope	Ci	WT. Ci	PU 239-240	PE-Ci	ALPHA Ci
H-3				920.028	N/A	N/A	[redacted]
					N/A	N/A	[redacted]
					N/A	N/A	[redacted]
					N/A	N/A	[redacted]
					N/A	N/A	[redacted]
					N/A	N/A	[redacted]
				920.028			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—[redacted]

9212681.0063

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) L3LAB-Bur-90-64

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-92

Temporary Storage Location

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-92

Comments

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1(1, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 1-7-89

SDAR Approval No: 23-1A-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (L3LAB-Bur-90-64)

PIN	E-3-88	CONTAINER	DOT 17 H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³	LxWxH	N/A
		GROSS WEIGHT	144.5 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A		
DOSE RATE AT 1 cm.	0.03 mrem/hr.	AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LBA-VUC-3	PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite		
THERMAL POWER (W/FT³)	< 0.1 w/ft³		
ORGANIC MATL. WT. (kg.)	N/A	ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	55.4		45
☐ CE	Tar/asphalt	33.3	27	
☐ DD	Diatomaceous earth	19.7		16
☒ DS	Plastic	6.2	5	
☐ SS	Metal	8.6		7
☐ NC				
	TOTALS	123.2	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

~~Isotope~~	Ci	~~Isotope~~	Ci	WT. Ci	PU 239-FGE	PE-Ci	ALPHA Ci
H-3				920.024	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				920.024			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

S4-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—681-873

9212683.0062

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-66

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☑ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package described below is complete and accurate, and the waste package meets the requirements of WHC-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No: 23-9A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR: LBLAB-Ber-90-66

PIN	E-2-88
CONTAINER	DOT 17H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	128.6 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LBA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 W/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL %	NON-COMB. VOL %
☐ BW	Silica gel	48.3		45
☐ CE	Tar/asphalt	29.0	27	
☐ DD	Diatomaceous earth	17.2		16
☒ DS	Plastic	5.4	5	
☐ SS	Metal	7.4		7
☐ NC				
	TOTALS	107.3	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

~~ISOTOPE~~	Ci	~~ISOTOPE~~	Ci	WT. Ci	PU 239 FGE	PE-Ci	ALPHA Ci
H-3				919.032	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
TOTALS				919.032			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—621-673

9212683.0067

500

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 2

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Dec-90-65

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Disposal ☐ Building Storage ☐ Compaction

Area | Facility | Unit | Tier

Beginning Coordinates: N ____ W ____

Ending Coordinates: N ____ W ____

Signature-Storage/Disposal | Date

Comments

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. AUNE

Address/Phone: 1 Cyclotron Road, MS: B75B-101, Berkeley CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state, or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-85

SDAR Approval No: 23-1A-3U-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Dec-90-65)

PIN: G-2-87

CONTAINER: DOT 17-H, 55 gal drum

CONTAINER VOL.: 7.4 ☒ FT³ ☐ M³

LxWxH: N/A

GROSS WEIGHT: 169.1 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr

AT 1 m.: 0.03 mrem/hr.

DOE/NRC 741 NO.: LZA-VUC-3

PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: silica gel, tar, plastic, metal diatomite, glass

THERMAL POWER (W/FT³): 0.1 w/ft³

ORGANIC MATL. WT. (kg.): N/A

ORGANIC MTL. VOL. %: n/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL. %	NON-COMB. VOL. %
☐ BW	silica gel	1.5		1
☐ CE	tar/asphalt	106.3	72	
☐ DD	diatomaceous earth	31.0		21
☒ DS	plastic	0		
☐ SS	metal	7.4		5
☐ NC	glass	1.5		1
	TOTALS	147.7	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
	TOTALS	

RADIOACTIVE MATERIAL CONTENT

TRU only

~~ISOTOPE~~		~~DISTRIBUTION~~		Ci	PU 239-FGE	PE-Ci	ALPHA
H-3				931	N/A	N/A	
					"	"	
					"	"	
					"	"	
					"	"	
					"	"	
				931	"	"	

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

S4-6000-726

☆U.S. GOVERNMENT PRINTING OFFICE: 1989-201-053

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLOB-Dec-90-67

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date 1-16-90

Temporary Storage Location

☐ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☒ Disposal ☐ Compaction

Area 2-W | Facility 218-W-3A | Unit TR-E 19 | Tier N/A

Beginning Coordinates N 45160 W 77435 | Ending Coordinates N 45160 W 77450

Signature-Storage/Disposal: [signature] Date 1-16-90

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A | DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. AUNE

Address/Phone: 1 Cyclotron Road, MS: B75B-101/Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date 9/17/89

SDAR Approval No: 23-1A-3B-1 | Uniform Haz Waste Manifest No: N/A

Comments

WASTE PACKAGE INFORMATION

SWSDR (LBLOB-Dec-90-67)

PIN	E-2-87
CONTAINER	DOT -17H, 55 gal drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LAWSH	N/A
GROSS WEIGHT	168.6 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE-NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	silica gel, tar, plastic, metal diatomite, glass
THERMAL POWER (W/FT³)	< 0.1 w/ft3
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	silica gel	1.5		1
☐ CE	tar/asphalt	106.1	72	
☐ DD	diatomaceous earth	30.9		21
☒ DS	plastic	0		
☐ SS	metal	7.3		5
☐ NC	glass	1.5		1
	TOTALS	147.3	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

Isotope	Ci	Isotope	Ci	CT	PU 239-241	PU-O	ALPHA-O
H-3				994	N/A	N/A	
					"	"	
					"	"	
					"	"	
					"	"	
					"	"	
				994	"	"	

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51 Canary – Tank Farms Scheduler, 272WA, T4-01
Pink – Return to Shipper Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226

☆ U.S. GOVERNMENT PRINTING OFFICE:

9212689.0060

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 2

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space): LBLAB-Ber-90-68

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location:

☒ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR#19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR XXX LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements [illegible] 0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-[illegible], or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 9/10/17-89

SDAR Approval No: 23-1A-SJ-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR: LBLAB-Ber-90-68

PIN	E-1-88
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VVC-3
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 w/ft³
ORGANIC MATL. WT. (kg)	N/A
CONTAINER	DOT 17 H 55-gal. drum
LxWxH	N/A
GROSS WEIGHT	144.5 ☐ LBS ☒ KG
AT 1 m.	0.03 mrem/hr.
PROPERTY DISPOSAL REQ. NO.	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☒ BW	Silica gel	55.4		45
☐ CE	Tar/asphalt	33.3	27	
☐ DD	Diatomaceous earth	19.7		16
☒ DS	Plastic	6.2	5	
☐ SS	Metal	8.6		7
☐ NC				
	TOTALS	123.2	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

Isotope	Ci	Isotope	Ci	WT. Ci	PU 239-FGE	PE-Q	ALPHA Q
H-3				920.032	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				920.032			

Distribution: White - Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink - Return to Shipper; Canary - Tank Farms Scheduler, 272WA, T4-01; Goldenrod - Acceptance Copy - Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆U.S. GOVERNMENT PRINTING OFFICE: 1988—491-075

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-69

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☑ Disposal ☐ Building Storage ☐ Compaction

Area: 2-W Facility: 218-W3A Unit: TR. 19 Tier: N/A

Beginning Coordinates: N 45160 W 77435 Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. AUNE

Address/Phone: 1 Cyclotron Road, MS: B758-101, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless documented as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Ber90-69)

PIN: E-1-87

CONTAINER: DOT 17-H, 55 Gal drum

CONTAINER VOL.: 7.4 ☒ ft³ ☐ M³

LaWaH: N/A

GROSS WEIGHT: 169.1 ☐ LBS ☒ KG

POINT OF ORIGIN: N/A

DOSE RATE AT 1 cm.: 0.03 mrem/hr. AT 1 m.: 0.03 mrem/hr.

DOE-NRC 741 NO: LZA-VUC-3 PROPERTY DISPOSAL REQ. NO.: N/A

PHYSICAL DESCRIPTION: silica gel, tar, plastic, metal, dio. earth, glass

THERMAL POWER (W/FT³): 0.1 w/ft³

ORGANIC MATL WT. (kg): N/A ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	1.5		1
☐ CE	tar/asphalt	106.3	72	
☐ DD	diatomaceous earth	31.0		21
☒ DS	plastic	0		
☐ SS	metal	7.4		5
☐ NC	glass	1.5		1
	TOTALS	147.7	72	28

HAZARDOUS CONSTITUENTS

WASTE NO	ITEM DESCRIPTION	WT. (kg)
N/A	n/a	N/A
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

TRU only

ISOTOPE ~~ELEMENT~~	Ci	ISOTOPE ~~DISTINGUISHING~~	Ci	WT. Ci	PU 239 FGE	PE-Ci	ALPHA Ci
H-3			962		N/A	N/A	N/A
					"	"	"
					"	"	"
					"	"	"
					"	"	"
					"	"	"
				962	"	"	"

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA T4-01; Goldenrod – Acceptance Copy Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-5000-226 (08/88)

☆U.S. GOVERNMENT PRINTING OFFICE: 1988—591-973

9212689.0057

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 5

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-70

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location: ☐ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TR #19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No. (WRM): 9002-17

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-1 Ω, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless [illegible] as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No.: 23-1A-3J-1

Uniform Haz Waste Manifest No.: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Ber-90-70)

PIN	D-1-88
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
CONTAINER	DOT 17 H 55-gal. drum
LxWxH	N/A
GROSS WEIGHT	128.2 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	<0.1 w/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL. %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	48.1		45
☐ CE	Tar/asphalt	28.8	27	
☐ DD	Diatomaceous earth	17.1		16
☒ DS	Plastic	5.3	5	
☐ SS	Metal	7.5		7
☐ NC				
	TOTALS	106.8	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

ISOTOPE	Ci	ISOTOPE	Ci	WT. Ci	PU 239 FGE	PE-Ci	ALPHA Ci
H-3				920.02	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				920.02			

TRU only

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—691-979

9212089.0056

(500)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

SWSDR No. (Do Not Write In This Space) LBLA3-Ber-90-70

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ Classified

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date 1-16-90

Charge Code N/A

DOE Authorization No (WRM) 9002-1

Name of Contact R. G. Aune (Bldg. #75B, Room 115)

Address/Phone 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 94720 (415) 486-5251

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste ☐ Pad/trench storage ☑ Disposal ☐ Building Storage ☐ Compaction

Area 2-W Facility 218-W3A Unit TR. 19 Tier N/A

Beginning Coordinates N 45160 W 77435

Ending Coordinates N 45160 W 77450

Signature-Storage/Disposal: [signature] Date 1-16-90

I certify that: (1) No capital property is included in this storage/disposal unless [illegible] by a Property Disposal Request and described below. (2) The waste package [illegible] below is complete and accurate, and the waste package meets the requirements [illegible] 0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless [illegible] MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-[illegible], or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature [signature] Date 1-17-89

SDAR Approval No. 23-1A-3J-1

Uniform Haz Waste Manifest No N/A

Comments

WASTE PACKAGE INFORMATION

SWSDR (LBLA3-Ber-90-71)

PIN	D-3-87
CONTAINER	DOT 17H 55-gal. drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
LxWxH	N/A
GROSS WEIGHT	169.1 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE/NRC 741 NO.	LZA-VUC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite
THERMAL POWER (W/FT³)	< 0.1 W/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL. %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL. %	NON-COMB. VOL. %
☐ BW	Silica gel	1.5		1
☐ CE	Tar, asphalt	106.3	72	
☐ DO	Diatomaceous earth	31.0		21
☒ OS	Plastic	0	--	--
☐ SS	Metal	7.4		5
☐ NC	Glass	1.5		1
	TOTALS	147.7	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

Isotope	Ci	Isotope	Ci	WT. Ci	PU (+ Pb-FBE)	Pb-Ci	ALPHA Ci
H-3	944			944	N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
					N/A	N/A	
				944			

TRU only

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—691-673

9212889.0056

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Westinghouse Hanford Company

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-72

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location

☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☑ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
2-W	218-W3A	TR. 19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

Comments

WASTE GENERATOR: LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. AUNE

Address/Phone: 1 Cyclotron Road, B75B-101, Berkeley, CA 94720 (415) [redacted]

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of [illegible] 0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless identified as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303 or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 7-17-89

SDAR Approval No. 23-1R-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION

SWSDR (LBLAB-Ber-90-72)

PIN	D-1-87
CONTAINER	DOT-17-H, 55 gal drum
CONTAINER VOL.	7.4 ☒ FT³ ☐ M³
L×W×H	N/A
GROSS WEIGHT	171.4 ☐ LBS ☑ KG
POINT OF ORIGIN	N/A
DOSE RATE AT 1 cm.	0.03 mrem/hr.
AT 1 m.	0.03 mrem/hr.
DOE-NRC 741 NO.	LBA-VOC-3
PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	silica gel, tar, plastic, Metal, dio. earth glass
THERMAL POWER (W/FT³)	<0.1 w/ft³
ORGANIC MATL. WT. (kg.)	N/A
ORGANIC MTL. VOL.%	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	Silica gel	1.5	[illegible]	1
☐ CE	Tar/Asphalt	1.8	72	
☐ DD	Diatomaceous earth	31.5		21
☒ DS	Plastic			
☒ SS	Metal	7.5		5
☐ NC	Glass	1.5		1
	TOTALS	150	72	28

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT

~~Isotope~~ ~~Element~~	C	~~Isotope~~ ~~Distribution~~	C	WT. Ci	TRU only: PU 239-241	PE-Ci	ALPHA Ci
H-3			985		N/A	N/A	[illegible]
					"	"	[illegible]
					"	"	[illegible]
					"	"	[illegible]
					"	"	[illegible]
					"	"	[illegible]
				985	"	"	[illegible]

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226 (08/88)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988—681-873

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write in This Space): LBLAB-Bor-90-73

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 1-16-90

Temporary Storage Location: ☑ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☐ Building Storage ☑ Disposal ☐ Compaction

Area	Facility	Unit	Tier
200 W	218-W3A	TR #19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 1-16-90

Comments:

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA [redacted] (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 10/17-89

SDAR Approval No: 23-1A-3J-1

Uniform Haz Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Bor-90-73)

PIN: C-3-88	CONTAINER: DOT 17H 55-gal. drum
CONTAINER VOL.: 7.4 ☒ ft³ ☐ M³	LxWxH: N/A
POINT OF ORIGIN: N/A	GROSS WEIGHT: 125 ☐ LBS ☒ KG
DOSE RATE AT 1 cm.: 0.03 mrem/hr	AT 1 m.: 0.03 mrem/hr.
DOE/NRC 241 NO.: LZA-VUC-3	PROPERTY DISPOSAL REQ. NO.: N/A
PHYSICAL DESCRIPTION: Silica gel, tar, plastic, metal, diatomite	
THERMAL POWER (W/FT³): < 0.1 W/ft³	
ORGANIC MATL. WT. (kg.): N/A	ORGANIC MTL. VOL.%: N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL %	NON-COMB. VOL. %
☐ BW	Silica gel	46.6		45
☐ CE	Tar/asphalt	27.9	27	
☐ DD	Diatomaceous earth	16.6		16
☒ DS	Plastic	5.2	5	
☐ SS	Metal	7.3		7
☐ NC				
	TOTALS	103.6	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT — TRU only

Isotope	Ci	Isotope	Ci	WT. Ci	Pu 239+240	Pu-Q	Alpha-Q
H-3				820.524	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				820.524			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Canary – Tank Farms Scheduler, 272WA, T4-01; Pink – Return to Shipper; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Support Unit 2750E, R1-51

54-6000-226 (08/89)

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—681-675

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 5

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) LBLAB-Ber-90-74

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Signature-Acceptance: [signature] Date: 7-16-90

Temporary Storage Location

☐ Check here if acceptance copy of this form is sent to SSWESU

Disposition of Waste: ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

Area	Facility	Unit	Tier
200W	218-W3A	TRU 19	N/A

Beginning Coordinates: N 45160 W 77435

Ending Coordinates: N 45160 W 77450

Signature-Storage/Disposal: [signature] Date: 7-16-90

Comments

WASTE GENERATOR LAWRENCE BERKELEY LABORATORY

Charge Code: N/A

DOE Authorization No (WRM): 9002-1

Name of Contact: R. G. Aune (Bldg. #75B, Room 115)

Address/Phone: 1 Cyclotron Rd., MS: B75B-101, Berkeley, CA 9472 (415) 486-5251

I certify that: (1) No capital property is included in this storage/disposal unless documente by a Property Disposal Request and described below. (2) The waste package descriptio below is complete and accurate, and the waste package meets the requirements of WAC-8 0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated a MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-30 or other state or federal regulation. (4) I have been trained in procedures for th identification and management of mixed waste. (5) The charge code is correct.

Signature: [signature] Date: 7-17-9

SDAR Approval No: 23-1A-3J-1

Uniform Haz. Waste Manifest No: N/A

WASTE PACKAGE INFORMATION SWSDR (LBLAB-Ber-90-74)

PIN	G-2-88	CONTAINER	DOT 17 H 55-gal. drum
CONTAINER VOL.	7.4 ☒ ft³ ☐ m³	LxWxH	N/A
		GROSS WEIGHT	129.1 ☐ LBS ☒ KG
POINT OF ORIGIN	N/A		
DOSE RATE AT 1 cm.	0.03 mrem-hr.	AT 1 m.	0.03 mrem-hr.
DOE/NRC 741 NO.	LZA-VVC-3	PROPERTY DISPOSAL REQ. NO.	N/A
PHYSICAL DESCRIPTION	Silica gel, tar, plastic, metal, diatomite		
THERMAL POWER (W/FT³)	< 0.1 W/ft³		
ORGANIC MATL. WT. (kg.)	N/A	ORGANIC MTL. VOL. %	N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-CC VOL.
☐ BW	Silica gel	48.5		45
☐ CE	Tar/asphalt	29.1	27	
☐ DD	Diatomaceous earth	17.2		16
☒ DS	Plastic	5.4	5	
☐ SS	Metal	7.5		7
☐ NC				
	TOTALS	107.7	32	68

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
N/A	N/A	N/A
N/A		
N/A		
N/A		
N/A		
N/A		
	TOTALS	N/A

RADIOACTIVE MATERIAL CONTENT TRU only

H-3				920.032	N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
					N/A	N/A	N/A
				920.032			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51; Pink – Return to Shipper; Canary – Tank Farms Scheduler, 272WA, T4-01; Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51

54-6000-226

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Appendix C

218-W-3AE Green Island Waste Burial Records

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218-W-3AE
(pg 1 of 3)

SWITS Printouts
5/14/2001

Low-level Burial Grounds
Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment	Waste Class
218-W-3AE	8	RTL0194	9/30/94	LBL	LLW
218-W-3AE	8	RTL0294 ?	9/30/94	LBL	
218-W-3AE	8	RTL0394	9/30/94	LBL	LLW
218-W-3AE	8	RTL0494	9/30/94	LBL	LLW
218-W-3AE	8	RTL0594	9/30/94	LBL	LLW
218-W-3AE	8	RTL0694	9/30/94	LBL	LLW
218-W-3AE	8	RTL0794	9/30/94	LBL	LLW
218-W-3AE	8	RTL0894	9/30/94	LBL	LLW
218-W-3AE	8	RTL0994	9/30/94	LBL	
218-W-3AE	8	RTL1094	9/30/94	LBL	
218-W-3AE	8	RTL1194	9/30/94	LBL	
218-W-3AE	8	RTL1294	9/30/94	LBL	
218-W-3AE	8	RTL1394	9/30/94	LBL	
218-W-3AE	8	RTL1494	9/30/94	LBL	
218-W-3AE	8	RTL1594	9/30/94	LBL	
218-W-3AE	8	RTL1694	9/30/94	LBL	
218-W-3AE	8	RTL1794	9/30/94	LBL	
218-W-3AE	8	RTL1894	9/30/94	LBL	
218-W-3AE	8	RTL1994	9/30/94	LBL	
218-W-3AE	8	RTL2094	9/30/94	LBL	
218-W-3AE	8	RTL2194	9/30/94	LBL	
218-W-3AE	8	RTL2294	9/30/94	LBL	
218-W-3AE	8	RTL2394	9/30/94	LBL	
218-W-3AE	8	RTL2494	9/30/94	LBL	
218-W-3AE	8	RTL2594	9/30/94	LBL	
218-W-3AE	8	RTL2694	9/30/94	LBL	
218-W-3AE	8	RTL2794	9/30/94	LBL	
218-W-3AE	8	RTL2894	9/30/94	LBL	
218-W-3AE	8	RTL2994	9/30/94	LBL	
218-W-3AE	8	RTL3194	9/30/94	LBL	
218-W-3AE	8	RTL3294	9/30/94	LBL	
218-W-3AE	8	RTL3394	9/30/94	LBL	
218-W-3AE	8	RTL3594	9/30/94	LBL	
218-W-3AE	8	RTL3694	9/30/94	LBL	
218-W-3AE	8	RTL3794	9/30/94	LBL	
218-W-3AE	8	RTL3894	9/30/94	LBL	
218-W-3AE	8	RTL3994	9/30/94	LBL	
218-W-3AE	8	RTL4094	9/30/94	LBL	
218-W-3AE	8	RTL4194	9/30/94	LBL	
218-W-3AE	8	RTL4294	9/30/94	LBL	
218-W-3AE	8	RTL4394	9/30/94	LBL	
218-W-3AE	8	RTL4494	9/30/94	LBL	
218-W-3AE	8	RTL4594	9/30/94	LBL	
218-W-3AE	8	RTL4694	9/30/94	LBL	
218-W-3AE	8	RTL4794	9/30/94	LBL	
218-W-3AE	8	RTL4894	9/30/94	LBL	
218-W-3AE	8	RTL4994	9/30/94	LBL	
218-W-3AE	8	RTL5094	9/30/94	LBL	
218-W-3AE	8	RTL5194	9/30/94	LBL	

49

218-W-3AE
(pg 2 of 3)

Low-level Burial Grounds
Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment	Waste Codes
218-W-3AE	8	RTL5294	9/30/94	LBL	— LLW
218-W-3AE	8	RTL5394	9/30/94	LBL	
218-W-3AE	8	RTL5494	9/30/94	LBL	
218-W-3AE	8	RTL5594	9/30/94	LBL	
218-W-3AE	8	RTL5694	9/30/94	LBL	
218-W-3AE	8	RTL5794	9/30/94	LBL	
218-W-3AE	8	RTL5894	9/30/94	LBL	
218-W-3AE	8	RTL5994	9/30/94	LBL	
218-W-3AE	8	RTL6094	9/30/94	LBL	
218-W-3AE	8	RTL6194	9/30/94	LBL	
218-W-3AE	8	RTL6294	9/30/94	LBL	
218-W-3AE	8	RTL6494	9/30/94	LBL	
218-W-3AE	8	RTL6594	9/30/94	LBL	
218-W-3AE	8	RTL6694	9/30/94	LBL	

(14) + (49)
= (63)

All containers

N 46060 W 76909
N 46060 W 76913

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area — 4. Facility 218W31AE — 5. Unit TR8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL0194
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0182
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.206 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 128.82
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	61.82			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	103.82	TOTAL	19	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200W — 4. Facility 218W3AE — 5. Unit TRS
6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-SJ-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL0294
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0183
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 116.12 101.12
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.005 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	47.00	37.12			
Silica gel	40.00	30.00			
Metal (cans)	10.00	10.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	101.12	TOTAL	19.005	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 600 — 4. Facility 25W34E — 5. Unit TRS
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46660 W 76913
Ending Coordinates N 46660 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL0394
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0178
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 113.40
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	46.40			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	88.40	TOTAL	19	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200W — 4. Facility 218W3 — 5. Unit TRS

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL0494

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0119

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 127.91

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	13.09 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	34.50	48.91			
Silica gel	50.00	37.50			
Metal (cans)	12.50	12.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	102.91	TOTAL	13.09	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218W3H6 5. Unit TR8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL0594

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0120

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 27. Gross Weight (kg) 119.29

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.01 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	44.50	48.29			
Silica gel	42.00	31.50			
Metal (cans)	10.50	10.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	94.29	TOTAL	19.01	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area — 4. Facility 218W3AE — 5. Unit 728
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL0894
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0123
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 121.1
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	9.045 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	62.00	64.11			
Silica gel	28.00	21.00			
Metal (cans)	7.00	7.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	96.11	TOTAL	9.045	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area — 4. Facility 8LU3/4E — 5. Unit TR8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. NA3943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL0694

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0121

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 122.92

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	45.92			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	97.92	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance [signature] Date 09-30-94

3. Area 4. Facility 218W3AE 5. Unit TR8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46000 W 76909

REFERENCES

16. RSR No. 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL0794

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0122

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 27. Gross Weight (kg) 115.67

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.14 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	38.67			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	90.67	TOTAL	19.14	

6x

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance [signature] Date 9-30-94

3. Area 28W 4. Facility 28W3HE 5. Unit TR8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL0994

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0124

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 27. Gross Weight (kg) 126.55

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ PW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	11.12 Ci	9
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	42.00	53.55			
Silica gel	44.00	33.00			
Metal (cans)	11.00	11.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	101.55	TOTAL	11.12	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information	
I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.	1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
	9. PIN RTL1094
	10. Waste Generator Lawrence Berkeley Laboratory
2. Signature Acceptance — Date 9-30-94	11. Charge Code, SO No., or MPO No. 3527800
3. Area 200W — 4. Facility 218W3AE — 5. Unit TRS	12. WRM No. 9410-0125
6. Storage Location (S01)	13. Name of Contact David Steffen/Susan Jahansoor
Module / Tier / Position	14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251
7. Disposal Location	I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.
Beginning Coordinates N 46060 W 76913	
Ending Coordinates N 46060 W 76909	
REFERENCES	
16. RSR No. 23943 — 17. SDAR No. 87-1C-3J-0401	
18. DOE NRC 741 No. N/A — 19. PDR No. N/A	15. Signature — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A		30. Waste Category (Check One)	31. Waste Code (Check One)
22. Container Type 55 gal drum	23. LxWxH or DxL 24"dia x 35" height	☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS	☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
24. Cont. Vol. (m^3) 0.208	25. Tare Weight (kg) 25		
26. Date Packaged 8-22-94	27. Gross Weight (kg) 117.93		
28. Thermal Power ☒ <0.1 W/ft	29. Dose Rate (mrem/hr) <0.02 at 1 cm		32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	39.50	42.93			
Silica gel	46.00	34.50			
Metal (cans)	11.50	11.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.93	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance — Date 9-30-94

3. Area 200W — 4. Facility 284W34E — 5. Unit TRS

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SOAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL1194

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0126

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 129.7 129.73

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	16.07 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	52.73			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	104.73	TOTAL	16.07	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area — 4. Facility 218W3AE — 5. Unit TR8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL1294

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0127

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steff — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 118.39

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	17.07 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	41.39			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	93.39	TOTAL	17.07	

RTL1294 Tab 60

SWITS LOG SHEETS 1994

Cmpy	Bldg	Area	Waste Type	P W Type	Facility	Unit	Accept Date	PIN Number	Volume
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1294	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1394	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1494	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1594	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1694	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1794	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1894	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL1994	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2094	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2194	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2294	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2394	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2494	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2594	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2694	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2794	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2894	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL2994	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3194	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3294	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3394	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3594	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3694	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3794	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3894	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL3994	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4094	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4194	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4294	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4394	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4494	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4594	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4694	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4794	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4894	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL4994	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5094	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5194	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5294	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5394	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5494	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5594	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5694	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5794	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5894	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL5994	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL6094	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL6194	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL6294	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL6494	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL6594	.208
LBL	LBLAB	200W	2A	R	218W3AE	T08	09/30/94	RTL6694	.208

107 rows selected.

