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Hanford Site Waste Management Units Report

Environmental Data Management

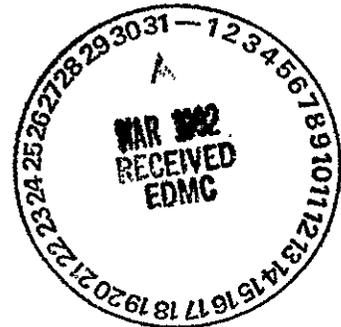
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United States
Department of Energy
P.O. Box 550
Richland, Washington 99352



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CONTENTS

1.0	INTRODUCTION	1-1
1.1	Organization	1-1
1.2	Criteria Used in the Development of the HSWMUR	1-3
1.3	References	1-4
2.0	CROSS REFERENCE OF SITE NAME TO ITS OPERABLE UNIT	2-1
3.0	100 AGGREGATE AREA OPERABLE UNITS	3-1
3.1	100-BC Area	3-3
3.2	100-DR Area	3-55
3.3	100-FR Area	3-103
3.4	100-HR Area	3-135
3.5	100-IU Area	3-157
3.6	100-KR Area	3-177
3.7	100-NR Area	3-219
4.0	200 AGGREGATE AREA OPERABLE UNITS	4-1
4.1	200-BP Area	4-3
4.2	200-IU Area	4-153
4.3	200-NO Area	4-189
4.4	200-PO Area	4-201
4.5	200-RO Area	4-347
4.6	200-SO Area	4-437
4.7	200-SS Area	4-455
4.8	200-TP Area	4-535
4.9	200-UP Area	4-579
4.10	200-ZP Area	4-643
5.0	300 AGGREGATE AREA OPERABLE UNITS	5-1
5.1	300-FF Area	5-3
5.2	300-IU Area	5-95
6.0	1100 AGGREGATE AREA OPERABLE UNITS	6-1
6.1	1100-EM Area	6-3
6.2	1100-IU Area	6-31
APPENDICES		
A.	Definitions and Acronyms	A-1
B.	Information on Unplanned Releases to or from Units	B-1
C.	Operable Unit Maps	C-1

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1.0 INTRODUCTION

The Hanford Site Waste Management Units Report (HSWMUR) was originated to provide information responsive to Section 3004(u) of the Hazardous and Solid Waste Amendments (HSWA) of the 1984 United States Code (USC 1984). This report provides a comprehensive inventory of all types of waste management units at the Hanford Site, including a description of the units and the waste they contain. Waste management units in this report include: 1) Resource Conservation and Recovery Act of 1976 (RCRA) disposal units, 2) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) disposal units, 3) unplanned releases, 4) inactive contaminated structures, 5) RCRA treatment, storage, and disposal (TSD) units, and 6) other storage areas. Because of the comprehensive nature of this report, the listing of sites is more extensive than required by Section 3004(u) of HSWA.

The information in this report is extracted from the Waste Information Data System (WIDS). The WIDS provides additional information concerning the waste management units contained in this report and is maintained current with changes to these units. This report is updated annually if determined necessary per the Hanford Federal Facility Agreement and Consent Order (commonly referred to as the Tri-Party Agreement, Ecology et al. 1990).

This report identifies 1,414 waste management units. Of these, 1,015 units are identified as solid waste management units (SWMU), and 342 are RCRA treatment, storage, and disposal units. The remaining 399 are comprised mainly of one-time spills to the environment, sanitary waste disposal facilities (i.e., septic tanks), and surplus facilities awaiting decontamination and decommissioning.

The RCRA TSD units are designated with their assigned TSD group number (e.g., T-2-1) from the Tri-Party Agreement. (Since all TSD units are SWMUs, the TSD group number also indicates the SWMU standing.)

Inactive waste management units should not be interpreted as "closed" by the definitions of RCRA. Inactive units do not currently receive wastes, nor are they intended to receive wastes in the near future. Active units are in operation and will receive wastes in the future (standby is considered active). Single-shell tanks are inactive units but are defined active storage units under RCRA and therefore are not closed by the definitions of RCRA.

1.1 ORGANIZATION

The waste units at the Hanford Site are grouped into four aggregate areas that reflect the Hanford Site listings on the National Priorities Listing (NPL). These aggregate areas are further divided into operable

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units containing individual waste management units that share similar characteristics and are located within the same general geographical area.

In Sections 3.0 through 6.0 of this report, the four aggregate areas are subdivided into their operable units. The operable units are further divided into two parts: 1) those units assigned to the operable unit that will be remediated as part of the Environmental Restoration Remedial Action Program (ERRA), and 2) those units located within the operable unit boundaries but not assigned (governed by the associated TPA regulations) to the operable unit. Not all operable unit sections contain the second part. These other units are included in this report for reference and are currently planned to be addressed separately under other programs.

BREAKDOWN OF WASTE MANAGEMENT UNITS

ERRA- PROGRAM		OTHER UNITS		TOTAL
RCRA TSD	3004(u) Past Prac. (RCRA/CERCLA)	Surplus Facilities & Misc. Units	RCRA TSD (Non ERRA)	
220 (220 SWMU)	950 (590 SWMU)	122 (83 SWMU)	122 (122 SWMU)	1,414 (1,015)

1.1.1 ENVIRONMENTAL RESTORATION REMEDIAL ACTION PROGRAM

Of the 1,414 waste management units, 1,170 units are assigned to 72 source operable units for subsequent investigation and remediation under the ERRA Program including 220 RCRA units. Schedules for corrective actions on the operable units are prioritized in the Tri-Party Agreement Action Plan. Investigation and remediation of these operable units will be in accordance with Work Plans approved by the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology). As additional waste management units are identified in the investigation of the operable units, they will be added to the WIDS.

1.1.2 OTHER UNITS

Of the 1,414 waste management units, 244 are other units located within the operable unit boundaries but not assigned to that operable unit. These include structures such as reactors and their ancillary facilities which will be decontaminated and decommissioned as part of the Hanford Surplus Facilities Program. These facilities are managed under the Atomic Energy Act of 1954. These units are included in this report because they are considered potential sources of contamination within the operable unit. Corrective actions, such as closure under RCRA or

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expedited responses and waste contents of these other units must be considered in the planning and execution of investigation and remediation activities on the operable units.

Appendix B provides information on unplanned releases (UPRs). These UPRs are not considered separate waste management units but releases into an existing waste management unit (e.g., a spill from a truck within the existing boundaries of a burial ground) or releases resulting in soil contamination from a waste management unit within the same operable unit (e.g., a leak from a single-shell tank). When a waste management unit has an associated unplanned release, it is identified as "UPR-XXX-XX" and cross-referenced to the related waste management unit in the "Known Releases" paragraph.

1.2 CRITERIA USED IN THE DEVELOPMENT OF THE HSWMUR

The criteria used to develop this document are as follows:

1. Only documented evidence of a unit or incident is used as a basis for its inclusion in the report.
2. Waste management units identified as "assigned to an operable unit" versus those designated "within an operable unit area" are as assigned in Appendix C of the Tri-Party Agreement.
3. Unplanned releases from or to waste management units, as well as significant unplanned releases that in and of themselves create a waste management unit, are included in the report. Because the term "significant" is not defined, a minimum limit for including unplanned release information in the report is set at CERCLA reportable quantities for those chemicals defined in Title 40 Code of Federal Regulations (CFR) 302.4, Table 302.4.
4. Tanks or container storage areas within buildings are not included in the report unless a release to the environment has occurred from them or they are designated as RCRA TSD units. All tanks or container storage areas outside of buildings are included in the report.
5. Units that have received only rainwater runoff are not included in the report. Steam condensate units are included in the report.
6. Air releases are included in the report if they have created documented surface contamination.
7. Unplanned releases that did not reach the environment (e.g., spills within a building that did not go to any sewer via building drains) are not included in the report.

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1.3 REFERENCES

EPA, 1990, Federal Register, "Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities," Washington, D.C.

USC, 1984, Hazardous and Solid Waste Amendments of 1984, 42 USC 6901 et sec, U.S. Government Printing Office, Washington, D.C.

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2.0 CROSS REFERENCE OF SITE NAME TO ITS
OPERABLE UNIT, IN SITE NAME ORDER

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OPERABLE UNITSITE NAME

100-BC-1	116-B-1
100-BC-1	116-B-2
100-BC-1	116-B-3
100-BC-1	116-B-4
100-BC-1	116-B-5
100-BC-1	116-B-6A
100-BC-1	116-B-6B
100-BC-1	116-B-7
100-BC-1	116-B-9
100-BC-1	116-B-10
100-BC-1	116-B-11
100-BC-1	116-B-12
100-BC-1	116-B-13
100-BC-1	116-B-14
100-BC-1	116-B-15
100-BC-1	116-B-16
100-BC-1	116-C-1
100-BC-2	116-C-2A
100-BC-2	116-C-2B
100-BC-2	116-C-2C
100-BC-2	116-C-3
100-BC-1	116-C-5
100-BC-2	116-C-6
100-DR-1	116-D-1A
100-DR-1	116-D-1B
100-DR-1	116-D-2
100-DR-1	116-D-3
100-DR-1	116-D-4
100-DR-1	116-D-5
100-DR-1	116-D-6
100-DR-1	116-D-7
100-DR-2	116-D-8
100-DR-1	116-D-9
100-DR-1	116-D-10
100-DR-1	116-DR-1
100-DR-1	116-DR-2
100-DR-2	116-DR-3
100-DR-2	116-DR-4
100-DR-1	116-DR-5
100-DR-2	116-DR-6
100-DR-2	116-DR-7
100-DR-2	116-DR-8
100-DR-1	116-DR-9
100-DR-3	116-DR-10
100-FR-1	116-F-1
100-FR-1	116-F-2
100-FR-1	116-F-3
100-FR-1	116-F-4
100-FR-1	116-F-5
100-FR-1	116-F-6
100-FR-1	116-F-7
100-FR-1	116-F-8
100-FR-1	116-F-9
100-FR-1	116-F-10

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OPERABLE UNIT

SITE NAME

100-FR-1	116-F-11
100-FR-1	116-F-12
100-FR-1	116-F-13
100-FR-1	116-F-14
100-FR-1	116-F-15
100-FR-1	116-F-16
100-HR-1	116-H-1
100-HR-1	116-H-2
100-HR-1	116-H-3
100-HR-1	116-H-4
100-HR-1	116-H-5
100-HR-1	116-H-6
100-HR-1	116-H-7
100-HR-1	116-H-9
100-KR-1	116-K-1
100-KR-1	116-K-2
100-KR-1	116-K-3
100-KR-2	116-KE-1
100-KR-2	116-KE-2
100-KR-2	116-KE-3
100-KR-1	116-KE-4
100-KR-2	116-KE-5
100-KR-2	116-KE-6A
100-KR-2	116-KE-6B
100-KR-2	116-KE-6C
100-KR-2	116-KE-6D
100-KR-2	116-KW-1
100-KR-2	116-KW-2
100-KR-1	116-KW-3
100-KR-2	116-KW-4
100-NR-1	116-N-1
100-NR-1	116-N-2
100-NR-1	116-N-3
100-NR-1	116-N-4
100-NR-1	116-N-8
100-BC-4	118-B-1
100-BC-3	118-B-2
100-BC-3	118-B-3
100-BC-3	118-B-4
100-BC-1	118-B-5
100-BC-3	118-B-6
100-BC-1	118-B-7
100-BC-1	118-B-8
100-BC-1	118-B-9
100-BC-1	118-B-10
100-BC-4	118-C-1
100-BC-2	118-C-2
100-BC-2	118-C-3
100-BC-2	118-C-4
100-DR-3	118-D-1
100-DR-3	118-D-2
100-DR-3	118-D-3
100-DR-3	118-D-4
100-DR-2	118-D-5

OPERABLE UNITSITE NAME

100-DR-1	118-D-6
100-DR-3	118-DR-1
100-DR-2	118-DR-2
100-FR-2	118-F-1
100-FR-2	118-F-2
100-FR-2	118-F-3
100-FR-2	118-F-4
100-FR-2	118-F-5
100-FR-2	118-F-6
100-FR-2	118-F-7
100-FR-1	118-F-8
100-FR-2	118-F-9
100-HR-2	118-H-1
100-HR-2	118-H-2
100-HR-2	118-H-3
100-HR-2	118-H-4
100-HR-2	118-H-5
100-HR-1	118-H-6
100-KR-2	118-K-1
100-KR-2	118-KE-1
100-KR-2	118-KE-2
100-KR-2	118-KW-1
100-KR-2	118-KW-2
100-NR-1	118-N-1
100-BC-1	120-B-1
100-DR-1	120-D-1
100-DR-1	120-D-2
100-FR-2	120-F-1
100-KR-3	120-KE-1
100-KR-3	120-KE-2
100-KR-3	120-KE-3
100-KR-3	120-KE-4
100-KR-3	120-KE-5
100-KR-3	120-KE-6
100-KR-2	120-KE-8
100-KR-3	120-KE-9
100-KR-3	120-KW-1
100-KR-3	120-KW-2
100-KR-3	120-KW-3
100-KR-3	120-KW-4
100-KR-3	120-KW-5
100-KR-2	120-KW-6
100-KR-3	120-KW-7
100-NR-1	120-N-1
100-NR-1	120-N-2
100-NR-1	120-N-3
100-NR-1	120-N-4
100-NR-1	120-N-5
100-NR-1	120-N-6
100-NR-1	120-N-7
100-NR-1	120-N-8
100-DR-2	122-DR-1
100-NR-1	124-N-1
100-NR-1	124-N-2

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OPERABLE UNIT

SITE NAME

100-NR-1	124-N-3
100-NR-1	124-N-4
100-NR-1	124-N-5
100-NR-1	124-N-6
100-NR-1	124-N-7
100-NR-1	124-N-8
100-NR-1	124-N-9
100-NR-1	124-N-10
100-BC-1	126-B-1
100-BC-1	126-B-2
100-BC-1	126-B-3
100-BC-1	126-B-4
100-DR-1	126-D-1
100-DR-1	126-D-2
100-DR-1	126-D-3
100-DR-2	126-DR-1
100-FR-2	126-F-1
100-FR-1	126-F-2
100-HR-2	126-H-1
100-HR-1	126-H-2
100-KR-2	126-K-1
100-KR-3	126-KE-2
100-KR-3	126-KE-3
100-BC-1	128-B-1
100-BC-1	128-B-2
100-BC-1	128-B-3
100-BC-1	128-C-1
100-DR-3	128-D-1
100-DR-1	128-D-2
100-FR-2	128-F-1
100-FR-1	128-F-2
100-FR-2	128-F-3
100-HR-2	128-H-1
100-HR-2	128-H-2
100-HR-2	128-H-3
100-KR-3	128-K-1
100-KR-3	128-K-2
100-NR-1	128-N-1
100-DR-1	130-D-1
100-KR-2	130-K-1
100-KR-2	130-K-2
100-KR-3	130-K-3
100-KR-2	130-KE-1
100-KR-2	130-KE-2
100-KR-2	130-KW-1
100-KR-2	130-KW-2
100-NR-1	130-N-1
100-BC-1	132-B-1
100-BC-1	132-B-2
100-BC-1	132-B-3
100-BC-1	132-B-4
100-BC-1	132-B-5
100-BC-1	132-B-6
100-BC-2	132-C-1

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OPERABLE UNITSITE NAME

100-BC-1 132-C-2
100-BC-2 132-C-3
100-DR-1 132-D-1
100-DR-1 132-D-2
100-DR-1 132-D-3
100-DR-1 132-D-4
100-DR-2 132-DR-1
100-DR-2 132-DR-2
100-FR-1 132-F-3
100-FR-1 132-F-4
100-FR-1 132-F-5
100-FR-1 132-F-6
100-HR-1 132-H-1
100-HR-2 132-H-2
100-HR-1 132-H-3
100-KR-2 132-KE-1
100-KR-2 132-KW-1
200-BP-9 200 Area Construction Pit
200-PO-6 200-E Burning Pit
200-SS-1 200-E Powerhouse Ash Pit
200-SO-1 200-E Powerhouse Ditch
200-BP-10 200-E8 Borrow Pit Demolition Site
200-SS-2 200-W Ash Disposal Basin
200-SS-2 200-W Ashpit Demolition Site
200-SS-2 200-W Burning Pit
200-UP-2 200-W Construction Surface Laydown Area
200-SS-2 200-W Powerhouse Ash Pit
200-TP-2 200-W Powerhouse Pond
200-SO-1 201-C Process Building
200-PO-1 202-A HWSA
200-PO-1 202-A Neutralization Unit
200-RO-3 202-S REDOX
200-RO-2 203-S & 205-S UNH Processing Facilities
200-PO-3 204-AR Waste Unloading Station
200-PO-1 205-A Silica Gel Facility
200-PO-5 207-A Retention Basin
200-BP-8 207-B Retention Basin
200-RO-2 207-S Retention Basin
200-RO-3 207-SL Retention Basin
200-TP-3 207-T Retention Basin
200-UP-2 207-U Retention Basin
200-ZP-2 207-Z Retention Basin
200-PO-1 211-A Neutralization Unit
200-NO-1 212-N Storage Facility
200-NO-1 212-P Storage Facility
200-NO-1 212-R Storage Facility
200-IU-4 213-J & K
200-IU-4 213-J & K Storage Facility
200-SO-1 215-C Gas Preparation Building
200-PO-5 216-A-1
200-PO-2 216-A-2
200-PO-1 216-A-3
200-PO-2 216-A-4
200-PO-2 216-A-5

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<u>OPERABLE UNIT</u>	<u>SITE NAME</u>
200-PO-4	216-A-6
200-PO-5	216-A-7
200-PO-5	216-A-8
200-PO-1	216-A-9
200-PO-2	216-A-10
200-PO-1	216-A-11
200-PO-1	216-A-12
200-PO-1	216-A-13
200-PO-1	216-A-14
200-PO-2	216-A-15
200-PO-5	216-A-16
200-PO-5	216-A-17
200-PO-5	216-A-18
200-PO-5	216-A-19
200-PO-5	216-A-20
200-PO-2	216-A-21
200-PO-1	216-A-22
200-PO-5	216-A-23A
200-PO-5	216-A-23B
200-PO-5	216-A-24
200-IU-6	216-A-25
200-PO-1	216-A-26
200-PO-1	216-A-26A
200-PO-2	216-A-27
200-PO-1	216-A-28
200-PO-5	216-A-29
200-PO-4	216-A-30
200-PO-2	216-A-31
200-PO-1	216-A-32
200-PO-1	216-A-33
200-PO-5	216-A-34
200-PO-1	216-A-35
200-PO-2	216-A-36A
200-PO-2	216-A-36B
200-PO-4	216-A-37-1
200-PO-4	216-A-37-2
200-PO-2	216-A-38-1
200-PO-3	216-A-39
200-PO-1	216-A-40
200-PO-1	216-A-41
200-PO-4	216-A-42
200-PO-2	216-A-45
200-PO-5	216-A-524
200-BP-8	216-B-2-1
200-BP-8	216-B-2-2
200-BP-8	216-B-2-3
200-BP-11	216-B-3
200-BP-11	216-B-3A
200-BP-11	216-B-3B
200-BP-11	216-B-3C
200-BP-11	216-B-3-1
200-BP-11	216-B-3-2
200-BP-11	216-B-3-3
200-BP-6	216-B-4