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance | Date 9-20-94
3. Area 200W | 4. Facility 218W3AC | 5. Unit TR8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 | 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A | 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL1394
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0128
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen | Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum | 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 | 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 | 27. Gross Weight (kg) 123.83
28. Thermal Power ☒ <0.1 W/ft | 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	15.07 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	46.83			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	98.83	TOTAL	15.07	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance — Date 9-30-94
3. Area 200W — 4. Facility 218W3FE — 5. Unit TR8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL1494
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0129
13. Name of Contact David Steffen/Susan Jahanzooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steff — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified
21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 118.84
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	16.085 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	34.50	39.84			
Silica gel	50.00	37.50			
Metal (cans)	12.50	12.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	93.84	TOTAL	16.085	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area 200 — 4. Facility 218W3AE — 5. Unit TR8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76900

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL1594

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0130

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 115.67

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	15.08 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	38.67			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	90.67	TOTAL	15.08	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200 — 4. Facility SW3FE — 5. Unit TR8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL1694
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0131
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified
21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 114.31
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	37.31			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	89.31	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 09-30-94
3. Area 100 — 4. Facility 618-3 E — 5. Unit TRS

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL1794

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0132

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 126.10

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	8.08 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	39.50	51.10			
Silica gel	46.00	34.50			
Metal (cans)	11.50	11.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	101.10	TOTAL	8.08	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area — 4. Facility 218 W3AE — 5. Unit TR 8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL1894
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0133
13. Name of Contact David Steffen/Susan Jahanscoz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 113.85
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	36.85			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	88.85	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance — Date 9-30-94

3. Area 200W — 4. Facility 218W3HE — 5. Unit TR8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76960 13

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL1994

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0134

13. Name of Contact David Steffen/Susan Jahanaooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 113.40

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	36.40			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	88.40	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200W — 4. Facility 218W346 — 5. Unit TR8
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46066 W 76913
Ending Coordinates N 46066 W 76909

REFERENCES

16. RSR No. 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL2094
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0135
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-22-94 — 27. Gross Weight (kg) 122.92

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	14.055 Ci	9
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	34.50	43.92			
Silica gel	50.00	37.50			
Metal (cans)	12.50	12.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	97.92	TOTAL	14.055	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature [illegible] Date 9-30-94

3. Area 200W 4. Facility 218W3AE 5. Unit TR8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76915

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL2194

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0136

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 27. Gross Weight (kg) 127.01

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.02 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	39.50	52.01			
Silica gel	46.00	34.50			
Metal (cans)	11.50	11.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	102.01	TOTAL	19.02	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area OU — 4. Facility 218W3A-E — 5. Unit TR8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL2294

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0137

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 115.21

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	38.21			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	90.21	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area 200 W — 4. Facility 218W346 — 5. Unit TR8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL2394

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0138

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 120.66

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	15.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	32.00	39.66			
Silica gel	52.00	39.00			
Metal (cans)	13.00	13.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	95.66	TOTAL	15.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200 W 4. Facility 241-SW-3AE 5. Unit TR8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23413 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL2494

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0139

13. Name of Contact David Steffen/Susan Jahanscoz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 27. Gross Weight (kg) 118.39

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	13.095 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	41.39			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	93.39	TOTAL	13.095	

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LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200 E — 4. Facility 218 W 3A E — 5. Unit TE 8
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL2594
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0140
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 113.40
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	36.40			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	88.40	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature/Acceptance — Date 9-30-94
3. Area 4. Facility 8LU3HE 5. Unit TR5
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76904

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL2694
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0141
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified
21. Point of Origin N/A
22. Container Type 55 gal drum
23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208
25. Tare Weight (kg) 25
26. Date Packaged 8-26-94
27. Gross Weight (kg) 115.21
28. Thermal Power ☒ <0.1 W/ft
29. Dose Rate (mrem/hr) <0.02 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	38.21			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	90.21	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area — 4. Facility — 5. Unit TRS
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL2794
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0142
13. Name of Contact David Steffen/Susan Jahanzooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature — Date 9-23-94

20. Waste Designation ☐ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 109.3
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ PW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.03 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	32.32			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	84.32	TOTAL	19.03	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200-E — 4. Facility 318W — 5. Unit TB8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76809

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL2894
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0143
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-25-94 — 27. Gross Weight (kg) 113.40
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.04 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	36.40			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	88.40	TOTAL	19.04	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area 200W — 4. Facility 1843AE — 5. Unit TR8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL2994

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0144

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop 8758-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-25-94 — 27. Gross Weight (kg) 126.10

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	3.145 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	49.10			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	101.10	TOTAL	3.145	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area [illegible] 4. Facility 184 3192 5. Unit TR8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3194
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0146
13. Name of Contact David Steffen/Susan Johansson
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum
23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208
25. Tare Weight (kg) 25
26. Date Packaged 8-25-94
27. Gross Weight (kg) 114.76
28. Thermal Power ☒ <0.1 W/ft
29. Dose Rate (mrem/hr) <0.02 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	67.00	37.76			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	130.00	89.76	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area — 4. Facility 218W3AE — 5. Unit TR 8
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3294
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0147
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-25-94 — 27. Gross Weight (kg) 121.1
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	15.03015 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	44.11			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	96.11	TOTAL	15.03015	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94

3. Area 200 W — 4. Facility 218W3AE — 5. Unit TRS

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913

Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. NA 3943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL3394

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0148

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-90 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 124.28

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	14.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	47.28			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	99.28	TOTAL	14.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area — 4. Facility 218W317L — 5. Unit TR8
6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3594
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0150
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 118.3
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.03 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	42.00	45.39			
Silica gel	44.00	33.00			
Metal (cans)	11.00	11.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	93.39	TOTAL	19.03	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200E — 4. Facility 241-SL-3 MF — 5. Unit TR-8
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46060 W 76915
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 3943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3694
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0151
13. Name of Contact David Steffen/Susan Jahansoox
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 108.41

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	31.41			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	83.41	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200W — 4. Facility 218W3AE — 5. Unit TF 8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3794
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0152
13. Name of Contact David Steffen/Susan Jahansoor
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 113.40

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.03 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	42.00	40.40			
Silica gel	44.00	33.00			
Metal (cans)	11.00	11.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	88.40	TOTAL	19.03	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 8 — 4. Facility 8W3KE — 5. Unit TR 8
6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES
16. RSR No. 83943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3894
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0153
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 117.93
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	40.93			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.93	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. Area 200W — 4. Facility 218W3AE — 5. Unit TR 8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. R3943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL3994
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0154
13. Name of Contact David Steffen/Susan Jahansoor
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steff — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.206 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 121.56
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.06 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	32.00	40.56			
Silica gel	52.00	39.00			
Metal (cans)	13.00	13.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	96.56	TOTAL	19.06	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-30-94
3. [illegible] 4. Facility 218W317E 5. Unit TRS
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 41060 W 76913
Ending Coordinates N 41060 W 76909

REFERENCES

16. RSR No. N/A 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL4094
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0155
13. Name of Contact David Steffen/Susan Jahansoor
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum
23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208
25. Tare Weight (kg) 25
26. Date Packaged 8-26-94
27. Gross Weight (kg) 120.20

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft
29. Dose Rate (mrem/hr) <0.02 at 1 cm
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.04 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	29.50	37.20			
Silica gel	54.00	40.50			
Metal (cans)	13.50	13.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	95.20	TOTAL	19.04	

ge 1 of 1 of D195069713

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance — Date 9-20-94
3. Area DOE — 4. Facility 218W 314E — 5. Unit TP8
6. Storage Location (S01)
Module — Tier — Position
7. Disposal Location
Beginning Coordinates N 46060 W 76913
Ending Coordinates N 46060 W 76909

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL4194
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0156
13. Name of Contact David Steffen/Susan Jahansoor
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen — Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum — 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 — 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 — 27. Gross Weight (kg) 111.58
28. Thermal Power ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	34.58			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	86.58	TOTAL	19.025	

je 1 of 1 of D195009714

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Zoe Franklin Date 9-30-94
3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76909
Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL4294
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0157
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25
26. Date Packaged 8-26-94 27. Gross Weight (kg) 112.49

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	35.49			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	87.49	TOTAL	19.025	

ge 1 of 1 of D19500971

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL4394

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0158

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m³) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 27. Gross Weight (kg) 117.48

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ PW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	9
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	40.48			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.48	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL4494

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0159

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 27. Gross Weight (kg) 99.79

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WL ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	9
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	33.79			
Silica gel	38.00	27.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	74.79	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Franklin Date 9-30-94

3. Area 200W 4. Facility 219-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL4594

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0160

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 27. Gross Weight (kg) 104.33

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	38.33			
Silica gel	38.00	27.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	79.33	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL4694

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0161

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-26-94 27. Gross Weight (kg) 105.23

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WL ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	39.23			
Silica gel	38.00	27.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	80.23	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Fowler Date 9-30-94
3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76909
Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL4794
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0162
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum
23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208
25. Tare Weight (kg) 25
26. Date Packaged 8-29-94
27. Gross Weight (kg) 94.35
28. Thermal Power ☒ <0.1 W/ft
29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ PW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	27.35			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	69.35	TOTAL	19	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL4894

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0163

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-29-94 27. Gross Weight (kg) 104.33

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WL ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	37.33			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	79.33	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Hamphe Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL4994

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0164

13. Name of Contact David Steffen/Susan Jahanscoz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-29-94 27. Gross Weight (kg) 92.95

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	9
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	25.99			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	67.99	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Fangle Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5194

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0166

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-29-94 27. Gross Weight (kg) 117.03

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ PW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.03 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	40.03			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.03	TOTAL	19.03	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Faraghr Date 9-30-94

3. Area 2004 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5294

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0167

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-30-94 27. Gross Weight (kg) 112.94

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	35.94			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	87.94	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5394

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0168

13. Name of Contact David Steffen/Susan Jahansoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-30-94 27. Gross Weight (kg) 120.66

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	13.055 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	43.66			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	95.66	TOTAL	13.055	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5494

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0169

13. Name of Contact David Steffen/Susan Jahanzooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-30-94 27. Gross Weight (kg) 114.76

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.025 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	37.76			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	89.76	TOTAL	19.025	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94
3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8
6. Storage Location (S01)
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 46060 W 76909
Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)
9. PIN RTL5594
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9410-0170
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum
23. LxWxH or DxL 24"dia x 35" height
24. Cont. Vol. (m^3) 0.208
25. Tare Weight (kg) 25
26. Date Packaged 8-30-94
27. Gross Weight (kg) 124.74
28. Thermal Power ☒ <0.1 W/ft
29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	15.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	47.74			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	99.74	TOTAL	15.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Fee Faraghi Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5694

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0171

13. Name of Contact David Steffen/Susan Jahanzoor

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-30-94 27. Gross Weight (kg) 117.03

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	40.03			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.03	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Fraga Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5794

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0172

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-31-94 27. Gross Weight (kg) 117.93

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.03 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	39.50	42.93			
Silica gel	46.00	34.50			
Metal (cans)	11.50	11.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.93	TOTAL	19.03	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Stamp Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5894

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0173

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-30-94 27. Gross Weight (kg) 118.84

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19.05 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	41.84			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	93.84	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL5994

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0174

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-31-94 27. Gross Weight (kg) 91.17

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	9
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	24.17			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	66.17	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 2006 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL6094

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0175

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-31-94 27. Gross Weight (kg) 96.62

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code N/A (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA 8-31-94

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	29.62			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	71.62	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance [signature] Date 9-30-94

3. Area 200w 4. Facility 218-W-3A/E 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL6194

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0176

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 8-31-94 27. Gross Weight (kg) 104.33

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	49.50	37.33			
Silica gel	38.00	28.50			
Metal (cans)	9.50	9.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	79.33	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Ian Taylor Date 9-30-94

3. Area 200W 4. Facility 218-W-317E 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL6294

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0177

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 9-1-94 27. Gross Weight (kg) 117.00

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	19 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	37.00	40.00			
Silica gel	48.00	36.00			
Metal (cans)	12.00	12.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	92.00	TOTAL	19.	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Faughn Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module | Tier | Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL6494

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0179

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 9-1-94 27. Gross Weight (kg) 112.04

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	16.02 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	47.00	43.04			
Silica gel	40.00	30.00			
Metal (cans)	10.00	10.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	87.04	TOTAL	16.02	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance: Lee Franklin — Date: 9-30-94

3. Area: 200W — 4. Facility: 218-W-3AE — 5. Unit: T-8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 — 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A — 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL6594

10. Waste Generator: Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0180

13. Name of Contact: David Steffen/Susan Jahansooz

14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen — Date: 9-23-94

20. Waste Designation: ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin: N/A

22. Container Type: 55 gal drum — 23. LxWxH or DxL: 24"dia x 35" height

24. Cont. Vol. (m^3): 0.208 — 25. Tare Weight (kg): 25

26. Date Packaged: 9-1-94 — 27. Gross Weight (kg): 86.18

28. Thermal Power: ☒ <0.1 W/ft — 29. Dose Rate (mrem/hr) <0.02 at 1 cm — 32. Seal No.

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ OM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	8.02 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	67.00	33.18			
Silica gel	24.00	18.00			
Metal (cans)	6.00	6.00			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	61.18	TOTAL	8.02	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. PAGE 1 OF 1

Storage/Disposal Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

2. Signature Acceptance Lee Faugh Date 9-30-94

3. Area 200W 4. Facility 218-W-3AE 5. Unit T-8

6. Storage Location (S01)

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 46060 W 76909

Ending Coordinates N 46060 W 76913

REFERENCES

16. RSR No. N/A 23943 17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

1. SWSDR No. (DO NOT WRITE IN THIS SPACE)

9. PIN RTL6694

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9410-0181

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Rquest and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defind by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 9-23-94

20. Waste Designation ☒ Category 1 ☐ Category 3 ☐ >Category 3 ☐ RMW ☐ Classified

21. Point of Origin N/A

22. Container Type 55 gal drum 23. LxWxH or DxL 24"dia x 35" height

24. Cont. Vol. (m^3) 0.208 25. Tare Weight (kg) 25

26. Date Packaged 9-2-94 27. Gross Weight (kg) 124.28

28. Thermal Power ☒ <0.1 W/ft 29. Dose Rate (mrem/hr) <0.02 at 1 cm

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WC ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

32. Seal No.

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
10 mil liner	1.00	2.00	H-3	18.07 Ci	g
Anticorrosion rad pad	1.00	1.00			
Absorbant (Superfine)	34.50	45.28			
Silica gel	50.00	37.50			
Metal (cans)	12.50	12.50			
Plastic (bags)	1.00	1.00			
39. TOTAL	100.00	99.28	TOTAL	18.07	

218-W-3AE
(pg 3 of 3)

SWITS
5/15/2001

Low-level Burial Grounds

Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment	Waste Codes
218-W-3AE	5	6803-1 (TRW)	9/24/87	debris with silver	D011, WT02
218-W-3AE	5	2345Z-87-0027S PFP	10/30/87	aluminum nitrate (D001)	D001, WT02
218-W-3AE	5 Shielding?	340-87-0246S PNNL	11/9/87	lead	D008, WT01
218-W-3AE	5	340-87-0247S PNNL	11/9/87	WT02 for Be (?) 5.7wt%	

(4)

N 46186 W 76701
N 46186 W 76709

N 46186 W 76706
N 46186 W 76716

N 46186 W 76708
N 46186 W 76712

N 46186 W 76708
N 46186 W 76712

START

3rd QUARTER 1987

TRWSG-TRW IND 200W 3AE T05 (108)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
092687	0001	318.20	CB	43	TR	6985.00	UN	298100.00000	T05	IO	3AE	TRW
							CI	0.00100				
							UD	66000.00000				
TOTALS...		318.20				6985.00						

6803-1

0 0 5 3 0 9 7 0 3 2 1

Rockwell Hanford Operations

SOLID WASTE BURIAL RECORD – LOW LEVEL MA

RSR# 17971

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. TRW56-TRW-87-1 (LOP)

DO NOT WRITE IN THIS SPACE

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200 W
Burial Ground No.: 218 W3AE
Trench No.: 5E
Caisson No.: N/A
Beginning Coordinates: N 46186 W 76701
Ending Coordinates: N 46186 W 76709
Remarks: S.A. → TR 5E
Signature - Acceptance
Date: 9-24-87
Signature - Burial
Date: 9-26-87

WASTE GENERATOR:

Charge Code: AB8497HS7A
DOE Authorization No. (RRM): 6803
Address/Phone: TRW SPACE & TECHNOLOGY GROUP, One Space Park, Redondo Beach, Ca. 90278, ~~213-536-2905~~

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D. Han. Date: 9/28/87.

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	79 %	Glass	%
Plastic	15 %	Concrete	%
Cloth	5 %	Stainless Steel	%
Rubber	%	Other Metals	1 %
	%		%
	%		%
	%		%
	%		%
Total	99 %	Total	1 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Silver	0.9 Kg.

CONTAINER INFORMATION

Quantity & Name: 43 55 Gallon Drums; Ø Hanford Standard Fiberboard Boxes (18" x 18" x 24"); Ø Other: NONE

BCC Approval Number: 32-1A-7TM-0
Dose Rate - Package: 1.2 mrem/hr at All package surface
Diameter or Length x Width: 22 1/2"
Height: 34 13/16"
Material of Construction: Steel
Nuclear Transaction No.: LBM-VUC-0001
Property Disposal Request No.: N.A.
Total Volume: 318.2 ~~313.9~~ Cu Ft.
Gross Weight: 6985 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☒ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: CORRECTED COPY

6803-1

17-298100
23-66,000

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
U	Natural Uranium	298.1 Kg.	NONE	
U	Depleted Uranium	66 Kg.		
Totals		364.1 Kg		NA

Measurement Method: Gamma Spectrometric or weighting
Determined By: D. Han

DISTRIBUTION: White - SWPDU 2750-E/200 E; Canary - TFS 272-W/200 W; Pink - Return to Shipper 200-W

54-3000-581 (7-85)

Rockwell Hanford Operations

SOLID WASTE BURIAL RECORD – LOW LEVEL

RSL #17971

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. (DO NOT WRITE IN THIS SPACE) TRWSG-TRW-87-1

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site.

Area: 200W
Burial Ground No.: 218W3AE
Trench No.: 5E
Caisson No.: N/A
Beginning Coordinates: N 46786 W 76701
Ending Coordinates: N 46786 W 76709
Remarks: Staging Area → tr 5E
Signature - Acceptance: Merrie C Miller — Date: 9-24-87
Signature - Burial: L L Mathlie — Date: 9-26-87

WASTE GENERATOR: TRW

Charge Code: AB8497HS7A
DOE Authorization No. (RRM): 6803-1
Address/Phone: TRW SPACE &TECHNOLOGY GROUP, One Space Park, Redondo Beach, Ca. 90278, ~~213-536-2905~~

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D. Han — Date: 9/21/87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	79 %	Glass	%
Plastic	15 %	Concrete	%
Cloth	5 %	Stainless Steel	%
Rubber	%	Other Metals	1 %
	%		%
	%		%
	%		%
	%		%
Total	99 %	Total	1 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Silver	0.9 Kg

CONTAINER INFORMATION

Quantity & Name: CB 43 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other:
BCC Approval Number: 32-1A-72RM-0
Dose Rate - Package: ≤1.2 mrem/hr at All package surface
Diameter or Length x Width: 22 1/2
Height: 34 13/16"
Material of Construction: Steel
Nuclear Transaction No.: LRM-VUC-6001
Property Disposal Request No.: N.A.
Total Volume: ~~313.9~~ 318.2 Cu Ft.
Gross Weight: 6985 ☒ Pounds ☐ Kilogram

WASTE CATEGORIES: ☐ BW ☒ OS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ____ Other

Remarks: See Correction 6803-1 copy

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
U	Natural Uranium	298.1 Kg.	—	—
U	Depleted Uranium	26.2 Kg.		
Totals		324.3 Kg.		—

Measurement Method: Gamma Spectrometric or weighting
Determined By: D. Han

17=298100
23 26200
CORRECTION ON D.U.

DISTRIBUTION: White - SWPDU 2750-E/200 E; Canary - TFS 272-W/200 W; Pink - Return to Shipper 200-W

54-3000-581 (7

0 0 5 2 0 9 1 0 3 2 4

E/NRC FORM 741
10) Previous editions are obsolete.
MANDATORY DATA COLLECTION
AUTHORIZED BY 10 CFR 30, 40, 50, 70, 150, Public Laws 83-703, 93-438, 95-91

U.S. DEPARTMENT OF ENERGY AND U.S. NUCLEAR REGULATORY COMMISSION
NUCLEAR MATERIAL TRANSACTION REPORT

Approved by OMB 038-R0478
Approved by GAO B-180225 (R0040)
Expires 6-30-83

1. SHIPPER'S RIS	2. RECEIVER'S RIS	3. TRANSACTION NO.	4. CORRECTION NO.	5. PROCESSING CODE	6. RECEIVED	7. ACTION CODE	8. DATA CODE	DOCUMENTATION (Copy of document is attached SECRET)
LBM	VUC	0001		SHIPPER A RECEIVER		SHIPPER A RECEIVER		PAGE 1 OF 1 PAGES COPY 2 OF 7 COPIES SERIES

9. NAME AND ADDRESS OF SHIPPER — 9. LICENSE NO. CA 0816-70
TRW Space & Defense
One Space Park MS149/1358
Redondo Beach, CA 90278
C. ATTENTION: W. A. Larson
D. TELEPHONE: (213) 536 2905

10A. NAME AND ADDRESS OF RECEIVER — 10. LICENSE NO.
Westinghouse Hanford Co.
P.O. Box 1970
Richland, WA 99352
C. ATTENTION: B. E. Weaver
D. TELEPHONE: (509) 373 4585

11. NO. OF DATA LINES: 02 — 12. NATURE OF TRANSACTION
13. A. SHIPPED FOR ACCOUNT OF — B. RIS
14. A. SHIPPED TO ACCOUNT OF — B. RIS

No.	DISTRIBUTION OF COPIES
1	VUC-LBM
2	VUC
3	VUC-LAA
4	VUC-HAA
5	HAA
6	LAA
7	LBM
8	
9	

TRANSFER AUTHORITY - CONTRACT, IBM DRAFT, OR ORDER NUMBER: DOE RRM #6803

15. EXPORT OR IMPORT TRANSFERS: A. LICENSE NO. — B. U.S. PORT ENTRY/EXIT

MATERIAL TYPE AND DESCRIPTION
Normal and depleted uranium scrap and dry waste. Shipped in 77 55-gal drums numbered 6803-1 through 6803-79. Drums 6803-4,-43 deleted from shipment.

A. MISCELLANEOUS
B. Comm Note Attached Yes ☐ No ☒
C. Comm Note Attached Yes ☐ No ☒

16. TRANSPORTATION PROFILE

Line No.	B. Carrier Identification	C. Transfer Point	A. Model No.	B. Number	20. Action Date	Month	Day	Year
1	TRSM		7A	77	A. Shipment	09	21	87
2					B. Shipper's Correction			
3					C. Receipt			
4					D. Receiver's Acknowledgment			
5					E. Receiver's Correction			

22. TOTAL GROSS WEIGHT: 12688 lb
23. TOTAL VOLUME: 570

Line No.	Form of Material	Identification (Batch Name)	No. of Items	Project Number	Pack Size Type	Comm Facility Code			Country Control Number	Key Meas. Point	Meas. Meth.			Gross Weight	Net Weight	Element Weight	Element Limit of Error	Weight % Isotope	Isotope Weight	Isotope Limit of Error
01	74	Drums 6803-1 to -79 excluding -3, -8, -43, -44	75	LGE0231030	81	G01		G	US000000					12303	975	392				
02	74	Drums 6803-8, -13, -44	3	LGE0231030	10	G01		G	USUS0000					385	145	66				

24. SHIPPER'S DATA — SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED: W. A. Larson 9/28/87

25. RECEIVER'S DATA — SIGNATURE OF AUTHORIZED OFFICIAL AND DATE SIGNED

947 in 34 drums and
298 in 43 drums
66 DU in 43 drums

6803-1

18 U.S.C. SECTION 1001, ACT OF JUNE 25, 1948, 62 STAT. 749, MADE IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION

U.S. Government Printing Office: 1983—341-973/1973

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 8-30-88)
Please print or type. (Form designed for use on elite (12-pitch typewriter).

TRWSG-TRW-87-1 (108)

Department of Health
Toxic Substances Contro
Sacramento,

6803-1

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: C A D 9 8 1 6 5 4 3 0 4
Manifest Document No.: 0 2 6 6 3
2. Page 1 of 1
Information in the shaded a is not required by Federal l

3. Generator's Name and Mailing Address
TRW Inc./Bldg. 108-A
2425 Manhattan Beach Blvd.
Redondo Beach, Calif. 90278
4. Generator's Phone (213) 535-1467

A. State Manifest Document Number: 87062663
B. State Generator's ID: H A H Q 3 6 0 0 8 6 3 3
C. State Transporter's ID: 0383
D. Transporter's Phone: (800) 641-758
E. State Transporter's ID:
F. Transporter's Phone:
G. State Facility's ID:
H. Facility's Phone: (509) 373-1881

5. Transporter 1 Company Name: TRI-STATE MOTOR FREIGHT
6. US EPA ID Number: M O D 0 9 5 0 3 8 9 9 8
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address
U.S. Dept. of Energy/Westinghouse Operation
Tank Farm Service
2401 Stevens Drive; 1167/1100
Richland, Wash. 99352
10. US EPA ID Number: W A 7 8 9 0 0 0 8 9 6 7

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Radioactive Material, LSA, N.O.S. Radioactive Material (UN2912) RQ	0 4 3 ~~0 4 5~~	D M ~~D M~~	0 6 9 8 5 ~~0 7 3 8 5~~	P ~~P~~	State; EPA/Other 181 ~~D011/WT~~
b.					State; EPA/Other
c.					State; EPA/Other
d.					State; EPA/Other

J. Additional Descriptions for Materials Listed Above
11a) Group B: Compacted Radioactive Material
(Natural Uranium) Containing Silver (0.16 Weight percent)
Less than 200 MR/HR RQ= 1.15

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
In Emergency Contact: TRW Security
(213) 536-1114

Return Manifest to: W.T. Panos
TRW Inc.
One Space Park 140/2302
~~Redondo Beach, Calif. 90278~~

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shippin name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicab international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I hav determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a goo faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name: David Han (For TRW)
Signature: [signature]
Month Day: 1 0 9 2 1

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: William R. Simms
Signature: William R. Simms
Month Day: 1 0 9 2 1

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: MERRIE C. MILLER
Signature: Merrie C Miller
Month Day: 1 0 9 2 4

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

0 0 5 8 7 0 6 2 6 6 3 0 3 2 5

DHS 6022 A (1/87)
EPA 8700—22
(Rev. 9-86) Previous editions are obsolete.

White: TSDF SENDS THIS COPY TO DOHS WITHIN 30 DAYS
To: P.O. Box 3000, Sacramento, CA 95812

INSTRUCTIONS ON THE BACK

TBWSG-TRW-87-1 (108)

6803-1

TRW Operations & Support Group

One Space Park
Redondo Beach, CA 90278
213 535.4321

NORTON

RECEIVED
OCT 21 1987
S. H. NORTON

Oct. 13, 1987.

Westinghouse Hanford Operations
2401 Stevens Dr.
1167 Building, 1100 Area,
Richland, Washington 99352

Attn: Mr. B. F. Weaver, Manager

Dear Mr. Weaver,

In reviewing the documents which accompanied the shipment made by TRW Inc. to your facility on Sept. 24th., 1987, the following errors were discovered:

1. On the Solid Waste Burial Record for BCC Approval Number 32-1A-7TM-0, the total elemental weight for the Depleted Uranium was in error. The enclosed Solid Waste Burial Record, with the corrected weight, replaces the previously submitted form.

2. In the group of waste under BCC Approval Number 32-1A-7TM-0, drums marked 6803-3, 6803-11, 6803-18 to 6803-42, do not require the EPA Hazardous Waste Sticker and the label "RMW" because they contain only contaminated dry soft waste without any Uranium Plate. Please obliterate the EPA Hazardouse Waste Stickers and the marking "RMW" from these drums.

Thank you for your assistance in correcting these errors.

Sincerely,

David Han
Sr. Health Physicist

Encl.

HW/hw.

TRW SYSTEMS GROUP

TRWSG-TRW-87-1 (1)

6803-1

RADIOACTIVE MATERIALS SHIPPING DATA SHEET

SHIPMENT NO.	DATE	AUTHORIZED BY	CCC	SNM TRANSFER
87-9-2	9-18-1987	D. Han	S471	LBM-VUC-0001

SHIPPED FROM:	SHIP TO:
TRW SPACE & TECHNOLOGY GROUP One Space Park, Redondo Beach, Ca. 90278 Attention: W. A. Larson (213)536-2905 License No. California 0816-70	U.S. Department of Energy c/o Westinghouse Hanford Operations B.F. Weaver, Manager Tank Farm Services, 2401 Stevens Dr., 1167 Building, 1100 Area, Richland, Washington 99352 License No.

PKG #	TOTAL RADIOISOTOPE CURIES/GRAMS (SNM)	FORM		95%	TRANSPORT	FISSILE CLASS
		XXXXXXX	NORMAL - DESCRIBE	XXXXX	XXXXXX	
1-3, 5-7, 9-12	Normal Uranium, Radioactive Material, LSA n.o.s. Scrap, contaminated dry paper, plastic, metal and hardware.					--------
14-42, 45.	UN2912, 271.9 Kg. 190.3mCi.					
8,13,44.	Normal and Depleted Uranium, Radioactive Material, LSA, n.o.s. Scrap, contaminated dry paper, plastic, metal and hardware.					
	UN 2912, Normal Uranium = 26.2 Kg., 18.34 mCi. Depleted Uranium = 66 Kg., 46.2 mCi.					
	FOR TRANSPORTATION EMERGENCY, CONTACT TRW SECURITY (			1-213-536-1114)		

	PKG # 1 1-3, 5-7, 9-12, 14-42, 45	PKG # 2 8,13,44	PKG # 3	PKG # 4
PACKAGE TYPE	A	A		
DOT SPEC CONTAINER	7A	7A		
TOTAL QUANTITY (mCi Uranium)	Total = 254.84 mCi., (364.1 Kg $U_{Nat.}$)			
REMOVABLE CONTAMINATION	None	None		
SURFACE RADIATION LEVEL (MREM/HR)	see attached			
TRANSPORT INDEX	see attached			
TAMPER SEAL	Yes wire and crimped seal			
DOT LABEL APPLIED	see attached			

METHOD OF TRANSPORT: Surface Vehicle

CERTIFICATE:

This is to certify that the above named articles are properly classified, described, packaged, marked and labeled and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation. ~~This shipment is within the limitations prescribed for passenger-carrying aircraft.~~

SHIPMENT SURVEYED BY:

SYSTEMS 4595

TRWSG-TRW-87-1 (108) 6803-1

SHIPPING
SURVEY DATA
SHEET ATTAC

TRW
SYSTEMS GROUP

RADIOISOTOPE INVENTORY

WI = White
YII = Yello

CUSTODIAN W. A. Larson RADIATION SOURCE REQUEST NO. _____

INVENTORY LOCATION 108A DATE 9-18-87

RADIOELEMENT	CONTAINER NO. OR SERIAL NO.	PHYSICAL STATE	REMOVABLE CONTAM.	KGU (MCI) QUANTITY	READINGS: SURFACE/AT 1M.	
Normal Uranium	6803-1	Solid Scrap paper, plastic, metal and hardware.	none	7.6 (5.32)	0.4	0.1
	6803-2		none	21.4 (14.98)	0.6	0.2
	6803-3		none	0.4 (2.80)	0.1	< 0.1
	~~[illegible]~~		~~none~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
	6803-5		none	23.2 (16.24)	0.25	0.1
	6803-6		none	20.1 (14.07)	0.3	0.1
	6803-7		none	13.8 (9.66)	0.5	0.1
	6803-8		none	26.0 (18.20)	0.6	0.2
Depleted Uranium				18.0 (12.60)		
Normal Uranium	6803-9		none	20.2 (14.14)	0.4	0.1
	6803-10		none	6.3 (4.41)	0.3	0.1
	6803-11		none	2.4 (1.68)	0.2	< 0.1
	6803-12		none	25.9 (18.13)	0.4	0.1
	6803-13		none	0.1 (0.07)	0.38	0.1
Depleted Uranium				36.0 (25.20)		
Normal Uranium	6803-14		none	19.7 (13.79)	0.3	0.1
	6803-15		none	14.2 (9.94)	0.8	0.2
	6803-16		none	3.3 (2.31)	0.2	< 0.1
	6803-17		none	12.4 (8.68)	0.2	< 0.1
	6803-18		none	37.8 (26.46)	1.2	0.4
	6803-19		none	0.1 (0.07)	0.1	< 0.1
	6803-20		none	0.1 (0.07)	0.1	< 0.1
	6803-21		none	0.1 (0.07)	0.1	< 0.1
	6803-22		none	0.1 (0.07)	0.1	< 0.1
	6803-23		none	0.1 (0.07)	0.1	< 0.1
	6803-24		none	0.1 (0.07)	0.1	< 0.1
	6803-25		none	0.1 (0.07)	0.1	< 0.1
	6803-26		none	0.1 (0.07)	0.1	< 0.1
	6803-27		none	0.2 (0.14)	0.2	< 0.1
	6803-28		none	0.4 (0.28)	0.2	< 0.1
	6803-29		none	0.1 (0.07)	0.1	< 0.1
	6803-30		none	1.4 (0.98)	0.4	0.1
	6803-31		none	0.1 (0.07)	0.3	0.1
	6803-32		none	0.1 (0.07)	0.3	0.1
	6803-33		none	0.1 (0.07)	0.3	0.1
	6803-34		none	0.1 (0.07)	0.1	< 0.1
	6803-35		none	0.1 (0.07)	0.1	< 0.1
	6803-36		none	0.1 (0.07)	0.1	< 0.1
	6803-37		none	0.1 (0.07)	0.1	< 0.1
	6803-38		none	0.3 (0.21)	0.1	< 0.1
	6803-39		none	0.1 (0.07)	0.1	< 0.1
	6803-40		none	0.1 (0.07)	0.1	< 0.1
	6803-41		none	0.1 (0.07)	0.1	< 0.1
	6803-42		none	0.3 (0.21)	0.2	< 0.1
	~~[illegible]~~		~~none~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
	6803-44		none	0.1 (0.07)	0.3	0.1
Depleted Uranium				12.0 (8.40)		
Normal Uranium	6803-45		none	38.7 (27.09)	0.6	0.2

4th QUARTER 1987

2345Z-WHC IND 200W 3AE T05 (65)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
103087	0001	15.00	CB	2	K310K	189.60	CI	0.00100	T05	I	3AE	WHC
...TOTALS...		15.00				189.60						

2345Z-87-00275

2345Z-87-00278

RSR 32826

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK BALL POINT PEN OR TYPE

SWBP NO 2345Z-WM-87-1 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE (This portion of form to be completed by Rockwell Representative at Disposal Site)

Area: 200W
Burial Ground No: 218 3 A
Trench No: 5E
Caisson No: NA
Beginning Coordinates: N 46186 W 76766
Ending Coordinates: N 46186 W 76770
Remarks: NA
Signature, Acceptance: L L Mathieu — Date: 10-30-87
Signature, Burial: — Date: —

WASTE GENERATOR: WHC
Charge Code: E16532
DOE Authorization No (RRM): NA
Address Phone: 234-5 3-2337

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: D.W. Faulk — Date: 10-30-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	%
Plastic	5 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
	%		%
	%	DIATOMACEOUS	%
	%	EARTH	95 %
	%		%
Total	5 %	Total	95 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity Lb or Kg
ALUMINUM NITRATE	20 LB

CONTAINER INFORMATION

Quantity & Name: 2 55 Gallon Drums; 0 Fiberboard Standard (18 x 18 x 24); 0 Other:
BCC Approval Number: 1-1B-71M-0
Dose Rate Package: <1 mrem/hr SURFACE
Diameter or Length x Width: 24" DIA.
Height: 35"
Material of Construction: GALV. DOT 17C STEEL DRUMS
Nuclear Transaction No: NA
Property Disposal Request No: NA
Total Volume: LN 15.0 FT³
Gross Weight: 86 ☐ Estimated ☒ Scale

WASTE CATEGORIES: ☐ BW ☒ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: RMW WITH SUSPECT CONTAMINATION. < 2nCi.