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<u>OPERABLE UNIT</u>	<u>SITE NAME</u>
200-BP-5	216-B-5
200-BP-6	216-B-6
200-BP-4	216-B-7 A & B
200-BP-4	216-B-8TF
200-BP-5	216-B-9TF
200-BP-6	216-B-10A
200-BP-6	216-B-10B
200-BP-4	216-B-11A & B
200-BP-9	216-B-12
200-BP-6	216-B-13
200-BP-2	216-B-14
200-BP-2	216-B-15
200-BP-2	216-B-16
200-BP-2	216-B-17
200-BP-2	216-B-18
200-BP-2	216-B-19
200-BP-2	216-B-20
200-BP-2	216-B-21
200-BP-2	216-B-22
200-BP-2	216-B-23
200-BP-2	216-B-24
200-BP-2	216-B-25
200-BP-2	216-B-26
200-BP-2	216-B-27
200-BP-2	216-B-28
200-BP-2	216-B-29
200-BP-2	216-B-30
200-BP-2	216-B-31
200-BP-2	216-B-32
200-BP-2	216-B-33
200-BP-2	216-B-34
200-BP-3	216-B-35
200-BP-3	216-B-36
200-BP-3	216-B-37
200-BP-3	216-B-38
200-BP-3	216-B-39
200-BP-3	216-B-40
200-BP-3	216-B-41
200-BP-3	216-B-42
200-BP-1	216-B-43
200-BP-1	216-B-44
200-BP-1	216-B-45
200-BP-1	216-B-46
200-BP-1	216-B-47
200-BP-1	216-B-48
200-BP-1	216-B-49
200-BP-1	216-B-50
200-BP-4	216-B-51
200-BP-2	216-B-52
200-BP-2	216-B-53A
200-BP-2	216-B-53B
200-BP-2	216-B-54
200-BP-9	216-B-55
200-BP-5	216-B-56

OPERABLE UNITSITE NAME

1 2 1 2 1 9 7 0 6 2 3

200-BP-1	216-B-57
200-BP-2	216-B-58
200-BP-5	216-B-59
200-BP-6	216-B-60
200-BP-1	216-B-61
200-BP-9	216-B-62
200-BP-8	216-B-63
200-BP-9	216-B-64
200-SO-1	216-C-1
200-SO-1	216-C-2
200-SO-1	216-C-3
200-SO-1	216-C-4
200-SO-1	216-C-5
200-SO-1	216-C-6
200-SO-1	216-C-7
200-PO-3	216-C-8
200-SO-1	216-C-9
200-SO-1	216-C-10
200-BP-11	216-E-28
200-NO-1	216-N-1
200-NO-1	216-N-2
200-NO-1	216-N-3
200-NO-1	216-N-4
200-NO-1	216-N-5
200-NO-1	216-N-6
200-NO-1	216-N-7
200-IU-6	216-N-8
200-RO-2	216-S-1 & 2
200-RO-2	216-S-3
200-UP-1	216-S-4
200-RO-1	216-S-5
200-RO-1	216-S-6
200-RO-2	216-S-7
200-RO-2	216-S-8
200-RO-2	216-S-9
200-RO-1	216-S-10D
200-RO-1	216-S-10P
200-RO-1	216-S-11
200-RO-3	216-S-12
200-RO-2	216-S-13
200-RO-3	216-S-14
200-RO-2	216-S-15
200-RO-1	216-S-16D
200-RO-1	216-S-16P
200-RO-1	216-S-17
200-RO-2	216-S-18
200-RO-1	216-S-19
200-RO-3	216-S-20
200-UP-1	216-S-21
200-RO-3	216-S-22
200-RO-2	216-S-23
200-RO-1	216-S-25
200-RO-3	216-S-26
200-RO-1	216-S-172

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<u>OPERABLE UNIT</u>	<u>SITE NAME</u>
200-TP-4	216-T-1
200-TP-4	216-T-2
200-TP-4	216-T-3
200-TP-3	216-T-4-1D
200-TP-3	216-T-4-2
200-TP-3	216-T-4A
200-TP-3	216-T-4B
200-TP-1	216-T-5
200-TP-3	216-T-6
200-TP-1	216-T-7TF
200-TP-4	216-T-8
200-TP-4	216-T-9
200-TP-4	216-T-10
200-TP-4	216-T-11
200-TP-3	216-T-12
200-TP-2	216-T-13
200-TP-3	216-T-14
200-TP-3	216-T-15
200-TP-3	216-T-16
200-TP-3	216-T-17
200-TP-2	216-T-18
200-TP-2	216-T-19TF
200-TP-2	216-T-20
200-TP-1	216-T-21
200-TP-1	216-T-22
200-TP-1	216-T-23
200-TP-1	216-T-24
200-TP-1	216-T-25
200-TP-2	216-T-26
200-TP-2	216-T-27
200-TP-2	216-T-28
200-TP-4	216-T-29
200-TP-2	216-T-31
200-TP-1	216-T-32
200-TP-4	216-T-33
200-TP-4	216-T-34
200-TP-4	216-T-35
200-TP-1	216-T-36
200-UP-2	216-U-1 & 2
200-UP-2	216-U-3
200-UP-2	216-U-4
200-UP-2	216-U-4A
200-UP-2	216-U-4B
200-UP-2	216-U-5
200-UP-2	216-U-6
200-UP-2	216-U-7
200-UP-2	216-U-8
200-RO-1	216-U-9
200-UP-1	216-U-10
200-UP-1	216-U-11
200-UP-2	216-U-12
200-UP-1	216-U-13
200-UP-2	216-U-14
200-UP-2	216-U-15

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OPERABLE UNIT

SITE NAME

200-UP-2	216-U-16
200-UP-2	216-U-17
200-SS-2	216-W-LWC
200-ZP-1	216-Z-1 & 2TF
200-ZP-1	216-Z-1A
200-UP-1	216-Z-1D
200-ZP-1	216-Z-3
200-ZP-2	216-Z-4
200-ZP-2	216-Z-5
200-ZP-2	216-Z-6
200-ZP-2	216-Z-7
200-ZP-2	216-Z-8
200-ZP-2	216-Z-9
200-ZP-2	216-Z-10
200-UP-1	216-Z-11
200-ZP-1	216-Z-12
200-ZP-1	216-Z-13
200-ZP-1	216-Z-14
200-ZP-1	216-Z-15
200-ZP-2	216-Z-16
200-ZP-2	216-Z-17
200-ZP-1	216-Z-18
200-UP-1	216-Z-19
200-UP-1	216-Z-20
200-BP-6	217-B Neutralization Unit
200-SO-1	218-C-9
200-PO-1	218-E-1
200-BP-10	218-E-2
200-BP-10	218-E-2A
200-SS-1	218-E-3
200-BP-10	218-E-4
200-BP-10	218-E-5
200-BP-10	218-E-5A
200-BP-6	218-E-6
200-BP-6	218-E-7
200-PO-6	218-E-8
200-BP-10	218-E-9
200-BP-10	218-E-10
200-PO-6	218-E-12A
200-PO-6	218-E-12B
200-PO-1	218-E-13
200-PO-2	218-E-14
200-PO-2	218-E-15
200-ZP-3	218-W-1
200-ZP-3	218-W-1A
200-ZP-3	218-W-2
200-ZP-3	218-W-2A
200-ZP-3	218-W-3
200-ZP-3	218-W-3A
200-ZP-3	218-W-3AE
200-ZP-3	218-W-4A
200-ZP-3	218-W-4B
200-ZP-3	218-W-4C
200-ZP-3	218-W-5

OPERABLE UNITSITE NAME

12121970632

200-PO-3	241-AN-A
200-PO-3	241-AN-B
200-PO-3	241-AP Valve Pit
200-PO-3	241-AP-101
200-PO-3	241-AP-102
200-PO-3	241-AP-103
200-PO-3	241-AP-104
200-PO-3	241-AP-105
200-PO-3	241-AP-106
200-PO-3	241-AP-107
200-PO-3	241-AP-108
200-PO-3	241-AR-151
200-PO-3	241-AW-101
200-PO-3	241-AW-102
200-PO-3	241-AW-103
200-PO-3	241-AW-104
200-PO-3	241-AW-105
200-PO-3	241-AW-106
200-PO-3	241-AW-A
200-PO-3	241-AW-B
200-PO-3	241-AX-101
200-PO-3	241-AX-102
200-PO-3	241-AX-103
200-PO-3	241-AX-104
200-PO-3	241-AX-151
200-PO-3	241-AX-152DS
200-PO-3	241-AX-155
200-PO-3	241-AX-501
200-PO-3	241-AX-A
200-PO-3	241-AX-B
200-PO-3	241-AY-101
200-PO-3	241-AY-102
200-PO-3	241-AY-151
200-PO-3	241-AY-152
200-PO-3	241-AZ-101
200-PO-3	241-AZ-102
200-PO-3	241-AZ-151DS
200-PO-3	241-AZ-152
200-BP-7	241-B-101
200-BP-7	241-B-102
200-BP-7	241-B-103
200-BP-7	241-B-104
200-BP-7	241-B-105
200-BP-7	241-B-106
200-BP-7	241-B-107
200-BP-7	241-B-108
200-BP-7	241-B-109
200-BP-7	241-B-110
200-BP-7	241-B-111
200-BP-7	241-B-112
200-BP-7	241-B-151
200-BP-7	241-B-152
200-BP-7	241-B-153
200-BP-5	241-B-154

OPERABLE UNIT

SITE NAME

200-BP-7	241-B-201
200-BP-7	241-B-202
200-BP-7	241-B-203
200-BP-7	241-B-204
200-BP-7	241-B-252
200-BP-7	241-B-301B
200-BP-5	241-B-302B
200-BP-5	241-B-361
200-BP-7	241-BR-152
200-BP-7	241-BX-101
200-BP-7	241-BX-102
200-BP-7	241-BX-103
200-BP-7	241-BX-104
200-BP-7	241-BX-105
200-BP-7	241-BX-106
200-BP-7	241-BX-107
200-BP-7	241-BX-108
200-BP-7	241-BX-109
200-BP-7	241-BX-110
200-BP-7	241-BX-111
200-BP-7	241-BX-112
200-BP-7	241-BX-153
200-BP-6	241-BX-154
200-BP-6	241-BX-155
200-BP-7	241-BX-302A
200-BP-6	241-BX-302B
200-BP-6	241-BX-302C
200-BP-7	241-BXR-151
200-BP-7	241-BXR-152
200-BP-7	241-BXR-153
200-BP-7	241-BY-101
200-BP-7	241-BY-102
200-BP-7	241-BY-103
200-BP-7	241-BY-104
200-BP-7	241-BY-105
200-BP-7	241-BY-106
200-BP-7	241-BY-107
200-BP-7	241-BY-108
200-BP-7	241-BY-109
200-BP-7	241-BY-110
200-BP-7	241-BY-111
200-BP-7	241-BY-112
200-BP-7	241-BYR-152
200-BP-7	241-BYR-153
200-BP-7	241-BYR-154
200-PO-3	241-C-101
200-PO-3	241-C-102
200-PO-3	241-C-103
200-PO-3	241-C-104
200-PO-3	241-C-105
200-PO-3	241-C-106
200-PO-3	241-C-107
200-PO-3	241-C-108
200-PO-3	241-C-109

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<u>OPERABLE UNIT</u>	<u>SITE NAME</u>
200-PO-3	241-C-110
200-PO-3	241-C-111
200-PO-3	241-C-112
200-PO-3	241-C-151
200-PO-3	241-C-152
200-PO-3	241-C-153
200-PO-3	241-C-201
200-PO-3	241-C-202
200-PO-3	241-C-203
200-PO-3	241-C-204
200-PO-3	241-C-252
200-PO-3	241-C-301C
200-PO-3	241-C-801
200-PO-3	241-CR-151
200-PO-3	241-CR-152
200-PO-3	241-CR-153
200-SO-1	241-CX-70
200-SO-1	241-CX-71
200-SO-1	241-CX-72
200-BP-9	241-ER-151
200-BP-6	241-ER-152
200-PO-3	241-ER-153
200-BP-9	241-ER-311
200-IU-5	241-EW-151
200-RO-4	241-S-101
200-RO-4	241-S-102
200-RO-4	241-S-103
200-RO-4	241-S-104
200-RO-4	241-S-105
200-RO-4	241-S-106
200-RO-4	241-S-107
200-RO-4	241-S-108
200-RO-4	241-S-109
200-RO-4	241-S-110
200-RO-4	241-S-111
200-RO-4	241-S-112
200-RO-2	241-S-151
200-RO-4	241-S-152
200-RO-2	241-S-302A
200-RO-4	241-S-302B
200-RO-4	241-S-A
200-RO-4	241-S-B
200-RO-4	241-S-C
200-RO-4	241-S-D
200-RO-4	241-SX-101
200-RO-4	241-SX-102
200-RO-4	241-SX-103
200-RO-4	241-SX-104
200-RO-4	241-SX-105
200-RO-4	241-SX-106
200-RO-4	241-SX-107
200-RO-4	241-SX-108
200-RO-4	241-SX-109
200-RO-4	241-SX-110

OPERABLE UNITSITE NAME

200-RO-4	241-SX-111
200-RO-4	241-SX-112
200-RO-4	241-SX-113
200-RO-4	241-SX-114
200-RO-4	241-SX-115
200-RO-4	241-SX-151
200-RO-4	241-SX-152
200-RO-2	241-SX-302
200-RO-4	241-SX-401
200-RO-4	241-SX-402
200-RO-4	241-SY-101
200-RO-4	241-SY-102
200-RO-4	241-SY-103
200-RO-4	241-SY-A
200-RO-4	241-SY-B
200-TP-6	241-T-101
200-TP-6	241-T-102
200-TP-6	241-T-103
200-TP-6	241-T-104
200-TP-6	241-T-105
200-TP-6	241-T-106
200-TP-6	241-T-107
200-TP-6	241-T-108
200-TP-6	241-T-109
200-TP-6	241-T-110
200-TP-6	241-T-111
200-TP-6	241-T-112
200-TP-6	241-T-151
200-TP-6	241-T-152
200-TP-6	241-T-153
200-TP-6	241-T-201
200-TP-6	241-T-202
200-TP-6	241-T-203
200-TP-6	241-T-204
200-TP-6	241-T-252
200-TP-6	241-T-301
200-TP-6	241-T-302
200-TP-4	241-T-361
200-TP-6	241-TR-152
200-TP-6	241-TR-153
200-TP-5	241-TX-101
200-TP-5	241-TX-102
200-TP-5	241-TX-103
200-TP-5	241-TX-104
200-TP-5	241-TX-105
200-TP-5	241-TX-106
200-TP-5	241-TX-107
200-TP-5	241-TX-108
200-TP-5	241-TX-109
200-TP-5	241-TX-110
200-TP-5	241-TX-111
200-TP-5	241-TX-112
200-TP-5	241-TX-113
200-TP-5	241-TX-114

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OPERABLE UNITSITE NAME

200-TP-5 241-TX-115
200-TP-5 241-TX-116
200-TP-5 241-TX-117
200-TP-5 241-TX-118
200-TP-2 241-TX-152
200-TP-5 241-TX-153
200-TP-4 241-TX-154
200-TP-2 241-TX-155
200-TP-5 241-TX-302A
200-TP-2 241-TX-302B
200-TP-4 241-TX-302C
200-TP-5 241-TXR-152
200-TP-5 241-TXR-153
200-TP-5 241-TY-101
200-TP-5 241-TY-102
200-TP-5 241-TY-103
200-TP-5 241-TY-104
200-TP-5 241-TY-105
200-TP-5 241-TY-106
200-TP-5 241-TY-153
200-TP-5 241-TY-302A
200-TP-5 241-TY-302B
200-UP-3 241-U-101
200-UP-3 241-U-102
200-UP-3 241-U-103
200-UP-3 241-U-104
200-UP-3 241-U-105
200-UP-3 241-U-106
200-UP-3 241-U-107
200-UP-3 241-U-108
200-UP-3 241-U-109
200-UP-3 241-U-110
200-UP-3 241-U-111
200-UP-3 241-U-112
200-UP-2 241-U-151
200-UP-2 241-U-152
200-UP-3 241-U-153
200-UP-3 241-U-201
200-UP-3 241-U-202
200-UP-3 241-U-203
200-UP-3 241-U-204
200-UP-3 241-U-252
200-UP-3 241-U-301
200-UP-2 241-U-361
200-UP-3 241-U-A
200-UP-3 241-U-B
200-UP-3 241-U-C
200-UP-3 241-U-D
200-UP-3 241-UR-151
200-UP-3 241-UR-152
200-UP-3 241-UR-153
200-UP-3 241-UR-154
200-UP-2 241-UX-154
200-UP-2 241-UX-302A

1 2 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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<u>OPERABLE UNIT</u>	<u>SITE NAME</u>
200-UP-2	241-WR Vault
200-ZP-1	241-Z Treatment Tank
200-ZP-1	241-Z-361
200-PO-3	242-A Evaporator
200-BP-7	242-B Evaporator
200-BP-7	242-B-151
200-RO-4	242-S Evaporator
200-TP-5	242-T Evaporator
200-TP-5	242-T-151
200-PO-3	244-A Receiver Tank
200-PO-3	244-AR Lift Station
200-PO-3	244-AR Vault
200-BP-7	244-BX Receiver Tank
200-BP-7	244-BXR Vault
200-PO-3	244-CR Vault
200-RO-2	244-S Receiver Tank
200-TP-5	244-TX Receiver Tank
200-UP-3	244-U Receiver Tank
200-UP-3	244-UR Vault
200-BP-6	270-E Condensate Neutralization Tank
200-UP-2	271-U Building
200-RO-2	276-S Solvent Facility
200-RO-2	276-S-141
200-RO-2	276-S-142
200-UP-2	276-U Solvent Facility
200-SO-1	291-C Fan and Filter Building
200-SO-1	291-C-1
200-RO-3	291-S Fan and Filter Building
200-RO-3	291-S-1
200-UP-2	291-U Fan and Filter Building
200-UP-2	291-U-1
200-RO-3	292-S Jet Pit House
200-RO-3	293-S Off Gas Treatment
200-RO-3	296-S-1
200-RO-3	296-S-2
200-RO-3	296-S-4
200-RO-3	296-S-6
200-RO-3	296-S-7
200-RO-2	296-S-12
200-RO-3	296-S-13
200-RO-3	296-S-16
200-RO-3	296-S-21
200-UP-2	296-U-10
200-PO-2	299-E24-111
300-FF-1	300 Area Ash Pits
300-FF-1	300 Area Filter Backwash Pond
300-FF-3	300 Area Interim Filter Backwash Disposal
300-FF-3	300 Area Powerhouse HWSA
300-FF-1	300 Area RLWS and 340 Complex
300-FF-1	300 Area Retired Filter Backwash Pond
300-FF-1	300 Area Retired RLWS
300-FF-1	300 Area Sanitary Sewer System
300-FF-2	300 Area Solvent Evaporator
300-FF-2	300 Area Vitrification Test Site