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
PU 239	94	0	—	—
Totals		* 0		0

Measurement Method: NaI
Determined By: D.W. Faulk

DISTRIBUTION: White - SWPDU 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200-W

54 3000 581 7 85

23452-87-00278 23452-WHC-87-1 (65)

Please print or type (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0404 Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: MW002
2 Page 1 of 1
Information in the shaded areas is not required by Federal law.

3 Generator's Name and Mailing Address
D. W. Faulk
234-5Z/200 West 7
4 Generator's Phone (509) 373-2332

A. State Manifest Document Number
B. State Generator's ID

5 Transporter 1 Company Name: Westinghouse Hanford
6 US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone: 373-2583

7 Transporter 2 Company Name: N/A
8 US EPA ID Number:
E. State Transporter's ID
F. Transporter's Phone

9 Designated Facility Name and Site Address
RMW Low Level Waste Burial
200 West Burial Grounds
200 West Area
10 US EPA ID Number: WA 789 000 8967
G. State Facility's ID
H. Facility's Phone: 373-1181

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	I Waste No.
a	X Radioactive Material Low Specific Activity Radioactive Material UN2912	2	DM	86	K	D001 W102
b						
c						
d						

J. Additional Descriptions for Materials Listed Above
Radioactive Mixed Waste. Secondary hazard: aluminum nitrate (OXIDIZER) D001, W102, 20 pounds
Drum No. RHZ-212-A17165 and RHZ-212-A17166

K. Handling Codes for Wastes Listed Above

15 Special Handling Instructions and Additional Information

16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: D. W. Faulk
Signature: D. W. Faulk
Month 10 Day 28 Year 87

17 Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Pete Alvarado Jr
Signature: Pete Alvarado Jr
Month 10 Day 28 Year 87

18 Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year

19 Discrepancy Indication Space

20 Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: D K Kizel
Signature: D K Kizel
Month 10 Day 25 Year 87

Style F15P-6 Labelmaster, Div. of American Labelmark Co., Inc. 60646 EPA Form 8700-22 (Rev. 3-81) Previous editions is obsolete

TRANSPORTER - 2

START

4th QUARTER 1987

340 -PNL IND 200W 3AE T05 (17)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
111887	0001	7.50	CB	1	PNL340	250.00	CI	0.00500	T05	I	3AE	PNL
			340-87-02465									
111887	0002	7.50	CB	1	PNL340	300.00	CI	0.00500	T05	I	3AE	PNL
			340-87-02475									
...TOTALS...		15.00				550.00						

340-87-0246S

RSR 23708

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL**

USE BLACK INK OR TYPE

SWBR NO 340-PN-87-1 (DO NOT WRITE IN THIS BLANK)

DISPOSAL SITE

Area: 200 W

Burial Ground No: 218-W-3AE

Line No: 5E

Cassette No: N/A

Beginning Coordinates: ~~76708~~ 76708 AA

Ending Coordinates: ~~76712~~ 76713 AA

Remarks:

Signature: L L Matthews — Date: 11-9-87

Signature: S B Kimelly — Date: 11-18-87

WASTE GENERATOR: 300/2

Charge Code: WB47K

DOE Authorization No (RRM): NA

Address Phone: 300/340/6-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: [illegible] — Date: 11-9-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products		Glass	
Plastic		Concrete	
Cloth		Steel	
Rubber		Other Metal: Lead	10
ABSORBENT	90		
Total	90	Total	10

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (lb or Kg)
LEAD	77 kg

CONTAINER INFORMATION

Quantity & Type: 1 55 Gallon Drum; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other

RCC Shipping Number: 2-1A-3Am-Q

Dose Rate Package: .5 mrem/hr at CONTACT

Diameter or Length x Width: N/A

Height: N/A

Material of Construction: N/A

Nuclear Transaction No: NO

Property Disposal Request No: N/A

Total Volume: 7.5 ft³

Gross Weight: 250 Pounds / Kilograms

WASTE CATEGORIES: NA, CF, DD, LS, SS, NC

Thermal Power: 0.1 watt/ft³ or less; Other

Remarks: Manifest Document No. PNL287031

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (%)	Total Element Weight	Isotope	Grams or Curies
	NONE	NA	Co^{60}	.5 mCi
Total		NA		.5 mCi

Measurement Method: ESTIMATED By CP

Determined By: G. L. BASH

DISTRIBUTION: [illegible]

340-87-02465 340-PNL-87 1 1/17

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: PNL 287031
2 Page 1 of 1
Information in the shaded areas is not required by Federal law

3 Generator's Name and Mailing Address
M. W. McCoy, PNL
306-T6/300 Area
4 Generator's Phone (509) 376-1483

A. State Manifest Document Number
B. State Generator's ID

5 Transporter 1 Company Name: Westinghouse Hanford Company
6 US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone: 373-1881

7 Transporter 2 Company Name
8 US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9 Designated Facility Name and Site Address
Burial Ground/200 W
Westinghouse Hanford Company
10 US EPA ID Number: WA 789 000 8967
G. State Facility's ID
H. Facility's Phone

GENERATOR

	11 US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12 Containers No	Type	13 Total Quantity	14 Unit Wt/Vol	I. Waste No.
a.	Radioactive Material ~~Poison~~ LSA, n.o.s. UN2912	X	1	DM	77	Kg	D008, WT01
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
Drums contain contaminated lead wrapped in plastic.

K. Handling Codes for Wastes Listed Above

15 Special Handling Instructions and Additional Information
item a - 1 55-gal 17H drum.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: John Deffenbaugh
Signature: [illegible]
Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible]
Signature: [illegible]
Month Day Year

18 Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space
[illegible] 5 [illegible]

20 Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: [illegible]
Signature: [illegible]
Month Day Year

Style F15REV-6 Labelmaster Div. of American Labelmark Co. Inc. 60646

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

TRANSPORTER - 2

340-87-02473

RSR 03708

Rockwell Hanford Operations	SOLID WASTE BURIAL RECORD – LOW LEVEL

USE BLACK BALL POINT PEN OR TYPE — SWBR NO 340-87-02473 (DO NOT WRITE IN THIS SPACE)

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative in Disposal Site.

Area: 200 W
Burial Ground No: 218-W-3AE
Trench No: 5E
Caisson No: N/A
Beginning Coordinates: N 76708 NA W 46188 AA
Ending Coordinates: N 76712 AA W 46190 AA
Remarks:

Signature Acceptance: L D Mathlick — Date: 11-9-87
Signature Burial: S B Kennedy — Date: 11-18-87

WASTE GENERATOR: D0012

Charge Code: WB47K
DOE Authorization No. (RRM): NA
Address/Phone: 300/3401 6-3420

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below.
2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC).
3. The charge code is correct.

Signature: [signature] — Date: 11-9-87

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS	%	NONCOMBUSTIBLE MATERIALS	%
Paper Products	%	Glass	%
Plastic	10 %	Concrete	%
Cloth	%	Stainless Steel	%
Rubber	%	Other Metals	%
Absorbent	90 %		%
	%		%
	%		%
Total	100 %	Total	0 %

HAZARDOUS CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
Be	5.7 Kg

CONTAINER INFORMATION

Quantity & Name: 1 55 Gallon Drums; 0 Hanford Standard Fiberboard Boxes (18" x 18" x 24"); 0 Other:

BCC Approval Number: 2-18-7711M-0
Dose Rate - Package: .5 mrem/hr at CONTACT
Diameter or Length x Width: N/A
Height: N/A
Material of Construction: N/A
Nuclear Transaction No.: N/A
Property Disposal Request No.: N/A
Total Volume: 7.5
Gross Weight: 300 ☑ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☑ DS ☐ CE ☐ SS ☐ DD ☐ NC

Thermal Power: ☑ 0.1 w/ft³ or less ☐ Other

Remarks: Hazardous Waste Manifest Document No. PNL28703

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
	N/A	NA	Be	.5mCi
Totals		NA		.5mCi

Measurement Method: ESTIMATED BICP
Determined By: G L BASH

DISTRIBUTION: White - SWPDC 2750-E 200 E; Canary - TFS 272-W 200 W; Pink - Return to Shipper 200 W

54 3000 (31) 7 85

340-87-0247S

340-PNL-87-2 (17)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No: WA 789 000 8967
Manifest Document No: PNL-287032
2. Page 1 of 1
Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
H. W. McCoy, PNL
306-T6/300 Area
4. Generator's Phone (509) 376-1483

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: Westinghouse Hanford Company
6. US EPA ID Number: WA 789 000 8967
C. State Transporter's ID
D. Transporter's Phone: 373-1881

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Burial Ground/200W
Westinghouse Hanford Company
10. US EPA ID Number: WA 789 000 8967
G. State Facility's ID
H. Facility's Phone

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X Radioactive Material LSA, n.o.s. ~~Poison~~ UN2912	1	DM	5.7	Kg	~~[illegible]~~ WT02
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
Waste is depleted uranium and beryllium in HCl that has been neutralized and absorbed in ~~diatex~~ diatomaceous earth.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
item a - 1 55-gal 17H drum.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: John W. K Johnston
Signature: John W. Johnston
Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name
Signature
Month Day Year

Style F15REV-6 Labelmaster Div. of American Labelmark Co. Inc. 60648

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

TRANSPORTER 2

Appendix D

218-W-4C Green Island Waste Burial Records

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218-W-4C
(pg 1 of 2)

Low-level Burial Grounds

Mixed Waste Disposed in Unlined Trenches Since 8/19/87

SWITS
5/18/01

Burial Ground	Trench	Container ID	Date Accepted	Comment	Waste Code	
218-W-4C	14	(8901-02-1)	4/15/89	lead	D008	F-HW
		Shipping Port	Shielding?			

(1)

N 39563 W 77950
N 39563 W 77902

START

2nd QUARTER 1989

SPAP -SPA MFP 200W 04C T14 (113)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	CONTAINER ID	WEIGHT	ISO	QUANTITY	TCH	WST TYP
041589	0001	9946.00	DS	1	8901-02-1	1798040.00	C060	7756.00000	T14	NO
							CI	16467.00000		
...TOTALS...		9946.00				1798040.00				

0 0 7 4 0 7 1 1 2 1 3

(113)

Westinghouse Hanford Company

SOLID WASTE STORAGE /DISPOSAL RECORD

Page 1 of 1

Waste Designation ☐ TRU ☒ LLW ☒ MW ☐ Classified

SWSDR No. (Do Not Write In This Space) SPAP-SPA-89-01

STORAGE/DISPOSAL SITE (This portion to be completed by WHC at storage disposal site.)

WASTE GENERATOR General Electric Company for DOE

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with approved Westinghouse Hanford Procedures

Charge Code 1WA72 WHC TPCN 1WA71

DOE Authorization No. (WRM) 8901-02

Signature-Acceptance [signature] Date 4-15-89

Name of Contact R.C. Culbertson

Temporary Storage Location ☐ Check here if acceptance copy of this form is sent to SSW/ESU

Address/Phone Highway 168 South, P.O. Box 325 Shippingport, PA 15077 412/643-5111 Ext. 240

Disposition of Waste ☐ Pad/trench storage ☒ Disposal ☐ Building Storage ☐ Compaction

I certify that: (1) No capital property is included in this storage/disposal unless documented by a Property Disposal Request and described below. (2) The waste package description below is complete and accurate, and the waste package meets the requirements of WHC-EP-0063 and the approved Storage/Disposal Approval Record (SDAR). (3) Unless designated as MW, this waste contains no hazardous constituents as defined by TSCA, RCRA, WAC 173-303, or other state or federal regulation. (4) I have been trained in procedures for the identification and management of mixed waste. (5) The charge code is correct.

Area	Facility	~~Unit~~ Trench	Tier
200-W	218-W-4C	14	N/A

Beginning Coordinates N 39563 W 77950

Ending Coordinates N 39563 W 77902

Signature [signature] Date 3/27/89

Signature-Storage/Disposal [signature] Date 4-15-89

SDAR Approval No. 30-8C-9LM-X

Uniform Haz. Waste Manifest No. 89002 / PAB 4485132

Comments

WASTE PACKAGE INFORMATION

SWSDR ( )

PIN 8901-02-1	CONTAINER Self-Contained RPV/NST
CONTAINER VOL. 9946 ☒ FT^3 ☐ M^3	LxWxH 17' 8" dia. X 40' 6 7/8" lg.
	GROSS WEIGHT 815,573 ☐ LBS ☒ KG
POINT OF ORIGIN N/A	
DOSE RATE AT 1 cm. = 6 mrem/hr.	AT 1 m. = .8 mrem/hr.
DOE/NRC 741 NO. N/A	PROPERTY DISPOSAL REQ. NO. N/A
PHYSICAL DESCRIPTION Reactor Pressure Vessel and Neutron Shield Tank w/Concrete	
THERMAL POWER (W/FT^3) 0.1	
ORGANIC MATL. WT. (kg.) N/A	ORGANIC MTL. VOL.% N/A

WASTE CONTENTS DESCRIPTION

WASTE CATEGORIES	WASTE DESCRIPTION	WT. (kg.)	COMBUSTIBLE VOL.%	NON-COMB. VOL.%
☐ BW	H M	398261	0	48.83
☒ CE	Concrete	413683	0	50.72
☐ DD	Lead	3629	0	.45
☐ DS				
☐ SS				
☐ NC				
	TOTALS	815573	0%	100%

HAZARDOUS CONSTITUENTS

WASTE NO.	ITEM DESCRIPTION	WT. (kg.)
D008	Lead	3629
	TOTALS	3629

RADIOACTIVE MATERIAL CONTENT

TRU only

ELEMENT	DISTRIBUTION (wt%)	WT./Ci	PU 239/GE	PE-Ci	ALPHA Ci
Co_{60}	47.1%	7756	N/A	N/A	N/A
Fe_{55}	47.0%	7739			
Ni_{63}	5.8%	955			
Ni_{59}	.1%	17			
TOTALS		16467			

Distribution: White – Site Solid Waste Engineering Support Unit, 2750E, R1-51 Canary – Tank Farms Scheduler, 272WA, T4-01
Pink – Return to Shipper ☆ GPO 1988-691-252/1003H Goldenrod – Acceptance Copy – Send to Site Solid Waste Engineering Suport Unit, 2750E, R1-51 54-6000-226 (08/88)

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P. O. Box 2063
Harrisburg, PA 17120

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2050-0039 Expires 9-30-88

ER-SWM-51:REV. 10/86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. P.A.6.8.9.0.1.1.3.9.6.7 — Manifest Document No. 8.9.0.0.2
2. Page 1 of 2 — Information in the shaded areas is not required by Federal law but is required by State law.

3. Generator's Name and Mailing Address
U.S. Department of Energy, Attn: General Electric Co.
Shippingport Atomic Power Station, Hwy. 168 South
4. Generator's Phone (412) 643-5111 Shippingport, PA 15077

A. State Manifest Document Number: PAB 4485132
B. State Gen. ID: N/A

5. Transporter 1 Company Name: National Marine
6. US EPA ID Number: L.A.D.9.8.0.8.6.8.5.7.4
C. State Trans. ID: PA-AH — N/A
D. Transporter's Phone: 504 525-5508

7. Transporter 2 Company Name: National Marine
8. US EPA ID Number: L.A.D.9.8.0.8.6.8.5.7.4
E. State Trans. ID: PA-AH — N/A
F. Transporter's Phone: 504 529-5508

9. Designated Facility Name and Site Address
U.S. Department of Energy Richland Operations Office
Hanford Site, Bldg. 1167, 1100 Area
Richland, WA 99352
10. US EPA ID Number: W.A.7.8.9.0.0.0.8.9.6.7
G. State Facility's ID: Not Required
H. Facility's Phone: 509 376-7101

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste Radioactive Material N.O.S. — Radioactive Materials — UN2982 (Contains Lead)	01	CY	89	T	WT01 D000
b. N/A					
c. N/A					
d. N/A					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

	Haz. Code	Physical State		Haz. Code	Physical State
a.	E	S	c.		
b.			d.		

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information

SEE B/L NO. A162653

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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Printed/Typed Name: J.P. O'Donnell — Signature: [signature] — Month 02 Day 28 Year 89

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Master of Tug Pere Marquette STANLEY G. RAUSCH — Signature: [signature] — Month 02 Day 28 Year 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Master of Tug Gulf Miss — Signature: [signature] — Month Day Year

19. Discrepancy Indication Space
Clan Comstock — Donald H Comstock — 03 07 89

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: DR Pozel — Signature: [signature] — Month 4 Day 15 Year 89

GENERATOR — TRANSPORTER — FACILITY

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

COPY 3 – TSD FACILITY: MAIL TO GENERATOR

SPAH-89-01

PAB 4485132

Form Approved OMB No. 2050-0039 Expires 9-30-88

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's US EPA ID No.: PA5890113967

Manifest Document No.: 89002

22. Page: 2/2

Information in the shaded areas is not required by Federal law.

23. Generator's Name: U.S. Department of Energy, Attn: General Electric Co. Shippingport Atomic Power Station, Hwy. 168 South Shippingport, PA 15077

L. State Manifest Document Number: PAB 4485132

M. State Generator's ID: N/A

24. Transporter 3 Company Name: National Marine

25. US EPA ID Number: LAD980868574

N. State Transporter's ID: N/A

O. Transporter's Phone: 504/529-8600

26. Transporter 4 Company Name: Heavy Transport, Inc.

27. US EPA ID Number: CAD981666852

P. State Transporter's ID: N/A

Q. Transporter's Phone: 213/636-2421

	28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.							
b.							
c.							
d.							
e.							
f.							
g.							
h.							
i.							

GENERATOR

S. Additional Descriptions for Materials Listed Above

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

TRANSPORTER

33. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name: Master of Tug Clarkston — Donald A Carstens

Signature: Donald G Comstock

Date: Month 4 Day 10 Year 89

34. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name: Project Manager, Heavy Transport — FRANKLIN D Sobieski

Signature: F. D. Sobieski

Date: Month 4 Day 13 Year 89

FACILITY

35. Discrepancy Indication Space

Style F15-6 Labelmaster, Chicago, IL 60646

EPA Form 8700-22A (3-84)

ORIGINATOR-RETURN TO GENERATOR

SHP-SOP-89-01

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
P.O. Box 2063
Harrisburg, PA 17120

PAB 4485132

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
ER-SWM-61:REV. 10/86 Form Approved. OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. P.A.5.8.9.0.1.1.3.9.6.7 Manifest Document No. 8.9.0.0.2
2. Page 1 of 2 — Information in the shaded areas is not required by Federal law but is required by State law.

3. Generator's Name and Mailing Address
U.S. Department of Energy, Attn: General Electric Co.
Shippingport Atomic Power Station, Hwy. 168 South
4. Generator's Phone (412) 643-5111 Shippingport, PA 15077

5. Transporter 1 Company Name: National Marine — 6. US EPA ID Number: L.A.D.9.8.0.8.6.8.5.7.4
7. Transporter 2 Company Name: National Marine — 8. US EPA ID Number: L.A.D.9.8.0.8.6.8.5.7.4
9. Designated Facility Name and Site Address: U.S. Department of Energy Richland Operations Office, Hanford Site, Bldg. 1167, 1100 Area, Richland, WA 99352 — 10. US EPA ID Number: W.A.7.8.9.0.0.0.8.9.6.7

A. PAB 4485132
B. State Manifest ID: N/A
C. State Transporter ID: PA AH
D. Transporter's Phone: 504 729-8580
E. Transporter's ID: N/A
F. Transporter's Phone: 504 529-8600
G. State Facility ID: Not Required
H. Facility's Phone: (509) 373-1181

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste Radioactive Material N.O.S. — Radioactive Materials — UN2982 (Contains Lead)	01	CY	89	T	WT01 0008
b. N/A					
c. N/A					
d. N/A					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)

Haz. Code	Physical State	Haz. Code	Physical State
a. E	S	c.	
b.		d.	

K. Handling Codes for Wastes Listed Above: a. c. b. d.

15. Special Handling Instructions and Additional Information
SEE B/L NO. A162653

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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Printed/Typed Name: J.P. O'Donnell — Signature: [signature] — Month 10 Day 28 Year 89

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Master of Tug Pere Marquette, STANLEY Q. RAUSCH — Signature: [signature] — Month 10 Day 28 Year 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Master of Tug Gulf Miss, KOLE RAY GRIFFIN — Signature: Ralf Ray Griffin — Month 03 Day 07 Year 19

19. Discrepancy Indication Space
Glen Comstock — Donald G Comstock

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: DR Pizzel — Signature: [signature] — Month 4 Day 5 Year 89

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete
COPY 1 – TSD FACILITY: MAIL TO DESTINATION STATE

GENERATOR — TRANSPORTER — FACILITY

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

SPMD 5MA 89-01

PAB 4485132

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
Bureau of Waste Management
P. O. Box 2063
Harrisburg, PA 17120

ER-SWM-81:REV. 10/86

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)
Form Approved. OMB No. 2050-0039 Expires 9-30-88

PAB 4485132

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. P.A.5.8.9.0.1.1.3.9.6.7 — Manifest Document No. 8.9.0.0.2
2. Page 1 of 2 — Information in the shaded areas is not required by Federal law but is required by State law.

3. Generator's Name and Mailing Address
U.S. Department of Energy, Attn: General Electric Co.
Shippingport Atomic Power Station, Hwy. 168 South
4. Generator's Phone 412 643-5111 Shippingport, PA 15077

A. State Manifest Document Number: PAB 4485132
B. State Gen. ID: N/A

5. Transporter 1 Company Name: National Marine — 6. US EPA ID Number: L.A.D.9.8.0.8.6.8.5.7.4
7. Transporter 2 Company Name: National Marine — 8. US EPA ID Number: L.A.D.9.8.0.8.6.8.5.7.4

C. State Trans. ID: PA-AH N/A
D. Transporter's Phone: 504 529-8600
E. State Trans. ID: PA-AH N/A
F. Transporter's Phone: 504 529-8600

9. Designated Facility Name and Site Address
U.S. Department of Energy Richland Operations Office
Hanford Site, Bldg. 1167, 1100 Area
Richland, WA 99352
10. US EPA ID Number: W.A.7.9.9.0.0.0.8.9.6.7

G. State Facility's ID: Not Required
H. Facility's Phone: 509 373-1181

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste Radioactive Material N.O.S. — Radioactive Materials — UN2982 (Contains Lead)	01	CY	8999	T	W101 D008
b. N/A					
c. N/A					
d. N/A					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)
a. Haz. Code E — Physical State S
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information
SEE B/L NO. A162653

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Printed/Typed Name: J.P. O'Donnell — Signature: [signature] — Month 02 Day 28 Year 89

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Master of Tug Pere Marquette STANLEY G. RAUSCH — Signature: [signature] — Month 02 Day 28 Year 89

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Master of Tug Gulf Miss Ralph Ray Griffin — Signature: Ralph Ray Griffin — Month Day Year

19. Discrepancy Indication Space
Glen Comstock — Donald H. Comstock — 03-07 89

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: D.R. Peel — Signature: [signature] — Month 4 Day 15 Year 89

GENERATOR — TRANSPORTER — FACILITY

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

PAB 4485132

EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

COPY 2 – TSD FACILITY: MAIL TO GENERATOR STATE

218-W-4C
(pg 2 of 3)

5 WITS
5/18/01

Low-level Burial Grounds
Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment	With Cmts
218-W-4C	58	324-88-0010S PNNL	5/18/88	lead Shielding?	D008, WT01

N 37910 W 77778
N 37910 W 77784

324-88-0010S

Rockwell Hanford Operations | **SOLID WASTE BURIAL RECORD – LOW LEVEL** RSR-25701 (10)

USE BLACK BALL POINT PEN OR TYPE

SWBR NO. (DO NOT WRITE IN THIS SPACE) 324-PNL-88-1

DISPOSAL SITE — This portion of form to be completed by Rockwell Representative at Disposal site.

Area	Burial Ground No.	Trench No.
200 WEST	218 W - 4C	58

Caisson No.: N/A

Beginning Coordinates: N 38410 37910 W 77778

Ending Coordinates: N 38410 37910 W 77784

Remarks:

Signature - Acceptance: Bruce A. Rogers — Date: 5-18-88

Signature - Burial: — Date:

WASTE GENERATOR: PNL

Charge Code: B79681 B-2 — DOE Authorization No. (RRM): N/A

Address/Phone: 324 bldg, 300 area, 376-3884

I certify that: 1. No capital property is included in this burial unless documented by a Property Disposal Request and described below. 2. The waste package description below is complete and the waste package conforms to RHO-MA-222 and the approved Burial Compliance Checksheet (BCC). 3. The charge code is correct.

Signature: J. E. Gose — Date: 5/17/88

WASTE DESCRIPTION

COMBUSTIBLE MATERIALS		NONCOMBUSTIBLE MATERIALS	
Paper Products	%	Glass	%
Plastic	%	Concrete	%
Cloth	%	Stainless Steel	50 %
Rubber	1 %	Other Metals	%
	%	Carbon steel	24 %
	%	lead	25 %
	%		%
	%		%
Total	1 %	Total	99 %

HAZARDOUS/CORROSIVE CONSTITUENTS

Name	Quantity (Lb or Kg)
lead shielding	15,800
(R)	

CONTAINER INFORMATION

Quantity & Name: N/A 55 Gallon Drums; N/A Hanford Standard Fiberboard Boxes (18" x 18" x 24")

TG 1 Other: lead shielded box

BCC Approval Number: 2-LA-LJM-X — Date Date Packed: 35E+3 RR 35C0 — Assembled at: Bottom Box

Diameter or Length x Width: 138" X 61" — Height: 62"

Material of Construction: mild steel with lead shielding

Nuclear Transaction No.: N/A — Property Disposal Request No.: PNL-88-143 & PNL-88-312

Total Volume: 327 cu. ft. — Gross Weight: 39,500 ☒ Pounds ☐ Kilograms

WASTE CATEGORIES: ☐ BW ☐ DS ☒ CE ☐ SS ☒ DD ☐ NC

Thermal Power: ☒ 0.1 w/ft³ or less ☐ Other

Remarks: Waste box is vented with a charcoal Nucfil filter.

RADIOACTIVE MATERIAL CONTENT

TRANSURANIC AND URANIUM			NONTRANSURANIC	
Element	Isotopic Distribution (Wt %)	Total Element Weight	Isotope	Grams or Curies
N/A	N/A	N/A	Cs-137	1250
Totals				1250 Ci

Measurement Method: From dose rate calculations

Determined By: J. E. Gose

DISTRIBUTION: White - SWPDU 2750-E/200 E; Canary - TFS 272-W/200 W; Pink - Return to Shipper 200-W

54 3000 581 (7-85)

START

2nd QUARTER 1988

324 -PNL MFP 200W 04C T58 (10)

DISPOSE DATE	LOG#	CU. FT.	TYPE	NO	ACCNT	WEIGHT	ISO	QUANTITY	TCH	WST TYP	BG	COM
051888	0001	327.00	TG	1	B79681	39500.00	CI	1250.00000	T58	N	04C	PNL
			324-88-00105									
060988	0002	253.00	ZO	1	B79680	14000.00	CS	2.00000	T58	N	04C	PNL
							CI	4.00000				
062388	0003	253.00	TR	1	B79680	14000.00	CS	1.00000	T58	N	04C	PNL
							CI	2.00000				
062388	0004	253.00	TR	1	B79680	14000.00	CS	1.00000	T58	N	04C	PNL
							CI	2.00000				
063088	0005	253.00	TR	1	B79680	14000.00	CS	2.00000	T58	N	04C	PNL
							CI	4.00000				
...TOTALS...		1339.00				95500.00						

324-PNL-88-1 (40)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. WA 789 000 8967
Manifest Document No PNL-88-001
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
N. W. McCoy, PNL
306-T6/300 Area
4. Generator's Phone (509) 376-1483

5. Transporter 1 Company Name
Westinghouse Hanford Company
6. US EPA ID Number
WA 789 000 8967

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Burial Ground/200 W
Westinghouse Hanford Company
10. US EPA ID Number
WA 789 000 8967

A. State Manifest Document Number
B. State Generator's ID
C. State Transporter's ID
D. Transporter's Phone
E. State Transporter's ID
F. Transporter's Phone
G. State Facility's ID
H. Facility's Phone 3-1/4-1

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Radioactive Material ~~EP Toxic~~ LSA, n.o.s. UN2912	1	CH	7,182	K	D008, W101
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
Metal box contains lead shielding.

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name: J. E. Gose
Signature
Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Dave A Rogers
Signature: D A Rogers
Month Day Year: 5 18 88

Style F15R-6 Labelmaster, Div. of American Labelmark Co. Inc. 60646

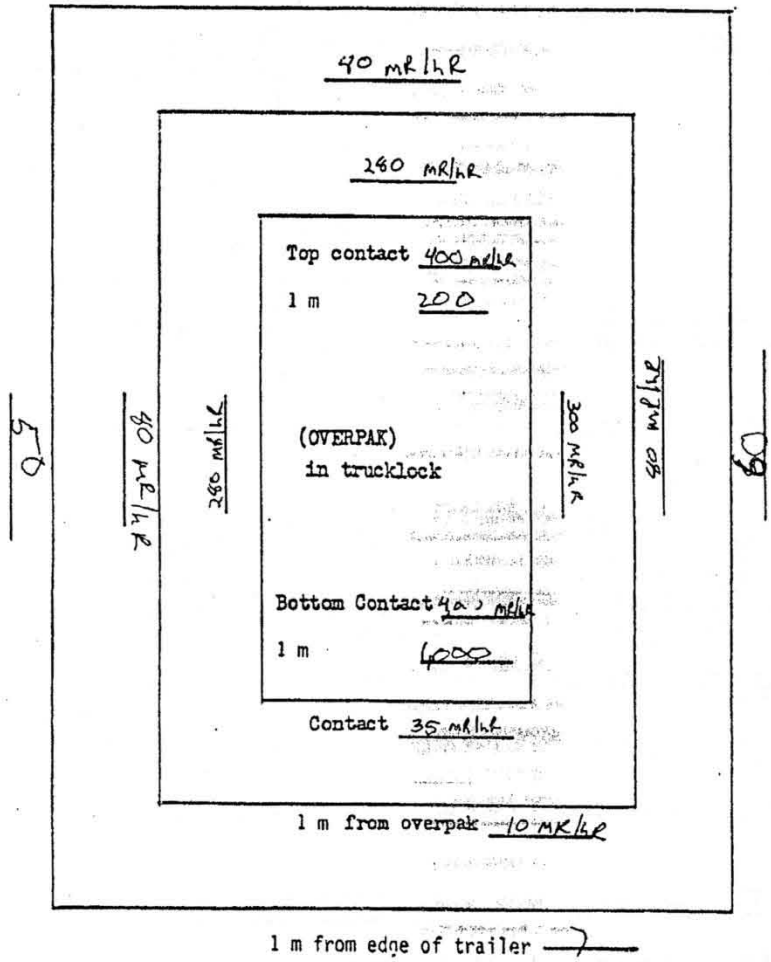
EPA Form 8700-22 (Rev. 4-85) Previous edition is obsolete.

FILE COPY OR STATE COPY

Date 6-30-88

Readings required by HEDL Storage and Disposal for Waste Haul:

1. Outside overpak - contact, all sides, top and bottom.
2. 1 m from overpack
3. 1 m from edge of trailer



J. E. Gose

218-W-4C

pg 3 of 3

SWITS 5/18/01

Low-level Burial Grounds

Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment	With Cards
218-W-4C	NC	RTL3094	1/9/95	LBL	-LLW
218-W-4C	NC	RTL0695	1/9/95	LBL	
218-W-4C	NC	RTL0595	1/9/95	LBL	
218-W-4C	NC	RTL0495	1/9/95	LBL	
218-W-4C	NC	RTL0395	1/9/95	LBL	
218-W-4C	NC	RTL0295	1/9/95	LBL	
218-W-4C	NC	RTL0195	1/9/95	LBL	
218-W-4C	NC	RTH2395	1/9/95	LBL	
218-W-4C	NC	RTH2295	1/9/95	LBL	
218-W-4C	NC	RTH2195	1/9/95	LBL	
218-W-4C	NC	RTH2095	1/9/95	LBL	
218-W-4C	NC	RTH1995	1/9/95	LBL	
218-W-4C	NC	RTH1895	1/9/95	LBL	
218-W-4C	NC	RTH1795	1/9/95	LBL	
218-W-4C	NC	RTH1695	1/9/95	LBL	
218-W-4C	NC	RTH1595	1/9/95	LBL	
218-W-4C	NC	RTH1495	1/9/95	LBL	
218-W-4C	NC	RTH1395	1/9/95	LBL	
218-W-4C	NC	RTH1295	1/9/95	LBL	
218-W-4C	NC	RTH1195	1/9/95	LBL	
218-W-4C	NC	RTH1095	1/9/95	LBL	
218-W-4C	NC	RTH0995	1/9/95	LBL	
218-W-4C	NC	RTH0895	1/9/95	LBL	
218-W-4C	NC	RTH0795	1/9/95	LBL	
218-W-4C	NC	RTH0695	1/9/95	LBL	
218-W-4C	NC	RTH0595	1/9/95	LBL	
218-W-4C	NC	RTH0495	1/9/95	LBL	
218-W-4C	NC	RTH0395	1/9/95	LBL	
218-W-4C	NC	RTH0295	1/9/95	LBL	
218-W-4C	NC	RTH0195	1/9/95	LBL	
218-W-4C	NC	RTL6394	1/9/95	LBL	
218-W-4C	NC	RTL3494	1/9/95	LBL	

32

WHC-SD-SM-TI-787

Sec 6 42 containers

All Containers

N 40300 W 77896

N 40300 W 77886

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature]
2. Date 1-9-95
3. Area 200W
4. Facility 218-W-4C
5. Unit T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN RTL3494
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9512-0008
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin N/A
22. Container Type 55 gal drum
23. 24"dia.x35"height
24. Cont Vol.(m^3) .208
25. Tare Weight (kg) 18
26. Date Packaged 09/21/94
27. Gross Weight (kg) 114
28. Thermal Power ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr) <.2 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ FW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA (09/21/94)
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	2.00	4	H-3	19	
Silica Gel	35.08	35			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	60.92	54			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	96	TOTAL	19	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance Lee Ofsaugh
2. Date 1-9-95
3. Area 200W
4. Facility 218-W4C
5. Unit TWC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN RTL6394
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9512-0009
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature David Steffen Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3) .208
25. Tare Weight (kg) 18
26. Date Packaged 09/01/94
27. Gross Weight (kg) 120

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr) <2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium and Thorium only)
Metal (Plates, Tubing, Etc.)	2.51	5	H-3	14	
Silica Gel	42.09	42			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	53.40	52			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	102	TOTAL	14	

PIN#: RTH0195
WRM#: 9512-0010

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 11 liters
Remaining volume filled with pyrofoam: 176 liters
Expansion space within the 90 mil liner: 158.4 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.

1) Moles of air present in the system, M_A:

$$M_A = \frac{158.4\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 6.53\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci*day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.53 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.53\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.53\text{mole} * 1.206\frac{\text{psi*liter}}{\text{mole*°K}} * 296°\text{K}}{158.4\text{liter}} = 1.70 \times 10^{1}\text{psi}$$

$$P = 17.0\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.15\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Humphr
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0195
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0010
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/16/94
27. Gross Weight (kg): 197
28. Thermal Power: [X] <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS
31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WE [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	91.00	51			
Silica Gel	3.00	17			
39. TOTAL	100.00	83	TOTAL	1000	

1 2

RTH0195
TAB 41

SWITS LOG SHEETS 1995

Cmpy	Bldg	Area	Waste Type	P W Type	Facility	Unit	Accept Date	PIN Number	Volume
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0195	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0295	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0395	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0495	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0595	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0695	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0795	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0895	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH0995	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1095	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1195	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1295	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1395	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1495	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1595	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1695	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1795	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1895	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH1995	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH2095	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH2195	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH2295	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTH2395	.780
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL0195	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL0295	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL0395	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL0495	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL0595	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL0695	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL3094	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL3494	.208
LBL	LBLAB	200W	2A	R	218W4C	TNC	01/09/95	RTL6394	.208

32 rows selected.

PIN#: RTH0295
WRM#: 9512-0011

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 104 liters
Remaining volume filled with pyrofoam: 83liters
Expansion space within the 90 mil liner: 74.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 830 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{74.7l * 273°K}{22.4\frac{l}{mole} * 296°K} = 3.08mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 830Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 2.88 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 830Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 8.06 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 3.08 + 2.88 \times 10^{-2} + 8.06 \times 10^{-1} = 3.91mole$$

Maximum pressure inside the container will be:

$$P = \frac{3.91mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{74.7liter} = 1.87 \times 10^{1} psi$$

$$P = 18.7psi * \frac{1atm.}{14.7psi} = 1.27atm.$$

2 - 2

ge 1 of 2 of D195036106

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faught
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0295
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0011
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101, Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen — Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/16/94
27. Gross Weight (kg): 272

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NE ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft^3
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	2.00	7	H-3	830	
Plastic	5.00	10			
Pyrofoam	71.00	39			
Silica Gel	7.00	43			
Tar	15.00	58			
39. TOTAL	100.00	157	TOTAL	830	

1-2

PIN#: RTH0395
WRM#: 9512-0012

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 22 liters
Remaining volume filled with pyrofoam: 165 liters
Expansion space within the 90 mil liner: 148.5 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{148.5\text{l} * 273°\text{K}}{22.4\frac{1}{\text{mole}} * 296°\text{K}} = 6.12\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci}*\text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.12 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.12\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.12\text{mole} * 1.206\frac{\text{psi}*\text{liter}}{\text{mole}*°\text{K}} * 296°\text{K}}{148.5\text{liter}} = 1.71 \times 10^{1}\text{psi}$$

$$P = 17.1\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.16\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faraglia
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-33-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0395
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0012
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen — Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/17/94
27. Gross Weight (kg): 201

30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS

31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WI [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA

28. Thermal Power: [X] <0.1 W/ft^3
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.50	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	88.00	44			
Silica Gel	5.50	28			
39. TOTAL	100.00	87	TOTAL	1000	

1-2

PIN#: RTH0495
WRM#: 9512-0013

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 14 liters
Remaining volume filled with pyrofoam: 173 liters
Expansion space within the 90 mil liner: 155.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{155.7\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 6.41\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci} * \text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.41 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.42\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.42\text{mole} * 1.206\frac{\text{psi} * \text{liter}}{\text{mole} * °\text{K}} * 296°\text{K}}{155.7\text{liter}} = 1.70 \times 10^{1}\text{psi}$$

$$P = 17.0\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.16\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Hughes
2. Date: 1-7-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T+NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 241161
17. SDAR No. 87-7A-35-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0495
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0013
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/17/94
27. Gross Weight (kg): 193
28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	90.50	43			
Silica Gel	3.50	21			
39. TOTAL	100.00	79	TOTAL	1000	

1-2

PIN#: RTH0595
WRM#: 9512-0014

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 18 liters
Remaining volume filled with pyrofoam: 169 liters
Expansion space within the 90 mil liner: 152.1 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 985 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{152.1\text{l} * 273°\text{K}}{22.4\frac{1}{\text{mole}} * 296°\text{K}} = 6.27\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 985\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.41 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 985\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci}*\text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.56 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.27 + 3.41 \times 10^{-2} + 9.56 \times 10^{-1} = 7.26\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.26\text{mole} * 1.206\frac{\text{psi}*\text{liter}}{\text{mole}*°\text{K}} * 296°\text{K}}{152.1\text{liter}} = 1.70 \times 10^{1}\text{psi}$$

$$P = 17.0\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.16\text{atm.}$$

2 - 2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faught
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0595
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0014
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin: N/A

22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/17/94
27. Gross Weight (kg): 200

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft^3
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	985	
Plastic	5.00	10			
Pyrofoam	89.50	44			
Silica Gel	4.50	27			
39. TOTAL	100.00	86	TOTAL	985	

1-2

PIN#: RTH0695
WRM#: 9512-0015

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 15 liters
Remaining volume filled with pyrofoam: 172liters
Expansion space within the 90 mil liner: 154.8liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{154.8l * 273°K}{22.4\frac{l}{mole} * 296°K} = 6.38mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.47 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 1000Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 9.71 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.38 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.38mole$$

Maximum pressure inside the container will be:

$$P = \frac{7.38mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{154.8liter} = 1.70 \times 10^{1} psi$$

$$P = 17.0psi * \frac{1atm.}{14.7psi} = 1.16atm.$$

D-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lon Jungh
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T. NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 241161
17. SDAR No. 87-7A-35-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0695
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0015
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/17/94
27. Gross Weight (kg): 194
28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	90.00	42			
Silica Gel	4.00	23			
39. TOTAL	100.00	80	TOTAL	1000	

1-2

PIN#: RTH0795
WRM#: 9512-0016

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 20 liters
Remaining volume filled with pyrofoam: 167 liters
Expansion space within the 90 mil liner: 150.3 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 980 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{150.3\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 6.19\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 980\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.39 \times 10^{-2}\,\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 980\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci} * \text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.52 \times 10^{-1}\,\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.19 + 3.39 \times 10^{-2} + 9.52 \times 10^{-1} = 7.18\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.18\text{mole} * 1.206\frac{\text{psi} * \text{liter}}{\text{mole} * °\text{K}} * 296°\text{K}}{150.3\text{liter}} = 1.70 \times 10^{1}\,\text{psi}$$

$$P = 17.0\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.16\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161 17. SDAR No. 87-7A-35-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

9. PIN RTH0795

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0016

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak 23. 33"dia.x49"height

24. Cont Vol.(m^3) .78 25. Tare Weight (kg) 114

26. Date Packaged 12/19/94 27. Gross Weight (kg) 193

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³ 29. Dose Rate (mrem/hr) <.2 at 1 cm 32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium and Thorium only)
Metal	1.00	5	H-3	980	
Plastic	5.00	10			
Pyrofoam	89.00	34			
Silica Gel	5.00	30			
39. TOTAL	100.00	79	TOTAL	980	

1-2

PIN#: RTH0895
WRM#: 9512-0017

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 19 liters
Remaining volume filled with pyrofoam: 168liters
Expansion space within the 90 mil liner: 151.2liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{151.2\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 6.23\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci*day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.23 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.23\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.23\text{mole} * 1.206\frac{\text{psi*liter}}{\text{mole*°K}} * 296°\text{K}}{151.2\text{liter}} = 1.71 \times 10^{1}\text{psi}$$

$$P = 17.1\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.16\text{atm.}$$

2-2

ge 1 of 2 of D195030114

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faught
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: 7-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-3[illegible]-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH0895
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0017
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen — Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/20/94
27. Gross Weight (kg): 190

30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS

31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WE [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA

28. Thermal Power: [X] <0.1 W/ft^3
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	89.00	41			
Silica Gel	5.00	20			
39. TOTAL	100.00	76	TOTAL	1000	

1-2

PIN#: RTH0995
WRM#: 9512-0018

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 35 liters
Remaining volume filled with pyrofoam: 152 liters
Expansion space within the 90 mil liner: 136.8 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{136.8\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 5.64\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci}*\text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 5.64 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 6.64\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{6.64\text{mole} * 1.206\frac{\text{psi}*\text{liter}}{\text{mole}*°\text{K}} * 296°\text{K}}{136.8\text{liter}} = 1.73 \times 10^{1}\text{psi}$$

$$P = 17.3\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.18\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161

17. SDAR No. 87-7A-35-0401

18. DOE NRC 741 No. N/A

19. PDR No. N/A

9. PIN RTH0995

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0018

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak

23. 33"dia.x49"height

24. Cont Vol.(m^3) .78

25. Tare Weight (kg) 114

26. Date Packaged 12/20/94

27. Gross Weight (kg) 203

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft^3

29. Dose Rate (mrem/hr) <.2 at 1 cm

32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	85.00	34			
Silica Gel	9.00	40			
39. TOTAL	100.00	89	TOTAL	1000	

1-2

PIN#: RTH1095
WRM#: 9512-0019

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 64 liters
Remaining volume filled with pyrofoam: 123 liters
Expansion space within the 90 mil liner: 110.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{110.71 * 273°K}{22.4 \frac{l}{mole} * 296°K} = 4.56 mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.47 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5 \frac{molecules}{100eV} * 1000Ci * 1.8 \times 10^{19} \frac{eV}{Ci * day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23} \frac{molecules}{mole}} = 9.71 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 4.56 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 5.57 mole$$

Maximum pressure inside the container will be:

$$P = \frac{5.57 mole * 1.206 \frac{psi * liter}{mole * °K} * 296°K}{110.7 liter} = 1.80 \times 10^{1} psi$$

$$P = 18.0 psi * \frac{1atm.}{14.7 psi} = 1.22 atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: [signature] 2. Date: 1-9-95

3. Area: 200W 4. Facility: 218-W-4C 5. Unit: T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161 17. SDAR No. 87-7A-35-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

9. PIN RTH1095

10. Waste Generator: Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0019

13. Name of Contact: David Steffen/Susan Jahansooz

14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin: N/A

22. Container Type: 150 gal Enduropak 23. 33"dia.x49"height

24. Cont Vol.(m^3): .78 25. Tare Weight (kg): 114

26. Date Packaged: 12/20/94 27. Gross Weight (kg): 270

28. Thermal Power: ☒ <0.1 W/ft3 29. Dose Rate (mrem/hr): <.2 at 1 cm 32. Seal No

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	80.00	36			
Silica Gel	4.00	25			
Tar	10.00	80			
39. TOTAL	100.00	156	TOTAL	1000	

1-2

PIN#: RTH1195
WRM#: 9512-0020

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 109 liters
Remaining volume filled with pyrofoam: 78 liters
Expansion space within the 90 mil liner: 70.2 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 999 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{70.2l * 273°K}{22.4\frac{l}{mole} * 296°K} = 2.89 mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 999Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.46 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 999Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 9.70 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 2.89 + 3.46 \times 10^{-2} + 9.70 \times 10^{-1} = 3.90 mole$$

Maximum pressure inside the container will be:

$$P = \frac{3.90mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{70.2liter} = 1.98 \times 10^{1} psi$$

$$P = 19.8psi * \frac{1atm.}{14.7psi} = 1.35atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77886

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161

17. SDAR No. 87-7A-35-0401

18. DOE NRC 741 No. N/A

19. PDR No. N/A

9. PIN RTH1195

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0020

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak

23. 33"dia.x49"height

24. Cont Vol.(m^3) .78

25. Tare Weight (kg) 114

26. Date Packaged 12/20/94

27. Gross Weight (kg) 278

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³

29. Dose Rate (mrem/hr) <.2 at 1 cm

32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	999	
Plastic	5.00	10			
Pyrofoam	73.00	32			
Silica Gel	7.00	27			
Tar	14.00	90			
39. TOTAL	100.00	164	TOTAL	999	

1-2

PIN#: RTH1295
WRM#: 9512-0021

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 96 liters
Remaining volume filled with pyrofoam: 91 liters
Expansion space within the 90 mil liner: 81.9 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 999.5 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{81.91 * 273°K}{22.4 \frac{l}{mole} * 296°K} = 3.37 mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 999.5Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.46 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5 \frac{molecules}{100eV} * 999.5Ci * 1.8 \times 10^{19} \frac{eV}{Ci * day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23} \frac{molecules}{mole}} = 9.71 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 3.37 + 3.46 \times 10^{-2} + 9.71 \times 10^{-1} = 4.38 mole$$

Maximum pressure inside the container will be:

$$P = \frac{4.38mole * 1.206 \frac{psi * liter}{mole * °K} * 296°K}{81.9liter} = 1.91 \times 10^{1} psi$$

$$P = 19.1psi * \frac{1atm.}{14.7psi} = 1.30atm.$$

2-2

ge 1 of 2 of D195050118

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161 17. SDAR No. 87-7A-33-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

9. PIN RTH1295

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0021

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak 23. 33"dia.x49"height

24. Cont Vol.(m^3) .78 25. Tare Weight (kg) 114

26. Date Packaged 12/21/94 27. Gross Weight (kg) 269

28. Thermal Power ☒ <0.1 W/ft³ 29. Dose Rate (mrem/hr) <.2 at 1 cm 32. Seal No

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	999.5	
Plastic	5.00	10			
Pyrofoam	76.00	35			
Silica Gel	6.00	34			
Tar	12.00	71			
39. TOTAL	100.00	155	TOTAL	999.5	

1-2

PIN#: RTH1395
WRM#: 9512-0022

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 5 liters
Remaining volume filled with pyrofoam: 182 liters
Expansion space within the 90 mil liner: 163.8 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{163.8l * 273°K}{22.4\frac{l}{mole} * 296°K} = 6.75mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.47 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 1000Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 9.71 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.75 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.75mole$$

Maximum pressure inside the container will be:

$$P = \frac{7.75mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{163.8liter} = 1.69 \times 10^{1} psi$$

$$P = 16.9psi * \frac{1atm.}{14.7psi} = 1.15atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161 17. SDAR No. 87-7A-33-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

9. PIN RTH1395

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0022

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak 23. 33"dia.x49"height

24. Cont Vol.(m^3) .78 25. Tare Weight (kg) 114

26. Date Packaged 12/20/94 27. Gross Weight (kg) 187

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³ 29. Dose Rate: (mrem/hr) <.2 at 1 cm 32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	0.50	2	H-3	1000	
Plastic	5.00	10			
Pyrofoam	93.50	54			
Silica Gel	1.00	7			
39. TOTAL	100.00	73	TOTAL	1000	

1-2

PIN#: RTH1495
WRM#: 9512-0023

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 104 liters
Remaining volume filled with pyrofoam: 83 liters
Expansion space within the 90 mil liner: 74.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 983 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{74.7\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 3.08\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 983\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.41 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 983\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci}*\text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.54 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 3.08 + 3.41 \times 10^{-2} + 9.54 \times 10^{-1} = 4.07\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{4.07\text{mole} * 1.206\frac{\text{psi}*\text{liter}}{\text{mole}*°\text{K}} * 296°\text{K}}{81.9\text{liter}} = 1.94 \times 10^{1}\text{psi}$$

$$P = 19.4\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.32\text{atm.}$$

2-2

ge 1 of 2 01 D195030120

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161 17. SDAR No. 87-7A-33-0401

18. DOE NRC 741 No. N/A 19. PDR No. N/A

9. PIN RTH1495

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0023

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak 23. 33"dia.x49"height

24. Cont Vol.(m^3) .78 25. Tare Weight (kg) 114

26. Date Packaged 12/22/94 27. Gross Weight (kg) 264

28. Thermal Power ☒ <0.1 W/ft³ 29. Dose Rate (mrem/hr) <.2 at 1 cm 32. Seal No

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	983	
Plastic	5.00	10			
Pyrofoam	76.00	40			
Silica Gel	6.00	39			
Tar	12.00	56			
39. TOTAL	100.00	150	TOTAL	983	

1-2

PIN#: RTH1595
WRM#: 9512-0024

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 108 liters
Remaining volume filled with pyrofoam: 79 liters
Expansion space within the 90 mil liner: 71.1 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{71.1l * 273°K}{22.4\frac{l}{mole} * 296°K} = 2.93mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.47 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 1000Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 9.71 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 2.93 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 3.93mole$$

Maximum pressure inside the container will be:

$$P = \frac{3.93mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{71.1liter} = 1.98 \times 10^{1} psi$$

$$P = 19.8psi * \frac{1atm.}{14.7psi} = 1.34atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Forsyth
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-33-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH1595
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0024
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen — Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/22/94
27. Gross Weight (kg): 270
28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	74.00	36			
Silica Gel	7.00	50			
Tar	13.00	55			
39. TOTAL	100.00	156	TOTAL	1000	

1-2

PIN#: RTH1695
WRM#: 9512-0025

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 35 liters
Remaining volume filled with pyrofoam: 152 liters
Expansion space within the 90 mil liner: 136.8 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 997.05 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{136.8\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 5.64\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 997.05\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.46 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 997.05\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci} * \text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.68 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 5.64 + 3.46 \times 10^{-2} + 9.68 \times 10^{-1} = 6.64\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{6.64\text{mole} * 1.206\frac{\text{psi} * \text{liter}}{\text{mole} * °\text{K}} * 296°\text{K}}{136.8\text{liter}} = 1.73 \times 10^{1}\text{psi}$$

$$P = 17.3\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.18\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faughn
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH1695
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0025
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/21/94
27. Gross Weight (kg): 225

30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS

31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WI [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA

28. Thermal Power: [X] <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	6.00	26	H-3	997.05001	
Plastic	8.00	15			
Pyrofoam	82.00	39			
Silica Gel	3.00	21			
Tar	1.00	10			
39. TOTAL	100.00	111	TOTAL	997.05001	

1-2

PIN#: RTH1795
WRM#: 9512-0026

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 14 liters
Remaining volume filled with pyrofoam: 173 liters
Expansion space within the 90 mil liner: 155.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{155.7\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 6.41\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\,\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci*day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\,\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.41 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.42\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.42\text{mole} * 1.206\frac{\text{psi*liter}}{\text{mole*°K}} * 296°\text{K}}{155.7\text{liter}} = 1.70 \times 10^{1}\,\text{psi}$$

$$P = 17.0\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.16\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-IVC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161

17. SDAR No. 87-7A-3[illegible]-0401

18. DOE NRC 741 No. N/A

19. PDR No. N/A

9. PIN RTH1795

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0026

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak

23. 33"dia.x49"height

24. Cont Vol.(m³) .78

25. Tare Weight (kg) 114

26. Date Packaged 12/21/94

27. Gross Weight (kg) 184

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³

29. Dose Rate (mrem/hr) <.2 at 1 cm

32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	91.00	38			
Silica Gel	3.00	17			
39. TOTAL	100.00	70	TOTAL	1000	

1-2

PIN#: RTH1895
WRM#: 9512-0027

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 100 liters
Remaining volume filled with pyrofoam: 87 liters
Expansion space within the 90 mil liner: 78.3 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{78.3\text{l} * 273°\text{K}}{22.4 \frac{\text{l}}{\text{mole}} * 296°\text{K}} = 3.23\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5 \frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19} \frac{\text{eV}}{\text{Ci} * \text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23} \frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 3.23 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 4.23\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{4.23\text{mole} * 1.206 \frac{\text{psi} * \text{liter}}{\text{mole} * °\text{K}} * 296°\text{K}}{78.3\text{liter}} = 1.93 \times 10^{1}\text{psi}$$

$$P = 19.3\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.31\text{atm.}$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: [signature]
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-33-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH1895
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0027
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/21/94
27. Gross Weight (kg): 263

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	1000	
Plastic	5.00	10			
Pyrofoam	76.00	37			
Silica Gel	6.00	37			
Tar	12.00	60			
39. TOTAL	100.00	149	TOTAL	1000	

1-2

PIN#: RTH1995
WRM#: 9512-0028

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 65 liters
Remaining volume filled with pyrofoam: 122 liters
Expansion space within the 90 mil liner: 109.8 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 999.6 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{109.8l * 273°K}{22.4\frac{l}{mole} * 296°K} = 4.52 mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 999.6Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.46 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 999.6Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 9.71 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 4.52 + 3.46 \times 10^{-2} + 9.71 \times 10^{-1} = 5.53 mole$$

Maximum pressure inside the container will be:

$$P = \frac{5.53mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{109.8liter} = 1.80 \times 10^{1} psi$$

$$P = 18.0psi * \frac{1atm.}{14.7psi} = 1.22atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit T-NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77896

REFERENCES

16. RSR No. N/A 24161

17. SDAR No. 87-7A-33-0401

18. DOE NRC 741 No. N/A

19. PDR No. N/A

9. PIN RTH1995

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0028

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 150 gal Enduropak

23. 33"dia.x49"height

24. Cont Vol.(m³) .78

25. Tare Weight (kg) 114

26. Date Packaged 12/22/94

27. Gross Weight (kg) 228

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³

29. Dose Rate (mrem/hr) <.2 at 1 cm

32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	1.00	5	H-3	999.6	
Plastic	5.00	10			
Pyrofoam	83.00	39			
Silica Gel	5.00	30			
Tar	6.00	30			
39. TOTAL	100.00	114	TOTAL	999.6	

1-2

PIN#: RTH2095
WRM#: 9512-0029

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 108 liters
Remaining volume filled with pyrofoam: 79 liters
Expansion space within the 90 mil liner: 71.1 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 996 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{71.1l * 273°K}{22.4\frac{l}{mole} * 296°K} = 2.93 mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 996Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.45 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 996Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 9.67 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 2.92 + 3.45 \times 10^{-2} + 9.67 \times 10^{-1} = 3.93 mole$$

Maximum pressure inside the container will be:

$$P = \frac{3.93mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{71.1liter} = 1.97 \times 10^{1} psi$$

$$P = 19.7psi * \frac{1atm.}{14.7psi} = 1.34atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faught
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: TNC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 241161
17. SDAR No. 87-7A-35-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH2095
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0029
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/22/94
27. Gross Weight (kg): 277

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	2.00	7	H-3	996	
Plastic	5.00	10			
Pyrofoam	78.00	40			
Silica Gel	7.00	50			
Tar	8.00	56			
39. TOTAL	100.00	163	TOTAL	996	

1-2

PIN#: RTH2195
WRM#: 9512-0030

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 104 liters
Remaining volume filled with pyrofoam: 83 liters
Expansion space within the 90 mil liner: 74.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 914 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{74.7l * 273°K}{22.4\frac{l}{mole} * 296°K} = 3.08mole$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 914Ci * \frac{1gram}{9616Ci} * \frac{1mole}{3gram} = 3.17 \times 10^{-2} mole$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{molecules}{100eV} * 914Ci * 1.8 \times 10^{19}\frac{eV}{Ci*day}}{\frac{1.539 \times 10^{-4}}{day} * 6.023 \times 10^{23}\frac{molecules}{mole}} = 8.87 \times 10^{-1} mole$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 3.08 + 3.17 \times 10^{-2} + 8.87 \times 10^{-1} = 3.99mole$$

Maximum pressure inside the container will be:

$$P = \frac{3.99mole * 1.206\frac{psi*liter}{mole*°K} * 296°K}{74.7liter} = 1.91 \times 10^{1} psi$$

$$P = 19.1psi * \frac{1atm.}{14.7psi} = 1.30atm.$$

2-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93) 8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-4-95
3. Area 200W 4. Facility 218-W-4C 5. Unit T-IVC
6. Storage Location
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 40300 W 77896
Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 241161 17. SDAR No. 87-7A-33-0401
18. DOE NRC 741 No. N/A 19. PDR No. N/A

9. PIN RTH2195
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9512-0030
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A
22. Container Type 150 gal Enduropak 23. 33"dia.x49"height
24. Cont Vol.(m^3) .78 25. Tare Weight (kg) 114
26. Date Packaged 12/23/94 27. Gross Weight (kg) 273

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³ 29. Dose Rate (mrem/hr) <.2 at 1 cm 32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	2.00	10	H-3	914	
Plastic	5.00	10			
Pyrofoam	73.50	39			
Silica Gel	6.50	39			
Tar	13.00	61			
39. TOTAL	100.00	159	TOTAL	914	

1-2

PIN#: RTH2295
WRM#: 9512-0031

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 25 liters
Remaining volume filled with pyrofoam: 162liters
Expansion space within the 90 mil liner: 145.8 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 1000 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{145.8\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 6.01\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 1000\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 3.47 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 1000\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci} * \text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 9.71 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 6.01 + 3.47 \times 10^{-2} + 9.71 \times 10^{-1} = 7.01\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{7.01\text{mole} * 1.206\frac{\text{psi} * \text{liter}}{\text{mole} * °\text{K}} * 296°\text{K}}{145.8\text{liter}} = 1.72 \times 10^{1}\text{psi}$$

$$P = 17.2\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.17\text{atm.}$$

2 - 2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: [signature]
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-33-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH2295
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0031
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/23/94
27. Gross Weight (kg): 195

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	2.00	8	H-3	1000	
Plastic	5.00	10			
Pyrofoam	87.00	36			
Silica Gel	6.00	27			
39. TOTAL	100.00	81	TOTAL	1000	

1-2

PIN#: RTH2395
WRM#: 9512-0032

Evaluation of Pressurization Potential

All containers placed inside the 90 mil liner have been punctured.
Internal volume of the 90 mil liner: 187 liters (22" diameter x 30" height).
Volume taken up by metal cans and silica gel: 34 liters
Remaining volume filled with pyrofoam: 153 liters
Expansion space within the 90 mil liner: 137.7 liters
(Pyrofoam is approximately 90 airspace)
Total activity inside liner: 783 Ci

The following calculation assumes that all tritium has decayed(i.e. 120 years have passed), and that all gas generated remains inside the 90 mil liner. Thus this represents a worst case scenario for maximum pressure buildup.
See Attachment D to WSDR for complete description of pressurization calculation.