OPERABLE UNITSITE NAME

300-FF-3 303-K Contaminated Waste Storage
300-FF-3 303-M Storage Area
300-FF-3 303-M Uranium Oxide Facility
300-FF-3 304 Concretion Facility
300-FF-3 304 Storage Area
300-FF-3 305-B Storage Facility
300-FF-1 307 Retention Basin
300-FF-3 309-TW-1
300-FF-3 309-TW-2
300-FF-3 309-TW-3
300-FF-3 311 Methanol Tank 1
300-FF-3 311 Methanol Tank 2
300-FF-3 311 Neutralized Waste Tank 1
300-FF-3 311 Neutralized Waste Tank 2
300-FF-3 313 Centrifuge
300-FF-3 313 Copper Remelt Operations
300-FF-3 313 East Side Storage Pad
300-FF-3 313 Filter Press
300-FF-3 313 Methanol Tank
300-FF-3 313 Uranium Recovery Operations
300-FF-3 313 Waste Acid Neutralization Tank
300-FF-3 315 Retired Sanitary Drain Field
300-FF-1 316-1
300-FF-1 316-2
300-FF-1 316-3
300-IU-1 316-4
300-FF-1 316-5
300-FF-3 323 Tank 1
300-FF-3 323 Tank 2
300-FF-3 323 Tank 3
300-FF-3 323 Tank 4
300-FF-3 324 Sodium Removal Pilot Plant
300-FF-3 325 Waste Treatment Facility
300-FF-3 331 LSL Drain Field
300-FF-3 331 LSL Trench 1
300-FF-3 331 LSL Trench 2
300-FF-3 331-C HWSA
300-FF-3 333 Chromium Treatment Tank 1
300-FF-3 333 Chromium Treatment Tank 2
300-FF-3 333 East Side HWSA
300-FF-3 333 East Side Heat Treat Salt Storage Area
300-FF-3 333 Laydown HWSA
300-FF-3 333 West Side Waste Oil Tank
300-FF-3 334 Tank Farm Waste Acid Storage Tank
300-FF-3 334-A Waste Acid Storage Tank 1
300-FF-3 334-A Waste Acid Storage Tank 2
300-FF-3 335 & 336 Retired Sanitary Drain Fields
300-FF-1 340 Complex HWSA
300-FF-3 350 HWSA
300-FF-4 400 Area French Drain 1A
300-FF-4 400 Area French Drain 1B
300-FF-4 400 Area French Drain 2
300-FF-4 400 Area French Drain 3
300-FF-4 400 Area French Drain 4

OPERABLE UNITSITE NAME

300-FF-4 400 Area French Drain 5
300-FF-4 400 Area French Drain 6
300-FF-4 400 Area French Drain 7
300-FF-4 400 Area French Drain 8
300-FF-4 400 Area French Drain 9
300-FF-4 400 Area French Drain 10
300-FF-4 400 Area French Drain 10A
300-FF-4 400 Area Process Pond and Sewer System
300-FF-4 400 Area Retired French Drains
300-FF-4 400 Area Retired Sanitary Pond
300-FF-4 400 Area Retired Septic Tanks
300-FF-4 400 Area Sand Bottom Trench
300-FF-4 400 Area Sanitary Sewer
300-FF-4 400 Area Sanitary Tile Field
300-FF-4 403 French Drain
300-FF-4 427 HWSA
300-FF-4 437 MASF
100-IU-1 600 Area Army Munitions Burial Site
200-IU-5 600 Area Batch Plant HWSA
200-IU-3 600 Area Central Landfill
200-IU-1 600 Area Exploratory Shaft HWSA
200-IU-1 600 Area Exploratory Shaft Septic Tank
200-IU-2 600 Area Near Surface Test Facility Septic Tank
200-IU-2 600 Area Near Surface Test Facility Underground Tank
200-IU-3 600 Area Nonradioactive Dangerous Waste Landfill
200-IU-3 600 Area Original Central Landfill
200-IU-5 616 Nonradioactive Dangerous Waste Storage
300-FF-2 618-1
300-FF-2 618-2
300-FF-2 618-3
300-FF-1 618-4
300-FF-1 618-5
300-FF-3 618-6
300-FF-2 618-7
300-FF-2 618-8
300-FF-2 618-9
300-IU-1 618-10
300-IU-1 618-11
300-FF-1 618-12
300-FF-2 618-13
200-IU-5 622-1
200-IU-5 622-R Septic Tank
100-IU-2 628-1
200-IU-2 628-2
100-DR-1 628-3
300-FF-1 628-4
1100-EM-2 700 Area Waste Solvent Tank
1100-EM-2 1100 Area Bus Shop Underground Hoist Rams
1100-EM-2 1100 Area HWSA
1100-EM-1 1100 Area Hanford Patrol Academy Demolition Site
1100-EM-2 1100 Area Underground Steam Pad Tank 2
1100-EM-2 1100 Area Underground Steam Pad Tank 3
1100-EM-2 1100 Area Used Oil Tank 4
1100-EM-2 1100 Area Used Oil Tank 5

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OPERABLE UNIT

SITE NAME

1100-EM-2	1100 Area Used Oil Tank 6
1100-EM-1	1100-1
1100-EM-1	1100-2
1100-EM-1	1100-3
1100-EM-1	1100-4
100-BC-1	1607-B1
100-BC-1	1607-B2
100-BC-1	1607-B3
100-BC-1	1607-B4
100-BC-1	1607-B5
100-BC-1	1607-B6
100-BC-1	1607-B7
100-BC-2	1607-B8
100-BC-4	1607-B9
100-BC-2	1607-B10
100-BC-2	1607-B11
100-DR-3	1607-D1
100-DR-1	1607-D2
100-DR-2	1607-D3
100-DR-1	1607-D4
100-DR-1	1607-D5
100-FR-2	1607-F1
100-FR-1	1607-F2
100-FR-1	1607-F3
100-FR-1	1607-F4
100-FR-1	1607-F5
100-FR-1	1607-F6
200-IU-2	1607-FSM
100-HR-2	1607-H1
100-HR-1	1607-H2
100-HR-2	1607-H3
100-HR-1	1607-H4
100-KR-3	1607-K1
100-KR-3	1607-K2
100-KR-3	1607-K3
100-KR-2	1607-K4
100-KR-3	1607-K5
100-KR-2	1607-K6
200-SS-1	2101-M Pond
200-SS-1	2607-E1
200-BP-6	2607-E3
200-BP-6	2607-E4
200-SO-1	2607-E5
200-PO-1	2607-E6
200-SO-1	2607-E7A
200-SS-1	2607-E7B
200-SS-1	2607-E8
200-BP-8	2607-E9
200-PO-1	2607-EA
200-BP-7	2607-EB
200-PO-5	2607-EC
200-PO-3	2607-ED
200-PO-3	2607-EG
200-SS-1	2607-EH

OPERABLE UNITSITE NAME

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200-PO-3	2607-EJ
200-SS-1	2607-EK
200-PO-4	2607-EL
200-SS-1	2607-EM
200-SS-1	2607-EP
200-SS-1	2607-EQ
200-SS-1	2607-ER
200-IU-5	2607-FSN
200-SS-1	2607-GF
200-SS-2	2607-W1
200-SS-2	2607-W2
200-TP-4	2607-W3
200-TP-4	2607-W4
200-UP-2	2607-W5
200-RO-3	2607-W6
200-UP-2	2607-W7
200-ZP-2	2607-W8
200-UP-1	2607-W9
200-ZP-2	2607-WA
200-TP-5	2607-WT
200-TP-5	2607-WTX
200-UP-3	2607-WUT
200-ZP-3	2607-WWA
200-RO-1	2607-WZ
200-ZP-1	2607-Z
200-ZP-2	2607-Z8
200-SS-1	2703-E HWSA
200-SS-1	2704-E HWSA
200-RO-3	2711-S Stack Monitoring Building
200-SS-1	2715-EA HWSA
200-RO-3	2718-S Filter Monitoring Building
200-RO-3	2727-S Nonradioactive Dangerous Waste Storage
200-RO-1	2904-S-160
200-RO-1	2904-S-170
200-RO-1	2904-S-171
200-RO-2	2904-SA Sample Building
1100-EM-3	3000 Area 1208 HWSA
1100-EM-3	3000 Area 1226 HWSA
1100-EM-3	3000 Area 1234 Storage Yard
1100-EM-3	3000 Area 1240 HWSA
1100-EM-3	3000 Area Jones Yard HWSA
1100-EM-3	3000 Area Underground Used Oil Tank
300-FF-3	3712 Uranium Scrap Storage Area
300-FF-3	3713 Paint Shop Hazardous Waste Satellite Area
300-FF-3	3713 Sign Shop Hazardous Waste Satellite Area
300-FF-3	3718-F Burn Shed
300-FF-3	3718-F Storage Facility
300-FF-3	3718-F Treatment Tank 1
300-FF-3	3718-F Treatment Tank 2
300-FF-3	3746-D Silver Recovery
300-FF-4	4713-B French Drain
300-FF-4	4713-B HWSA
300-FF-4	4721 French Drain
300-FF-4	4722 Paint Shop HWSA

OPERABLE UNITSITE NAME

300-FF-4	4722-B French Drain
300-FF-4	4722-C French Drain
300-FF-4	4831 Laydown HWSA
300-FF-4	4843 FFTF Sodium Storage
200-IU-3	6607-1
200-IU-3	6607-2
200-IU-1	6607-3
1100-IU-1	6652-C SSL Active Septic Tank
1100-IU-1	6652-C SSL Inactive Septic Tank
1100-IU-1	6652-G ALE Field Storage Building Septic Tank
1100-IU-1	6652-I ALE Headquarters Septic Tank
200-BP-6	B Plant Filter
200-BP-6	B Plant Settle and Decant Tank
200-BP-6	B Plant Storage
200-BP-6	B Plant Waste Piles
300-FF-3	Biological Treatment Test Facilities
200-SS-1	Chemical Tile Field North of 2703-E
100-IU-2	East White Bluffs City Landfill
200-PO-3	Grout Treatment Facility
200-PO-3	Grout Treatment Facility Landfill
200-IU-4	Hanford Townsite Landfill
200-IU-4	Hanford Trailer Camp Landfill
200-BP-9	Hanford Waste Vittrification Plant
1100-EM-1	Horn Rapids Disposal
200-SO-1	Hot Semiworks Valve Pit
300-IU-1	JA Jones 1
100-IU-2	JA Jones 2
200-IU-5	Old Central Shop Area
200-IU-4	P-11
200-PO-1	PUREX Tank E-F11
200-PO-1	PUREX Tank E5
200-PO-1	PUREX Tank F15
200-PO-1	PUREX Tank F16
200-PO-1	PUREX Tank F18
200-PO-1	PUREX Tank G7
200-PO-1	PUREX Tank U3
200-PO-1	PUREX Tank U4
200-PO-1	PUREX Waste Piles
300-FF-3	Physical and Chemical Treatment Test Facilities
200-ZP-3	Radioactive Mixed Waste Storage Facility
1100-IU-1	Rattlesnake Mountain Nike Missile Base
100-IU-1	Riverland Railroad Car Wash Pit
1100-EM-3	Simulated High-Level Waste Slurry Treatment and Storage
100-IU-4	Sodium Dichromate Barrel Disposal Landfill
200-TP-4	T Plant Treatment Tank
300-FF-3	Thermal Treatment Test Facilities
200-BP-6	Tile Field South of 218-E-4
100-FR-1	UN-100-F-1
100-KR-2	UN-100-K-1
100-NR-1	UN-100-N-1
100-NR-1	UN-100-N-2
100-NR-1	UN-100-N-3
100-NR-1	UN-100-N-4
100-NR-1	UN-100-N-5

OPERABLE UNITSITE NAME

100-NR-1 UN-100-N-6
100-NR-1 UN-100-N-7
100-NR-1 UN-100-N-8
100-NR-1 UN-100-N-9
100-NR-1 UN-100-N-10
100-NR-1 UN-100-N-11
100-NR-1 UN-100-N-12
100-NR-1 UN-100-N-13
100-NR-1 UN-100-N-14
100-NR-1 UN-100-N-14
100-NR-1 UN-100-N-15
100-NR-1 UN-100-N-17
100-NR-1 UN-100-N-18
100-NR-1 UN-100-N-19
100-NR-1 UN-100-N-20
100-NR-1 UN-100-N-21
100-NR-1 UN-100-N-22
100-NR-1 UN-100-N-23
100-NR-1 UN-100-N-24
100-NR-1 UN-100-N-25
100-NR-1 UN-100-N-26
100-NR-1 UN-100-N-29
100-NR-1 UN-100-N-30
100-NR-1 UN-100-N-31
100-NR-1 UN-100-N-32
100-NR-1 UN-100-N-33
100-NR-1 UN-100-N-34
100-NR-1 UN-100-N-35
200-BP-6 UN-200-E-1
200-BP-6 UN-200-E-2
200-BP-6 UN-200-E-3
200-BP-5 UN-200-E-7
200-BP-1 UN-200-E-9
200-PO-1 UN-200-E-10
200-PO-1 UN-200-E-11
200-PO-1 UN-200-E-12
200-PO-2 UN-200-E-13
200-BP-11 UN-200-E-14
200-PO-1 UN-200-E-15
200-PO-3 UN-200-E-16
200-PO-3 UN-200-E-18
200-PO-1 UN-200-E-19
200-PO-1 UN-200-E-20
200-PO-2 UN-200-E-22
200-PO-2 UN-200-E-25
200-PO-1 UN-200-E-26
200-PO-3 UN-200-E-27
200-PO-1 UN-200-E-28
200-PO-1 UN-200-E-31
200-PO-1 UN-200-E-33
200-SO-1 UN-200-E-36
200-SO-1 UN-200-E-37
200-PO-2 UN-200-E-39
200-PO-2 UN-200-E-40
200-BP-6 UN-200-E-41

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OPERABLE UNIT

SITE NAME

200-PO-1	UN-200-E-42
200-BP-7	UN-200-E-43
200-BP-6	UN-200-E-44
200-BP-5	UN-200-E-45
200-PO-3	UN-200-E-47
200-PO-3	UN-200-E-48
200-PO-1	UN-200-E-49
200-BP-6	UN-200-E-52
200-BP-6	UN-200-E-54
200-BP-6	UN-200-E-55
200-PO-5	UN-200-E-56
200-PO-1	UN-200-E-58
200-PO-1	UN-200-E-60
200-BP-10	UN-200-E-61
200-PO-6	UN-200-E-62
200-BP-1	UN-200-E-63
200-BP-9	UN-200-E-64
200-PO-1	UN-200-E-65
200-PO-5	UN-200-E-67
200-PO-3	UN-200-E-68
200-BP-6	UN-200-E-69
200-PO-3	UN-200-E-72
200-BP-7	UN-200-E-76
200-BP-7	UN-200-E-79
200-BP-6	UN-200-E-80
200-PO-3	UN-200-E-81
200-PO-3	UN-200-E-82
200-BP-2	UN-200-E-83
200-BP-6	UN-200-E-85
200-PO-3	UN-200-E-86
200-BP-6	UN-200-E-87
200-PO-1	UN-200-E-88
200-BP-1	UN-200-E-89
200-BP-6	UN-200-E-90
200-PO-3	UN-200-E-91
200-BP-11	UN-200-E-92
200-PO-3	UN-200-E-94
200-BP-10	UN-200-E-95
200-PO-1	UN-200-E-96
200-PO-2	UN-200-E-97
200-SO-1	UN-200-E-98
200-PO-3	UN-200-E-99
200-PO-3	UN-200-E-100
200-BP-7	UN-200-E-101
200-BP-6	UN-200-E-103
200-BP-7	UN-200-E-105
200-PO-3	UN-200-E-107
200-BP-7	UN-200-E-109
200-BP-1	UN-200-E-110
200-BP-10	UN-200-E-112
200-PO-1	UN-200-E-114
200-PO-2	UN-200-E-117
200-PO-3	UN-200-E-118
200-BP-6	UN-200-E-140

OPERABLE UNITSITE NAME

200-SO-1	UN-200-E-141
200-PO-1	UN-200-E-142
200-TP-4	UN-200-W-2
200-TP-4	UN-200-W-3
200-TP-4	UN-200-W-4
200-UP-2	UN-200-W-6
200-TP-3	UN-200-W-7
200-TP-4	UN-200-W-8
200-RO-4	UN-200-W-10
200-ZP-1	UN-200-W-11
200-TP-2	UN-200-W-14
200-TP-5	UN-200-W-17
200-UP-2	UN-200-W-19
200-ZP-1	UN-200-W-23
200-TP-4	UN-200-W-27
200-TP-2	UN-200-W-29
200-RO-2	UN-200-W-32
200-UP-2	UN-200-W-33
200-RO-2	UN-200-W-34
200-RO-3	UN-200-W-35
200-TP-4	UN-200-W-38
200-UP-2	UN-200-W-39
200-RO-2	UN-200-W-41
200-RO-2	UN-200-W-42
200-RO-3	UN-200-W-43
200-ZP-3	UN-200-W-44
200-UP-2	UN-200-W-46
200-UP-2	UN-200-W-48
200-RO-2	UN-200-W-49
200-RO-2	UN-200-W-50
200-RO-2	UN-200-W-52
200-UP-2	UN-200-W-55
200-RO-3	UN-200-W-56
200-TP-4	UN-200-W-58
200-UP-2	UN-200-W-60
200-RO-3	UN-200-W-61
200-TP-6	UN-200-W-62
200-TP-3	UN-200-W-63
200-TP-6	UN-200-W-64
200-TP-4	UN-200-W-65
200-TP-4	UN-200-W-67
200-UP-1	UN-200-W-68
200-RO-2	UN-200-W-69
200-UP-3	UN-200-W-71
200-TP-4	UN-200-W-73
200-ZP-1	UN-200-W-74
200-ZP-1	UN-200-W-75
200-TP-5	UN-200-W-76
200-TP-4	UN-200-W-77
200-UP-2	UN-200-W-78
200-ZP-2	UN-200-W-79
200-RO-4	UN-200-W-80
200-RO-4	UN-200-W-81
200-RO-2	UN-200-W-82

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OPERABLE UNIT

SITE NAME

200-RO-2	UN-200-W-83
200-TP-4	UN-200-W-85
200-UP-2	UN-200-W-86
200-SS-2	UN-200-W-88
200-ZP-1	UN-200-W-89
200-ZP-1	UN-200-W-90
200-ZP-1	UN-200-W-91
200-TP-6	UN-200-W-97
200-TP-4	UN-200-W-98
200-TP-2	UN-200-W-99
200-TP-5	UN-200-W-100
200-UP-2	UN-200-W-101
200-TP-4	UN-200-W-102
200-ZP-1	UN-200-W-103
200-RO-2	UN-200-W-108
200-RO-2	UN-200-W-109
200-TP-2	UN-200-W-113
200-RO-2	UN-200-W-114
200-RO-3	UN-200-W-116
200-UP-2	UN-200-W-117
200-UP-2	UN-200-W-118
200-RO-2	UN-200-W-123
200-RO-2	UN-200-W-127
200-ZP-2	UN-200-W-130
200-ZP-3	UN-200-W-132
200-TP-2	UN-200-W-135
200-ZP-1	UN-200-W-159
200-UP-2	UN-200-W-161
300-FF-1	UN-300-1
300-FF-1	UN-300-2
300-FF-3	UN-300-4
300-FF-3	UN-300-5
300-FF-3	UN-300-7
300-FF-3	UN-300-10
300-FF-1	UN-300-11
300-FF-3	UN-300-12
300-FF-3	UN-300-13
300-FF-1	UN-300-14
300-FF-3	UN-300-17
300-FF-3	UN-300-18
300-FF-1	UN-300-31
300-FF-3	UN-300-39
300-FF-3	UN-300-40
300-FF-1	UN-300-41
300-FF-3	UN-300-42
300-FF-3	UN-300-43
300-FF-3	UN-300-44
300-FF-3	UN-300-45
300-FF-1	UN-300-FF-1
300-FF-4	UN-400-1
200-IU-3	UN-600-12
200-IU-4	UN-600-16
100-NR-1	UN-600-17
200-IU-4	UN-600-18

OPERABLE UNIT

SITE NAME

200-IU-4	UN-600-19
1100-EM-1	UN-1100-5
1100-EM-1	UN-1100-6
1100-EM-3	UN-3000-1
200-BP-7	UPR-200-E-4
200-BP-7	UPR-200-E-5
200-BP-7	UPR-200-E-6
200-PO-1	UPR-200-E-17
200-PO-4	UPR-200-E-21
200-PO-6	UPR-200-E-24
200-PO-4	UPR-200-E-29
200-PO-6	UPR-200-E-30
200-BP-8	UPR-200-E-32
200-BP-11	UPR-200-E-34
200-BP-7	UPR-200-E-38
200-PO-6	UPR-200-E-50
200-BP-11	UPR-200-E-51
200-PO-2	UPR-200-E-53
200-PO-3	UPR-200-E-59
200-PO-4	UPR-200-E-66
200-PO-3	UPR-200-E-70
200-BP-7	UPR-200-E-73
200-BP-7	UPR-200-E-74
200-BP-7	UPR-200-E-75
200-BP-5	UPR-200-E-77
200-BP-6	UPR-200-E-78
200-BP-9	UPR-200-E-84
200-PO-6	UPR-200-E-106
200-BP-7	UPR-200-E-108
200-PO-3	UPR-200-E-115
200-BP-7	UPR-200-E-116
200-PO-3	UPR-200-E-119
200-PO-3	UPR-200-E-125
200-PO-3	UPR-200-E-126
200-BP-7	UPR-200-E-127
200-BP-7	UPR-200-E-128
200-BP-7	UPR-200-E-129
200-BP-7	UPR-200-E-130
200-BP-7	UPR-200-E-131
200-BP-7	UPR-200-E-132
200-BP-7	UPR-200-E-133
200-BP-7	UPR-200-E-134
200-BP-7	UPR-200-E-135
200-PO-3	UPR-200-E-136
200-PO-3	UPR-200-E-137
200-BP-8	UPR-200-E-138
200-TP-2	UPR-200-W-5
200-TP-5	UPR-200-W-12
200-RO-2	UPR-200-W-13
200-RO-2	UPR-200-W-15
200-ZP-3	UPR-200-W-16
200-RO-2	UPR-200-W-20
200-TP-4	UPR-200-W-21
200-UP-3	UPR-200-W-24

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OPERABLE UNITSITE NAME

1212 : 970613

200-ZP-3	UPR-200-W-26
200-TP-2	UPR-200-W-28
200-RO-2	UPR-200-W-36
200-SS-2	UPR-200-W-37
200-ZP-3	UPR-200-W-45
200-RO-1	UPR-200-W-47
200-RO-2	UPR-200-W-51
200-ZP-3	UPR-200-W-53
200-RO-3	UPR-200-W-57
200-RO-1	UPR-200-W-59
200-SS-2	UPR-200-W-70
200-ZP-3	UPR-200-W-72
200-ZP-3	UPR-200-W-84
200-RO-3	UPR-200-W-87
200-RO-2	UPR-200-W-95
200-RO-3	UPR-200-W-96
200-UP-1	UPR-200-W-104
200-UP-1	UPR-200-W-105
200-UP-1	UPR-200-W-106
200-UP-1	UPR-200-W-107
200-UP-1	UPR-200-W-110
200-UP-2	UPR-200-W-111
200-UP-2	UPR-200-W-112
200-RO-1	UPR-200-W-124
200-TP-5	UPR-200-W-126
200-UP-3	UPR-200-W-128
200-TP-5	UPR-200-W-129
200-TP-2	UPR-200-W-131
200-ZP-3	UPR-200-W-134
200-UP-2	UPR-200-W-138
200-RO-1	UPR-200-W-139
200-RO-4	UPR-200-W-140
200-RO-4	UPR-200-W-141
200-RO-4	UPR-200-W-142
200-RO-4	UPR-200-W-143
200-RO-4	UPR-200-W-144
200-RO-4	UPR-200-W-145
200-RO-4	UPR-200-W-146
200-TP-6	UPR-200-W-147
200-TP-6	UPR-200-W-148
200-TP-5	UPR-200-W-149
200-TP-5	UPR-200-W-150
200-TP-5	UPR-200-W-151
200-TP-5	UPR-200-W-152
200-TP-5	UPR-200-W-153
200-UP-3	UPR-200-W-154
200-UP-3	UPR-200-W-155
200-UP-3	UPR-200-W-156
200-UP-3	UPR-200-W-157
200-ZP-3	UPR-200-W-158
200-TP-4	UPR-200-W-160
300-FF-1	UPR-300-8
300-FF-1	UPR-300-9
300-FF-1	UPR-300-15

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OPERABLE UNIT

SITE NAME

300-FF-1	UPR-300-19
300-FF-1	UPR-300-20
300-FF-1	UPR-300-21
300-FF-1	UPR-300-22
300-FF-1	UPR-300-23
300-FF-1	UPR-300-24
300-FF-1	UPR-300-25
300-FF-1	UPR-300-26
300-FF-1	UPR-300-27
300-FF-1	UPR-300-28
300-FF-1	UPR-300-29
300-FF-1	UPR-300-30
300-FF-1	UPR-300-32
300-FF-1	UPR-300-33
300-FF-1	UPR-300-34
300-FF-1	UPR-300-35
300-FF-1	UPR-300-36
300-FF-1	UPR-300-37
300-FF-3	UPR-300-38
300-IU-1	UPR-600-1
300-IU-1	UPR-600-2
300-IU-1	UPR-600-3
300-IU-1	UPR-600-4
300-IU-1	UPR-600-5
300-IU-1	UPR-600-6
300-IU-1	UPR-600-7
300-IU-1	UPR-600-8
300-IU-1	UPR-600-9
300-IU-1	UPR-600-10
300-IU-1	UPR-600-11
300-FF-1	UPR-600-15
100-IU-3	USBR 2,4-D Burial Site
200-ZP-3	WRAP
100-IU-3	Wahluke Slope Nike Missile Base
100-IU-2	White Bluffs Landfill
100-IU-5	White Bluffs Pickling Acid Crib
200-ZP-3	Z Plant Burning Pit

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3.0 100 AGGREGATE AREA OPERABLE UNITS

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100-BC-1

Waste Units Assigned to this Operable Unit

116-B-1 Trench
116-B-2 Trench
116-B-3 Crib
116-B-4 French Drain
116-B-5 Crib
116-B-6A Crib
116-B-6B Crib
116-B-7 Outfall Structure
116-B-9 French Drain
116-B-10 French Drain
116-B-11 Retention Basin
116-B-12 Crib
116-B-13 Trench
116-B-14 Trench
116-B-15 Pit
116-B-16 Storage Tank
116-C-1 Trench
116-C-5 Retention Basin
118-B-5 Burial Ground
118-B-7 Burial Ground
118-B-10 Pit
120-B-1 Sump
126-B-1 Ash Pit
126-B-2 Demolition and Inert Landfill
126-B-3 Demolition and Inert Landfill
126-B-4 Brine Pit
128-B-1 Burning Pit
128-B-2 Burning Pit
128-B-3 Burning Pit
128-C-1 Burning Pit
132-B-1 Building
132-B-3 Stack
132-B-4 Building
132-B-5 Building
132-B-6 Outfall Structure
132-C-2 Outfall Structure
1607-B1 Septic Tank
1607-B2 Septic Tank
1607-B3 Septic Tank
1607-B4 Septic Tank
1607-B5 Septic Tank
1607-B6 Septic Tank
1607-B7 Septic Tank

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UNIT NAME: 116-B-1
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1946
END DATE: 1955

COORDINATES: N71530 W79600

WASTE TYPES AND AMOUNTS: The site received effluent from the 107-B Retention Basin at times of high activity due to fuel element failure.

CLEANUP ACTIONS: The unit was covered to grade with clean fill.

7-9-65

UNIT NAME: 116-B-2
UNIT TYPE: Trench
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1946
END DATE: 1946

COORDINATES: N69080 W80250

WASTE TYPES AND AMOUNTS: This unit was dug after a fuel element was cut in half (accidentally) in the 105-B Storage Basin. Basin water was discharged to this unit in an attempt to remove radionuclides from the fuel storage basin cooling water for contamination control.

CLEANUP ACTIONS: The unit was filled with 15 ft of clean soil.

1-2-1-9

UNIT NAME: 116-B-3
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1952

COORDINATES: N68180 W80460 (center)

WASTE TYPES AND AMOUNTS: The site received effluent from reactor tubes containing ruptured fuel elements.

SITE DESCRIPTION: The unit is an excavation, possibly shored with railroad ties and filled with gravel. It is marked with a concrete marker flush with the ground.

UNIT NAME: 116-B-4
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1957
END DATE: 1968

COORDINATES: N69120 W80430

WASTE TYPES AND AMOUNTS: The site received spent acid rinse water from the 105-B dummy (fuel element spacers and reactor hardware) decontamination facility.

SITE DESCRIPTION: The unit has a graded rock and sand bottom. It is marked with four yellow steel posts and has a curved yellow pipe in the center along with a concrete marker.

UNIT NAME: 116-B-5
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1968

COORDINATES: N69925 W80654 (center)

WASTE TYPES AND AMOUNTS: The site received liquid tritium wastes from the 108 Building. Only wastes of less than 1 uCi/cc were discharged to this unit.

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UNIT NAME: 116-B-6A
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1968

COORDINATES: N68620 W80363

WASTE TYPES AND AMOUNTS: The site received radioactive wastes from equipment decontamination, the 111-B Building, and liquid wastes from fuel element spacer decontamination (performed at 111-B Building Decontamination Station).

UNIT NAME: 116-B-6B
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1953

COORDINATES: N68549 W80335

WASTE TYPES AND AMOUNTS: The site received radioactive wastes from equipment decontamination in the 111-B Building and liquid wastes from fuel element spacer decontamination.

116533

UNIT NAME: 116-B-7
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N71800 W80780

WASTE TYPES AND AMOUNTS: Used for the disposal of water plant treatment waste water.

SITE DESCRIPTION: The unit consisted of an open concrete sump and effluent lines that ran from the sump to approximately mid-channel of the river. It also included a concrete spillway that terminated at the river shore line. It is fenced with hog wire fencing.

UNIT NAME: 116-B-9
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1954

COORDINATES: N69743 W80728

WASTE TYPES AND AMOUNTS: The site received wastewater from the P-10 Storage Building drain.

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UNIT NAME: 116-B-10
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1968

COORDINATES: N69674 W80722

WASTE TYPES AND AMOUNTS: This site received liquid decontamination wastes from the 108-B Tube Examination and Experimental Facility. During the tritium recovery programs the site also received liquid decontamination wastes from the mask and small tool decontamination station located on the second floor.

SITE DESCRIPTION: The unit has a metal manhole type cover. A 1.5-in. drain line was added in the mid-50's that came from the experimental tube and other hardware decontamination facility.

CLEANUP ACTIONS: The site has been covered with ~1 ft of gravel.

9 1 1 9

UNIT NAME: 116-B-11
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N71660 W80560, N71660 W80090, N71430 W80560, N71430 W80090

WASTE TYPES AND AMOUNTS: This unit received cooling water effluent from the 105-B Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Total radionuclide inventories in the vicinity of the unit ranged from 5 to over 400 Ci. Eighty percent of the total radionuclide inventory is contained within the soil adjacent to the unit. Approximately 10 Ci have leached into the concrete floor and walls.

SITE DESCRIPTION: The unit is concrete-lined with a vertical baffle down the middle, lengthwise. The floor consists of concrete slabs, their joints originally closed with neoprene water seals. To a height of almost 10 ft above the floor, the walls slope and are ~4 in. thick. The upper sections of the walls, ~10 ft, are vertical and range in thickness from ~5 ft 8 in. at the bottom to 1 ft at the top. The unit was backfilled with soil to a depth of almost 4 ft.

KNOWN RELEASES: In early 1952, gross leakage at the inlet for the 105-B effluent line was detected and steadily increased in volume. In late 1952, two known leaks from the effluent line: 1) near the #2 diversion box for the 30-in. line and 2) near the 8-in. riser for the temporary by-pass line northeast of the 105-B Building. In February 1954, a break occurred in this unit. The extent of the contamination from these releases is well within the zone encompassed by the unit and is within the AC-5-40 permanent posting.

70690

UNIT NAME: 116-B-14
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1948

COORDINATES: N71760 W80270

WASTE TYPES AND AMOUNTS: The unit received low-level sludge waste from the 107-B Retention Basins.

SITE DESCRIPTION: The unit is a sludge burial site covered with 6 ft of soil.

UNIT NAME: 116-B-15
UNIT TYPE: Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1984
END DATE: December 1985

COORDINATES: N69134 W79930

WASTE TYPES AND AMOUNTS: The unit received processed water from the 105-B Fuel Storage Basin. During the cleaning of this basin, the radiologically contaminated shielding water was processed through a process system that utilized ion exchange columns. Before discharging the water to the unit, composite samples were taken to ensure that radionuclide concentrations were below release criteria in Table II of DOE Order 5480.1. No known chemical substances were present in the water; however, chemical analysis during that period was not a standard practice, and there is no evidence that it was performed.

SITE DESCRIPTION: The unit is an open, excavated pit, rectangular in shape. Soil excavated from the center was used as a berm around its perimeter.

CLEANUP ACTIONS: The unit was released using ARCL methodology.

UNIT NAME: 116-B-16
UNIT TYPE: Storage Tank
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
END DATE: 1968

COORDINATES: N68620 W80363

WASTE TYPES AND AMOUNTS: The unit is believed to have received wastes similar to those identified in the 116-B-6A (111-B Crib No. 1); i.e., radioactive waste from equipment decontamination, the 111-B Building, and liquid wastes from fuel element spacer decontamination.

SITE DESCRIPTION: The unit is constructed of concrete. The floor, foundation, and tank are the only remaining portions of the 111-B. It is not known if the tank was backfilled, but it is believed to have been filled with either sand or concrete prior to abandonment of the building.

UNIT NAME: 116-C-1
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1968

COORDINATES: N71560 W79130, N71650, W78551 (centerline)

WASTE TYPES AND AMOUNTS: The site received effluent overflow from the 107-C Retention Basin during reactor outages due to ruptured fuel elements. Beginning in 1955, this site also served the 107-B Retention Basin.

CLEANUP ACTIONS: The site was covered with at least 5 ft of clean fill.

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UNIT NAME: 116-C-5
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1969

COORDINATES: N71045 W79970, N71045 W80320

WASTE TYPES AND AMOUNTS: This site received cooling water effluent from the 105-C Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Total radionuclide inventories in the vicinity of the basin ranged from 5 to over 400 Ci. Eighty percent of the total radionuclide inventory is contained within the soil adjacent to the unit. Approximately 10 Ci have leached into the sediment.

SITE DESCRIPTION: The unit consists of two carbon steel tanks, each with a series of steel baffle plates inside to prevent water from channeling across the tank into the discharge line.

KNOWN RELEASES: The unit and its ~5-ft-diameter effluent line developed leaks during its operating life. The leaks could have been as high as 5,000 to 10,000 gal/min. The extent of contamination from these releases is well within the zone encompassed by the unit and is within the AC-5-40 permanent posting.

RELEASE POTENTIAL: Wind has caused surface contamination to spread from rust on the tank walls.

1970063

UNIT NAME: 118-B-10
UNIT TYPE: Pit
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive

SITE DESCRIPTION: The site is a 2- to 3-ft raised mound, fenced with a single chain, and marked with underground radiation signs.

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UNIT NAME: 120-B-1
UNIT TYPE: Sump
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1969

COORDINATES: N69200 W80800

WASTE TYPES AND AMOUNTS: The site contained unknown amounts of sulfuric acid from spillage during use and servicing of an emergency power battery bank inside the 105-B Building. The residual liquid and sludge were analyzed for heavy metals in 1986 using the EP Toxicity Test and Cr was found.

CLEANUP ACTIONS: The unit was cleaned and neutralized in December 1986.

RELEASE POTENTIAL: The unit is concrete-lined.

UNIT NAME: 126-B-1
UNIT TYPE: Ash Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1969

COORDINATES: N70820 W81530

WASTE TYPES AND AMOUNTS: Unknown amounts of coal ash were sluiced to this pit with raw river water. The ash has been analyzed using the EP Toxicity Test in accordance with WAC 173-303, and no hazardous materials were found.

UNIT NAME: 126-B-2
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N69075 W82000

WASTE TYPES AND AMOUNTS: Currently, the pump room is the only portion of this unit containing waste. The waste consists of demolition waste from the above-ground portion of the pump room.

SITE DESCRIPTION: The site is made up of two clearwells separated in the center by a pump room. The clearwells are covered, reinforced concrete and have a capacity of ~10M gal. The pump room is constructed of reinforced concrete and is ~22 ft deep. The clearwells are intact, and the above-ground portion of the pump room has been demolished.

UNIT NAME: 126-B-3
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: 1970's

COORDINATES: N70100 W82250

WASTE TYPES AND AMOUNTS: This unit contains waste from demolished 100-B facilities. These include released portions of 108-B, 117-B&C, 115-B/C, and 184-B.

SITE DESCRIPTION: The unit is an excavated pit originally used to store coal for use in the powerhouse. Approximately 75% of this pit was used for waste disposal and was covered with ~1 ft of pit run backfill material.

UNIT NAME: 126-B-4
UNIT TYPE: Brine Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N70371 W81908 (northwest corner)

SITE DESCRIPTION: The salt-dissolving pit and brine pit were both below-grade concrete vaults with internal void spaces (brine pit 500 cu ft, dissolving pit 900 cu ft). Now the site is a cleared area and the surface is covered by cobble and coal ashes. Vegetation is annual weeds and cheatgrass. No evidence of the site remains on the surface.

CLEANUP ACTIONS: The site was demolished in situ March 1988. Both pits were sampled for radiation and EP toxic metals. Samples showed less than 1% NaCl concentration, and no reportable concentrations of heavy metals were found. The samples also showed no significant radiation above background. Northwest Environmental Services, Inc. removed all waste and salt cake from the pits and certified them clean before in situ demolition and final grading. The pits were partially backfilled with rubble and leveled to grade with clean fill.

UNIT NAME: 128-B-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1943
END DATE: 1950

COORDINATES: N71500 W78500 (center)

WASTE TYPES AND AMOUNTS: The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents. This area is believed to have been used for disposal of miscellaneous debris and soil that was excavated during construction of the 107-B and -C basins and overflow trenches. The area is not known to have been used as a routine burning area.

CLEANUP ACTIONS: The site was covered over in 1978.

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UNIT NAME: 128-B-2
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1968

COORDINATES: N71500 W76500

WASTE TYPES AND AMOUNTS: The site received nonradioactive, combustible materials. Old paint cans and sandblast sand can still be seen at the site. Office waste, paint waste, chemicals, and solvent were burned at this site.

SITE DESCRIPTION: The site width ranges from 30 to 50 ft and is identifiable by a pile of large boulders. There are sand-blasting garnet, old paint cans, and evidence of burning in the area.

UNIT NAME: 128-B-3
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N71500 W76500

WASTE TYPES AND AMOUNTS: Coal ash, burning evidence, and demolition rubble can be seen at the surface of the site. A 1952 shop manual was found among the waste.