1) Moles of air present in the system, M_A:

$$M_A = \frac{137.7\text{l} * 273°\text{K}}{22.4\frac{\text{l}}{\text{mole}} * 296°\text{K}} = 5.67\text{mole}$$

2) Moles of helium in the system, M_{He}:

$$M_{He} = 783\text{Ci} * \frac{1\text{gram}}{9616\text{Ci}} * \frac{1\text{mole}}{3\text{gram}} = 2.71 \times 10^{-2}\text{mole}$$

3)Moles of hydrogen in the system (maximum), M_H:

$$M_H = \frac{0.5\frac{\text{molecules}}{100\text{eV}} * 783\text{Ci} * 1.8 \times 10^{19}\frac{\text{eV}}{\text{Ci} * \text{day}}}{\frac{1.539 \times 10^{-4}}{\text{day}} * 6.023 \times 10^{23}\frac{\text{molecules}}{\text{mole}}} = 7.60 \times 10^{-1}\text{mole}$$

4) Total moles of vapor present in the system, M_T:

$$M_T = 5.67 + 2.71 \times 10^{-2} + 7.60 \times 10^{-1} = 6.46\text{mole}$$

Maximum pressure inside the container will be:

$$P = \frac{6.46\text{mole} * 1.206\frac{\text{psi} * \text{liter}}{\text{mole} * °\text{K}} * 296°\text{K}}{137.7\text{liter}} = 1.67 \times 10^{1}\text{psi}$$

$$P = 16.7\text{psi} * \frac{1\text{atm.}}{14.7\text{psi}} = 1.14\text{atm.}$$

2-2

CS

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Fowler
2. Date: 1-9-95
3. Area: 200
4. Facility: 218-W4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-7A-3[illegible]-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTH2395
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0032
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 150 gal Enduropak
23. 33"dia.x49"height
24. Cont Vol.(m^3): .78
25. Tare Weight (kg): 114
26. Date Packaged: 12/23/94
27. Gross Weight (kg): 208

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal	2.00	10	H-3	783	
Plastic	5.00	10			
Pyrofoam	85.00	36			
Silica Gel	8.00	38			
39. TOTAL	100.00	94	TOTAL	783	

1-2

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95

3. Area 200W 4. Facility 218-W-4C 5. Unit NC

6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161

17. SDAR No. 87-1C-3J-0401

18. DOE NRC 741 No. N/A

19. PDR No. N/A

9. PIN RTL0195

10. Waste Generator Lawrence Berkeley Laboratory

11. Charge Code, SO No., or MPO No. 3527800

12. WRM No. 9512-0001

13. Name of Contact David Steffen/Susan Jahansooz

14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A

22. Container Type 55 gal drum

23. 24"dia.x35"height"

24. Cont Vol.(m^3) .208

25. Tare Weight (kg) 18

26. Date Packaged 10/07/94

27. Gross Weight (kg) 133

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³

29. Dose Rate (mrem/hr) <.2 at 1 cm

32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	3.01	6	H-3	19.1	
Silica Gel	53.11	53			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	41.88	53			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	115	TOTAL	19.1	

18

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Fough
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: IV C
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77886

Ending Coordinates N 40300 W 77896

9. PIN: RTL0295
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0002
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road, Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

REFERENCES

16. RSR No.: N/A 24161
17. SDAR No.: 87-1C-3J-0401
18. DOE NRC 741 No.: N/A
19. PDR No.: N/A

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3): .208
25. Tare Weight (kg): 18
26. Date Packaged: 10/07/94
27. Gross Weight (kg): 123

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WE ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium and Thorium only)
Metal (Plates, Tubing, Etc.)	2.51	5	H-3	19.05	
Silica Gel	44.10	44			
10 mil Liner	1.00	2			
ABSORBENT (Super Fine)	51.39	53			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	105	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faraghr
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40700 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTL0395
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0003
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21. Point of Origin: N/A
22. Container Type: 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3): .208
25. Tare Weight (kg): 18
26. Date Packaged: 11/07/94
27. Gross Weight (kg): 110
28. Thermal Power: [X] <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS
31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WE [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	2.00	4	H-3	20	
Silica Gel	36.08	36			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	59.92	49			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	92	TOTAL	20	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Faught
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-IVC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTL0495
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0004
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen — Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21. Point of Origin: N/A
22. Container Type: 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3): .208
25. Tare Weight (kg): 18
26. Date Packaged: 11/07/94
27. Gross Weight (kg): 117

30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS

31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WI [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA

28. Thermal Power: [X] <0.1 W/ft^3
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	2.51	5	H-3	19.06	
Silica Gel	45.10	45			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	50.39	46			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	99	TOTAL	19.06	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: Lee Fraughs
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTL0595
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0005
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: David Steffen
Date: 1/6/95

20. Waste Description: [X] Category 1 [ ] Category 3 [ ] Category >3 [ ] RMW [ ] Classified

21 Point of Origin: N/A
22. Container Type: 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3): .208
25. Tare Weight (kg): 18
26. Date Packaged: 12/05/94
27. Gross Weight (kg): 117

30. Waste Category (Check One): [ ] BW [ ] DD [ ] DS [X] NC [ ] CE [ ] SS

31. Waste Code (Check One): [ ] FW [ ] HM [ ] CL [ ] WL [X] SL [ ] GL [ ] CM [ ] TW [ ] DM [ ] SO [ ] PB [ ] NC [ ] LM [ ] PA

28. Thermal Power: [X] <0.1 W/ft^3
29. Dose Rate (mrem/hr): <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	2.51	5	H-3	19.05	
Silica Gel	44.10	44			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	51.39	47			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	99	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance [signature] 2. Date 1-9-95
3. Area 200W 4. Facility 218-W-4C 5. Unit F-NC
6. Storage Location
Module | Tier | Position
7. Disposal Location
Beginning Coordinates N 40700 W 77896
Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN RTL0695
10. Waste Generator Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No. 3527800
12. WRM No. 9512-0006
13. Name of Contact David Steffen/Susan Jahansooz
14. Address Phone Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature [signature] Date 1/6/95

20. Waste Description ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21 Point of Origin N/A
22. Container Type 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3) .208
25. Tare Weight (kg) 18
26. Date Packaged 12/05/94
27. Gross Weight (kg) 118

30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS

31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA

28. Thermal Power ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr) <.2 at 1 cm
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	2.51	5	H-3	19.05	
Silica Gel	44.10	44			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	51.39	48			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	100	TOTAL	19.05	

LOW-LEVEL WASTE STORAGE/DISPOSAL RECORD (REV 2, 6/25/93)

8. Page 1 of 1

Storage/Disposal Site Information

I certify that a physical inspection of the waste package to the extent possible and a cross check of the applicable documentation have been performed in accordance with SW-100-050 or SW-100-110.

1. Signature Acceptance: [signature]
2. Date: 1-9-95
3. Area: 200W
4. Facility: 218-W-4C
5. Unit: T-NC
6. Storage Location

Module	Tier	Position

7. Disposal Location

Beginning Coordinates N 40300 W 77896

Ending Coordinates N 40300 W 77886

REFERENCES

16. RSR No. N/A 24161
17. SDAR No. 87-1C-3J-0401
18. DOE NRC 741 No. N/A
19. PDR No. N/A

9. PIN: RTL3094
10. Waste Generator: Lawrence Berkeley Laboratory
11. Charge Code, SO No., or MPO No.: 3527800
12. WRM No.: 9512-0007
13. Name of Contact: David Steffen/Susan Jahansooz
14. Address Phone: Lawrence Berkeley Laboratory, One Cyclotron Road. Mailstop B75B-101 Berkeley CA 94720 510-486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated a Radioactive Mixed Waste (RMW), this waste is not a dangerous waste as defined by Chapter 173-30 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

15. Signature: [signature] Date: 1/6/95

20. Waste Description: ☒ Category 1 ☐ Category 3 ☐ Category >3 ☐ RMW ☐ Classified

21. Point of Origin: N/A
22. Container Type: 55 gal drum
23. 24"dia.x35"height"
24. Cont Vol.(m^3): .208
25. Tare Weight (kg): 18
26. Date Packaged: 09/21/94
27. Gross Weight (kg): 113
28. Thermal Power: ☒ <0.1 W/ft³
29. Dose Rate (mrem/hr): <.2 at 1 cm
30. Waste Category (Check One): ☐ BW ☐ DD ☐ DS ☒ NC ☐ CE ☐ SS
31. Waste Code (Check One): ☐ FW ☐ HM ☐ CL ☐ WI ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM ☐ PA
32. Seal No

WASTE CONTENTS DESCRIPTION

33. Article Description	34. Estimated Volume %	35. Est. Weight (kg)	36. Radio-nuclide	37. Curies (Fission/Activation Products only)	38. Weight (g) (TRU, Uranium, and Thorium only)
Metal (Plates, Tubing, Etc.)	2.51	5	H-3	18.03	
Silica Gel	44.10	44			
10 mil Liner	1.00	2			
Absorbent (Super Fine)	51.39	43			
Anticorrosion Radpad	1.00	1			
39. TOTAL	100.00	95	TOTAL	18.03	

Appendix E

218-W-5 Green Island Waste Burial Records

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218-W-5
(pg 1 of 1)

Low-level Burial Grounds
Mixed Waste Disposed in Unlined Trenches Since 8/19/87

Burial Ground	Trench	Container ID	Date Accepted	Comment
218-W-5	22	9002-02-39	8/20/90	LBL
218-W-5	22	9002-02-43	8/20/90	LBL
218-W-5	22	9002-02-44	8/20/90	LBL
218-W-5	22	9002-02-45	8/20/90	LBL
218-W-5	22	9002-02-46	8/20/90	LBL
218-W-5	22	9002-02-47	8/20/90	LBL
218-W-5	22	9002-02-48	8/20/90	LBL
218-W-5	22	9002-02-49	8/20/90	LBL
218-W-5	22	9002-02-51	8/20/90	LBL
218-W-5	22	9002-02-52	8/20/90	LBL
218-W-5	22	9002-02-53	8/20/90	LBL
218-W-5	22	9002-02-54	8/20/90	LBL
218-W-5	22	9002-02-55	8/20/90	LBL
218-W-5	22	9002-02-56	8/20/90	LBL
218-W-5	22	9002-02-57	8/20/90	LBL
218-W-5	22	9002-02-58	8/20/90	LBL
218-W-5	22	9002-02-59	8/20/90	LBL
218-W-5	22	9002-02-60	8/20/90	LBL
218-W-5	22	9002-02-61	8/20/90	LBL
218-W-5	22	9002-02-62	8/20/90	LBL
218-W-5	22	9002-02-40	8/22/90	LBL
218-W-5	22	9002-02-41	8/22/90	LBL
218-W-5	22	9002-02-42	8/22/90	LBL
218-W-5	22	9002-02-50	8/22/90	LBL

(24)

All Containers
N 45445 W 78728
N 45445 W 78720

LBL ID # 1-3-90

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard H. Morley

Date: 8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-58

Waste Generator: Lawrence Berkeley Laboratory

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron Road, MS: B75B-101 Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP 0063 and the Storage/Disposal Approval Record (SDAR) (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste (4) The charge code is correct.

Signature: R. G. Aune Date: 6/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0062	POINT OF ORIGIN	N/A
CONTAINER TYPE	55 gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	1/18/90	GROSS WEIGHT (kg)	169.7
THERMAL POWER	☒ < 0.1 W/ft³	ORGANIC MATL VOL % N/A	ORGANIC MATL WT. (kg) N/A
Dose Rate (mrem/hr)	0.03 at 1 cm	NEUTRON (> 20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar, diatomite, plastic 32 ea. steel cans, (1 gal.) - silica gel

LBL I.D.# 1-3-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	~~23-1A-3~~ 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
tar	60	105.2
diatomite	26	26.8
plastic	5	1.4
steel	4	11.7
silica gel	5	3.2
TOTALS	100	148.3

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	872		
TOTAL	872		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014268

00969

TRITIUM WASTE FORM

500

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature - Acceptance: Richard A Moody

Date: 8/20/90

Area: 200W

Facility: 218-W5

Unit: TR-22

Storage Location (S01)

Module: N/A

Tier: N/A

Position: N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-39

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: Rayne Aune

Date: 8/20-90

WASTE PACKAGE INFORMATION

PIN: 9002-02-0039

POINT OF ORIGIN: N/A

CONTAINER TYPE: 17H 55-gallon drum

L x W x H OR D x L: N/A

CONTAINER VOLUME (m^3): 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg): 21.3

DATE PACKAGED: 6/8/90

GROSS WEIGHT (kg): 142.0

THERMAL POWER: ☒ <0.1 W ft³

ORGANIC MATL. VOL %: N/A

ORGANIC MATL. WT. (kg): N/A

Dose Rate (mrem/hr): 0.04 at 1 cm NEUTRON (>20 mrem/hr): N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 6-1-90

REFERENCES

DOE/NRC 741 NO.: LZA-VUC-4

RSR NO.: N/A

PROPERTY DISPOSAL REQUEST NO.: N/A

SDAR NO.: 23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES

(Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	946.027		
		TOTAL	946.027

WASTE CATEGORY (CHECK ONE)

☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ CL ☒ SL ☐ CM ☐ DM ☐ PB ☐ LM ☐ HM ☐ WD ☐ GL ☐ TW ☐ SO ☐ NC

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	12.0	30.16
Diatomite	22.5	19.10
Silica Gel	55.7	58.90
Steel	9.0	11.90
Plastic	1.25	.58
Paper	1.07	.04
TOTALS	100	120.68

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)
N/A	N/A	N/A
TOTALS		

TRU WASTE ONLY

PU 239 - FGE	PE - CI	ALPHA CI
N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

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TRITIUM WASTE FORM

10600 00961

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: R. A. Morley

Date: 8/22/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-87

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR) (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste (4) The charge code is correct

Signature: Raymond Aune

Date: 8/26-90

WASTE PACKAGE INFORMATION

PIN 9002-02-0040

POINT OF ORIGIN XXX N/A

CONTAINER TYPE 17H 55-gallon drum

L x W x H OR D x L N/A

CONTAINER VOLUME (m^3) 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg) 21.3

DATE PACKAGED 3-17-89

GROSS WEIGHT (kg) 115.4

THERMAL POWER ☒ < 0.1 W/m^3

ORGANIC MATL VOL % N/A

ORGANIC MATL. WT. (kg) N/A

Dose Rate (mrem/hr) 0.03 at 1 cm NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # C-4-89

REFERENCES

DOE/NRC 741 NO. LZA-VUC-4

RSR NO. N/A

PROPERTY DISPOSAL REQUEST NO. N/A

SDAR NO. 23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
~~XXXXXXXXXXXXXXXXXXXX~~			
^3H	920.028		
		TOTAL	920.028

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	9	22.9
Diatomite	24	13.5
Silica Gel	55.0	44.9
Steel	9.0	11.6
Plastic	~~1.0~~ 2	.8
Paper	1	.2
TOTALS	100.0	93.9

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
	TOTALS				

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

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TRITIUM WASTE FORM

500 00962

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Monk

Date: 8/22/90

Area	Facility	Unit
2000W	218-WS	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-88

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste (4) The charge code is correct

Signature: Rayne Aune Date: 6/26-90

WASTE PACKAGE INFORMATION

PIN 9002-02-0041

POINT OF ORIGIN: N/A

CONTAINER TYPE: 17H 55-gallon drum

L x W x H OR D x L: N/A

CONTAINER VOLUME (m^3): 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg): 21.3

DATE PACKAGED: 3-17-89

GROSS WEIGHT (kg): 133.4

THERMAL POWER ☒ < 0.1 W ft³

ORGANIC MATL. VOL %: N/A

ORGANIC MATL. WT. (kg): N/A

Dose Rate (mrem/hr): 0.03 at 1 cm NEUTRON (>20 mrem/hr): N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # C-6-89

REFERENCES

DOE/NRC 741 NO.: LZA-VUC-4

RSR NO.: N/A

PROPERTY DISPOSAL REQUEST NO.: N/A

SDAR NO.: 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	9~~.8~~	24.8
Diatomite	~~23.6~~ 24	22.4
Silica Gel	56.0	52.45
Steel	9.0	11.4
Plastic	1~~.6~~	.8
Paper	1~~.6~~	.15
TOTALS	100	112

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	920.028		
TOTAL	920.028		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 - FGE	PE - CI	ALPHA CI
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014501

TRITIUM WASTE FORM

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110

Signature – Acceptance	Date
Richard A Morley	8/22/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates	N 45445	W 78728
Ending Coordinates	N 45445	W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-89

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste (4) The charge code is correct

Signature [signature] Date 6/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0042	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	3-17-89	GROSS WEIGHT (kg)	124.7

THERMAL POWER ☒ < 0.1 W/ft³ ORGANIC MATL. VOL % N/A ORGANIC MATL. WT. (kg) N/A

Dose Rate (mrem/hr) 0.03 at 1 cm NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # C-5-89

REFERENCES

DOE/NRC 741 NO	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	9~~.0~~	23.0
Diatomite	24.0	17.0
Silica Gel	55~~.4~~	50.85
Steel	9.0	11.6
Plastic	~~1.0~~ 2	.8
Paper	~~.0~~ 1	.15
TOTALS	100	103.4

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	920.028		
		TOTAL	920.028

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
	TOTALS				

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

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500 00968

TRITIUM WASTE FORM

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-40

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 6/26-90

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance [signature] Date 8/20/90

Area	Facility	Unit
200 W	218-W5	TK-22

Storage Location (S01)

Module	Tier	Position
01	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

WASTE PACKAGE INFORMATION

PIN 9002-02-0043

POINT OF ORIGIN N/A

CONTAINER TYPE 17H 55-gallon drum

L x W x H OR D x L N/A

CONTAINER VOLUME (m^3) 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg) 21.3

DATE PACKAGED 6-12-90

GROSS WEIGHT (kg) 140.2

THERMAL POWER ☒ < 0.1 W/ft³ ORGANIC MATL. VOL % N/A ORGANIC MATL. WT. (kg) N/A

Dose Rate (mrem/hr) 0.03 at 1 cm NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 6-2-90

REFERENCES

DOE/NRC 741 NO. LZA-VUC-4

RSR NO. N/A

PROPERTY DISPOSAL REQUEST NO. N/A

SDAR NO. 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	14.0	38.2
Diatomite	13.5	21.7
Silica Gel	61.8	48.21
Steel	8.6 9	10.0
Plastic	1.6 2	.68
Paper	1 1	.05
TOTALS	100	118.84

WASTE CODE (CHECK ONE)

☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	920.5		
		TOTAL	920.5

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)
N/A	N/A	N/A
TOTALS		

TRU WASTE ONLY

PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014270

500 00972

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: R. A. Monk

Date: 8/20/90

Area	Facility	Unit
200 W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-41

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: [illegible] Date: 6/26-91

WASTE PACKAGE INFORMATION

PIN	9002-02-0044
POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum
L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21
EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	9-12-89
GROSS WEIGHT (kg)	132
THERMAL POWER	XX < 0.1 W ft³
ORGANIC MATL. VOL %	N/A
ORGANIC MATL. WT. (kg)	N/A
Dose Rate (mrem/hr)	0.04 at 1 cm
NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments: Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 9-6-89

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4
RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A
SDAR NO.	23-1A-3J-2

WASTE CONTENTS DESCRIPTION

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	8	21.8
Diatomite	27	22.7
Silica Gel	~~59.93~~ 60	53.6
Steel	~~3.8~~ 3	11.6
Plastic	1 ~~7~~	.86
Paper	~~.07~~ 1	.09
TOTALS	100	110.7

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	920.408		
TOTAL	920.408		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)
N/A	N/A	N/A
TOTALS		

TRU WASTE ONLY

PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014271

(500) 00971

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Morley	8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-42

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 6-26-90

WASTE PACKAGE INFORMATION

PIN 9002-02-0045	POINT OF ORIGIN N/A
CONTAINER TYPE 17H 55-gallon drum	L x W x H OR D x L N/A
CONTAINER VOLUME (m^3) 0.21	EMPTY TARE WEIGHT OF CONTAINER (kg) 21.3
DATE PACKAGED 9-14-89	GROSS WEIGHT (kg) 147.9
THERMAL POWER ☒ <0.1 W/ft³	ORGANIC MATL VOL % N/A; ORGANIC MATL. WT. (kg) N/A
Dose Rate (mrem/hr) 0.04 at 1 cm	NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 9-8-89

REFERENCES

DOE/NRC 741 NO. LZA-VUC-4	RSR NO. N/A
PROPERTY DISPOSAL REQUEST NO. N/A	SDAR NO. 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	~~8.9~~ 9	25.4
Diatomite	26~~.5~~	23.6
Silica Gel	59~~.45~~	65.1
Steel	3~~.4~~	11.6
Plastic	~~1.7~~ 2	.82
Paper	~~0.07~~ 1	.06
TOTALS	100	126.6

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	920.024		
TOTAL	920.024		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – CI	ALPHA CI
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014273

00970

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Morley	8/30/90

Area	Facility	Unit
200 W	218-W5	TK-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-43

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW) this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 8/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0046	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	9-14-89	GROSS WEIGHT (kg)	137.9

THERMAL POWER ☒ < 0.1 W/ft³ ORGANIC MATL VOL % N/A ORGANIC MATL. WT. (kg) N/A

Dose Rate (mrem/hr) 0.03 at 1 cm NEUTRON (> 20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 9-7-89

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^{3}H	920.024		
		TOTAL	920.024

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	8	22.7
Diatomite	26 ~~.7~~	20.9
Silica Gel	~~60.63~~ 61	60.4
Steel	3 ~~.3~~	11.6
Plastic	1 ~~.7~~	.9
Paper	~~.07~~ 1	.06
TOTALS	100	116.56

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)
N/A	N/A	N/A
TOTALS		

TRU WASTE ONLY

PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014274

TRITIUM WASTE FORM

00959

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Morley	8/20/90

Area	Facility	Unit
200 W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates	N 45445	W 78728
Ending Coordinates	N 45445	W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-44

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 6/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0047	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	9-7-90	GROSS WEIGHT (kg)	141.5
THERMAL POWER	☒ <0.1 W ft³	ORGANIC MATL. VOL % N/A	ORGANIC MATL. WT. (kg) N/A
Dose Rate (mrem/hr)	0.03 at 1 cm	NEUTRON (>20 mrem/hr)	X N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 9-3-~~90~~ 89

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	920.024		
		TOTAL	920.024

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	7~~1~~	24.5
Diatomite	29.~~8~~	24.83
Silica Gel	57.~~82~~	58.5
Steel	~~3.6~~ 4	11.6
Plastic	~~1.8~~ 2	.7
Paper	~~.08~~ 1	.06
TOTALS	100	120.19

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)
N/A	N/A	N/A
	TOTALS	

TRU WASTE ONLY

PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014275

(600) 00900

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Morley	8-20-90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates	N 45445	W 78728
Ending Coordinates	N 45445	W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-45

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 6/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0048	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	9-8-89	GROSS WEIGHT (kg)	160.5

THERMAL POWER ☒ <0.1 W/ft³ | ORGANIC MATL. VOL % N/A | ORGANIC MATL. WT. (kg) N/A

Dose Rate (mrem/hr) 0.04 at 1 cm NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, ~~Paper~~

LBL ID # 9-5-89

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	902		

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	52.~~4~~	87.7
Diatomite	~~12.6~~ 13	25.4
Silica Gel	30.2	16.3
Steel	3.0	9.1
Plastic	~~1.8~~ 2	.8
TOTALS	100	139.3

TOTAL 902

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
		TOTALS			

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014276

(500) 0050 1

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Morb	8/20/91

Area	Facility	Unit
200W	218-W5	TK-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates	N 45445	W 78728
Ending Coordinates	N 45445	W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-46

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 9/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0049	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	9-7-90	GROSS WEIGHT (kg)	166.9
THERMAL POWER	☒ <0.1 W ft³	ORGANIC MATL. VOL %	N/A
ORGANIC MATL. WT. (kg)	N/A		
Dose Rate (mrem/hr)	0.03 at 1 cm	NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic

LBL ID # 9-4-~~90~~ 89

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	913		
TOTAL	913		

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	~~46.7~~ 47	86.6
Diatomite	32	27.2
Silica Gel	17~~.5~~	22.7
Steel	2.0	8.2
Plastic	~~1.8~~ 2	.9
TOTALS	100	145.6

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 - FGE	PE - CI	ALPHA CI
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

je 1 of 1 of D194014502

TRITIUM WASTE FORM (500) 00960

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Morlock

Date: 8/22/90

Area: 200W

Facility: 218-W5

Unit: TR-22

Storage Location (501)

Module: N/A

Tier: N/A

Position: N/A

Disposal Location (D81)

Beginning Coordinates: N 45445 W 78756 RM 28

Ending Coordinates: N 45445 W 78720

Waste Designation: ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-90

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste (4) The charge code is correct

Signature: [signature] Date: 8/26-90

WASTE PACKAGE INFORMATION

PIN: 9002-02-0050

POINT OF ORIGIN: N/A

CONTAINER TYPE: 17H 55-gallon drum

L x W x H OR D x L: N/A

CONTAINER VOLUME (m^3): 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg): 21.3

DATE PACKAGED: 9-7-90

GROSS WEIGHT (kg): 143.8

THERMAL POWER: ☒ <0.1 W/ft³

ORGANIC MATL. VOL %: N/A

ORGANIC MATL. WT. (kg): N/A

Dose Rate (mrem/hr): 0.03 at 1 cm

NEUTRON (>20 mrem/hr): N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 9-2-89

REFERENCES

DOE/NRC 741 NO.: LZA-VUC-4

RSR NO.: N/A

PROPERTY DISPOSAL REQUEST NO.: N/A

SDAR NO.: 23-1A-3J-2

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	925.504		
		TOTAL	925.504

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	9.~~7~~	39.5
Diatomite	18.0	14.9
Silica Gel	3.~~0~~	56.4
Steel	~~66.9~~ 67	10.9
Plastic	~~1.0~~ 2	.7
Paper	~~.07~~ 1	.05
TOTALS	100	122.45

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
	TOTALS				

White: Solid Waste Engineering Yellow: Solid Waste Scheduler Pink: Return to Shipper Goldenrod: Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014278

(500) 01562

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Morley

Date: 8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (DB1)

Beginning Coordinates N 45445 W 78728 RAM

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-47

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. AUNE

Address/Phone: One Cyclotron Road, Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: [signature] Date: 6/20-91

WASTE PACKAGE INFORMATION

PIN: 9002-02-0051

POINT OF ORIGIN: N/A

CONTAINER TYPE: 17H 55-gal. drum

L x W x H OR D x L: N/A

CONTAINER VOLUME (m^3): 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg): 21.3

DATE PACKAGED: 5/22/90

GROSS WEIGHT (kg): 141.1

THERMAL POWER: ☒ <0.1 W ft³

ORGANIC MATL. VOL %: N/A

ORGANIC MATL. WT. (kg): N/A

Dose Rate (mrem/hr): 0.05 at 1 cm

NEUTRON (>20 mrem/hr): N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 5-3-90

REFERENCES

DOE/NRC 741 NO.: LZA-VUC-4

RSR NO.: N/A

PROPERTY DISPOSAL REQUEST NO.: N/A

SDAR NO.: 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	1 ~~7~~	2.7
Diatomite	24 ~~1~~	27.2
Silica Gel	~~64.9~~ 65	76.2
Steel	8 ~~5~~	13.0
Plastic	~~23~~ 1	.6
Paper	~~07~~ 1	.05
TOTALS	100	119.75

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^{3}H	45.08		
TOTAL	45.08		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
[redacted]	[redacted]	[redacted]	N/A	N/A	N/A
U	235-81%, 238-19% Fissile Exempt ~~24~~	14	N/A	N/A	N/A
TOTALS		14 RAM	N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014279

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SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110

Signature - Acceptance	Date
Richard H Morley	8/20/90

Area	Facility	Unit
200W	218-U5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-48

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. AUNE

Address/Phone One Cyclotron Road, Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 8/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0052	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	5/8/90	GROSS WEIGHT (kg)	140.2
THERMAL POWER	☒ <0.1 W ft³	ORGANIC MATL. VOL % N/A	ORGANIC MATL. WT. (kg) N/A
Dose Rate (mrem/hr)	0.04 at 1 cm	NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar,
Diatomite,
Silica Gel,
Steel,
Plastic,
Paper.