SITE DESCRIPTION: This area is identifiable by a pile of large boulders to the south. It is present in a PNL photograph (45222-11CN) taken during the construction of the 116-C-1 (107-C Overflow Trench).

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UNIT NAME: 128-C-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N67200 W78700

WASTE TYPES AND AMOUNTS: The waste consisted of combustible materials (vegetation, office waste, paint waste, and chemical solvents) and some large metal material, such as hardware, machinery, and other noncontaminated miscellaneous equipment.

SITE DESCRIPTION: Broken glass and ash mark the area. Some smaller areas very close to the site have had some dumping and small surface burning.

UNIT NAME: 132-B-1
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1970s

COORDINATES: N69750 W80658 (northeast corner)

WASTE TYPES AND AMOUNTS: The main radionuclide at the site is tritium.

SITE DESCRIPTION: The building was a steel frame and concrete block structure with reinforced concrete foundation and floors. The interior was laid out into many individual rooms that were used for laboratories, offices, and change rooms. The original building was 41 ft above grade, 12 ft below grade, and 132 ft long, with a 16-ft extension for an additional ventilation supply fan. Also, an annex 60 ft long by 32 ft wide was added to the southwest corner of the original building. Now the site is graded flat. All that remains is a section of concrete foundation with two teardrop-shaped steel plates ~20 to 26 in. in diameter. The foundation is inside an "underground radiation zone".

CLEANUP ACTIONS: The decommissioning was completed May 1985. All the above-grade portions of the building were demolished to a minimum of 3 m below grade. The clean rubble and debris were disposed in the 184-D Coal Pit. The radiological waste, consisting of lab equipment, cells, drains, and exhaust ducts, were disposed in a 200 Area burial ground. The rest of the facility was demolished in situ. The site was covered with at least one meter of clean fill and graded to match existing terrain.

UNIT NAME: 132-B-3
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N69704 W80720 (base)

SITE DESCRIPTION: A burial trench was excavated north of the stack. The dimensions are 250 ft long, 30 ft wide, and 18 ft deep. The stack was built of reinforced concrete. The maximum wall thickness was 2.5 ft at the base. It rested on a double-octagon base that extended 10.25 ft below grade. The upper octagon was 25 ft across the flats and 3.25 ft thick. The lower octagon was 34 ft across the flats and 7 ft thick. The stack contained a stainless steel liner. Supported by concrete pillars, it was located 6 ft above the base and extended up 6 more feet.

CLEANUP ACTIONS: On September 9, 1983, the stack was demolished under the ARCL method in conjunction with in situ decommissioning for permanent disposal. Explosives were used to fall the stack. Clean fill was used to cover the rubble. The foundation was demolished separately in place and covered with clean fill.

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UNIT NAME: 132-B-4
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1961
END DATE: 1968

COORDINATES: N68900 W80575

WASTE TYPES AND AMOUNTS: Total radionuclide inventory in this unit is estimated to be 92 nCi. The radionuclides comprising this inventory are H-3, C-14, Cs-137, Sr-90, Pu-239/240. Of these radionuclides, Sr-90 is the most restrictive in the ARCL calculations. Co-60, Eu-152, -153, -155 were not identified in any of the samples analyzed.

SITE DESCRIPTION: The unit was a reinforced concrete structure, 35 ft high, and almost completely below grade. Approximately 8 ft was above grade with an earth and gunnite berm. The maximum thickness of the walls and floors was 2 ft, with the majority being 1 ft thick or less. The ducts were made of reinforced concrete with a maximum wall thickness of 12 in. The inlet tunnel was ~110 ft long, and the exhaust tunnel was ~80 ft long. The site now has the appearance of a gravel parking lot.

CLEANUP ACTIONS: The site was decommissioned using ARCL methodology. Demolition and final site grading were completed January 1988. The building and ducts were excavated and demolished in situ. The contaminated rubble was buried at least 1 m deep, except for rubble from the seal pits, which was buried under a minimum of 5 m of clean earth.

RELEASE POTENTIAL: The interior surfaces of the building were coated with polyvinyl (ply-on) to seal cracks and imperfections in the concrete.

UNIT NAME: 132-B-5
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1968

COORDINATES: N68860 W80527 (northeast corner)

WASTE TYPES AND AMOUNTS: The resident radionuclides are H-3, C-14, Co-60, Sr-90, Cs-137, Eu-152, and Pu-239.

SITE DESCRIPTION: The unit consisted of the vacuum and pressure seal pit and tunnels. It was a single-story reinforced concrete structure with a basement. It was 20 ft above and 11 ft below grade, and the width ranged from 72 ft to 98 ft.

CLEANUP ACTIONS: The building was demolished in situ using ARCL methodology. The at- and below-grade structures (floor slab, walls, footing pedestals, tunnel roof and walls, pipes and other structures) were exposed by excavating and demolishing to at least one meter below grade. The resulting rubble was placed in the basement and tunnels for in situ disposal. Tunnel demolition was restricted due to a suspected radioactive waste burial site (115-B/C Cassion) located directly over the tunnel about 75 ft north of the unit. The 115-B/C Caisson was removed and disposed of as hazardous waste. The ground around the caisson was sampled for metals and found to be below EP Toxic Metal limits.

UNIT NAME: 132-B-6
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N71890 W80050

WASTE TYPES AND AMOUNTS: The unit received and discharged reactor coolant effluent wastes to the river.

SITE DESCRIPTION: The unit consisted of an open concrete sump and effluent lines that ran from the sump to approximately mid-channel of the river. It also included a concrete spillway that terminated at the top of the river bank. If the main line plugged, the effluent would overflow into the spillway that lead to a large riprap area at the top of the river bank and then to the river.

CLEANUP ACTIONS: The unit was reduced to near-grade level and backfilled with clean fill.

UNIT NAME: 132-C-2
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive

COORDINATES: N72000 W79255

SITE DESCRIPTION: The unit contains a riprap overflow down to the river consisting of basalt boulders. The area from the roadway to the top of the riprap is marked by concrete posts with "Caution Underground Radioactive Material". These posts continue down to the river. The area above the riprap is marked by metal posts.

CLEANUP ACTIONS: The unit was reduced to near-grade level and backfilled with clean fill.

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UNIT NAME: 1607-B1
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1960

COORDINATES: N69900 W78206

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of sanitary sewage from 1701-B Badgehouse (security checkpoint), 1709-B Fire Station, and 1720-B Patrol Change Room and offices.

SITE DESCRIPTION: The unit includes a tile field. It is 11 ft deep, constructed of reinforced concrete, and has a 125-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open-jointed and spaced 8 ft apart.

UNIT NAME: 1607-B2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N70450 W80775

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 100 B/C Area office buildings, 105-B Reactor Building, and 190-B Pumphouse. (All office buildings have been removed; however, the sewer lines to the respective buildings still exist.) The flow rate to the unit is estimated at less than 35 gal/d.

SITE DESCRIPTION: The unit includes a tile field. It is 13 ft deep, constructed of reinforced concrete, and has a 450-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open-jointed and spaced 8 ft apart.

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UNIT NAME: 1607-B3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1974

COORDINATES: N70275 W81850

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 184-B Powerhouse, amount unknown.

SITE DESCRIPTION: This unit included a tile field. It was 10 ft 5 in. deep, constructed of reinforced concrete, and had a 48-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor were 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

CLEANUP ACTIONS: The unit was pumped dry and demolished in December 1987. The remaining contents were taken to 124-N-10 Sanitary Sewer System for disposal.

UNIT NAME: 1607-B4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N68447 W81600

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 151-B Electrical Distribution Facility. The flow rate to the unit is estimated at less than 35 gal/d.

SITE DESCRIPTION: The unit includes a tile field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 10-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 1607-B5
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N71428 W81980

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 181-B/C River Pumphouse. The flow rate to the unit is estimated at 35 gal/d.

SITE DESCRIPTION: The unit includes a tile field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 6-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 6-in. vitrified pipe, with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

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UNIT NAME: 1607-B6
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1988

COORDINATES: N68081 W82680

WASTE TYPES AND AMOUNTS: This unit receives 35 gal/d of sanitary sewage from the 182-B Pump Station. It also received sewage from 183-B Headhouse, which was decommissioned in 1987.

SITE DESCRIPTION: The unit includes a tile field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 25-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 1607-B7
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1969

COORDINATES: N69700 W82000

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 183-B Water Treatment Plant, amount unknown.

SITE DESCRIPTION: The unit includes a tile field. It is constructed of reinforced concrete. The walls are 8 in. thick, the floor is 6 in. thick, and it is 8 ft 3 in. deep. It has a 12-person capacity (35 gal per capita) with an average detention period of 24 h. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

Other Waste Units Located Within the Operable Unit Area

118-B-8	Reactor
118-B-9	Storage Facility
132-B-2	Stack

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UNIT NAME: 118-B-8
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N69050 W80680

WASTE TYPES AND AMOUNTS: This unit contains an estimated 23,500 Ci of radionuclides, 88 tons of lead, 3,000 cu ft of asbestos, and 500 lb of cadmium.

SITE DESCRIPTION: This unit consists of: (1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; (2) the irradiated fuel storage basin; and (3) contaminated portions of the reactor building. The building has 3- to 5-ft-thick concrete walls around the reactor and concrete block upper walls. Roof construction is reinforced concrete over the inner rod room and rear face enclosure, pre-cast concrete over the rest of the building.

KNOWN RELEASES: It is suspected that the irradiated fuel storage basin leaked for a number of years prior to deactivation. The leak rate was small, and the location of the leak was never identified.

CLEANUP ACTIONS: The basin has been drained, cleaned, and surface contamination has been fixed. The building is scheduled for decommissioning after the National Environmental Process (NEPA) is complete.

RELEASE POTENTIAL: Minimal release potential. Over 90% of the radionuclide inventory is bound in activated metal and graphite. The waste is fixed inside the reactor envelope. The potential for release is low.

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UNIT NAME: 118-B-9
UNIT TYPE: Storage Facility
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1965

COORDINATES: N69700 W80750

WASTE TYPES AND AMOUNTS: The unit contains trace amounts of radioactive waste. Currently, it is used to store some slightly contaminated components from B and C reactors.

SITE DESCRIPTION: The unit is a concrete structure about 10 ft high with special cells in the floor to store casks used in the Pilot P-10 Program. It also housed an air sampling system for the 108-B stack.

RELEASE POTENTIAL: The building was deactivated.

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UNIT NAME: 132-B-2
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N68950 W80680

WASTE TYPES AND AMOUNTS: Until the 117 Filter Building was built in 1960, air moving from the least contaminated zones through increasingly contaminated zones was discharged to the unit unfiltered. The unit received low-level contamination from the reactor.

SITE DESCRIPTION: Part of the 105-B Reactor Gas and Exhaust Air System, the unit is constructed of reinforced concrete with a base diameter of ~16 ft. The unit is still standing.

100-BC-2

Waste Units Assigned to this Operable Unit

116-C-2A	Crib
116-C-2B	Pump Station
116-C-2C	Sand Filter
116-C-3	Storage Tank
116-C-6	Pit
118-C-2	Storage Tank
132-C-1	Stack
132-C-3	Building
1607-B8	Septic Tank
1607-B10	Septic Tank
1607-B11	Septic Tank

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UNIT NAME: 116-C-2A
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1968 (1969)*

COORDINATES: N67501 W79962

WASTE TYPES AND AMOUNTS: The site received an unknown volume of contaminated wastes from the decontamination of dummy fuel elements on the wash pad, contaminated water from 105-C Irradiated Fuel Examining facilities, and 105-C Reactor rear face liquid wastes.

SITE DESCRIPTION: The unit contains gravel and sand fill.

CLEANUP ACTIONS: The unit was covered with 12 to 15 ft of soil.

* Conflicting Dates

UNIT NAME: 116-C-2B
UNIT TYPE: Pump Station
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1969

COORDINATES: N67474 W80052

WASTE TYPES AND AMOUNTS: The unit received waste from 105-C and pumped it into 116-C-2C (105-C Pluto Crib Sand Filter).

UNIT NAME: 116-C-2C
UNIT TYPE: Sand Filter
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1969

COORDINATES: N67474 W80052

WASTE TYPES AND AMOUNTS: The site received contaminated wastes from the decontamination of dummy fuel elements on wash pad and effluents from 105-C Irradiated Fuel Examination facilities.

SITE DESCRIPTION: The structure is an open-bottom concrete box placed in a sand and gravel pit. Contaminated water was spread over the surface of the sand filter media by distribution trays. It is covered with concrete shielding slabs.

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UNIT NAME: 116-C-3
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N67870 W80025

WASTE TYPES AND AMOUNTS: Originally, the unit was installed to receive liquid waste from the 105-C Fuel Examination Facility.

SITE DESCRIPTION: The unit consists of two tanks with 27,000 gal capacity.

UNIT NAME: 116-C-6
UNIT TYPE: Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1984
END DATE: August 1985

COORDINATES: N67548 W79749

WASTE TYPES AND AMOUNTS: This unit received processed water from the 105-C Fuel Storage Basin cleanout. During this effort, the radiologically contaminated shielding water in the basin was processed through a process system that utilized ion exchange columns. Before discharging the water to the unit, composite samples were taken to ensure that radionuclide concentrations were below release criteria in Table II of DOE Order 5480.1. No known hazardous substances were present in the water; however, chemical analysis during that period was not a standard practice, and there is no evidence that it was performed.

SITE DESCRIPTION: The unit is an L-shaped, open excavated pit. Soil was excavated from the center and used as a berm around its perimeter. The approximate side lengths are 100 ft by 100 ft by 45 ft by 50 ft by 55 ft by 50 ft.

CLEANUP ACTIONS: The unit was released using ARCL methodology.

UNIT NAME: 118-C-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1969
END DATE: 1969

COORDINATES: N67590 W80333

WASTE TYPES AND AMOUNTS: Highly irradiated boron steel balls were stored in the unit for radioactive decay and subsequent burial. The balls are still present.

SITE DESCRIPTION: The unit is buried in the ground with two visible standpipes and a shielding mound ~2 ft above ground level.

UNIT NAME: 132-C-1
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1969

COORDINATES: N67150 W80375

WASTE TYPES AND AMOUNTS: The interior of the unit contained ~2.8 mCi of radioactive materials.

CLEANUP ACTIONS: In FY85, the unit was demolished and buried in situ between the 117-C Building and the 105-C Reactor Building.

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UNIT NAME: 132-C-3
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1961
END DATE: 1969

COORDINATES: N67240 W80280 (southwest corner)

WASTE TYPES AND AMOUNTS: Total radionuclide inventory in this unit is estimated to be 0.84 mCi. The radionuclides comprising this inventory are H-3, C-14, Co-60, Cs-137, Sr-90, Eu-154, Eu-152, and Pu-239/240. Of these radionuclides, Sr-90 is the most restrictive in the ARCL calculations.

SITE DESCRIPTION: The unit was a reinforced concrete structure, 35 ft high, and almost completely below grade. Approximately 8 ft was above grade. The maximum thickness of the walls and floors was 2 ft, with the majority being 1 ft thick or less. The ducts were made of reinforced concrete with a maximum wall thickness of 12 in. The inlet tunnel was ~40 ft long, and the exhaust tunnel was ~60 ft long. The site now resembles a gravel parking lot.

CLEANUP ACTIONS: The site was decommissioned using ARCL methodology. Demolition and site grading were performed in October and November 1988. The building and ducts were excavated and demolished in situ. The contaminated rubble was buried at least 1 m deep, except for the rubble from the seal pits which were buried under a minimum of m of clean earth.

RELEASE POTENTIAL: The interior surfaces of the building were coated with polyvinyl (ply-on) to seal cracks and imperfections in the concrete.

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UNIT NAME: 1607-B8
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1969

COORDINATES: N67450 W80880

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 190-C Pumphouse, amount unknown.

SITE DESCRIPTION: The unit includes a tile field.

UNIT NAME: 1607-B10
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1952

COORDINATES: N67303 W82384

WASTE TYPES AND AMOUNTS: There were no known discharges of hazardous chemicals or radionuclides. The unit received only sanitary sewer wastes from the 183-C Water Treatment Plant.

SITE DESCRIPTION: The unit includes a drain field. It is enclosed with steel marker posts that are painted yellow and outline a 15- by 30-ft perimeter. "Septic Tank" and "Drain Field" labels are also present. A steel pipe riser 10 in. in diameter and 33 in. above grade also marks the location of the tank.

UNIT NAME: 1607-B11
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1952

COORDINATES: N67628 W81668

WASTE TYPES AND AMOUNTS: There were no known discharges of hazardous chemicals or radionuclides. The unit received only sanitary sewer wastes from the 183-C Water Treatment Plant.

SITE DESCRIPTION: The unit includes a drain field. It is enclosed with steel marker posts that are painted yellow and outline a 15- by 30-ft perimeter. "Septic Tank" and "Drain Field" labels are attached to the posts. A steel riser 10 in. in diameter and 18 in. above grade also marks the location of the tank.

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100-BC-2

Other Waste Units Located Within the Operable Unit Area

118-C-3	Reactor
118-C-4	Storage Facility

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UNIT NAME: 118-C-3
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1969

COORDINATES: N67415 W80400

WASTE TYPES AND AMOUNTS: This unit contains an estimated 25,000 Ci of radionuclides, 105 tons of lead, and 7,000 cu ft of asbestos.

SITE DESCRIPTION: The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building. The reactor building has 3- to 5-ft-thick concrete walls around the reactor and corrugated asbestos/cement siding upper walls. Roof construction is reinforced concrete over the inner rod room and the rear face enclosure and poured insulating concrete over the rest of the building.

KNOWN RELEASES: There may have been some seepage from the fuel storage basins, in which case the soil column under the basins may be contaminated. The soil has not been characterized, but the radionuclide inventory is estimated to be low when compared to the total inventory in the reactor.

CLEANUP ACTIONS: The basin has been drained and cleaned, and surface contamination has been fixed. The building is scheduled for decommissioning after the NEPA process is complete.

RELEASE POTENTIAL: The waste is fixed inside the reactor envelope. Over 90% of the radionuclide inventory is bound in activated metal and graphite.

UNIT NAME: 118-C-4
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1969

COORDINATES: N67100 W80120

WASTE TYPES AND AMOUNTS: The tunnel was used for temporary storage for radioactive decay pending subsequent disposal. Some miscellaneous components are currently in the rod cave. The radiation reading at the entrance to the tunnel with the door open is 5 mR/h.

SITE DESCRIPTION: The unit is a concrete tunnel covered with a 4-ft-thick mound of earth.

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100-BC-3

Waste Units Assigned to this Operable Unit

118-B-2	Burial Ground
118-B-3	Burial Ground
118-B-4	Burial Ground
118-B-6	Burial Ground

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UNIT NAME: 118-B-2
UNIT TYPE: Burial Ground
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1956

COORDINATES: N69300 W80050

WASTE TYPES AND AMOUNTS: The unit was used for disposal of dry waste from 107-B Basin repair work and for wastes from 115-B alterations by minor construction.

SITE DESCRIPTION: The unit contains a trench running east and west.

CLEANUP ACTIONS: The unit is covered with a minimum of 4 ft of soil.

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UNIT NAME: 118-B-3
UNIT TYPE: Burial Ground
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1956
END DATE: 1960

COORDINATES: N69300 W79800

WASTE TYPES AND AMOUNTS: The unit was used for the disposal of solid waste from the effluent line modification and for disposal of reactor-generated solid waste during various modification programs.

SITE DESCRIPTION: The unit contains many trenches running east and west.

CLEANUP ACTIONS: The unit was covered with a minimum of 4 ft of soil.

UNIT NAME: 118-B-4
UNIT TYPE: Burial Ground
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1956
END DATE: 1958

COORDINATES: N69425 W80400

WASTE TYPES AND AMOUNTS: The unit was used for disposal of fuel spacers.

SITE DESCRIPTION: The unit consists of six dummy storage pits installed below ground. The pits are constructed of metal culverts 15 ft deep and 6 ft in diameter.

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UNIT NAME: 118-B-6
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1953

COORDINATES: N69500 W80500

WASTE TYPES AND AMOUNTS: The unit was used for the disposal of tritium wastes and tritium recovery process waste, primarily aluminum target cans and lead target melting pots.

SITE DESCRIPTION: The unit consisted of two concrete pipes, 18 ft long and 6 ft in diameter, buried vertically in the ground. A light metal cap was placed over pipes in the concrete pad.

100-BC-4

Waste Units Assigned to this Operable Unit

118-B-1	Burial Ground
118-C-1	Burial Ground
1607-B9	Septic Tank

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UNIT NAME: 118-B-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1973

COORDINATES: N67000 W83500

WASTE TYPES AND AMOUNTS: The spline silos received metallic wastes. The trenches received general reactor waste from 100-B and 100-N reactors that included the following: aluminum tubes, irradiated facilities, thermocouples, vertical and horizontal aluminum thimbles, stainless steel gunbarrels and expendables, plastic, wood, cardboard.

SITE DESCRIPTION: The site consists of 21 trenches running east-west, 3 trenches running north-south, perforated burials, and spline silos. Perforated burials were generally in excavations shored with railroad ties. Spline silos were metal culverts with a 5- to 6-ft radius. Typically, the trenches are 300 ft long by 20 ft wide by 20 ft deep with a 20-ft space between them.

UNIT NAME: 118-C-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1969

COORDINATES: N67250 W79459,N66920 W79459,N66920 W79970,N67316 W79970,N67316 W79713

WASTE TYPES AND AMOUNTS: The unit was used for miscellaneous solid waste from 105-C Building that includes pressure tubes, aluminum spacers, control rods, soft waste, and reactor hardware.

SITE DESCRIPTION: The site contains many trenches running north and south and six pits (10 by 10 ft). Typically, the trenches were 300 by 200 by 20 ft with a 20-ft space between each trench.

UNIT NAME: 1607-B9
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive

COORDINATES: N66300 W79800

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 105-C Reactor Building, amount unknown.

SITE DESCRIPTION: This unit includes a tile field.

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100-DR-1

Waste Units Assigned to this Operable Unit

116-D-1A	Trench
116-D-1B	Trench
116-D-2	Crib
116-D-3	French Drain
116-D-4	French Drain
116-D-5	Outfall Structure
116-D-6	French Drain
116-D-7	Retention Basin
116-D-9	Crib
116-D-10	Pit
116-DR-1	Trench
116-DR-2	Trench
116-DR-5	Outfall Structure
116-DR-9	Retention Basin
120-D-1	Pond
120-D-2	Storage Tank
126-D-1	Ash Pit
126-D-2	Demolition and Inert Landfill
126-D-3	Brine Pit
128-D-2	Burning Pit
130-D-1	Storage Tank
132-D-1	Building
132-D-2	Building
132-D-3	Pump Station
628-3	Burning Pit
1607-D2	Septic Tank
1607-D4	Septic Tank
1607-D5	Septic Tank

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UNIT NAME: 116-D-1A
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1947
END DATE: 1952

COORDINATES: N92230 W52480

WASTE TYPES AND AMOUNTS: The site received contaminated water and sludge from 105-D Fuel Storage Basin.

CLEANUP ACTIONS: The unit was covered with 6 ft of soil.

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UNIT NAME: 116-D-1B
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1967

COORDINATES: N92300 W52570

WASTE TYPES AND AMOUNTS: The site received contaminated water and sludge from 105-D Fuel Storage Basin and contaminated liquid waste from the decontamination of fuel spacers and reactor hardware.

CLEANUP ACTIONS: The unit was covered with 6 ft of soil.

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UNIT NAME: 116-D-2
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1952

COORDINATES: N91970 W52610 (#1), N91900 W52640 (#2)

WASTE TYPES AND AMOUNTS: The site received effluent water from isolated tubes containing ruptured fuel elements.

SITE DESCRIPTION: The unit is sand-filled and shored with railroad ties. There may be two pluto crib sites. The first one is suspected to be just a hole in the ground and used only one time. This was the one sampled (N91900 W52640). N91970 W52610 is thought to be the main crib but was not visible in 1976 during sampling.

CLEANUP ACTIONS: The site was covered with 10 ft of soil.

UNIT NAME: 116-D-3
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1967

COORDINATES: N92700 W52575

WASTE TYPES AND AMOUNTS: The site received low-level fission product wastes from a contaminated maintenance shop and cask decontamination pad in the 108 Building.

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UNIT NAME: 116-D-4
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1956
END DATE: 1957

COORDINATES: N92675 W52650

WASTE TYPES AND AMOUNTS: The site received low-level fission product wastes from contaminated maintenance shops in the 108 buildings.

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UNIT NAME: 116-D-5
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N94634 W53645

WASTE TYPES AND AMOUNTS: This unit received reactor coolant water from the 107-D Retention Basin and waste water from the 100-D Water Support Facilities: 183, 190, etc.

SITE DESCRIPTION: The unit is an open, reinforced, compartmentalized concrete water box with a reinforced concrete overflow spillway to the shoreline. It is enclosed with a chain-link security fence and an aviary exclusion mesh cover.

CLEANUP ACTIONS: The overflow spillway has been filled and covered with soil from its origin to the shoreline.

UNIT NAME: 116-D-6
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1961
END DATE: 1967

COORDINATES: N92300 W52720

WASTE TYPES AND AMOUNTS: The site received domestic water from the changing room and water from the mask decontamination station.

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UNIT NAME: 116-D-7
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N94455 W52780, N94685 W53250

WASTE TYPES AND AMOUNTS: This site retained cooling water effluent from the 105-D Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Total radionuclide inventories in the vicinity of the basin ranged from 5 to over 400 Ci. Seventy percent of the total radionuclide inventory is contained within the soil adjacent to the unit. Approximately 10 Ci have leached into the concrete floor and walls.

SITE DESCRIPTION: The unit is an open concrete basin with a vertical concrete baffle constructed lengthwise in the middle of the basin. The floor consists of concrete slabs, their joints originally closed with neoprene water seals. The walls slope from the floor to a point 10 ft above the floor level with the remaining wall (~10 ft) being vertical. The sloping wall sections are 4 in. thick, and the vertical walls are reinforced construction with a minimum thickness of 1 ft at the top and 5.75 ft at the bottom.

CLEANUP ACTIONS: The floor is covered with ~2 ft of soil. The walls and baffle were demolished and disposed of in situ. They were stabilized with a minimum of 1 ft of backfill. The fill dirt used to cover sludge along this unit and 107-DR Retention Basin floors during deactivation was obtained from the immediate vicinity of the basins. It is believed that some of the fill dirt was removed from the sludge disposal trenches.

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UNIT NAME: 116-D-9
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1960
END DATE: 1967

COORDINATES: N92053 W52532

WASTE TYPES AND AMOUNTS: The site received drainage from confinement system 117
Building seal pits.

SITE DESCRIPTION: The site is filled with gravel and covered to grade with clean
soil. A large steel vent cap is located in the center of the site.

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UNIT NAME: 116-D-10
UNIT TYPE: Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: July 1984
END DATE: September 1984

COORDINATES: N92325 W52225

WASTE TYPES AND AMOUNTS: The unit received processed water from the 105-D Fuel Storage Basin. During the cleanout of this basin, the radiologically contaminated shielding water was processed through a process system using ion exchange columns. Before discharging the water to the unit, composite samples were taken to ensure that radionuclide concentrations were below release criteria in Table II of DOE Order 5480.1. No known hazardous substances were present in the water; however, chemical analysis was not a standard practice during that period, and there is no evidence that one was performed. It should be noted that water removed from the 1608-D is believed to be comparable to the storage basin water, and EP-TOX testing results for the 1608-D water were negative.

SITE DESCRIPTION: The unit consists of two open excavated pits with a crossover channel connecting them. The west excavation was 35 ft long, 22 ft wide, and 3 ft deep. The east excavation was 50 ft long, 24 ft wide, and 4 ft deep. Both pits have been backfilled and graded to resemble the natural terrain.

KNOWN RELEASES: On August 27, 1984, there was a process equipment failure which introduced very fine particles of sludge into the processed water holdup tanks. When the "clean water," verified by radiochemical and isotopic analysis, from the holdup tanks was discharged, the fine sludge particles were also discharged thus significantly increasing the amount of radioactive material in the soil.

CLEANUP ACTIONS: Six dumptruck loads totalling 1,000 cu ft of contaminated soil were removed from the unit. After removal of the contaminated soil, a detailed survey, using standard Hanford beta-gamma detection instruments was performed. Soil samples were also collected. Based on these results, the unit was released and backfilled to grade with 3 to 4 ft of clean soil.

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UNIT NAME: 116-DR-1
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950 (1951)*
END DATE: 1967

COORDINATES: N94650 W51900 (centerline between 116-DR-1 and 116-DR-2)

WASTE TYPES AND AMOUNTS: The site received effluent from the 107-D and 107-DR retention basins after 105-D and 105-DR had outages due to ruptured fuel elements.

CLEANUP ACTIONS: The site was covered to grade with clean soil.

* Conflicting Dates

UNIT NAME: 116-DR-2
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1967

COORDINATES: N94650 W51900 (centerline between 116-DR-1 and 116-DR-2)

WASTE TYPES AND AMOUNTS: The site received effluent overflow from the 107-D and 107-DR retention basins at times of high activity due to fuel element failure.

CLEANUP ACTIONS: The site was covered to grade with clean soil.

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UNIT NAME: 116-DR-5
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1965

COORDINATES: N94933 W53232

WASTE TYPES AND AMOUNTS: This unit received reactor coolant from the 107-DR Retention Basin.

SITE DESCRIPTION: The unit is an open, reinforced, compartmentalized concrete water box with a reinforced concrete overflow spillway to the shoreline.

CLEANUP ACTIONS: The unit was demolished and covered with soil. The overflow spillway was filled and covered with soil from its point of origin to the shoreline.

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UNIT NAME: 116-DR-9
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1965

COORDINATES: N94058 W52516, N94680 W52219

WASTE TYPES AND AMOUNTS: This site received cooling water effluent from the 105-DR Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Total radionuclide inventories in the vicinity of the basin ranged from 5 to over 400 Ci. Seventy percent of the total radionuclide inventory is contained within the soil adjacent to the unit. Approximately 10 Ci have leached into the concrete floor and walls.

SITE DESCRIPTION: The unit is an open concrete structure with a vertical concrete baffle constructed lengthwise in the middle. The floor consists of concrete slabs, their joints originally closed with neoprene water seals. The walls slope from the floor to a point 10 ft above the floor level, with the remaining wall (~10 ft) being vertical. The sloping wall sections are 4 in. thick, and the vertical walls are reinforced construction with a minimum thickness of 1 ft at the top and 5.75 ft at the bottom.

CLEANUP ACTIONS: The floor is covered with ~3 ft of soil. The wall and baffle have been demolished and disposed of in situ. They were stabilized with a minimum of 1 ft of backfill material. Fill dirt used to cover sludge along this unit and 107-D Retention Basin floors during deactivation was obtained from the immediate vicinity of the basins. It is believed that some of the fill dirt was removed from the sludge disposal trenches.

9212-971715

UNIT NAME: 120-D-1
UNIT TYPE: Pond
WASTE CATEGORY: Nonhazardous/Nonradioactive

TSD: D-1-1
UNIT STATUS: Active
START DATE: January 1, 1977

COORDINATES: N93800 W53800

WASTE TYPES AND AMOUNTS: This site receives 183-D Sandfilter backwash (nonhazardous), small quantities of filtered, chlorinated water from hydraulic test loops and fuel discharge trampoline tests. The estimated flow rate is 45,000 gal/d. Demineralizer recharge effluent (corrosive) from two sources were released at intervals of once every 2 to 3 yr for one regenerate source and once every 6 yr for the other.

UNIT NAME: 120-D-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N92170 W53840 (NE corner)

WASTE TYPES AND AMOUNTS: This unit was never used for waste acid storage. No records have been found to document the disposal of waste of any kind in this facility. No written documentation has been found concerning the disposal of the lead flashing that was used in the construction of the waste acid reservoir; however, it is assumed that the lead flashing was disposed in situ during the demolition of the 186-D facility.

SITE DESCRIPTION: The unit was constructed of acid-proof brick, 3-ply waterproof membrane, vit pipe, #8 lead flashing, and gunnite. The sides of the reservoir were sloped 2:1 from 5 ft below grade level to the bottom. At present (6-21-91), the site area is covered with gravel and annual weeds. No evidence remains on the surface of the building structure. A brick manhole at the site may have been associated with the structure.

CLEANUP ACTIONS: The 186-D Building and the Waste Acid Reservoir were demolished in 1979.

9212197717

UNIT NAME: 126-D-1
UNIT TYPE: Ash Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1960

COORDINATES: N93900 W53800 (center)

WASTE TYPES AND AMOUNTS: This site received an unknown amount of coal ash that was sluiced to pits with raw river water from the 184-D Powerhouse. The ash has been determined by testing in accordance with WAC 173-303 to be nonextraction process (EP) toxic.

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UNIT NAME: 126-D-2
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1970's
END DATE: 1986

COORDINATES: N93250 W54375 (center)

WASTE TYPES AND AMOUNTS: The unit contains demolition and inert waste from demolished facilities in and around 100-D. These include such facilities as: 184-D (including stacks), 108-D, released portions of the 115-D/DR, 186-D, etc. Of all the demolition and inert waste landfills in the areas, this one has the highest potential of containing hazardous waste. It was active for many years and was known to have received waste from 100-N as well as the maintenance facility at 189-D.

SITE DESCRIPTION: The unit is an excavated pit originally used to store coal for the powerhouse. This unit is full. It is covered with ~1 ft of pit run backfill material and graded to conform with the natural terrain.

CLEANUP ACTIONS: In 1983 and 1984, paint cans (both spray and buckets), drums, and various types of garbage were found and removed from this landfill. At that time, ~80% of the landfill was full and covered with backfill

UNIT NAME: 126-D-3
UNIT TYPE: Brine Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

SITE DESCRIPTION: The salt dissolving pit and brine pit were both below-grade concrete vaults with internal void spaces (brine pit 500 ft³, dissolving pit 900 ft³). No evidence of the site remains on the surface.

CLEANUP ACTIONS: The site was demolished in situ March 1988. Both pits were sampled for radiation and EP toxic metals. Samples showed the NaCl concentrations were greater than 10% (hazardous material limit). No significant radioactive materials were found. Northwest Environmental Services, Inc. removed all hazardous waste and salt cake from the pits and certified them clean before in situ demolition and final grading. The pits were partially backfilled with rubble and leveled to grade with clean fill.

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UNIT NAME: 128-D-2
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N93280 W50900

WASTE TYPES AND AMOUNTS: Some pieces of reactor hardware and graphite blocks were found at the site (not contaminated).

SITE DESCRIPTION: The site is a large landfill area with evidence of surface burning. It has no definite boundaries but is approximately one area. The site is marked with signs of plant stress, depressions, and berms.

UNIT NAME: 130-D-1
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N92880 W53920

WASTE TYPES AND AMOUNTS: The unit was used for storage of leaded gasoline (product).

SITE DESCRIPTION: The unit is a steel underground storage tank with a capacity between 1,000 and 4,999 gal.

CLEANUP ACTIONS: When the garage and gas dispensing operation were centralized following deactivation of the 100 D/DR Area, the unit was emptied of gasoline and filled with water. The unit was removed. The soil was tested and found to be free of contaminants.

RELEASE POTENTIAL: No potential for release of hazardous constituents exists; the unit is filled with water.

9 2 1 2 1 9 7 0 7 2 0

UNIT NAME: 132-D-1
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N92012 W52727

WASTE TYPES AND AMOUNTS: The resident radionuclides are tritium, C-14, Co-60, Sr-90, Cs-137, Eu-152, and Pu-239.

SITE DESCRIPTION: The unit consisted of the building, the vacuum and pressure seal pit, and tunnels. The building was a single-story, reinforced concrete structure, 20 ft high, with a basement. At ground level, an operating gallery ran the length of the building and was flanked on either side by cells that contained the gas processing equipment. The cells, including walls, ceilings and floors, were constructed of reinforced concrete slabs with composition surfaces. At right angles to the operating gallery and extending across the full width of the building's end, the fan room was constructed of concrete block and contained the ventilation fan, air compressor, office, locker room, etc. At each end of the basement, a tunnel containing the gas recirculating piping lead to the reactors. The tunnel to 105-D was 12 ft wide by 6.5 ft high. The tunnel to 105-DR was 5 ft wide. Connected to and part of the 105-D tunnel was the vacuum and pressure seal pit. Also, the tunnel formed part of the 1608-D Lift Station. Presently, the site looks like a gravel parking lot and is free of any debris.

CLEANUP ACTIONS: The building and adjoining tunnels were decommissioned in situ in 1985 and 1986, using ARCL methodology. The at- and below-grade structures (floor slab, walls, footing pedestals, tunnel roof and walls, pipes and other structures) were exposed by excavating and demolishing to at least 1 m below grade. The resulting rubble was placed in the basement and tunnels for in situ disposal.

92122971721

UNIT NAME: 132-D-2
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1961
END DATE: 1967

COORDINATES: N92005 W52856 (northeast corner)

WASTE TYPES AND AMOUNTS: Total radionuclide inventory in the 117-D building was estimated to be $3.9E-3$ Ci. The radionuclides comprising this figure are H-3, C-14, Co-60, Sr-90, CS-137, Eu-152, and Pu-239.

SITE DESCRIPTION: The unit was a reinforced concrete structure, 35 ft high, and almost completely below grade. About 8 ft was above grade. The maximum thickness of the walls and floors was 2 ft, with the majority 1 ft thick or less. The ducts were made of reinforced concrete with a maximum wall thickness of 12 in. The inlet duct was 115 ft long, and the exhaust duct was 92 ft long. The site now resembles a gravel parking lot.

CLEANUP ACTIONS: The site was decommissioned using ARCL methodology. The demolition and site grading were performed in January and February 1986. The building and ducts were excavated and demolished in situ. The contaminated rubble was buried at least 1 m deep, except for rubble from the seal pits, which was buried under a minimum of 5 m of clean earth.

92121970722

UNIT NAME: 132-D-3
UNIT TYPE: Pump Station
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N92106 W52755

WASTE TYPES AND AMOUNTS: This unit received water from reactor building drains containing trace amounts of low-level radionuclides and decontamination chemicals. Radionuclides were primarily miscellaneous fission and activation products. The decontamination chemicals consisted of sodium fluoride, oxalic acid, and citric acid. Water was pumped from the reactor collection pits into the reactor effluent lines near the reactor building and became part of the 107-D effluent that was discharged to the Columbia River.