LBL ID # 5-2-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

WASTE CONTENTS DESCRIPTION

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ CL ☒ SL ☐ CM ☐ DM ☐ PB ☐ LM ☐ HM ☐ WD ☐ GL ☐ TW ☐ SO ☐ NC

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	5 ~~4~~	8.6
Diatomite	24 ~~3~~	25.0
Silica Gel	61.0	72.8
Steel	8 ~~5~~	11.6
Plastic	~~33~~ 1	.6
Paper	~~07~~ 1	.2
TOTALS	100	118.8

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	38.06		
TOTAL			38.06

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	PU 239 - FGE	PE - Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014280

(500) 01562

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Si

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Morley

Date: 8/20/90

Area: 200W

Facility: 218-W5

Unit: TR-22

Storage Location (S01)

Module: N/A

Tier: N/A

Position: N/A

Disposal Location (DB1)

Beginning Coordinates: N 45445 W 78728

Ending Coordinates: N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-49

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. AUNE

Address/Phone: One Cyclotron Road, Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: [illegible]

Date: 8/20-90

WASTE PACKAGE INFORMATION

PIN: 9002-02-0053

POINT OF ORIGIN: N/A

CONTAINER TYPE: 17H 55-gallon drum

L x W x H OR D x L: N/A

CONTAINER VOLUME (m^3): 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg): 21.3

DATE PACKAGED: 5/22/90

GROSS WEIGHT (kg): 140.6

THERMAL POWER: ☒ <0.1 W/ft³

ORGANIC MATL VOL %: N/A

ORGANIC MATL WT. (kg): N/A

Dose Rate (mrem/hr): 0.05 at 1 cm

NEUTRON (>20 mrem/hr): N/A

Physical Description of Waste and Comments: Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID# 5-4-90

REFERENCES

DOE/NRC 741 NO.: LZA-VUC-4

RSR NO.: N/A

PROPERTY DISPOSAL REQUEST NO.: N/A

SDAR NO.: 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	1~~6~~	2.5
Diatomite	24.0	28.1
Silica Gel	65~~1~~	75.3
Steel	8~~5~~	12.8
Plastic	~~35~~ 1	.6
Paper	~~17~~ 1	.04
TOTALS	100	119.34

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	57.037		
TOTAL			57.037

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 - FGE	PE - Ci	ALPHA Ci
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	N/A	N/A	N/A
U	235-93% 238-7% Fissile Exempt 27	7	N/A	N/A	N/A
TOTALS		7 RAM	N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014282

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SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date	Area	Facility	Unit
Ruben A Mosly	8/20/90	200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-50

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. AUNE

Address/Phone One Cyclotron Road, Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 8/20-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0054	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55-gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	5/22/90	GROSS WEIGHT (kg)	130.2
THERMAL POWER	☒ <0.1 W ft³	ORGANIC MATL. VOL % N/A	ORGANIC MATL. WT. (kg) N/A
Dose Rate (mrem/hr)	0.05 at 1 cm	NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 5-5-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	1 ~~.8~~	2.6
Diatomite	23 ~~.1~~	26.7
Silica Gel	65 ~~.6~~	66.0
Steel	9 ~~.3~~	12.9
Plastic	~~0.33~~ 1	.54
Paper	0 ~~.07~~ 1	.14
TOTALS	100.0	108.88

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	64.0		
TOTAL			64.0

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 - FGE	PE - Ci	ALPHA Ci
NXA	NXA	NXA	N/A	N/A	N/A
U	235-93% 238-7% 24 Fissile Exempt	11	N/A	N/A	N/A
TOTALS		11 RAM	N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014283

(500) 01060

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Morley

Date: 8/20/90

Area	Facility	Unit
200 W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-51

Waste Generator: Lawrence Berkeley Laboratory

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1Cyclotron Road, Berkeley CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR) (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: [signature] Date: 8-20-90

WASTE PACKAGE INFORMATION

PIN: 9002-02-0055

POINT OF ORIGIN: N/A

CONTAINER TYPE: 17 H 55 gallon drum

L x W x H OR D x L: N/A

CONTAINER VOLUME (m^3): 0.21

EMPTY TARE WEIGHT OF CONTAINER (kg): 21.3

DATE PACKAGED: 2-4-90

GROSS WEIGHT (kg): 150.6

THERMAL POWER: ☒ <0.1 W ft³

ORGANIC MATL. VOL %: N/A

ORGANIC MATL. WT. (kg): N/A

Dose Rate (mrem/hr): 0.03 at 1 cm

NEUTRON (>20 mrem/hr): N/a

Physical Description of Waste and Comments: Tar, diatomite, silica gel, steel plastic and paper

LBL ID# 2-4-90

REFERENCES

DOE/NRC 741 NO.: LZA-VUC-4

RSR NO.: N/A

PROPERTY DISPOSAL REQUEST NO.: N/A

SDAR NO.: 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	10	20.82
Diatomite	35	31.15
silica gel	46	65.3
steel	4	11.5
plastic	5	.43
paper	< 0.001	.10
TOTALS	100	129.3

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^{3}H	200.522		
TOTAL	200.522		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 - FGE	FE - CI	ALPHA CI
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014284

(500) 01058

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Moody

Date: 8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-52

Waste Generator: Lawrence Berkeley Laboratory

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune/MS: B75B-107

Address/Phone: 1 Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR) (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste (4) The charge code is correct

Signature: Raymond G. Aune

Date: 6/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0056
POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55 gallon drum
L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21
EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	2-9-90
GROSS WEIGHT (kg)	138.3
THERMAL POWER	XX < 0.1 W ft³
ORGANIC MATL VOL %	N/A
ORGANIC MATL. WT. (kg)	N/A
Dose Rate (mrem/hr)	0.03 at 1 cm
NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments: Tar, Diatomite, Silica Gel, Steel, Plastic and paper

LBL ID # 2-2-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4
RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A
SDAR NO.	N/A 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	10	22.3
Diatomite	35	33.3
Silica Gel	46	69.8
Steel	4	12.4
Plastic	5	.4
Paper	0.001	.10
TOTALS	100	138.3

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	200.027		
TOTAL	200.027		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PU – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014285

(500)

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: R.A. Morley

Date: 8/20/90

Area	Facility	Unit
200W	218-W5	TR22

Storage Location (501)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-53

Waste Generator: LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. AUNE

Address/Phone: One Cyclotron Rd., Berkeley, CA 94720

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: Raymond Aune

Date: 8/26-90

WASTE PACKAGE INFORMATION

PIN 9002-02-0057	POINT OF ORIGIN N/A
CONTAINER TYPE 17H 55-gallon drum	L x W x H OR D x L N/A
CONTAINER VOLUME (m^3) 0.21	EMPTY TARE WEIGHT OF CONTAINER (kg) 21.3
DATE PACKAGED 5-8-90	GROSS WEIGHT (kg) 148.3

THERMAL POWER ☒ <0.1 W/ft³ ORGANIC MATL. VOL % N/A ORGANIC MATL. WT. (kg) N/A

Dose Rate (mrem/hr) 0.04 at 1 cm NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, Diatomite, Silica Gel, Steel, Plastic, Paper

LBL ID # 5-1-90

REFERENCES

DOE/NRC 741 NO. LZA-VUC-4	RSR NO. N/A
PROPERTY DISPOSAL REQUEST NO. N/A	SDAR NO. 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	8.0	9.07
Diatomite	24.1	28.59
Silica Gel	58.6	77.1
Steel	8.5	11.6
Plastic	1.23	.59
Paper	1.07	.05
TOTALS	100	127.0

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	45.07		
TOTAL	45.07		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – CI	ALPHA CI
U	235-93%, 238-7% Fissile Exempt 24	14.0	N/A	N/A	N/A
TOTALS		14.0			

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014288

(5)(X) 91000

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Morley

Date: 8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (DB1)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER - 90-54

Waste Generator: Lawrence Berkeley Laboratory

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron Rd, Ms: B75B, Berkeley CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: Raymond G. Aune

Date: 8/26-9

WASTE PACKAGE INFORMATION

PIN	9002-02-0058	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H 55 gallon drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	2-3-90	GROSS WEIGHT (kg)	139.7
THERMAL POWER	☒ < 0.1 W/ft³	ORGANIC MATL VOL % N/A	ORGANIC MATL WT. (kg) N/A
Dose Rate (mrem/hr)	0.03 at 1 cm	NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar, diatomite, silica gel, steel plastic and paper.

LBL ID # 2-3-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	10	19.1
diatomite	35	28.5
silica gel	46	59.8
Steel	4	10.5
plastic	5	.41
paper	< 0.001	.08
TOTALS	100	118.39

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	199.521		
TOTAL	199.521		

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 - FGE	PE - CI	ALPHA CI
N/A	N/A	N/A	N/A	N/a	N/A
TOTALS					

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

(50C) ...002

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance: Richard A Morley

Date: 8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-55

Waste Generator: Lawrence Berkeley Laboratory

Charge Code, SO No., or MPO No: PO 4688506

WRM No: 9002

Name of Contact (Type or Print Clearly): R. G. Aune

Address/Phone: 1 Cyclotron RD., MS: B75B, Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature: R. G. Aune Date: 8/20-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0059	POINT OF ORIGIN	N/A
CONTAINER TYPE	55 gal drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	1/25/90	GROSS WEIGHT (kg)	157.4
THERMAL POWER	☒ <0.1 W ft³	ORGANIC MATL VOL %	ORGANIC MATL. WT. (kg) N/A
Dose Rate (mrem/hr)	0.03 at 1 cm	NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar, diatomite, plastic steel cans, silica gel, paper

LBL I.D. # 1-4-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	XXXXXX 23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
tar	60	70
Diatomite	26	28.0
Silica Gel	5	26.8
Steel cans	4	11.0
Plastic	5	.4
Paper	< 0.001	.2
TOTALS	100	136.4

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	909.5		
		TOTAL	909.5

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PU – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	n/A
	TOTALS				

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

9002-02-0060

5

START

SWITS LOG SHEETS 1990

Cmpy	Bldg	Area	Waste Type	P W Type	Facility	Unit	Accept Date	PIN Number	Volume	Weight	SWSDR
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-60	.210	134.72	900056
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-61	.210	146.01	900057
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-62	.210	169.69	900058
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-63	.210	337.29	900059
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-64	.210	355.89	900060
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-65	.210	354.98	900061
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-66	.210	329.08	900062
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-67	.210	347.31	900063
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-68.A	.210	348.58	900064
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-69	.210	347.72	900065
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-70	.210	360.01	900066
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-71	.210	378.20	900067
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-72	.210	350.90	900068
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-73	.210	379.11	900069
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-74	.210	337.38	900070
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-75	.210	360.51	900071
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-76	.210	357.70	900072
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-77	.210	332.71	900073
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-78	.210	328.58	900074
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-79	.210	327.72	900075
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-80	.210	339.10	900076
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-81	.210	325.00	900077
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-82	.210	320.01	900078
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-83	.210	361.78	900079
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-84	.210	355.89	900080
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-85	.210	361.42	900081
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-86	.210	354.12	900082
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-87	.210	348.58	900083
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-88	.210	355.89	900084
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-89	.210	358.20	900085
BER	LBLAB	200W	3A	R	218W5	T22	08/20/90	9002-02-91	.210	410.00	900086
BER	LBLAB	200W	3A	R	218W5	T22	08/22/90	9002-02-40	.210	115.39	900087
BER	LBLAB	200W	3A	R	218W5	T22	08/22/90	9002-02-41	.210	133.40	900088
BER	LBLAB	200W	3A	R	218W5	T22	08/22/90	9002-02-42	.210	124.69	900089
BER	LBLAB	200W	3A	R	218W5	T22	08/22/90	9002-02-50	.210	143.79	900090
BER	LBLAB	200W	3A	R	218W5	T22	08/22/90	9002-02-90	4.500	1946.81	900091

Box # 121880

1 of 2

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SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Marty	8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (501)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-56

Waste Generator Lawrence Berkeley Laboratory

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune, MS: B75B

Address/Phone 1 Cyclotron Rd., Berkeley, CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 8/26-90

WASTE PACKAGE INFORMATION

PIN 9002-02-0060	POINT OF ORIGIN N/A
CONTAINER TYPE 17H, 55 gallon drum	L x W x H OR D x L N/A
CONTAINER VOLUME (m^3) 0.21	EMPTY TARE WEIGHT OF CONTAINER (kg) 21.3
DATE PACKAGED 2-1-90	GROSS WEIGHT (kg) 134.7
THERMAL POWER ☒ < 0.1 W/ft³	ORGANIC MATL. VOL % N/A; ORGANIC MATL. WT. (kg) N/A
Dose Rate (mrem/hr) 0.03 at	NEUTRON (>20 mrem/hr) N/A

Physical Description of Waste and Comments

Tar, diatomite, silica gel, steel, plastic and paper

LBL ID # 2-1-90

REFERENCES

DOE/NRC 741 NO. LZA-VUC-4	RSR NO. N/A
PROPERTY DISPOSAL REQUEST NO. N/A	SDAR NO. 23-1A-3J-2

WASTE CONTENTS DESCRIPTION

WASTE CATEGORY (CHECK ONE): ☐ BW ☐ CE ☐ DD ☒ DS ☐ SS ☐ NC

WASTE CODE (CHECK ONE): ☐ FW ☐ HM ☐ CL ☐ WD ☒ SL ☐ GL ☐ CM ☐ TW ☐ DM ☐ SO ☐ PB ☐ NC ☐ LM

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	10	18.0
Diatomite	35	27.2
Silica Gel	46	57.5
Steel	4	10.0
Plastic	5	.5
Paper	< .001	.2
TOTALS	100	113.4

FISSION/ACTIVATION RADIONUCLIDES (Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	150.02		
TOTAL			150.02

TRU/FISSILE/SOURCE MATERIAL (Uranium, Thorium, and TRU elements)

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)
N/A	N/A	N/A
TOTALS		

TRU WASTE ONLY

PU 239 - FGE	PE - Ci	ALPHA Ci
N/A	N/A	N/A

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

ge 1 of 1 of D194014461

(500) 01053

SOLID WASTE STORAGE/DISPOSAL RECORD

Page 1 of 1

START

Storage/Disposal Site

I certify that a physical inspection of the waste packages to the extent possible and a cross check of the applicable documentation have been performed in accordance with TO-100-050 or TO-100-110.

Signature – Acceptance	Date
Richard A Moody	8/20/90

Area	Facility	Unit
200W	218-W5	TR-22

Storage Location (S01)

Module	Tier	Position
N/A	N/A	N/A

Disposal Location (D81)

Beginning Coordinates N 45445 W 78728

Ending Coordinates N 45445 W 78720

Waste Designation ☐ TRU ☒ LLW ☐ MW ☐ C+ ☐ Classified

SWSDR No. (DO NOT WRITE IN THIS SPACE) LBLAB-BER-90-57

Waste Generator LAWRENCE BERKELEY LABORATORY

Charge Code, SO No., or MPO No PO 4688506

WRM No 9002

Name of Contact (Type or Print Clearly) R. G. Aune

Address/Phone 1 Cyclotron Rd., MS/B75B, Berkeley CA 94720 (415) 486-5251

I certify that: (1) No capital property is included in this waste unless documented by a Property Disposal Request and described below. (2) To the best of my knowledge, the information entered below is complete and accurate, and the waste package is in compliance with WHC-EP-0063 and the Storage/Disposal Approval Record (SDAR). (3) Unless designated as Mixed Waste (MW), this waste is not a dangerous waste as defined by Chapter 173-303 WAC or other applicable state or federal regulation governing the management of hazardous waste. (4) The charge code is correct.

Signature [signature] Date 6/26-90

WASTE PACKAGE INFORMATION

PIN	9002-02-0061	POINT OF ORIGIN	N/A
CONTAINER TYPE	17H, 55 gal drum	L x W x H OR D x L	N/A
CONTAINER VOLUME (m^3)	0.21	EMPTY TARE WEIGHT OF CONTAINER (kg)	21.3
DATE PACKAGED	1/29/90	GROSS WEIGHT (kg)	146.0
THERMAL POWER	☒ <0.1 W ft³	ORGANIC MATL. VOL % N/A	ORGANIC MATL. WT. (kg)
Dose Rate (mrem/hr)	0.03 at	NEUTRON (>20 mrem/hr)	N/A

Physical Description of Waste and Comments

Tar, diatomite, plastic, steel cans, silica gel and paper

LBL ID# 1-6-90

REFERENCES

DOE/NRC 741 NO.	LZA-VUC-4	RSR NO.	N/A
PROPERTY DISPOSAL REQUEST NO.	N/A	SDAR NO.	23-1A-3J-2

WASTE CATEGORY (CHECK ONE)

☐ BW
☐ CE
☐ DD
☒ DS
☐ SS
☐ NC

WASTE CONTENTS DESCRIPTION

WASTE DESCRIPTION	VOLUME %	WEIGHT (kg)
Tar	10	20.0
Diatomite	35	30.1
Silica gel	46	63.0
Steel	4	11
Plastic	5	0.4
Paper	< 0.001	0.2
TOTALS	100	124.7

WASTE CODE (CHECK ONE)

☐ FW ☐ HM
☐ CL ☐ WD
☒ SL ☐ GL
☐ CM ☐ TW
☐ DM ☐ SO
☐ PB ☐ NC
☐ LM

FISSION/ACTIVATION RADIONUCLIDES
(Do not include Uranium, Thorium, or TRU elements)

RADIONUCLIDE	Ci	RADIONUCLIDE	Ci
^3H	918.535		
TOTAL	918.535		

TRU/FISSILE/SOURCE MATERIAL *(Uranium, Thorium, and TRU elements)*

ELEMENT	ISOTOPIC DISTRIBUTION (Weight %)	WEIGHT (g)	TRU WASTE ONLY: PU 239 – FGE	PE – Ci	ALPHA Ci
N/A	N/A	N/A	N/A	N/A	N/A
	TOTALS				

White - Solid Waste Engineering Yellow - Solid Waste Scheduler Pink - Return to Shipper Goldenrod - Retained by Shipper 54-6000-226 (07/89)

Appendix F

Regulatory Citations Supporting Redesignation of Waste

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Criteria for Classification of Solid Waste Disposal Facilities and Practices and Criteria for Municipal Solid Waste Landfills: Disposal of Residential Lead-Based Paint Waste

Note: EPA no longer updates this information, but it may be useful as a reference or resource.

[Federal Register: June 18, 2003 (Volume 68, Number 117)]
[Rules and Regulations]
[Page 36487-36495]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr18jn03-14]

ENVIRONMENTAL PROTECTION AGENCY
40 CFR Parts 257 and 258
[FRL-7514-7]
RIN 2050-AE86

Criteria for Classification of Solid Waste Disposal Facilities and Practices and Criteria for Municipal Solid Waste Landfills: Disposal of Residential Lead-Based Paint Waste

AGENCY: Environmental Protection Agency (EPA).
ACTION: Final rule.

SUMMARY: To help accelerate the pace of lead-based paint removal from residences, and thereby reduce exposure to children and adults from the health risks associated with lead, EPA is promulgating a change to its definition of ``municipal solid waste landfill unit'' in both the Criteria for Classification of Solid Waste Disposal Facilities and Practices and the Criteria for Municipal Solid Waste Landfills. In addition, EPA is promulgating two new definitions for ``construction and demolition (C&D) landfill'' and ``residential lead-based paint waste.'' This final rule will expressly allow residential lead-based paint waste that is exempted from the hazardous waste management requirements as household waste to be disposed of in construction and demolition landfills by stating that a construction and demolition landfill accepting residential lead-based paint waste, and no other

household waste, is not a municipal solid waste landfill unit. Today's action would not prevent a municipal solid waste landfill unit from continuing to receive residential lead-based paint waste.

DATES: This final rule will become effective on June 18, 2003. The Agency finds good cause to make this rule effective immediately because today's final rule provides an additional disposal option for residential lead-based paint waste.

ADDRESSES: Copies of the documents relevant to this action (Docket No. RCRA-2001-0017) are available for public inspection during normal business hours from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays, at the RCRA Information Center (RIC), located at EPA West, Room B-102, 1301 Constitution Ave., NW. Washington, DC.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA Hotline at (800) 424-9346 or TDD (800) 553-7672 (hearing impaired). In the Washington, DC, metropolitan area, call (703) 412-9810 or TDD (703) 412-3323.

For information on specific aspects of this rule, contact Paul Cassidy, Municipal and Industrial Solid Waste Division, Office of Solid Waste (mail code 5306W), U.S. Environmental Protection Agency (EPA, HQ), 1200 Pennsylvania Avenue, NW, Washington, DC 20460; (703) 308-7281, cassidy.paul@epa.gov. The index and some supporting materials are available on the Internet. You can find these materials at http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/pb-paint.htm.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Regulated Entities

Entities potentially covered by this regulation are public or private individuals or groups that generate residential lead-based paint (LBP) waste as a result of abatement, rehabilitation, renovation and remodeling in homes, residences, and other households. By ``households,'' we mean single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. Affected categories and entities include:

[[Page 36488]]

Category	Examples of affected entities
Individuals and firms who generate residential LBP wastes.	Contractors and do-it-yourselfers who generate and dispose of residential LBP waste as a result of abatement, rehabilitation, renovation and remodeling in homes, residences, and other households.
Construction and demolition waste disposal firms.	Owners or operators of construction and demolition landfills that accept residential LBP waste for disposal.

The table above is not intended to be exhaustive but, rather, is intended to provide examples of entities likely to be regulated by this action. To determine whether your facility would be impacted by this action, you should carefully examine the applicability criteria in this rule. If you have questions regarding the applicability of this action to a particular facility, please contact Paul Cassidy, U.S. EPA, Office of Solid Waste (5306W), 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone 703-308-7281; e-mail: cassidy.paul@epa.gov.

B. How Can I Get Copies of This Document and Other Related Information?

1. Docket. EPA has established an official public docket for this action under Docket ID No. RCRA-2001-0017. The official public docket consists of the documents specifically referenced in this action, any public comments received and other information related to this action. The official public docket is the collection of materials that is available for public viewing at the RCRA Information Center (RIC), located at EPA West, Room B-102, 1301 Constitution Ave. NW., Washington DC. The Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744. In the Washington, DC, metropolitan area, call 202-566-0270 or TDD 703-412-3323 (hearing impaired). To review the docket materials in person, we recommend that the public make an appointment by calling 202-566-0270. The public can copy a maximum of 100 pages from the docket at no charge. Additional copies cost $0.15/page. If you access the information electronically, you can download or print copies free of charge.

2. Electronic Access. You may access this Federal Register document electronically through the EPA Internet under the ``Federal Register'' listings at http.www.epa.gov/fedrgstr.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at http://www.regulations.gov/ to access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Once in the system, select ``search,'' then key in the appropriate docket identification number. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility identified above in Unit I.B.

C. Acronyms

Acronym	Definition
CDC	Centers of Disease Control and Prevention.
C&D	Construction and Demolition.
CFR	Code of Federal Regulations.
EA	Economic Analysis.
EPA	Environmental Protection Agency.
FR	Federal Register.
HUD	U.S. Department of Housing and Urban Development.

IQ	Intelligence Quotient.
LBP	Lead-Based Paint.
MSWLF	Municipal Solid Waste Landfill.
OMB	Office of Management and Budget.
OPPTS	Office of Prevention, Pesticides, and Toxic Substances.
OSWER	Office of Solid Waste and Emergency Response.
RCRA	Resource Conservation and Recovery Act.
RIC	RCRA Docket Information Center.
TC	Toxicity Characteristic.
TCLP	Toxicity Characteristic Leaching Procedure.
TSCA	Toxic Substances Control Act.
USEPA	United States Environmental Protection Agency.

Outline

I. Legal Authority
II. Summary of Proposed Lead-Based Paint Rule
A. Proposed Change to the Definition of ``Municipal Solid Waste Landfill (MSWLF) Unit''
B. Proposed Definition of ``Construction and Demolition (C&D) Landfill''
C. Proposed Definition of ``Residential Lead-Based Paint Waste''
D. Rationale for Proposed Rule
III. Summary of Public Comments and the Agency's Responses to those Comments
IV. Other Applicable Federal, State, Tribal, and Local Requirements
V. How Will States and Tribes Implement this Rule?
VI. How Does this Rule Comply with Applicable Statutes and Executive Orders? Statutory and Executive Order Reviews
A. Executive Order 12866: Regulatory Planning and Review
B. Paperwork Reduction Act
C. Regulatory Flexibility Act
D. Unfunded Mandates Reform Act
E. Executive Order 13132: Federalism
F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use
I. National Technology Transfer and Advancement Act of 1995
J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
K. Congressional Review Act

I. Legal Authority

EPA is promulgating this rule pursuant to section 1008(a)(3), 2002(a), 4004(a) and 4010(c) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Secs. 6907(a), 6912(a), 6944(a), 6949a(c). We are

also correcting a typographical error in the existing statement of authority in part 257 by amending the citation to 42 U.S.C. 6949(c) to read ``6949a(c).''

II. Summary of Proposed Lead-Based Paint Rule

A. Proposed Change to the Definition of ``Municipal Solid Waste Landfill (MSWLF) Unit''

In its October 23, 2001, proposal (see 66 FR 53566-53573) regarding the disposal of residential lead-based paint waste, the Agency proposed to expressly allow construction and demolition landfills to receive residential lead-based paint (LBP) waste.\1\ This was to be accomplished in part by adding a sentence to the definition of municipal solid waste landfill (MSWLF) unit in 40 CFR 257.2 and 258.2, as follows: ``A

[[Page 36489]]

construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.'' The Agency explained in the preamble to the proposal that the existing definition of a MSWLF unit includes language which states that a disposal unit ``that receives household waste'' is a municipal solid waste landfill unit. This language can be construed to prohibit the disposal of any household waste into a facility that is not designed and operated in conformance with 40 CFR part 258 regulations. As a result the Agency proposed to amend the definition of MSWLF unit, to distinguish residential lead-based paint waste, which has been determined to be a household waste, from other types of household waste, for purposes of disposal.

\1\ EPA published a direct final rule at 66 FR 53535 (Oct. 23, 2001) together with the proposed rule. EPA withdrew the direct final rule after receiving adverse comments. 66 FR 67108 (Dec. 28, 2001). Today's rule is final action on the proposed rule.

The definition as proposed is as follows: ``Municipal solid waste landfill (MSWLF) unit means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined in this section. A MSWLF unit also may continue to receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, and industrial solid waste. Such a landfill may be publicly or privately-owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.''

The proposed change was designed to simply distinguish residential LBP waste from other household wastes. The proposal would not alter what a MSWLF could or could not receive. MSWLFs would be allowed to continue to receive residential LBP waste as household waste. The proposed rule expressly provided an additional land-based waste disposal option for residential LBP waste.

B. Proposed Definition of ``Construction and Demolition Landfill''

The October 23, 2001 notice also proposed to add a definition of a construction and demolition (C&D) waste landfill, which would expressly allow only C&D landfills, and no other types of land disposal units that meet the criteria of 40 CFR part 257, to receive residential LBP waste. The Agency proposed to define a C&D landfill as follows: ``Construction and demolition (C&D) landfill means a solid waste disposal facility subject to the requirements of subparts A or B of this part that receives construction and demolition waste and does not receive hazardous waste (defined in Sec. 261.3 of this chapter) other than conditionally exempt small quantity generator waste (defined in Sec. 261.5 of this chapter), or industrial solid waste (defined in Sec. 258.2 of this chapter). A C&D landfill typically receives any one or more of the following types of solid wastes: roadwork material, excavated material, demolition waste, construction/renovation waste, and site clearance waste.'' The proposed rule would add this definition to 40 CFR parts 257 and 258.

C. Proposed Definition of ``Residential Lead-Based Paint Waste''

Finally, EPA proposed to define ``residential lead-based paint waste'' to clarify the scope of the waste stream addressed by the proposed rule. The proposed definition of residential lead-based paint waste is as follows: ``Residential lead-based paint waste means waste generated as a result of lead-based paint activities (including abatement, rehabilitation, renovation and remodeling) in homes and other residences. The term residential lead-based paint waste includes, but is not limited to, lead-based paint debris, chips, dust, and sludges.'' Not included in the proposed definition of residential LBP waste were residential LBP demolition and deconstruction waste, and LBP waste from nonresidential structures such as public and commercial buildings, warehouses, bridges, water towers, and transmission towers.

In proposing the definition of residential lead-based paint waste, the Agency included these particular LBP activities because they were limited to residences and would pose lead hazards to occupants, especially to children. We included the particular waste types (i.e., debris, chips, dust, and sludges) because they are typically generated during the named LBP activities.

D. Rationale for Proposed Rule

In the preamble to the proposal, EPA explained the Agency's rationale and justification of the proposed changes, as well as the analytical basis for the proposal. The proposal provided a specific discussion of: (1) The reasons that residential lead-based paint is a concern to children; (2) the Congressional enactment of the Residential Lead-Based Paint Hazard Reduction Act of 1992 (hereinafter referred to as Title X of the Housing and Community Development Act of 1992, or Title X); (3) the concerns of stakeholders who have seen the application of RCRA's hazardous waste regulations as a barrier to the cost-effective abatement of lead hazards; (4) the 1988 proposed rule under the Toxic Substances Control Act (TSCA) which proposed new TSCA management and disposal standards for LBP debris generated by contractors from pre-1978 homes and public and commercial buildings; (5) the 1988 temporary suspension of the toxicity characteristic for specified lead-based paint debris under RCRA; and (6) the July 31, 2000

memorandum clarifying the regulatory status under RCRA Subtitle C of wastes generated as a result of LBP activities, including abatements, renovation and remodeling, and rehabilitations in homes and other residences. In the July 31, 2000 memorandum, the Agency interpreted residential LBP waste as a household waste excluded from the hazardous waste management requirements pursuant to the household waste exclusion in 40 CFR 261.4(b)(1), thus giving rise to the proposed amendments to parts 257 and 258 to expand disposal options for residential LBP waste to include C&D landfills, as well as MSWLF units.

III. Summary of Public Comments and the Agency's Response to Those Comments

The Agency received a total of eight comments on the proposed residential LBP waste rule: four from construction and/or demolition trade associations, and one each from a state, an association of state agencies, an environmental organization, and an individual. In general, commenters supported the proposal to allow residential LBP waste to be disposed of in C&D landfills. However, some commenters requested clarifications of the rule or preamble language or suggested additions to the rule language.

Definition of Residential Lead-Based Paint Waste

The state commenter argued that the proposed rule contained a significant flaw by including chips, dust and sludges in the definition of ``residential lead-based paint waste,'' because EPA failed to take into account the potential for sleet, surface-water or wind-borne movement of lead paint chips, dust, and sludges off-site from a C&D landfill. The commenter stated that the placement of LBP dust, chips and sludges in an open environment (i.e., a landfill that does not provide for daily cover) over an extended period of time, e.g., 30 days, may allow a significant rain or wind event to transport lead-containing materials off-site. The commenter

[[Page 36490]]

further stated that sudden intense rain events or winds above 20 to 25 miles per hour can transport lead-containing wastes off-site by surface water or air currents. The commenter suggested that requiring daily cover or special packaging at C&D landfills for the above-mentioned wastes would mitigate the potential for adverse impact from surface water or air transport.

Because other features of C&D landfills and LBP waste handling practices serve to mitigate potential impacts from surface water or air transport, the Agency does not believe that requirements for daily cover or special packaging are needed on the federal level. Surface water transport off-site by sudden intense rain events would constitute ``non-point source'' pollution under the Clean Water Act. To mitigate potential surface water impacts, C&D landfills must comply with 40 CFR 257.3-3(c), which requires that a facility or practice shall not cause non-point source pollution that violates legal requirements implementing an areawide or statewide water quality management plan approved by EPA under the Clean Water Act.