SITE DESCRIPTION: Prior to decommissioning, the structure extended 4 ft above grade and 32 ft below grade. The walls and floor were constructed of reinforced concrete and the roof was constructed of a wood frame with composition surface. The facility included an accumulation sump, which supplied three separate sumps.

CLEANUP ACTIONS: Decommissioning was performed in two phases. Phase 1 consisted of water removal (240 gal), asbestos removal/disposal (40 cu ft), and pump and piping removal and was completed 4/4/86. Phase 2 consisted of demolition (in situ) and site grading and was completed 1/6/87. The facility was covered with 1 m of soil.

RELEASE POTENTIAL: There is no potential for release.

UNIT NAME: 628-3
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N93280 W49500

WASTE TYPES AND AMOUNTS: Debris, consisting mostly of burnt wood, nails, metal pipes, rebar, and glass, is scattered over the area. In some spots, the site also contains what looks like asbestos, friable and nonfriable.

SITE DESCRIPTION: The site is roughly oval. The center is distinguished by a 4-ft depression. The depression shows signs of severe plant stress and soil discoloration. The depression, as well as the area around it, is littered with debris. It appears that at one time cat tractors bulldozed some of the surrounding soil.

70724

UNIT NAME: 1607-D2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N94210 W52770

WASTE TYPES AND AMOUNTS: This unit receives sanitary waste from office, maintenance services, and process water pumping buildings (190-DA, 189-D, 185-D, 182-D, 183-D, 170-D, and 105-D). The flow rate to this unit is estimated at 1,225 gal/d.

SITE DESCRIPTION: The unit includes a tile field. It is 13.5 ft deep, constructed of reinforced concrete, and has a 553-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

92129

UNIT NAME: 1607-D4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1968

COORDINATES: N91750 W52600

WASTE TYPES AND AMOUNTS: This unit received sanitary waste from the 115-D Gas Recirculation Building, amount unknown.

SITE DESCRIPTION: The unit includes a tile field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 6-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 1607-D5
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N92900 W55790

WASTE TYPES AND AMOUNTS: This unit receives sanitary waste from the 181-D Pumphouse. The flow rate to this unit is estimated at 35 gal/d.

SITE DESCRIPTION: The unit includes a tile field. It is 7 ft 10 in. deep, constructed of reinforced concrete, and has a 6-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

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100-DR-1

Other Waste Units Located Within the Operable Unit Area

118-D-6
132-D-4

Reactor
Stack

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UNIT NAME: 118-D-6
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N92200 W52790

WASTE TYPES AND AMOUNTS: This unit contains an estimated 21,500 Ci of radionuclides, 94 tons of lead, and 100 cu ft of asbestos.

SITE DESCRIPTION: The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building.

KNOWN RELEASES: It is suspected that the irradiated fuel storage basin leaked for a number of years prior to deactivation. The leak rate was small, and the location of the leak was never identified.

CLEANUP ACTIONS: The water has been drained from the basin. The basin has been cleaned, and loose surface contamination has been fixed to the surfaces of the basin. The building is scheduled for decommissioning after the NEPA process is complete.

RELEASE POTENTIAL: Minimal release potential--over 90% of the radionuclide inventory is bound in activated metal and graphite. The waste is fixed inside the reactor envelope.

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UNIT NAME: 132-D-4
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N92200 W52790

WASTE TYPES AND AMOUNTS: This unit was used to exhaust confinement air that originated from the work areas in the 105-D Reactor Building. The interior of the stack contains an unknown quantity of low-level radioactive materials.

SITE DESCRIPTION: The unit is a monolithic, reinforced concrete structure with a maximum wall thickness of 1.5 ft at the base. It rests on a double octagon-shaped base that extends 17.5 ft below grade. An opening at the base provides access to its interior portion. This opening is fitted with a steel door.

RELEASE POTENTIAL: This unit remains standing, and the inlet plenum is sealed off.

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100-DR-2

Waste Units Assigned to this Operable Unit

116-DR-3	Trench
116-DR-4	Crib
116-DR-6	Trench
116-DR-7	Crib
116-DR-8	French Drain
118-D-5	Burial Ground
126-DR-1	Demolition and Inert Landfill
132-DR-1	Pump Station
1607-D3	Septic Tank

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9 2 1 2 1 9 7 0 7 3 2

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UNIT NAME: 116-DR-6
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1965

COORDINATES: N91300 W52550

WASTE TYPES AND AMOUNTS: The site received diverted coolant during the Ball 3X upgrade. It also received diverted water during a reactor shutdown, when maintenance was necessary on the effluent system.

CLEANUP ACTIONS: The unit was covered with 6 ft of soil.

7.0734

UNIT NAME: 116-DR-7
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1953

COORDINATES: N91123 W52734

WASTE TYPES AND AMOUNTS: Liquid potassium borate solution was drained from the 3X System prior to the Ball 3X System upgrade.

SITE DESCRIPTION: Currently, the site is identifiable by a concrete marker.

9.1219

UNIT NAME: 116-DR-8
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1960
END DATE: 1964

COORDINATES: N92053 W52532

WASTE TYPES AND AMOUNTS: The site received drainage from the containment system 117 Building seal pits.

SITE DESCRIPTION: The structure is filled with gravel and covered to grade with clean soil. A large steel vent identifies the site.

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UNIT NAME: 118-D-5
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1954
END DATE: 1954

COORDINATES: N90900 W52750

WASTE TYPES AND AMOUNTS: This site contains the thimbles removed from the 105-DR Reactor during the Ball 3X work in 1954.

SITE DESCRIPTION: The unit consists of two burial trenches located parallel to each other with one trench each side of the above-ground experimental Level 1 discharge pipe. Each trench is 40 ft long by 20 ft wide.

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UNIT NAME: 126-DR-1
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: 1970's

COORDINATES: N90875 W53900 (center)

WASTE TYPES AND AMOUNTS: The unit contains demolition and inert waste from demolished facilities, including rubble from released portions of the 115-D/DR, and some rubble from 183-DR. In 1989, small amounts of friable asbestos were found scattered throughout the southern sector. The asbestos is believed to be the result of salvage operations during the 1970's. This site may contain chromates in both the soil and underground piping as a result of its association with water treatment. Because of this potential, it is closed to waste disposal.

SITE DESCRIPTION: The unit is an excavated area between the 183-DR and 190-DR that contained four 3,750,000-gal steel water storage tanks. The four tanks were removed. Approximately 25% of the bottom surface area contains a layer of waste ~5 to 10 ft deep that is covered with pit run backfill and located in the northwest sector of the pit. The southern sector is posted as an asbestos area.

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UNIT NAME: 132-DR-1
UNIT TYPE: Pump Station
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1964

COORDINATES: N91364 W52648 (northeast corner)

WASTE TYPES AND AMOUNTS: This site received water from reactor building drains containing trace amounts of low-level radionuclides and decontamination chemicals. Radionuclides were primarily miscellaneous fission and activation products. The decontamination chemicals consisted of sodium fluoride, oxalic acid, and citric acid. Water was pumped from the reactor collection pits into the reactor effluent lines near the reactor building and became part of the 107-DR effluent that was discharged to the Columbia River.

SITE DESCRIPTION: The unit consisted of: 1) an above-ground structure consisting of concrete block walls, a reinforced concrete floor, and a roof reinforced concrete deck with a composition surface; and 2) a below-grade structure of reinforced concrete. The facility contained an operating level, which consisted of pumping equipment, and an accumulation inlet chamber, which fed three discharge sump chambers. The accumulation chamber was located in the northern section of the facility.

CLEANUP ACTIONS: Decommissioning consisted of: 1) Removal/disposal of ~136 cu ft of asbestos, 2) removal/disposal of pump equipment and related piping, 3) removal/disposal of ~126,750 gal sump water, 4) removal/disposal of fifteen 55-gal drums of sludge from the sumps, and 5) demolition and site grading. All decommissioning activities were completed on September 30, 1987.

UNIT NAME: 1607-D3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N91350 W53290

WASTE TYPES AND AMOUNTS: This unit receives sanitary waste from the 151-D Electrical Distribution Substation. The flow rate to this unit is estimated at 1,050 gal/d.

SITE DESCRIPTION: The unit includes a tile field. It is 9 ft 10 in. deep, constructed of reinforced concrete, and has a 10-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

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100-DR-2

Other Waste Units Located Within the Operable Unit Area

116-D-8	Storage Pad
118-DR-2	Reactor
122-DR-1	Test Treatment or Support Facility
132-DR-2	Stack

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0 5 2 0 7 0 7 0 0

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UNIT NAME: 116-D-8
UNIT TYPE: Storage Pad
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1946
END DATE: 1975

COORDINATES: N91200 W53000

WASTE TYPES AND AMOUNTS: This site contains trace amounts of radionuclides and decontamination chemicals.

SITE DESCRIPTION: The unit is a concrete pad with a drain. The drain, which facilitated pad decontamination and rain runoff, discharged into the 105-DR process sewer.

CLEANUP ACTIONS: All casks have been removed, and an asphalt emulsion coating was placed on the concrete to fix all surface contamination.

RELEASE POTENTIAL: The pad contains one contaminated drain, which is piped to a French drain.

9 2 1 2 1 9 7 0 7

UNIT NAME: 118-DR-2
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: October 3, 1950
END DATE: December 30, 1964

COORDINATES: N91240 W52790

WASTE TYPES AND AMOUNTS: This unit contains an estimated 13,500 Ci of radionuclides, 94 tons of lead, 100 cu ft of asbestos and 500 lb of cadmium.

SITE DESCRIPTION: The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building.

KNOWN RELEASES: It is suspected that the irradiated fuel storage basin leaked for a number of years prior to deactivation. The leak rate was small, and the location of the leak was never identified.

CLEANUP ACTIONS: The fuel storage basin has been drained and cleaned, and contamination has been fixed to the inside surface of the basin. The building is scheduled for decommissioning after the NEPA process is complete.

RELEASE POTENTIAL: Minimal release potential - over 90% of the radionuclide inventory is bound in activated metal and graphite.

9210970712

UNIT NAME: 122-DR-1
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Hazardous Waste

TSD: T-1-1
UNIT STATUS: Inactive
START DATE: 1972
END DATE: 1986

COORDINATES: N91240 W52950

WASTE TYPES AND AMOUNTS: Wastes consist of sodium, lithium, and sodium-potassium alloy. Approximately 20,000 kg are managed at this facility each year. The facility is also used to store up to 20,000 L of dangerous wastes.

SITE DESCRIPTION: Waste thermal treatment unit and hazardous waste staging area.

RELEASE POTENTIAL: Typical containers are 55-gal drums stored and treated inside a concrete building. Nonhazardous aqueous hydroxide wastes are discharged to an existing crib.

UNIT NAME: 132-DR-2
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1986

COORDINATES: N91240 W52790

WASTE TYPES AND AMOUNTS: Until 1964 the unit discharged exhaust air from the 105-DR Building. Since 1972, the unit was used to support operations relating to the 105-DR Sodium Burn Facility (122-DR-1). The interior of the unit contains an unknown quantity of low-level radioactive materials.

SITE DESCRIPTION: The unit is a monolithic, reinforced concrete structure with a maximum wall thickness of 1.5 ft at the base. It rests on a double octagon-shaped base that extends 17.5 ft below grade. An opening at the base provides access to its interior portion. This opening is fitted with a steel door.

RELEASE POTENTIAL: This unit remains standing and is operable.

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Waste Units Assigned to this Operable Unit

116-DR-10	Pit
118-D-1	Burial Ground
118-D-2	Burial Ground
118-D-3	Burial Ground
118-D-4	Burial Ground
118-DR-1	Burial Ground
128-D-1	Burning Pit
1607-D1	Septic Tank

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9 2 1 2 1 9 7 0 7 1 6

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UNIT NAME: 116-DR-10
UNIT TYPE: Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1984
END DATE: November 1984

COORDINATES: N91075 W52200

WASTE TYPES AND AMOUNTS: The unit received processed water from the 105-DR Fuel Storage Basin. During the cleanout of this basin, the radiologically contaminated shielding water was processed through a process system using ion exchange columns. Before discharging the water to the unit, composite samples were taken to ensure that radionuclide concentrations were below release criteria in Table II of DOE Order 5480.1. Although the water was cleaned to applicable release limits, minute quantities (below release limits) of radionuclides remaining in the water accumulated in the soil at some low points of the floor. No known hazardous substances were present in the water; however, chemical analysis was not a standard practice during that period, and there is no evidence that one was performed. It should be noted that water removed from the 1608-DR is believed to be comparable to the storage basin water, and EP-TOX testing results for the 1608-DR water were negative.

SITE DESCRIPTION: The unit is an open excavated pit located in a natural depression. The excavation has been backfilled and graded to match the natural terrain. The original natural depression remains.

CLEANUP ACTIONS: The contaminated soil was removed, and the site was released using ARCL methodology. The unit was backfilled and graded to match the natural terrain.

UNIT NAME: 118-D-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N90380 W53205, N90380 W52755, N90005 W52755, N90005 W53205

WASTE TYPES AND AMOUNTS: The unit was used for the disposal of irradiated dummies, thimbles, rods, gun barrels, and other contaminated solid waste.

SITE DESCRIPTION: This unit contains many trenches running north and south. Typically, the trenches are 300 ft long by 20 ft wide and 20 ft deep with a 20-ft space between them.

UNIT NAME: 118-D-2
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1970

COORDINATES: N90582 W55652, N90582 W55295, N89493 W55295, N89500 W55652

WASTE TYPES AND AMOUNTS: The unit was used for miscellaneous contaminated solid waste, irradiated dummies, splines, rods, thimbles, and gun barrels. After April 1966, 100-N Area solid wastes were also buried here.

SITE DESCRIPTION: The unit contained many trenches running east-west and 5 disposal pits. The trenches are 66 ft wide at the surface, 20 ft wide at the bottom, and 20 ft deep. Each pit site is composed of two small pits together, constructed with railroad ties, with interior dimensions of ~6 ft by 6 ft, placed within an excavation 24 ft wide by 24 ft deep. All were covered with 6 ft of soil.

UNIT NAME: 118-D-3
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1956
END DATE: 1973

COORDINATES: N91222 W52543, N91473 W51950, N91265 W51430, N91224 W52099

WASTE TYPES AND AMOUNTS: The unit contains miscellaneous contaminated solid wastes and irradiated dummies, splines, rods, thimbles, and gun barrels. It was also used for disposal of 100-N solid wastes.

SITE DESCRIPTION: The unit contains a trench running north and south. Typically, trenches were 200 ft long by 20 ft wide and 20 ft deep. The spacing between trenches was not uniform.

UNIT NAME: 118-D-4
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1967

COORDINATES: N91900 W52100

WASTE TYPES AND AMOUNTS: This unit contains contaminated material generated during various reactor modifications from the 105-D Reactor building. The contaminated material consisted mainly of reactor components and hardware.

SITE DESCRIPTION: The unit contains many trenches. The 105-D Ball 3X Burial Ground is part of this site and is located in the northeast corner. Three square concrete markers mark its location.

UNIT NAME: 118-DR-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1963
END DATE: 1964

COORDINATES: N90400 W52800

WASTE TYPES AND AMOUNTS: This unit contains irradiated metal assemblies from the 105-DR Gas Loop.

SITE DESCRIPTION: The unit contains a trench running north and south.

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UNIT NAME: 128-D-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1967

COORDINATES: N92800 W51300 (center)

WASTE TYPES AND AMOUNTS: The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents.

UNIT NAME: 1607-D1
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N89810 W50425

WASTE TYPES AND AMOUNTS: This unit received sanitary waste from the 1701-D Badgehouse (security check point) and the 1709-D Patrol Change Room and offices, amount unknown.

SITE DESCRIPTION: The unit includes a tile field. It is 11 ft deep, constructed of reinforced concrete, and has a 125-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

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100-FR-1

Waste Units Assigned to this Operable Unit

116-F-1	Trench
116-F-2	Trench
116-F-3	Trench
116-F-4	Crib
116-F-5	Crib
116-F-6	Trench
116-F-7	French Drain
116-F-8	Outfall Structure
116-F-9	Trench
116-F-10	French Drain
116-F-11	French Drain
116-F-12	French Drain
116-F-13	French Drain
116-F-14	Retention Basin
116-F-15	Crib
116-F-16	Outfall Structure
126-F-2	Demolition and Inert Landfill
128-F-2	Burning Pit
132-F-3	Building
132-F-4	Stack
132-F-5	Building
132-F-6	Pump Station
1607-F2	Septic Tank
1607-F3	Septic Tank
1607-F4	Septic Tank
1607-F5	Septic Tank
1607-F6	Septic Tank
UN-100-F-1	Unplanned Release

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UNIT NAME: 116-F-1
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1965

COORDINATES: N78920 W28457, N80000 W28881, N79389 W31024, N78824 W31430

WASTE TYPES AND AMOUNTS: The site received liquid wastes from 105-F and 190-F buildings and decontamination wastes from 189-F Building. Occasionally, contaminated coolant from the reactor front and rear faces was also drained to the unit.

KNOWN RELEASES: During the Ball 3X outage in 1953, effluent water drained to the river via this unit.

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UNIT NAME: 116-F-2
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1965

COORDINATES: N79500 W28675, N79366 W28600, N79290 W28556, N79010 W28540 (centerline)

WASTE TYPES AND AMOUNTS: The site received coolant effluent from 107-F Retention Basin during reactor outages due to fuel ruptures. During deactivation of the 105-F Reactor, the unit received overflow water from the 105-F Storage Basin via the retention basin.

CLEANUP ACTIONS: The unit was covered with 4 to 10 ft of soil.

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UNIT NAME: 116-F-3
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1947
END DATE: 1951

COORDINATES: N78890 W30910

WASTE TYPES AND AMOUNTS: The site received reactor effluent (105-F) during an early fuel failure outage. In 1951, the site received sludge from the 105-F Storage Basin.

SITE DESCRIPTION: The unit is an open excavation ranging from 10 to 20 ft wide and from 8 to 11 ft deep, according to various references. No drawings show exact dimensions.

CLEANUP ACTIONS: The unit was covered with 8 ft of soil.

UNIT NAME: 116-F-4
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1952 (1956)*

COORDINATES: N78840 W31090

WASTE TYPES AND AMOUNTS: The site received coolant water from pressure tubes containing ruptured fuel elements.

SITE DESCRIPTION: The unit is wooden and filled with gravel. A yellow steel post and capped pipe mark the site.

CLEANUP ACTIONS: The site was covered to grade with clean soil.

* Conflicting Dates

UNIT NAME: 116-F-5
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1962
END DATE: 1964

COORDINATES: N78855 W31126

WASTE TYPES AND AMOUNTS: The site received liquid waste from decontamination of boron steel balls.

SITE DESCRIPTION: The site is marked with an old wooden railing fence and radiation zone signs.

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UNIT NAME: 116-F-6
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1965

COORDINATES: N78730 W30930 (north end center), N78552 W30774 (south end center)

WASTE TYPES AND AMOUNTS: The site received diverted water during reactor shutdown, where maintenance was necessary on the effluent system. This practice was used during several reactor upgrades. During the Ball 3X Project (1953), effluent was diverted to 116-F-1.

KNOWN RELEASES: In the spring of 1956, effluent water overflowed, flooding an area south of the site.

CLEANUP ACTIONS: The unit was covered with 6 ft of soil.

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UNIT NAME: 116-F-7
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1960
END DATE: 1965

COORDINATES: N78600 W31200

WASTE TYPES AND AMOUNTS: The site received drainage from confinement exhaust systems filter seal pits in the 117 Building.