To further mitigate potential water or air transport, both EPA and the U.S. Department of Housing and Urban Development (HUD) have issued guidance for LBP waste management calling for the containment of LBP

wastes in plastic with sealed seams. EPA's ``Reducing Lead Hazards When Remodeling Your Home'' EPA 747-K-97-001 (http://www.epa.gov/lead/rrpamph.pdf) and EPA's Model Renovation Training Course EPA 747-B-00-005/6 (http://www.epa.gov/opptintr/lead/rrmodel.htm) both call for safe and secure disposal. Safe and secure disposal involves placing the LBP wastes in plastic (4-6 mil poly) bags that are sealed closed. HUD modified the EPA training course and developed their own training program to serve the specific needs of HUD's constituents. The HUD training course entitled ``Addressing Lead-Based Paint Hazards During Renovation, Remodeling and Rehabilitation in Federally Owned and Assisted Housing'' (also referred to as ``The 3R Course'') (http://www.hud.gov/offices/lead/training/3r/3r_course.cfm) EXIT Disclaimer was first delivered to remodeling and rehabilitation workers during HUD's nationwide training initiative in 2001-2002. HUD's training recommends that safe disposal of LBP wastes be accomplished by means of plastic bags. Other HUD brochures and documents also recommend that LBP wastes be placed in plastic bags for safe disposal. These brochures include:

``Lead Paint Can Poison: Is Your Family at Risk?''
(http://www.hud.gov/offices/lead/outreach/parents.pdf). EXIT Disclaimer
``Lead Paint Safety--A Field Guide for Painting, Home Maintenance, and Renovation Work''
(http://www.hud.gov/offices/lead/training/LBPguide.pdf). EXIT Disclaimer
``Caution: Lead Paint Handle With Care''
(http://www.hud.gov/offices/lead/outreach/tradesOKAYTOPRINT.pdf).
EXIT Disclaimer
``Lead Paint Can Poison: Protect Your Family When You Repaint or Remodel''.
(http://www.hud.gov/offices/lead/outreach/remodel.pdf) EXIT Disclaimer

HUD also operates the Lead-Based Paint Hazard Control Grant Program that has as its primary purpose to reduce the exposure of young children to lead-based paint hazards in their homes. The program provides grants to State and local governments for control of lead-based paint hazards in privately owned, low income owner-occupied and rental housing. These grants are designed to stimulate the development of a trained and certified hazard evaluation and control industry. Evaluation and hazard control work under the program must be conducted by either contractors who are certified and workers who are trained through a State-accredited program or by contractors trained in lead-safe work practices in the case of interim controls.

Moreover, as of March 1, 2000, lead service providers within the United States must be certified (or licensed) under an EPA authorized lead program. Most of the States have developed and are administering such a program and EPA certifies lead service providers in states that do not have their own programs. As of January 2003, 38 States had EPA-approved state lead programs that actively certify (license) lead service providers.

EPA has also discussed this issue with the National Association of Demolition Contractors (NADC). NADC re-confirmed EPA's understanding that paint chips and dust are managed in plastic bags. NADC stated that lead-based dust is removed with vacuums with HEPA filters and that the vacuum bags are removed and then tied closed prior to disposal. Paint chips that may fall on a plastic sheet are collected in the plastic sheet which is then placed in a tied plastic bag.

As stated above, the EPA believes that sufficient guidance,

literature, training programs, EPA-approved state lead programs, and current practices exist so that whether the LBP waste is in the form of chips, dust, or sludge it will be managed appropriately (i.e., containment in plastic bags on site prior to transport to disposal). At the disposal facility, the containment plastic serves to mitigate against potential impacts of water or wind transport.

Additionally, where water or wind transport are problematic, States have demonstrated their ability, even in the absence of a federal requirement, to impose additional requirements for weekly, monthly, or daily cover as necessary to control particulate releases. According to the 1995 report, ``Construction and Demolition Waste Landfills,'' 14 States require on-site C&D units to provide daily cover, while 19 States require daily cover at off-site C&D units. Based on these C&D landfill features and LBP waste handling practices, the Agency does not believe it is necessary to impose on the federal level a requirement for daily cover at C&D landfills receiving LBP waste.

Two industry association commenters stated that lead-based paint architectural debris generated from all structures, commercial and industrial, as well as, residential, can safely be disposed of in C&D landfills (i.e., Subtitle D facilities). The commenters disagreed with the Agency's statement in the preamble that demolition and deconstruction waste was not similar to household waste. The commenters believe that LBP material handled by the demolition industry in commercial and industrial structures is no more dangerous to public health and the environment than when LBP appears in a residential structure.

The Agency wishes to clarify that today's rule is an outgrowth of the July 31, 2000 Memorandum stating that waste generated as a result of LBP activities in homes and other residences falls within the exclusion for ``household waste'' in 40 CFR 261.4(b)(1). (See 66 FR 53569.) The scope of this rulemaking concerns only residential lead-based paint wastes and not lead-based paint wastes from commercial and industrial structures because lead-based paint waste from commercial and industrial structures does not fall within the exclusion for ``household waste'' in 40 CFR 261.4(b)(1) or the definition of ``household waste'' in 40 CFR 258.2. Thus, residential LBP waste that would otherwise be hazardous waste subject to the hazardous waste management requirements of Subtitle C of RCRA can be managed under Subtitle D of RCRA. The purpose of this rulemaking is to expand Subtitle D disposal options for this particular household waste, which, without today's rule could only be disposed of in municipal solid waste landfills pursuant to 40 CFR part 258.

The July 31, 2000 Memorandum did not affect the regulatory status of

[[Page 36491]]

nonresidential LBP waste, such as that generated during the abatement or renovation and remodeling of a commercial building. ``Household waste'' is defined as ``any material (including garbage, trash and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas).'' (Emphasis added.)

The Agency recognizes that not all lead-based paint waste, whether from residential, commercial, or industrial sources, is ``hazardous waste'' which must be managed under RCRA Subtitle C. Any LBP waste that

is not hazardous waste can be safely disposed of in a Subtitle D landfill, including a C&D waste landfill.

Several commenters stated that the proposed rule was not sufficiently clear as to the distinctions between those LBP activities that generate waste that would qualify as ``residential LBP waste'' (e.g. abatement, rehabilitation, renovation, and remodeling'') and those that would not fall within the scope of the rule (e.g., ``demolition and deconstruction''). One of these commenters stated that the regulated community might believe that there is some deconstruction or demolition occurring whenever you perform rehabilitation, renovation, remodeling, and perhaps to some extent abatement. The commenter suggested that the focus of the final rule be on waste type and not on waste activity.

The Agency distinguishes demolition and deconstruction activities from abatement, rehabilitation, renovation, and remodeling on the basis that demolition and deconstruction result in the elimination of the residential structure, while the residential structure remains where the other listed activities are conducted. The proposed definition of residential lead based paint waste does not include residential demolition and deconstruction activities. The proposed definition was limited to LBP waste that would be subject to Subtitle C of RCRA, except that it is included within the household waste exclusion in 40 CFR 261.4(b)(1). The Agency has applied two criteria to define the scope of the exclusion: (1) The waste must be generated by individuals on the premises of a household, and (2) the waste must be composed primarily of materials found in the wastes generated by consumers in their homes (49 FR 44978 and 63 FR 70241). In the case of LBP wastes, we have determined that demolition and deconstruction, which result in the elimination of the household structure, are outside the scope of the household waste exclusion and therefore are not included in the definition of ``residential LBP waste.'' Although demolition activities and renovation activities may produce some of the same types of waste, the waste type is not a factor for consideration under 40 CFR 261.4(b)(1), and therefore, today's final rule continues to read as proposed. The Agency wants to make it clear that deconstruction and demolition wastes can continue to be placed in construction and demolition waste landfills provided that these types of wastes do not exhibit the toxicity or any other characteristic (i.e., are not a hazardous waste).

One commenter was specifically concerned that the proposed definition of residential lead-based paint waste could create confusion about the scope of activities that are considered ``lead-based paint activities'' under the Toxic Substances Control Act (TSCA). The proposed residential LBP definition states that LBP activities include abatement, rehabilitation, renovation, and remodeling. Regulations promulgated under TSCA define ``lead-based paint activities'' to mean lead inspection, risk assessment, and abatement in the case of target (most pre-1978) housing (see 40 CFR 745.223). Renovation, remodeling, and rehabilitation are not considered lead-based paint activities under Title X. The commenter was concerned that the Agency was trying to change the scope of the TSCA regulation under the proposed RCRA regulation. The commenter suggested that the term lead-based paint activities be deleted and replaced with the phrase ``activities that disturb lead-based paint.''

The Agency did not intend or propose to change the scope of the TSCA regulation in the October 2001 proposal. However, to eliminate any potential confusion, the Agency has decided to change the definition of

residential LBP wastes to eliminate the words ``lead-based paint activities.'' The definition of residential LBP wastes included in today's final rule does not use the term ``lead-based paint activities.'' This definition is as follows: ``Residential lead-based paint waste means waste containing lead-based paint, which is generated as a result of activities such as abatement, rehabilitation, renovation and remodeling in homes and other residences. The term residential lead-based paint waste includes, but is not limited to, lead-based paint debris, chips, dust, and sludges.''

Definition of Construction and Demolition Waste Landfill

A trade association commenter objected to the proposed definition of ``construction and demolition waste landfill'' because the proposed rule would define a C&D waste landfill as one that does not receive ``industrial wastes,'' as defined in section 258.2. The commenter objected because the definition as proposed would preclude a C&D landfill that receives industrial waste in the form of manufacturer's ``off-spec,'' rejected, or damaged construction materials from accepting residential lead-based paint waste. Thus C&D landfills in that state would have to choose between residential LBP waste or off spec., damaged, or rejected construction materials, but not both.

In the proposed definition of construction and demolition waste landfill, the Agency stated that C&D waste landfills were not eligible to receive ``industrial solid wastes as defined in 40 CFR 258.2.'' The definition of ``industrial solid waste'' in section 258.2 covers ``wastes resulting from'' particular manufacturing or industrial processes. In defining C&D landfills, the Agency was concerned about C&D waste landfills receiving wastes generated by manufacturing or industrial processes and, as such, wrote the definition to exclude such wastes. In practice, industrial process wastes are typically managed on-site, or in limited cases, sent off-site to private/commercial industrial waste facilities. Industrial process wastes should not be received for disposal at a C&D waste landfill. The commenter was concerned that off-spec construction products (e.g., toilets or shingles) would not be allowed in a C&D waste landfill because of the proposed definition. However, the Agency views ``off-spec,'' rejected, or damaged construction materials as virtually identical in nature to the type of waste that is appropriately received at a C&D waste landfill and are not ``industrial solid waste'' as defined at 40 CFR 258.2. Because the definition of industrial solid waste does not explicitly include materials that do not meet manufactures' specifications, are damaged or rejected for use, EPA believes that industrial waste in the form of manufacturer's ``off-spec,'' rejected, or damaged construction materials can be appropriately placed in a C&D landfill. In addition, the Agency expects that States would exercise judgment in what is considered industrial wastes. Thus, EPA believes that the definition in today's final rule accommodates disposal of unused construction materials that do not meet

[[Page 36492]]

manufacturers' specifications, are damaged or rejected for use.

Another commenter stated that the definition of C&D landfill as proposed could be interpreted to mean that conditionally exempt small quantity generator waste could be accepted in a 40 CFR part 257 Subpart A facility. The commenter suggested a wording change to eliminate this

possible misinterpretation.

EPA does not intend that a C&D landfill be allowed to receive conditionally exempt small quantity generator wastes if the C&D landfill meets the requirements of 40 CFR part 257 Subpart A, but does not meet the requirements of part 257, subpart B. Therefore, the Agency has changed the definition of C&D waste landfill to eliminate any potential confusion. The definition has been changed to clarify that conditionally exempt small quantity generator wastes can only be disposed of in a C&D landfill that meets the requirements of 40 CFR part 257, Subpart B.

Effect on State Programs

The state association commenter indicated that it is important that EPA be explicit that states are not required to amend their programs to incorporate today's rule; however the commenter also suggested language to assure States that their prior approved programs will not be reopened regardless of whether they adopt today's rule or not. EPA agrees with the comment and has revised the language in Section V. of today's preamble to make this clear.

Lead-Contaminated Soils

Lastly, a commenter stated that EPA had missed a golden opportunity to allow lead-contaminated soils to be managed similarly and requested that EPA move expeditiously to craft a rule to allow lead-contaminated soils to be disposed of in C&D and municipal solid waste landfills. The commenter claimed that the disposal of lead-contaminated soils in C&D landfills and municipal solid waste landfills is environmentally safer than is the disposal of lead-based paint debris. The commenter also argued that the cost of managing those soils that fail the TCLP under the RCRA hazardous waste requirements discourages soil lead abatement from residences. As discussed previously, today's rulemaking is limited to providing the C&D landfill disposal option for residential lead-based paint waste addressed in the July 31, 2000 Memorandum. Lead-contaminated soils were not included in the July 31, 2000 Memorandum, thus EPA is not addressing disposal of lead-contaminated soils at this time.

Summary of Final Rule Changes

This final rule will expressly allow residential lead-based paint waste to be disposed of in construction and demolition waste landfills by clearly stating that a construction and demolition landfill accepting residential lead-based paint waste, and no other household waste, is not a municipal solid waste landfill unit. Today's action does not prevent a municipal solid waste landfill from continuing to receive residential lead-based paint waste. Two minor changes were made to the final regulatory language based on comments received on the proposal. Today's final rule was modified to remove ``LBP activities'' to one that includes ``activities that disturb LBP.'' The definition of construction and demolition waste landfill was changed to eliminate any confusion so that small quantity generator waste can only be disposed of in a facility that meets the requirements of 40 CFR part 257, subpart B.

IV. Other Applicable Federal, State, Tribal, and Local Requirements

Today's final rule would not alter the authority of State, local and Tribal governments to regulate LBP waste more stringently than does EPA. Generators of residential LBP waste should contact the appropriate State environmental agencies to determine if there are additional or more stringent disposal requirements for residential LBP waste. Also, generators are subject to applicable HUD and/or TSCA regulations when addressing residential LBP hazards.

V. How Will States and Tribes Implement This Final Rule?

Because today's final rule is less stringent than existing federal criteria, States are not required to amend their permit programs which have been determined to be adequate under 40 CFR part 239. States have the option of amending statutory or regulatory definitions pursuant to today's final rule. If a state chooses to amend its permit program pursuant to today's action, the State would be required to notify the Regional Administrator of the modification as provided by 40 CFR 239.12. Whether a State chooses to incorporate today's rule into its solid waste program has Statutory and Executive Order Reviews no effect on its existing status with respect to EPA approval, i.e., State revisions will not open previously approved solid waste programs for Federal review.

Today's amendments are directly applicable to landfills in States without an approved permit program under part 239 and in Indian Country. We encourage Tribes to adopt today's rule into their programs to promote lead-based paint abatement activities in homes and other residences in Indian Country.

VI. How Does This Final Rule Comply With Applicable Statutes and Executive Orders?

Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866, EPA must determine whether a regulatory action is significant and therefore subject to Office of Management and Budget (OMB) review and the other provisions of the Executive Order. The Order defines a significant regulatory action as one that is likely to result in a rule that may: (1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or rights and obligations or recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in Executive Order 12866.

It has been determined that this rule is not a ``significant regulatory action'' under the terms of Executive Order 12866 and is therefore not subject to OMB review.

EPA has performed a full economic analysis, ``Economic Analysis of EPA's Final Rule Amending 40 CFR parts 257 and 258,'' which is available in the docket for today's rule. The Economic Analysis concludes that this rule will impose no additional costs to parties,

Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under Section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

[[Page 36494]]

Today's final rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector. This final rule does not impose any enforceable duty on any State, local or tribal governments or the private sector. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132, entitled ``Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ``meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' Policies that have federalism implications' is defined in the Executive Order to include regulations that have ``substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. As explained in Section V. of this preamble, none of today's proposed revisions are more stringent or broaden the scope of the existing Federal requirements. Therefore, States are not required to adopt the revision to the definition of MSWLF unit nor the additional definitions of construction and demolition (C&D) landfill and residential lead-based paint waste in today's rule. Thus, Executive Order 13132 does not apply to this final rule.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled ``Consultation and Coordination with Indian Tribal Governments'' (59 FR 22951, November 6, 2000), requires EPA to develop an accountable process to ensure ``meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' This final rule does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Today's final rule would expressly provide an additional option for disposal of certain waste applicable in Indian Country, but would not create any mandate on Indian tribal governments. Thus, Executive Order

13175 does not apply to this rule.

G. Executive Order 13045: Protection of Children From Environmental Risks and Safety Risks

Executive Order 13045, ``Protection of Children from Environmental Health Risks and Safety Risks'' applies to any rule that: (1) Is determined to be ``economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to Executive Order 13045 because it is not an economically significant rule as defined by Executive Order 12866. However, this rule will affect decisions involving the environmental health or safety risks to children. In fact, it will benefit children by allowing environmentally protective disposal of residential lead-based paint waste in C&D landfills, which is less costly than disposal in MSWLFs in certain areas of the U.S., therefore reducing the cost of lead abatements. Reducing the cost of LBP abatements will also reduce the amount of time needed to complete abatements in public housing. Lower abatement costs may increase the amount of private homes undergoing abatements. By reducing costs associated with the disposal of LBP waste, the Agency believes that the number of abatements may marginally increase, thus resulting in a reduction of the number of children exposed to LBP.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This proposed rule is not a ``significant energy action'' as defined in Executive Order 13211, ``Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355 (May 22, 2001)) because it will not have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub L. 104-113, Sec. 12(d) (15 U.S.C. 272 note) directs us to use voluntary consensus standards in our regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (for example, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when we decide not to use available and applicable voluntary consensus standards. Today's final rule does not involve technical standards, voluntary or otherwise. Therefore, the NTTAA does not apply to today's final rule.

J. Executive Order 12898: Federal Action To Address Justice in Minority Populations and Low-Income Populations

Under Executive Order 12898, ``Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,'' as well as through EPA's April 1995, ``Environmental Justice Strategy, OSWER Environmental Justice Task Force Action Agenda Report,'' and the National Environmental Justice Advisory Council, EPA has undertaken to incorporate environmental justice into its policies and programs. EPA is committed to addressing environmental justice concerns, and is assuming a leadership role in environmental justice

Sec. 258.2 Definitions.

* * * * *

Construction and demolition (C&D) landfill means a solid waste disposal facility subject to the requirements in part 257, subparts A or B of this chapter that receives construction and demolition waste and does not receive hazardous waste (defined in Sec. 261.3 of this chapter) or industrial solid waste (defined in Sec. 258.2 of this chapter). Only a C&D landfill that meets the requirements of 40 CFR part 257, subpart B may receive conditionally exempt small quantity generator waste (defined in Sec. 261.5 of this chapter). A C&D landfill typically receives any one or more of the following types of solid wastes: roadwork material, excavated material, demolition waste, construction/renovation waste, and site clearance waste.

* * * * *

Municipal solid waste landfill (MSWLF) unit means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under Sec. 257.2 of this chapter. A MSWLF unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.

* * * * *

Residential lead-based paint waste means waste containing lead-based paint, which is generated as a result of activities such as abatement, rehabilitation, renovation and remodeling in homes and other residences. The term residential lead-based paint waste includes, but is not limited to, lead-based paint debris, chips, dust, and sludges.

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http://www.epa.gov/osw/hazard/tsd/lead/faq.htm

Questions About the Disposal of Lead-Contaminated Items

1. What is the appropriate disposal method that household consumers should use for their lead-contaminated children's products?
2. If consumers have numerous lead-contaminated toys for disposal, would this be treated differently than a household that had only one or two?
3. What is the appropriate disposal method for apartment complexes, hotels, military bases and hospital facilities?
4. How should retailers manage the items they have in inventory if they decide on disposal? Retailers may have tens of thousands of items in inventory.
5. Should retailers (or manufacturers) treat consumer-returned merchandise differently than inventoried products?
6. Does EPA require testing to determine whether a waste is hazardous?
7. What test method does the EPA recommend to retailers to determine whether their inventory is hazardous? Are there certified laboratories that can conduct these tests?
8. Where can retailers get a copy of the test method?
9. What concentration of lead in an item makes it a "hazardous waste"?
10. Is there a contact person at EPA that can offer retailers guidance on disposal if their inventory is determined to be hazardous?

1. What is the appropriate disposal method that household consumers should use for their lead-contaminated children's products?

EPA's regulations state that wastes from households (i.e., garbage and trash) are not regulated as hazardous waste under RCRA. Household waste includes waste derived from single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreational areas (see 40 CFR 261.4(b)(1)). Therefore, consumers that qualify as a household may dispose of their lead-contaminated toys in the same manner that they discard ordinary household trash. Some states, however, may have more restrictive requirements, and localities may encourage consumers to dispose of such items in household hazardous waste collection events (typically sponsored by the local government); consumers should consult their state and local government for more information.

Top of page

2. If consumers have numerous lead-contaminated toys for disposal, would this be treated differently than a household that had only one or two?

No, EPA's regulations provide that wastes from households are not regulated as hazardous, and there are no limitations on the quantity of the wastes. However, consumers should consult their state or local government as some states or localities have more restrictive requirements.

Top of page

3. What is the appropriate disposal method for apartment complexes, hotels, military bases and hospital facilities

EPA's regulations provide that wastes from single and multiple residences, hotels, motels, bunkhouses, crew quarters, ranger stations, campgrounds, picnic grounds, and day-use recreational areas are considered household wastes and are not regulated as hazardous under the federal RCRA hazardous waste regulations (see 40 CFR 261.4(b)(1)). Waste items generated from military base housing units would also be exempt, provided it was not mixed with other wastes generated on base. These facilities may therefore dispose of the waste lead-contaminated toys in the same manner that they discard other trash or garbage.

Hospitals and other non-residential buildings are not considered generators of household wastes. They are subject to the same disposal requirements that apply to retailers, which are described in the answer to question #4 below. Lead-contaminated items generated from offices, day care centers, and other buildings also would not be considered as coming from a household and thus would not be an exempted household waste.

Top of page

4. How should retailers manage the items they have in inventory if they decide on disposal? Retailers may have tens of thousands of items in inventory.

Once a retailer decides to discard the items, they must: 1) determine whether the items are hazardous waste (see 40 CFR 262.10 and question #6 below); and, if they are hazardous; 2) the retailer must determine its status as a generator because the generator requirements vary depending on the total quantity of hazardous waste generated.

The retailer determines its generator status by calculating how much total hazardous waste he or she generates in a calendar month (40 CFR 262.10(b) and 261.5). If the retailer generates less than 100 kg of hazardous waste (these products plus any other hazardous waste generated on site) then the retailer would be classified as a Conditionally Exempt Small Quantity Generator (CESQG). A retailer

who generates between a 100 kg and 1000 kg of hazardous waste in a calendar month would be classified as a Small Quantity Generator (SQG), while a retailer who generates more than 1000 kg of hazardous waste in a single calendar month is classified as a Large Quantity Generator (LQG). CESQGs have minimal requirements under EPA's hazardous waste regulations (40 CFR 261.5) and may dispose of these items in non-hazardous waste facilities, although disposal must be in State approved facilities. Some states have additional requirements for CESQGs beyond the federal minimum, so retailers should always consult their state hazardous waste agency for complete information on applicable requirements.

Both SQGs and LQGs are subject to more comprehensive hazardous waste requirements under EPA's hazardous waste regulations (40 CFR 262 - 270), and ultimately its disposal in regulated hazardous waste disposal facilities. The requirements for SQGs are similar, but less stringent than those for LQGs. Both SQGs and LQGs may be required to:

- Obtain an EPA identification number (40 CFR 262.12);
- Prepare the hazardous waste for shipment (package, label, mark, placard) (40 CFR 262.30 - 262.33);
- Manifest the hazardous waste for shipment to a hazardous waste treatment, storage, disposal, or recycling facility (40 CFR 262.20 - 262.23, 262.42);
- Manage the hazardous waste on site in an environmentally sound manner (40 CFR 262.34);
- Keep records and/or submit reports (40 CFR 262.40 - 262-41);
- Ensure the hazardous waste meets treatment standards before land disposal (40 CFR 268); and
- Comply with the hazardous waste export and import requirements, when necessary (40 CFR 262 Subpart E and Subpart F).

The retailer should also contact its state hazardous waste agency for more information on management and compliance in its state, because some states may have their own more stringent or different regulations governing hazardous waste.

Top of page

5. Should retailers (or manufacturers) treat consumer-returned merchandise differently than inventoried products?

Generally, retailers may dispose of items returned from consumers and those from inventoried stock either separately or together. A retailer who chooses to handle them separately may take advantage of the household hazardous waste exclusion for the items returned from households. The inventoried stock must be managed as described in the response to question #4. Because only items generated in a household (as defined in 40 CFR 261.4 (b)(1)) are eligible for the household hazardous waste exclusion, the retailer must be certain that items returned from other regulated sources, such as businesses and commercial facilities are not mixed with those from households. The items returned

from sources other than households should be handled with the inventoried stock in accordance with the hazardous waste regulations.

If a retailer does not wish to segregate these items, then all items must be handled as described in question #4.

Top of page

6. Does EPA require testing to determine whether a waste is hazardous?

No, EPA regulations require that a generator of waste determine if that waste is hazardous. The generator may test the waste or use its knowledge of the composition or properties of an item to make that determination (40 CFR 261.11).

For wastes that may be RCRA hazardous (such as items removed from inventory due to high lead content), the generator may also assume that the waste is hazardous and comply with the hazardous waste regulations.

Although testing is not required, if subsequent testing by EPA or others demonstrates that the waste was hazardous, an incorrect determination would leave a waste generator (the retailer or manufacturer) vulnerable to possible enforcement action.

Top of page

7. What test method does the EPA recommend to retailers to determine whether their inventory is hazardous? Are there certified laboratories that can conduct these tests?

The toxicity characteristic leaching procedure (TCLP: Method-1311 (PDF) (35 pp, 288K)) would be used to determine whether lead-contaminated toys are a hazardous waste when disposed (40 CFR 261.24). EPA does not certify laboratories that perform the TCLP test; however, many reputable commercial laboratories are capable of performing the test. Testing labs can be identified by contacting the American Council of Independent Laboratories (ACIL) EXIT Disclaimer, at 202-887-5872.

Top of page

8. Where can retailers get a copy of the test method?

Retailers will generally want to rely on a testing lab to understand the test method details. Copies of the TCLP test method are available as a part of the EPA analytic methods manual, SW-846 (through NTIS, 703-487-4650), or from the analytical methods information communication exchange (MICE)

hotline, at 703-676-4690. Information and method descriptions can also be obtained on the SW-846 test methods Web site.

Top of page

9. What concentration of lead in an item makes it a "hazardous waste"?

The TCLP test uses a sample of the waste and a leaching solution (in a ratio of 1:20). After mixing the waste with the leaching solution, the leaching solution is tested for hazardous constituent concentration. If lead in the leaching solution is present at a concentration greater than or equal to 5 mg/l (or parts-per-million - ppm), the waste would be considered to be hazardous, and would be required to be managed as a hazardous waste.

If the overall concentration of lead in the entire object is less than 100 ppm on a mass basis, then the object, when it has become a waste, would not fail the TC/TCLP. However, if the overall concentration of lead is greater than 100 ppm, the waste may or may not be RCRA hazardous since it is rare that all of the lead present in a waste will leach in the TCLP test. Please note that for the purposes of the TCLP test, the lead concentration of the entire object being discarded is measured, whereas for the CPSIA, total lead content by weight for any part of the product in measured. So, it is possible that an item may be "hazardous" under the CPSIA and not under the RCRA hazardous waste regulations. It may also be possible to estimate a weighted average concentration of lead in the entire object if the weights of the lead-contaminated portions are known, along with the lead concentration in those portions.

Top of page

10. Is there a contact person at EPA that can offer retailers guidance on disposal if their inventory is determined to be hazardous?

For further assistance in understanding the applicable hazardous waste regulations, the retailer should contact the hazardous waste agency in his or her state or the EPA Regional office.

9444.1991(02)

LEAD SHIELDING FOR RADIOACTIVE WASTE IS A RCRA SOLID WASTE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

4-30-91

Gaynor Dawson
Vice President
ICF Kaiser Engineers
601 Williams Blvd., 4th Floor
Richland, WA

Dear Mr. Dawson:

I am writing to respond to your August 17, 1990 letter requesting clarification of the circumstances under which lead shielding for radioactive waste is a solid waste under RCRA. In your letter, you refer to the June 26, 1987 correspondence between the Director of the office of Solid Waste, Marcia Williams, and Terry Husseman, Chair of the Northwest Interstate Compact Committee, which states in part: "... lead whose primary use is shielding in low-level waste disposal operations is not subject to Federal hazardous waste regulations when placed on the land as part of its normal commercial use." This policy is unchanged.

Most recently, this policy was echoed in the October 4, 1989 Agency guidance to NRC licensees, "Guidance on the Definition and Identification of Commercial Mixed Low-level Radioactive and Hazardous waste and Answers to Anticipated Questions." In question 6, on page 4 of the guidance, the issue is raised: "Are lead containers whose primary use is for shielding in disposal operations, hazardous waste under RCRA?" The first paragraph of the response follows:

> No. While lead containers and lead container liners may exhibit the hazardous characteristic for lead, those containers whose primary use is for shielding in low-level waste disposal operations are not considered hazardous wastes and thus, are not subject to the hazardous waste rules. These same containers and liners if disposed of or discarded would be considered wastes and if they exhibit the hazardous characteristic, would be subject to the hazardous waste rules.

RO 13468

In summary, your statement that "... lead containers or container liners [are] not solid wastes when the radioactive waste [is] disposed because the lead shielding continue[s] to fulfill this intended use as shielding, is a correct interpretation of Agency policy. While the lead shielding is not a solid waste, we recommend that it be macroencapsulated prior to disposal in or on the land to prevent the shielding from leaching. When this is done, the environment will be protected from radiation by the lead shielding, and from the leaching of lead by the macroencapsulation of the entire waste package. Please note that this macroencapsulation is not required by the land disposal restrictions, but represents best management practice. Of course, if the shielding is no longer serving its intended use as a commercial product and is discarded, and exhibits a characteristic, it is a solid waste and must meet all Subtitle C requirements, including macroencapsulation before being placed in or on the ground.

Your letter asks several questions regarding lead shielding, some of which were discussed over the phone with Rod Larang of your staff. The first question asks if lead shielding for radioactive wastes is a solid waste when it is disposed under certain conditions.

The first condition is when the shielding is part of an object being disposed, and while necessary for radiation protection during waste handling prior to its disposal in or on the land, is not necessary for radiation protection after the object has been placed in or on the land. Since the shielding is not necessary for radiation protection once the object has been disposed, it becomes a solid waste upon disposal, and therefore must meet all applicable treatment standards.

The second condition concerns lead shielding that is part of a disposed waste package and is necessary for radiation protection after the object has been buried. Here, the lead shielding is fulfilling its intended use as a commercial product, and is not considered a solid waste.

The third condition involves the introduction of shielding during the packaging of radioactive waste in preparation for its disposal. As the lead shielding is necessary only during waste handling in this example, once the shielding is disposed, it becomes a solid waste.

The fourth condition concerns the introduction of shielding during the packaging of the radioactive waste for disposal; the shielding being

RO 13468

necessary for radiation protection after the waste package has been buried. Here the shielding is not a solid waste as long as it is fulfilling its intended use as a commercial 'Product.

Question two reads, "If lead shielding is a solid waste when placed for disposal, it is subject to 40 CFR 268 waste treatment standards (i.e., encapsulation for DOOS waste lead shielding), or are these standards inapplicable because the shielding is not a solid waste until disposal is completed?" As indicated above, if the lead shielding itself is discarded and is no longer fulfilling its intended use as a commercial product, it is a solid waste, and is subject to all applicable treatment standards.

Question three describes a situation where a waste package with nonencapsulated shielding disposed in the past is retrieved in the future in order to treat the waste. In this case, as long as the shielding is fulfilling its intended use, it is not a solid waste. Once the shielding is discarded, however, the shielding becomes a solid waste, as it would no longer be serving the function for which it was intended. As the land disposal restrictions apply prospectively, it is important to know when the shielding was discarded. If it was discarded before the applicable effective land disposal restrictions date for the RCRA hazardous waste, the land disposal restrictions would not apply until it was dug up.

Question four in your letter provides two more examples of the use of lead shielding: radioactive materials passing through a lead pipe, and nonradioactive materials being protected from a radioactive environment by lead. To respond to the subparts of question four, first, the abandonment of buried lead-lined piping which transported radioactive materials and the radioactively contaminated lead-shielded phone cable constitutes disposal of a solid waste. See 40 CFR 261.2 for the definition of solid waste. This lead would be subject to treatment standards under the Land Disposal Restrictions program. Lead contaminated with radioactivity must be macroencapsulated before disposal (55 FR 22628). The piping and cables are wastes once abandoned; redisposing the waste elsewhere would not affect its status as a solid waste. Again, because the land disposal restrictions apply prospectively, if the material was abandoned before the land disposal restrictions effective date for the hazardous waste(s), the land ban would rot apply unless the material was dug up. Liability for the improper disposal of hazardous waste would occur immediately upon such disposal. Violations of the land disposal prohibitions may result in

RO 13468

the issuance of an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both. (RCRA section 3008 (a)(1)). To reiterate, HSWA requires hazardous wastes to meet promulgated treatment standards prior to land disposal. Failure to meet these standards is a violation of HSWA.

Question 5 of your letter asks if, under Section 6001 of RCRA, federal agencies are immune from regulation by authorized states. Section 6001 of RCRA spells out clearly that any part of the Federal government engaging in waste disposal operations is subject to all federal, state, interstate, and local requirements. Moreover, Executive Order 12088 states that the Federal government will comply with all environmental statutes and regulations, including the environmental statutes and regulations of authorized states. Thus, under Section 6001 of RCRA, Federal agencies are not immune from regulation by authorized states.

We hope that this letter answers your concerns regarding the circumstances under which lead shielding for radioactive wastes is or is not a solid waste under RCRA. If you have further questions on this matter, please contact me.

Sincerely,

Richard Kinch, Chief
Waste Treatment Branch

RO 13468

9441.1992(12)

RCRA/Superfund/OUST Hotline Monthly Report Question

May 1992

1. Lead Used as Shielding In Low-Level Radioactive Waste Disposal

   A generator of low-level radioactive waste places the waste in lead or lead-lined containers. These containers, used to dispose of radioactive waste, also serve as shielding. Would the containers, once disposed of in a landfill, be regulated as a mixed waste under both RCRA (because the containers exhibit toxicity characteristics for lead) and the Atomic Energy Act (because they contain radioactive waste)?

No, the containers or container liners would not be regulated as a mixed waste if their primary use is for shielding in disposal operations. Because the containers would be fulfilling their intended use and thus would not be considered discarded under RCRA, they do not meet the definition of a solid waste (40 CFR §261.2(c)(1)(ii)). Since the containers would not meet the definition of solid waste, they would not meet the definition of hazardous waste. A 1987 internal Agency memorandum states, "[i]n this instance, containers or liners may be analogous to commercial chemical products (e.g., pesticides) where as a product, their normal use is placement on the land. Therefore, lead whose primary use is shielding in low-level waste disposal operations is not subject to Federal hazardous waste regulations when placed on the land as part of its normal commercial use. In this example, the containers are not subject to RCRA and are not regulated as mixed waste.

The radioactive waste would, however, be subject to any applicable Atomic Energy Act regulations.

EPA notes, however, that "...lead containers and liners may be equally hazardous to human health and the environment when placed in the ground independent of [the] legal classification as a waste or container. Therefore, EPA recommends that all lead containers and lead liners be managed in an environmentally safe manner (e.g., managed in a permitted hazardous waste facility or treated such that it no longer exhibits its characteristic)" (OSWER Directive 9432.00-2; October 4, 1989).

RO 13538

DOE/NV-1120

Position Paper on the Use of Lead Shielding for the Disposal of Low Level Waste at the Nevada Test Site

Revision 2, June 2, 2005

Approved By:
U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office

Original Signed by Gary Pyles	**05/17/2006**
Gary Pyles, NNSA/NSO, RWAP Task Manager	**Date**

Concur:

Original Signed James B. Zovi	**05/17/2006**
James B. Zovi, Bechtel Nevada, RWAP Manager	**Date**

Prepared By:
Bechtel Nevada, Radioactive Waste Acceptance Program

Original Signed by Michael McKinnon	**05/17/2006**
Michael McKinnon, Senior Engineer, PE, CHP	**Date**
Original Signed by Brian Moran	**05/17/2006**
Brian Moran, Senior Scientist	**Date**
Original Signed by Andrew Rosenman	**05/17/2006**
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DOE/NV-1120

Position Paper on the Use of Lead Shielding for the Disposal of Low Level Waste at the Nevada Test Site

The U.S. Department of Energy, National Nuclear Security Administration/Nevada Site Office (NNSA/NSO) adopted a *Position on the Use of Lead Shielding for the Disposal of Low-Level Radioactive Waste at the Nevada Test Site (NTS)*[1] justifying the use of lead lined containers and bulk lead shielding for disposal of Low Level Radioactive Waste (LLRW) at NTS. The position is based on numerous United States Environmental Protection Agency (EPA) letters from the Office of Solid Waste and Emergency Response (e.g. OSWER Directives) stating lead that provides shielding in disposal operations are not solid wastes.[2] Revision 1 specifically excluded the use of radioactively contaminated lead as shielding. This position was documented in Issue 6 of the "Position Paper on the Proper Characterization and Disposal of Sealed Radioactive Sources", June 1996. The prohibition on the use of radioactively contaminated lead was based on consistency with practices at a commercial disposal facility. The acceptance of the June 1996 position paper on the proper characterization and disposal of sealed radioactive sources was documented in the August 7, 1996 letter from Runore C. Wycoff to distribution. The letter stated, "Based on the above reasoning and with the State of Nevada concurrence, the use of lead for shielding in containers for the disposal of LLRW should be an acceptable practice provided that standard packaging would not reduce the exposure rate to less than 0.005 rem/hr at 30 centimeters and shielding is necessary for radiation protection. The lead being used for shielding cannot be radioactively contaminated when introduced. The addition of lead shielding to LLRW where additional radiation protection is not required is prohibited by RCRA".

The justification for the use of lead shielding was based on EPA's position on the use of lead-lined containers, documented, most notably in OSWER Directive 9432.00-2[3]. The subject guidance addresses the issue of identifying if lead container liners whose primary use is for shielding in disposal operations are hazardous waste under RCRA. The directive stated that while lead container liners may exhibit the hazardous characteristic for lead, those containers whose primary use is for shielding in low-level waste disposal operations are not considered solid waste and thus, not subject to the hazardous waste rules.

The position paper determined that bulk lead introduced into LLRW packages was also not considered a hazardous waste under RCRA as long as the lead was necessary for radiation protection during disposal operations and it was not radioactively contaminated when introduced.

Generators who use the NTS for disposal of LLRW have requested to use radioactively contaminated lead shielding in lieu of radioactively uncontaminated or virgin lead shielding in the disposal packages. The use of radioactively contaminated lead shielding provides U.S. Department of Energy (DOE) generators waste minimization opportunities as opposed to procuring virgin lead. In 2001, the United States DOE Oak Ridge National Laboratory prepared

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[1] NNSA/NSO, *Position on the Use of Lead Shielding for the Disposal of Low-Level Radioactive Waste at the Nevada Test Site*, Revision 1, August 2001

[2] EPA OSWER Letter from Richard Kinch to Gaynor Dawson, "Lead Shielding For Radioactive Waste Is A RCRA Solid Waste", April 30, 1991, RPPC Number 9444.1991(02), Faxback Number 13468, EPA Publication Number Not Applicable; and EPA OSWER Letter from Marcia Williams to Terry Husseman, "Treatment And Disposal Methods For Low-Level Wastes That Contain Uncontaminated Or Radioactive Lead ", June 26, 1987, RPPC Number 9441.1987(52), Faxback Number 12956, EPA Publication Number Not applicable;

[3] EPA OSWER , Memorandum from Jonathan Z. Cannon and Robert Bernero to all All NRC Licensees, "Joint EPA/NRC Guidance on the Definition and Identification of Commercial Mixed Low-Level Radioactive and Hazardous Waste," Directive No. 9432-00-2, October 4, 1989;

a paper titled *Supplemental Release Limits for the Directed Reuse of Lead in Shielding Products* (ORNL/TM-2001/36). The paper included life cycle costs analysis for the use of residual contaminated lead in shielding versus the disposal of the material demonstrating the cost savings and waste minimization opportunities by using residually contaminated lead as shielding in storage disposal containers.

> "The cost comparison of alternatives uses as a baseline the burial of 400 tons annually of contaminated Pb as mixed waste (MW Burial). The value of 400 tons is chosen because it represents the amount of Pb that may be processed annually for directed re-use in radiation shields, the single other alternative considered. Four cost elements—characterization/survey/sorting, packaging, transportation, and disposal—are common to both alternatives. Costs for packaging in strong, tight containers are the same ($69K) in both alternatives, since the number of SeaLand containers required is the same in either case. Transportation costs are also considered to be essentially equivalent (at $25K), since the scrap lead must move from various DOE sites around the continental United States to a fairly central location for either recycling or burial. More extensive characterization, survey and sorting requirements for burial as mixed waste result in higher cost ($186K), compared with the re-use alternative ($6K). A significant difference is also noted in disposal costs for the two alternatives: burial as mixed waste at the EnviroCare disposal facility costs are estimated at $3.00/lb, for a resulting total burial cost of $2,400K – almost twice as expensive as encapsulation of the lead as shielding for an estimated $1.60/lb and a total cost of $1,280K. A cost saving is present in the re-use option as an approximately $800K credit against the price of commercial lead which does not have to be purchased for the construction of radiation shields. The cost comparison, detailed in Attachment 1 (provided by NMR for this analysis), shows that burial of contaminated Pb as mixed waste would cost the DOE approximately $2.7M annually, compared with an annual cost of $0.6M for re-use as encapsulated radiation shields. Directed re-use of the Pb in radiation shields therefore represents a $2.1M annual cost savings for the DOE."[4]

Based on the above reasoning, and with the State of Nevada concurrence, the use of lead for shielding in containers for the disposal of LLW should be an acceptable practice provided the shielding is necessary for radiation protection. The use of contaminated lead shielding would be acceptable under the following conditions:

1. Documentation demonstrating that standard packaging without lead shielding would not reduce the exposure rate to less than 0.005 rem/hr at 30 centimeters and the shielding is necessary for radiation protection must be maintained.

2. Documentation demonstrating that the amount of lead used for shielding is not excessive for each specific container of LLRW. The documentation shall include calculations demonstrating the amount of lead (thickness/quantity) in the container is not excessive by justifying the quantity of lead required in each given container, or on a container-by-container basis. Justification for using the appropriate amount of lead shielding can be demonstrated by a detailed dose rate survey that shows the shielded dose rate exceeds 0.005 rem/hr at 30 cm from the waste package.

[4] DOE ORNL *Supplemental Release Limits for the Directed Reuse of Lead in Shielding Products by the Department of Energy,* ORNL/TM-2001/36, Section 3.5, p. 13, August 2001.

Appendix G

Summary of Green Island Contents and Key Background Information

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Table G-1. Summary of Green Island Contents and Key Background Information

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste Information	Radiological Data		Dangerous Waste Component	Burial Coordinates
01	218-E-10-T09	Hanford PUREX/202A	202A-87-0211S (202A-WHC-87-1)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 76,000 lb	• Paper products, plastic, cloth, stainless steel, other metal, and lead • Container designates as mixed waste due to 240 lb of lead (>100 ppm total concentration) • Additional information is provided in the burial record(s) in Appendix A	Curies	37 Ci Sr-90 37.5 Ci Cs-137 Other MFP 150 Ci total	Lead 240 lb	Unknown
						Dose Rate	90 mR/hr on contact at time of burial		
02	218-E-10-T09	Hanford B Plant/221B	221B-87-0100S (221B-WHC-87-2)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 68,000 lb	• Contains paper products, plastic, cloth, stainless steel, other metal, and lead • Container originally designated as mixed waste due to lead; re-designated due to small quantity (4.8 lb) of lead (<100 ppm) • Additional information is provided in the burial record(s) in Appendix A	Curies	1,000 Ci MFP total	Lead 4.8 lb	Beginning: N 45676 W 55725 Ending: N 45636 W 55725
						Dose Rate	10 mR/hr on contact at time of burial		
03	218-E-10-T09	Hanford PUREX/202A	202A-87-0232S (202A-WHC-87-2)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 77,500 lb	• Contains stainless steel, concrete debris, other metal, and lead • Container designates as mixed waste due to a 270 lb lead (>100 ppm total concentration) counterweight • Additional information is provided in the burial record(s) in Appendix A	Curies	22.5 Ci Sr-90 22.5 Ci Cs-137 other MFP 90 Ci total	Lead 270 lb	Beginning: N 45636 W 55725 Ending: N 45587 W 55725
						Dose Rate	12 mR/hr on contact at time of burial		
04	218-E-10-T09	Hanford B Plant/221B	221B-87-0118S (221B-WHC-87-3)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 68,000 lb	• Contains paper, plastic, cloth, wood, concrete, asbestos, stainless steel, other metal, and lead • Container originally designated as mixed waste due to lead; re-designated due to small quantity (2.2 lb) of lead (<100 ppm) • Additional information is provided in the burial record(s) in Appendix A	Curies	3,750 Ci Sr-90 3,750 Ci Cs-137 other MFP 15,000 Ci total	Lead 2.2 lb Asbestos 2.2 lb	Beginning: N 45587 W 55725 Ending: N 45557 W 55725
						Dose Rate	3,000 mR/hr at 10 ft at time of burial		
05	218-E-10-T09	Hanford B Plant/221B	221B-87-0133S (221B-WHC-87-4)	Standard concrete burial box 22’ 7” × 11’ 8” × 10’ 80,000 lb	• Contains paper, plastic, cloth, stainless steel, other metal, and lead • Container designates as mixed waste due to 40 lb lead wool and wiring (>100 ppm total concentration) • Additional information is provided in the burial record(s) in Appendix A	Curies	5 Ci Sr-90 5 Ci Cs-137 Other MFP >20 Ci total	Lead 40 lb	Beginning: N 45514 W 55725 Ending: N 45539 W 55725
						Dose Rate	>5 R/hr at contact at time of burial		

Table G-1. Summary of Green Island Contents and Key Background Information

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste Information	Radiological Data		Dangerous Waste Component	Burial Coordinates
06	218-E-10-T09	Hanford B Plant/225B (WESF)/271B Support Bldg	271B-91-000289	Burial box made of plastic and fiberboard placed in trench and grouted 19’8” × 7’ 8” × 10’ 8” 148,000 lb including added grout	• HEPA filters, rags, paper, plywood, plastic, rubber, grout, and stainless steel • Originally designated as mixed waste due to the presence of Di-octyl Phthalate (CAS# 117-84-0) as a Washington state carcinogen. The regulatory status of this chemical has changed since the carcinogenic criteria was removed from WAC 173-303 and is now regulated as a toxic constituent (Toxic B). The weight percent of this constituent (6.53 kg [0.0097 wt%]) falls below regulatory levels as a Washington State toxic and therefore no longer designates as mixed waste. • Additional information is provided in the burial record(s) in Appendix A	Curies	204 Ci Cs-137 333 Ci Sr-90 537 Ci total	Di-octyl phthalate 6.53 kg	Beginning: N 45145 W 55725 Ending: N 45180 W 55725
						Dose Rate	5 R/hr at 1 m (3.28 ft)		
07	218-E-10-T09	Hanford B Plant/225B (WESF)/271B Support Bldg	271B-91-000290	Burial box made of plastic and fiberboard placed in trench and grouted 19’8” × 7’ 8” × 10’ 8” 148,000 lb including added grout	• HEPA filters, rags, paper, plywood, plastic, rubber, grout, and stainless steel. • Originally designated as mixed waste due to the presence of Di-octyl Phthalate (CAS# 117-84-0) as a Washington state carcinogen. The regulatory status of this chemical has changed since the carcinogenic criteria was removed from WAC 173-303 and is now regulated as a toxic constituent (Toxic B). The weight percent of this constituent (6.53 kg [0.0097 wt%]) falls below regulatory levels as a Washington State toxic and therefore no longer designates as mixed waste. • Additional information is provided in the burial record(s) in Appendix A	Curies	152 Ci Cs-137 248 Ci Sr-90 400 Ci total	Di-octyl phthalate 6.53 kg	Beginning: N 45105 W 55725 Ending: N 45140 W 55725
						Dose Rate	<3 R/hr at 1 meter		
08	218-W-3A-TS6	Bettis Atomic Power Lab	BETTS-MIN-87-1 (6511-4)	Metal box 10’4” × 5’ 4” × 5’ 9” 9,755 lb	• Dry coolant pump, filters, metal tubing, asbestos, vent screens, fission chambers, wood bracing, and uncontaminated lead (730 lb) as shielding. • Originally designated as mixed waste due to the presence of lead. However, the lead is used for its intended purpose as radiological shielding; therefore, this container is no longer designated as mixed waste. • Additional information is provided in the burial record(s) in Appendix B	Curies	Co-60 Fe-55 Mn-54 Co-58 N-163 C-14 U-235 1.56E-02 Ci total	U235 1.23 g Lead 730 lb Asbestos 15.5% of total noncombustible material volume	Beginning: N 44140 W 77854 Ending: N 44140 W 77860
						Dose Rate	45 mR/hr on contact at time of burial		
09	218-W-3A-TS6	Hanford 300 Area/340	340-87-0199S (340-PNL-87-3)	Five 55-gal Drums	• Each of the 5 containers holds conwed pads, iron, galvanized sheet, paper/cardboard, and sorbed	Curies	MFP 5 mCi	Toluene 675 kg Total	Beginning: N 44140

Table G-1. Summary of Green Island Contents and Key Background Information

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste Information	Radiological Data		Dangerous Waste Component	Burial Coordinates
				1,500 lb total weight (individual container weights are not recorded on burial records)	liquid • Containers are designated as mixed waste due to the presence of toluene • Additional information is provided in the burial record(s) in Appendix B	Dose Rate	1 mR/hr on contact at time of burial		W 77832 Ending: N 44140 W 77828
10	218-W-3A-TS6	Hanford 1608D	1608D-87-0004S	Fifteen 90-gal Fiberglass Drums 15,000 lb total weight (individual container weights are not recorded on burial records)	• Each of the 15 drums contains sludge contaminated with heavy metals, absorbent, and plastic • Containers are designated as mixed waste due to the presence of heavy metals, including barium, cadmium, chromium, lead, mercury, and silver • Additional information is provided in the burial record(s) in Appendix B	Curies	Co-60 Cs-137 Eu-152 Eu-154 Eu-155 33.7 mCi total	Barium 15 lb Cadmium <0.5 lb Chromium 6 lb Lead 16.5 lb Mercury 1.5 lb Silver 3.8 lb	Beginning: N 44140 W 77824 Ending: N 44140 W 77812
						Dose Rate	30 mR/hr on contact at time of burial		
11	218-W-3A-TS6	Hanford 300 Area/340	340-87-0222S 340-87-0223S 340-87-0224S	Three 55-gal Drums 357 lb 297 lb 71 lb	• Each of the 3 drums contains absorbent, glass, and sorbed liquids • Containers are designated as mixed waste due to the presence of dioxane and naphthalene (340-87-0222S), toluene (340-87-0223S), and hydraulic oil (340-87-0224S) • Additional information is provided in the burial record(s) in Appendix B	Curies	Co-60, Cesium, Uranium, Radium each container has MFP 0.5 mCi	Dioxane, Naphthalene 135 kg Toluene 135 kg Hydraulic oil 5 kg	Beginning: N 44140 W 77688 Ending: N 44140 W 77686
						Dose Rate	0.5 mR/hr at contact at time of burial		
12	218-W-3A-TS6	Hanford 1608H	1608H-87-0004S	Nineteen 90-gal Fiberglass Drums 19,000 lb total weight (individual container weights are not recorded on burial records)	• Each of the 19 drums contains sludge contaminated with heavy metals, absorbent, and plastic • Containers are designated as mixed waste due to the presence of heavy metals, including barium, cadmium, chromium, lead, mercury, and silver • Additional information is provided in the burial record(s) in Appendix B	Curies	Co-60 Cs-137 Eu-152 Eu-154 Eu-155 4.40E-02 Ci Total	Barium 20 lb Cadmium <0.8 lb Chromium 8.0 lb Lead 22.0 lb Mercury 2.0 lb Silver 5.0 lb	Beginning: N 44140 W 77588 Ending: N 44140 W 77618
						Dose Rate	20 mR/hr on contact at time of burial		
13	218-W-3A-TS6	Hanford PFP	2345Z-87-0026S	55-gal Drum 90 lb	• Paper, plastic, metal, and amalgamated mercury contained in commercial spill kit • Container is designated as mixed waste due to the presence of mercury (1 lb) • Additional information is provided in the burial record(s) in Appendix B	Curies	MFP 1 m (3.28 ft) Ci total	Amalgamated Mercury 1 lb	Beginning: N 44140 W 77778 Ending: N 44140 W 77768
						Dose Rate	<1 mR/hr on contact at time of burial		

Table G-1. Summary of Green Island Contents and Key Background Information

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste Information	Radiological Data		Dangerous Waste Component	Burial Coordinates
14	218-W-3A-TS6	Hanford 222-S	222-86-13 222-86-14 222-86-16 222-86-17 222-86-23 222-86-24 222-86-25 222-86-26 222-86-27 222-86-28 222-86-32 222-86-33	Twelve 55-gal Drums Drums range in weight from 180 lb to 264 lb	• Each container holds plastic, conwed pads, and sorbed liquid organics, including acetonitrile, xylene, and miscellaneous organics • Containers are designated as mixed waste due to the presence of sorbed organic liquids • Additional information is provided in the burial record(s) in Appendix B	Curies	MFP 1.0E-07 per container	All data is total for all drums: Acetonitrile 56.34 kg Xylene 214.86 kg Methanol 23.82 kg Ethanol 0.83 kg Toluene 2.42 kg Dibutyl-n, n-diethyl carbamyl phosphate 0.83 kg Tributyl phosphate 1.33 kg Normal paraffin hydrocarbon 2.37 kg Trioctylphosphineoxide in cyclohexane 1.87 kg Aliquat-336 0.81 kg N-butyl acetate 2.36 kg Cyclohexanone 4.34 kg Isopropyl alcohol 1.04 kg Ethanol amine 1.04 kg	Beginning: N 44140 W 77778 Ending: N 44140 W 77768
						Dose Rate	0.1 to 3 mR/hr at time of burial		
15	218-W-3A-TS6	Hanford 300 Area/340	340-87-0236S 340-87-0237S 340-87-0238S 340-87-0239S 340-87-0240S 340-87-0241S 340-87-0242S 340-87-0243S	Eight 55-gal Drums Drums range in weight from 325 lb to 1,000 lb	• Drums -236S and -237S contain plastic, assorted metal, and lead; all other drums contain glass, conwed pads, and sorbed liquid • Drums are designated as mixed waste due to the presence of lead (>100 ppm total concentration) and sorbed pseudocumene • Additional information is provided in the burial record(s) in Appendix B	Curies	Drums -236S and -237S have 0.1m Ci Co-60; all others contain 0.1 mCi MFP	Lead 742 kg Total Pseudocumene 150 kg Total	Beginning: N 44140 W 77770 Ending: N 44140 W 77762
						Dose Rate	1 mrem/hr at contact at time of burial		
16	218-W-3A-T19	LBNL	9002-1 Series (see Appendix B for individual container identification numbers)	Thirty 55-gal Drums Drums range in weight from 277 lb to 381 lb	• Each of the drums contains silica gel, asphalt, blacktop, metal, tar, plastic, and dirt contaminated with tritium • Containers are designated as mixed waste due to the presence of tar and asphalt • Additional information is provided in the burial record(s) in Appendix B	Curies	800-1,000 Ci H-3 per drum	Tar/asphalt 1750.28 kg Total	Beginning: N 45160 W 77435 Ending: N 45160 W 77450
						Dose Rate	0.03 mrem/hr at 1 meter at the time of burial		
17	218-W-3AE-T08	LBNL	RTL0194 Series (see Appendix C for individual container identification numbers)	Sixty-three 55-gal Drums Drums range in weight from 200 lb to 284 lb	• Absorbents, plastic, and metal cans contaminated with tritium. • The debris was accepted as low-level only waste, but later declared mixed waste by the generator. • Additional information is provided in the burial record(s) in Appendix C	Curies	80-200 Ci H-3 per drum at time of burial	LBNL waste was disposed as non-dangerous radioactive waste in 1990, 1994, and 1995. LBNL informed DOE of additional process knowledge that these wastes were mixed waste. DOE informed Ecology in March 1996 of the new process knowledge. Ecology determined that some of the process knowledge did not warrant a listed waste designation, but the waste streams cannot be differentiated in the burial records, so it is all presumed to be mixed waste.	Beginning: N 46060 W 76913 Ending: N 46060 W 76909
						Dose Rate	<0.02 mrem/hr at contact at time of burial		

Table G-1. Summary of Green Island Contents and Key Background Information

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste Information	Radiological Data		Dangerous Waste Component	Burial Coordinates
18	218-W-3AE-T05	TRW, Inc.	6803-1 Series (see Appendix C for individual container identification numbers)	Forty-three 55-gal Drums 6,985 lb total weight (individual container weights are not recorded on burial records)	• Natural uranium, depleted uranium, cloth, metal, paper and plastic debris, and silver. • Containers designate as mixed waste due to the presence of silver. • Additional information is provided in the burial record(s) in Appendix C	Curies	255 mCi U	Silver 0.9 kg	Beginning: N 46186 W 76701 Ending: N 46186 W 76709
						Dose Rate	1.2 mR/hr at surface at time of burial		
19	218-W-3AE-T05	Hanford PFP	2345Z-87-0027S	55-gal Drum 190 lb	• Plastic, diatomaceous earth, and aluminum nitrate. • Container designates as mixed waste due to the presence of aluminum nitrate (20 lb) • Additional information is provided in the burial record(s) in Appendix C	Curies	< 2 nCi Pu-239	Aluminum nitrate 9.1 kg	Beginning: N 46186 W 76706 Ending: N 46186 W 76710
						Dose Rate	1 mR/hr at surface at time of burial		
20	218-W-3AE-T05	Hanford 300 Area/340	340-87-0246S 340-87-0247S	Two 55-gal Drums 250 lb 300 lb	• Plastic, lead, absorbent material, beryllium, and absorbed/neutralized hydrochloric acid. • Drums are designated as mixed waste due to the presence of lead and beryllium (WT02). • Additional information is provided in the burial record(s) in Appendix C	Curies	0.5 mCi Co-60 0.5 mCi Be	Lead 77 kg Beryllium 5.7 kg	Beginning: N 46186 W 76708 Ending: N 46186 W 76712
						Dose Rate	0.5 mR/hr on contact at time of burial per container		
21	218-W-4C-T14	Shipping Port	8901-02-1	17’ × 40’ – non containerized equipment 1.8M lb	• The waste is a non-containerized reactor pressure vessel containing lead shielding (8,000 lb). • Originally designated as mixed waste due to the presence of lead. However, the lead is used for its intended purpose as radiological shielding; therefore, this container is no longer designated as mixed waste. • Additional information is provided in the burial record(s) in Appendix D	Curies	1.65E+04 Ci MFP at burial including Co-60, Ni-63, Fe-55, Ni-59	Lead 3,629 kg	Beginning: N 39563 W 77950 Ending: N 39563 W 77902
						Dose Rate	6 mR/hr at contact at time of burial		
22	218-W-4C-T58	Hanford 300 Area/324	324-88-0010S	Lead shielded box with carbon steel 11’6” × 5’1” × 5’2” 39,500 lb	• Rubber, mild steel, stainless steel, carbon steel, and lead (15,800 lb) • Originally designated as mixed waste due to the presence of lead. However, the lead is used for its intended purpose as radiological shielding; therefore, this container is no longer designated as mixed waste. • Additional information is provided in the burial record(s) in Appendix D	Curies	1,250 Ci Cs-137 at time of burial	Lead 7,182 kg	Beginning: N 37910 W 77778 Ending: N 37910 W 77784
						Dose Rate	35,000 mR/hr contact dose rate at time of burial		

Table G-1. Summary of Green Island Contents and Key Background Information

Green Island No.	Landfill and Trench No.	Generator	Container Identification Number	Container Size and Weight	Waste Information	Radiological Data		Dangerous Waste Component	Burial Coordinates
23	218-W-4C-TNC	LBNL	RTL- and RTH- Series (see Appendix D for individual container identification numbers)	Nine 55-gal Drums Twenty-three 150-gal Enduropaks Weight ranges from 264 lb to 613 lb	• All containers hold pyrofoam, absorbents, plastic, and metal contaminated with tritium. • The debris was accepted as LLW, but later declared mixed waste by the generator. • Additional information is provided in the burial record(s) in Appendix D	Curies	1,000 Ci H-3 per container at time of burial	LBNL waste was disposed as non-dangerous radioactive waste in 1990, 1994, and 1995. LBNL informed DOE of additional process knowledge that these wastes were mixed waste. DOE informed Ecology in March 1996 of the new process knowledge. Ecology determined that some of the process knowledge did not warrant a listed waste designation, but the waste streams cannot be differentiated in the burial records, so it is all presumed to be mixed waste.	Beginning: N 40300 W 77896 Ending: N 40300 W 77886
						Dose Rate	<2 mrem/hr at contact at time of burial		
24	218-W-5-T22	LBNL	9002-02 Series (see Appendix E for individual container identification numbers)	Twenty-four 55-gal Drums Weight ranges from 253 lb to 375 lb	• All containers hold paper, tar, diatomite, silica gel, steel, and plastic. • The debris was accepted as LLW, but later declared mixed waste by the generator. • Additional information is provided in the burial record(s) in Appendix E	Curies	800-1,000 Ci H-3 per drum	LBNL waste was disposed as non-dangerous radioactive waste in 1990, 1994, and 1995. LBNL informed DOE of additional process knowledge that these wastes were mixed waste. DOE informed Ecology in March 1996 of the new process knowledge. Ecology determined that some of the process knowledge did not warrant a listed waste designation, but the waste streams cannot be differentiated in the burial records, so it is all presumed to be mixed waste.	Beginning: N 45445 W 78728 Ending: N 45445 W 78720
						Dose Rate	0.03 mrem/hr at contact at time of burial		

CAS = Chemical Abstracts Service
DOE = U.S. Department of Energy
Ecology = Washington State Department of Ecology
ERDF = Environmental Restoration Disposal Facility
HEPA = high-efficiency particulate air
LBNL = Lawrence Berkeley National Laboratory
MFP = mixed fission products
ppm = parts per million
PFP = Plutonium Finishing Plant
PUREX = plutonium-uranium extraction
WESF = Waste Encapsulation and Storage Facility