SITE DESCRIPTION: The unit is filled with gravel and covered with clean soil. The facility is marked by a vent pipe.

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UNIT NAME: 116-F-8
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1965

COORDINATES: N80675 W29255

WASTE TYPES AND AMOUNTS: Reactor water from the 107 Basin was piped into the outfall structure that discharges into the Columbia River.

SITE DESCRIPTION: This unit was designed to provide an escape for the effluent flow from the 107 Retention Basin to the river should the line, which normally carried the effluent to the center of the river, become plugged. If the main line did plug, the effluent would overflow into a spillway that led to the edge of the Columbia River. The unit consists of a reinforced, compartmentalized concrete water box with walls 1 ft above grade and 25 ft below grade. Spillways are constructed of reinforced concrete. Quantities of broken concrete are visible on the river bank in this location.

CLEANUP ACTIONS: The unit was reduced to near-grade and backfilled with clean soil.

116-F-8

UNIT NAME: 116-F-9
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1963
END DATE: 1976

COORDINATES: N80140 W28880, N79860 W28610, N80110 W28910, N79840 W28640

WASTE TYPES AND AMOUNTS: The site received wash wastewater from animal pens.

SITE DESCRIPTION: Two trenches are connected together, forming a Y shape. The long section is 400 ft, and the shorter branch section is 100 ft long. Both trenches are 15 ft wide (all surface dimensions).

UNIT NAME: 116-F-10
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1965

COORDINATES: N78762 W30875

WASTE TYPES AND AMOUNTS: The site received radioactive water rinses and spent acids from the decontamination of fuel element spacers and other reactor hardware, primarily pressure tube caps.

SITE DESCRIPTION: A vitreous tile extends a few feet out of the ground. There is about 10 ft of sand and gravel beneath the tile.

UNIT NAME: 116-F-11
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1965

COORDINATES: N79016 W30885

WASTE TYPES AND AMOUNTS: The site received cushion corridor decontaminated waste.

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UNIT NAME: 116-F-12
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1964

COORDINATES: N80270 W29120

WASTE TYPES AND AMOUNTS: This site received recovered effluent pump prime from the lift station that discharged back to the effluent line.

29120

UNIT NAME: 116-F-13
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1976

COORDINATES: N80620 W29290

WASTE TYPES AND AMOUNTS: This site received effluent water for a botany experiment.

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UNIT NAME: 116-F-14
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1965

COORDINATES: N79967 W29130, N79967 W28900, N79500 W28900, N79500 W29130

WASTE TYPES AND AMOUNTS: This site received cooling water effluent from the 105-F Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Seventy percent of the total radionuclide inventory is contained within the soil adjacent to the basin. Approximately 10 Ci have leached into the concrete floor and walls.

SITE DESCRIPTION: The unit is concrete-lined with 20-ft walls, similar in design to the 107-B and 107-D retention basins. The unit has been backfilled to a depth of ~5 ft, with soil piled to cover the walls.

KNOWN RELEASES: The largest known leak extended roughly 25 ft from the foot of the unit wall. A leak in the effluent lines going to the 148-F Pumphouse was discovered in the summer of 1952. Another source of contamination was a large manhole at the outlet end of the unit. Effluent overflowed intermittently for an extended period before it was stopped. The extent of the release is well within the zone encompassed by the unit and is within the limit of the AC-5-40 permanent posting.

CLEANUP ACTIONS: The unit has been backfilled to a depth of ~5 ft, with soil piled to cover the walls.

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UNIT NAME: 116-F-15
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N79125 W30375

WASTE TYPES AND AMOUNTS: The unit has not been sampled for radiological or chemical contaminations. It is known that alpha contamination experiments were conducted in the 108-F Building.

SITE DESCRIPTION: The size and design of the unit is unknown. The floor opening is covered with plywood to restrict access. A 20-ft by 18-in. trench is present and appears to slope down into the unit. The trench is covered with plywood and posted as radioactive.

UNIT NAME: 116-F-16
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive

WASTE TYPES AND AMOUNTS: The unit received animal sewage, 107-F Retention Basin water, and low-level contamination from the farm projects. The 107-F Retention Basin water was used in animal experiments at the farm project.

SITE DESCRIPTION: A pipe discharged into a concrete spillway, which extends into the river. The spillway is an 8- to 10-ft-wide concrete structure that extends ~20 ft out from the shoreline and ~12 ft into the Columbia River. The sides are 18 in. high and extend down the length of the structure.

CLEANUP ACTIONS: The majority of the unit has been backfilled; only a small portion near the shoreline is visible.

UNIT NAME: 126-F-2
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: 1970s

COORDINATES: N80475 W30850

WASTE TYPES AND AMOUNTS: The unit now contains nonhazardous and nonradioactive demolition and inert waste from demolished facilities. This waste includes rubble from the released portion of 115-F as well as rubble from such noncontaminated facilities as 183-F, 190-F, 189-F, 185-F, 171-F.

SITE DESCRIPTION: The unit consists of covered, reinforced concrete basins, having a capacity of about 10M gal, separated in the center by a pump room. The pump room was reinforced concrete and largely below grade. The above-ground portion of the pump room has been demolished, and the below-ground portion has been filled with pump room rubble and backfill. Approximately 25% of the east clearwell basin contains waste. The west clearwell remains intact.

UNIT NAME: 128-F-2
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N80000 W28200

WASTE TYPES AND AMOUNTS: Nonradioactive, combustible materials (vegetation, office waste, paint waste, and chemical solvents) have been burned at the site. There are also some large metal materials present, such as hardware, machinery, and other noncontaminated miscellaneous equipment.

SITE DESCRIPTION: The ground still shows signs of burning. Broken glass, cans, and ashes mark areas of the site. Smaller areas of surface burning are located close to the original burn pit.

UNIT NAME: 132-F-3
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1943
END DATE: 1956

WASTE TYPES AND AMOUNTS: The resident radionuclides are H-3, C-14, Co-60, Sr-90, Cs-137.

SITE DESCRIPTION: This unit was a single-story, reinforced concrete structure, 20 ft high. An operating gallery extended down the center and was flanked on either side by cells that contained the gas processing equipment. The equipment cell walls and floors were 3 ft thick. At right angles to the operating gallery and extending across the full width of the west end was the service section, which contained the ventilation fan, air compressor, office, locker room, etc. A pipe tunnel 36 ft wide by 8 ft high ran beneath the full length of the building. The main gas lines to and from the 105-F Building entered through this tunnel. At present, the site looks like a gravel parking lot that is free of any debris.

CLEANUP ACTIONS: The building was demolished in situ using ARCL methodology. The demolition was started and completed during the last quarter of FY84. The above-ground debris and rubble were trucked to the 100-F clearwell for disposal. The below-grade perimeter walls, which extended 13 ft below grade, were demolished to 3 to 4 ft below grade. The remaining walls were left intact and served as containment for the building rubble. The entire area was covered with clean backfill material. This overburden averaged 4 to 5 ft in depth, which exceeded the ARCL requirements of 1 m of clean fill. In addition, grading the final site to be compatible with the surrounding terrain added another 3 to 4 ft of clean backfill.

UNIT NAME: 132-F-4
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N79140 W31010

WASTE TYPES AND AMOUNTS: The interior of the unit contained 4.2 mCi of radioactive materials.

SITE DESCRIPTION: This was used to dispose of confinement air that originated from the work areas in the 105 Reactor Building. The unit has reinforced concrete construction with a base diameter of ~16 ft.

CLEANUP ACTIONS: This unit was demolished in September 1983 and buried in a trench between the 117-F Building Site and the 115-F Building Site.

UNIT NAME: 132-F-5
UNIT TYPE: Building
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N79100 W31450

WASTE TYPES AND AMOUNTS: The radionuclides found in the 117-F Building are H-3, C-14, Co-60, Cs-137, Sr-90, Eu-154, and Eu-152.

SITE DESCRIPTION: The unit and duct work were all made of reinforced concrete, 1 to 2 ft thick. The building was 35 ft high with 8 ft above ground.

CLEANUP ACTIONS: The site was decommissioned using ARCL methodology. The building and ducts were excavated and demolished in situ. The contaminated rubble was buried at least 1 m deep except for rubble from the seal pits, which was buried under a minimum of 5 m of clean earth.

UNIT NAME: 132-F-6
UNIT TYPE: Pump Station
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N78925 W30800

WASTE TYPES AND AMOUNTS: This site received water from reactor building drains containing trace amounts of low-level radionuclides and decontamination chemicals (primarily Turco). Radionuclides were primarily miscellaneous activation products. The decontamination chemicals consisted of sodium fluoride, oxalic acid, and citric acid. Water was pumped from the reactor collection pits into the reactor effluent lines near the reactor building and became part of the 107-F effluent that was discharged to the Columbia River.

SITE DESCRIPTION: The unit was constructed of reinforced concrete, 12 ft above grade and 32 ft below grade. The unit included a wastewater collection pit.

CLEANUP ACTIONS: The facility was demolished in situ and backfilled with a minimum of 5 m of clean fill. The unit was decommissioned in 1987. Water and sludge were removed from the facility, and all incoming piping was sealed prior to demolition.

UNIT NAME: 1607-F2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1988

COORDINATES: N79500 W29740

WASTE TYPES AND AMOUNTS: This unit received unknown amounts of sanitary sewage from the 184-F Powerhouse, 185-F Chemical Treatment Building, 190-F Pumphouse, 105-F Reactor Building, 108-F Building, and the 1700 administration and service buildings. The unit now services the 105-F and 108-F buildings only. The other buildings have been demolished.

SITE DESCRIPTION: The unit is 13 ft 6 in. deep, constructed of reinforced concrete, and has a 522-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 1607-F3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N80440 W32100

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from the 182-F Pump Station, 183-F Water Treatment Plant, and 151-F Substation, amounts unknown.

SITE DESCRIPTION: The unit includes a tile field. It is 11 ft deep, constructed of reinforced concrete, and has a 41-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

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UNIT NAME: 1607-F4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N79130 W31550

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 115-F Gas Recirculation Building amount unknown.

SITE DESCRIPTION: The unit includes a tile field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 6-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 1607-F5
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N82130 W31040

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 181-F Pumphouse, amount unknown.

SITE DESCRIPTION: The unit includes a tile field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 6-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with a minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 1607-F6
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1975

COORDINATES: N80400 W29725

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 141-B, -C, -F, and -M buildings and 146-FR Animal Farm buildings, amounts unknown.

SITE DESCRIPTION: The unit includes a tile field.

UNIT NAME: UN-100-F-1
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 13, 1971

COORDINATES: N80000 W92440

WASTE TYPES AND AMOUNTS: The spill consisted of wash water used to clean out animal pens. The water contained $4.0E-5$ Ci of Sr-90 and $1.06E-6$ Ci of Pu-239.

KNOWN RELEASES: The main sewer lines from 141-C to 141-M buildings became plugged and spread contamination on the ground.

CLEANUP ACTIONS: The area was stabilized with clean gravel and is now within the permanent AC-5-40 markers.

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100-FR-1

Other Waste Units Located Within the Operable Unit Area

118-F-8

Reactor

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UNIT NAME: 118-F-8
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1964

COORDINATES: N79150 W30940

WASTE TYPES AND AMOUNTS: This unit contains an estimated 16,000 Ci of radionuclides, 94 tons of lead, less than 100 cu ft of asbestos, and 30 lb of cadmium.

SITE DESCRIPTION: The unit consists of: 1) A reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building.

KNOWN RELEASES: There may have been some seepage from the fuel storage basins in which case the soil column under the basins may be contaminated. The soil has not been characterized, but the radionuclide inventory is estimated to be low when compared to the total inventory in the reactor.

CLEANUP ACTIONS: A notice of intent was published in the Federal Register on May 16, 1985, stating that an environmental impact statement will be prepared by DOE for the decommissioning of the eight shut-down Hanford reactors.

RELEASE POTENTIAL: Minimal release potential--over 90% of the radionuclide inventory is bound in activated metal and graphite.

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Waste Units Assigned to this Operable Unit

118-F-1	Burial Ground
118-F-2	Burial Ground
118-F-3	Burial Ground
118-F-4	Burial Ground
118-F-5	Burial Ground
118-F-6	Burial Ground
118-F-7	Burial Ground
118-F-9	Burial Ground
120-F-1	Trench
126-F-1	Ash Pit
128-F-1	Burning Pit
128-F-3	Burning Pit
1607-F1	Septic Tank

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UNIT NAME: 118-F-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1954
END DATE: 1965

COORDINATES: N78071 W32200,N78178 W31800,N78178 W31600,N77671 W31600,N77671 W32200

WASTE TYPES AND AMOUNTS: This site contains miscellaneous radioactive solid wastes and reactor components and hardware.

SITE DESCRIPTION: The site contains trenches that run north-south and are typically 300 ft long by 20 ft wide.

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UNIT NAME: 118-F-2
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1965

COORDINATES: N78990 W32787, N78985 W32461, N78626 W32469, N78623 W32796

WASTE TYPES AND AMOUNTS: The site contains miscellaneous radioactive solid wastes, reactor components and hardware.

SITE DESCRIPTION: The individual trenches run north and south and are typically 250 ft by 20 ft.

UNIT NAME: 118-F-3
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1952

COORDINATES: N78839 W31274, N78812 W31232, N78749 W31273, N78660 W31317

WASTE TYPES AND AMOUNTS: The site contains irradiated wastes, such as thimbles and step plugs, that were removed from the 105-F pile during the Ball 3X work in 1952.

SITE DESCRIPTION: The site runs north and south.

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UNIT NAME: 118-F-4
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1949

COORDINATES: N78880 W31400

WASTE TYPES AND AMOUNTS: The site contains silica gel removed from gel tower in one of the 115-F dryer rooms.

SITE DESCRIPTION: The unit is a small pit covered with 6 ft of soil. A yellow steel post marks the site.

118-F-4

UNIT NAME: 118-F-5
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1954
END DATE: 1975

COORDINATES: N78980 W28990, N79020 W27900, N78600 W27780, N78690 W28380

WASTE TYPES AND AMOUNTS: The site contains low-level activity sawdust from animal pens.

SITE DESCRIPTION: The site is a large raised mound with trenches running north and south.

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UNIT NAME: 118-F-6
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1965
END DATE: February 1973

COORDINATES: N77780 W31948, N77390 W31270

WASTE TYPES AND AMOUNTS: This unit contains animal and laboratory wastes. This is considered a biology burial ground not receiving reactor-related wastes.

SITE DESCRIPTION: The unit runs north and south. It adjoins the 118-F-1 Burial Ground and is designated by HPS-AC-5-40 concrete markers.

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UNIT NAME: 118-F-7
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1965

COORDINATES: N78760 W30905

WASTE TYPES AND AMOUNTS: This site served as temporary storage for miscellaneous reactor hardware. The hardware is still present.

SITE DESCRIPTION: The unit consists of a concrete box with a wooden cover.

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UNIT NAME: 118-F-9
UNIT TYPE: Burial Ground
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N78500 W29444

SITE DESCRIPTION: The site contains only one trench. The site appears to have been backfilled, and native vegetation has become re-established. The site is posted as a surface-contaminated area, and a chain barricade with radiation signs surrounds the site.

UNIT NAME: 120-F-1
UNIT TYPE: Trench
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

WASTE TYPES AND AMOUNTS: The site is covered with ~2 ft of florescent tubes; incandescent light bulbs; instrument vacuum tubes; and small AAA, C, and D batteries. The site also contains an assortment of chemical bottles, both large and small.

SITE DESCRIPTION: The site was cut into the ground with the front blade of a bulldozer, pushing all the dirt to the west end of the unit. The original access road is overgrown with 3-ft-high sagebrush, indicating this site has not been used for many years.

UNIT NAME: 126-F-1
UNIT TYPE: Ash Pit
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1965

COORDINATES: N79000 W29650

WASTE TYPES AND AMOUNTS: Unknown amounts of coal ash from the 184-F Powerhouse were sluiced to this unit with raw river water. The ash has been analyzed using the EP Toxicity Test in accordance with WAC 173-303, and no hazardous materials were found. This site also received low-level radionuclides from effluent system leakage.

SITE DESCRIPTION: The original site is a low lying area between the above-ground effluent lines leading to 116-F-14. This area is radioactively contaminated because of large volume leakage from the effluent systems in this area. The entire area is a radiation control area and is within the HPS-AC-5-40 permanent markers. Probably in the late 1940's, the effluent leakage area was contained by an earthen dike, and the ash sluice pipe was extended through the dike into the new ash pit area. The new area is also a radiation control area, but the contamination levels are very low. The new area is not within the HPS-AC-5-40 permanent markers.

UNIT NAME: 128-F-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1965

COORDINATES: N78850 W28800

WASTE TYPES AND AMOUNTS: The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents.

UNIT NAME: 128-F-3
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

WASTE TYPES AND AMOUNTS: It is not known what was burned at the site. It was, however, verified that the site was used for burning by PNL and WHC employees. In 1988, the DOE Headquarter Environmental survey conducted sampling at this site. A backhoe was used for the investigation. A hole was dug 6 to 8 ft deep, but because of the coal ash used for fill, the sides of the ditch caved in. Nothing but coal ash was found at the site.

SITE DESCRIPTION: The site is characterized by annual weeds. The surface has a thin layer of coal and coal ash mixed with fine sandy soil. Scraping the surface a few inches reveals black ash or coal dust. Nothing on the soil surface distinguishes this site from other sites of coal ash dumping found along the dirt road just south of the ash disposal pit.

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100-HR-1

Waste Units Assigned to this Operable Unit

116-H-1	Trench
116-H-2	Trench
116-H-3	French Drain
116-H-4	Crib
116-H-5	Outfall Structure
116-H-6	Retention Basin
116-H-7	Retention Basin
116-H-9	Crib
126-H-2	Demolition and Inert Landfill
132-H-1	Stack
132-H-3	Pump Station
1607-H2	Septic Tank
1607-H4	Septic Tank

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UNIT NAME: 116-H-1
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1952
END DATE: May 1965

COORDINATES: N94850 W38602, N95050 W38602

WASTE TYPES AND AMOUNTS: The site received diversion effluent from the 107-H Retention Basin during reactor outages due to fuel element ruptures and water and sludge from 107-H during deactivation of the unit.

CLEANUP ACTIONS: The site was covered to grade with clean soil.

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UNIT NAME: 116-H-2
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1965

COORDINATES: N94830 W39750

WASTE TYPES AND AMOUNTS: The site received coolant water from the 105-H Reactor building during the Ball 3X system upgrade program. The site was used during other upgrade programs and, when maintenance was necessary, on the effluent system.

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UNIT NAME: 116-H-3
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1965

COORDINATES: N95190 W39335 (center #1) N95173 W39350 (center #2)

WASTE TYPES AND AMOUNTS: The site received spent acid and rinse water from the 105-H Dummy Decontamination Facility (fuel element spacers and other reactor hardware, primarily reactor tube caps).

SITE DESCRIPTION: The two units are made of vitreous tile conduit. The conduit extends a few feet above the ground.

UNIT NAME: 116-H-4
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1952

COORDINATES: N95130 W39850

WASTE TYPES AND AMOUNTS: The site received effluent from tubes containing ruptured fuel elements.

CLEANUP ACTIONS: When the site was retired, it was covered with 10 ft of soil. In 1960, the site was exhumed and moved to 118-H-5 Burial Ground Thimble Pit.

UNIT NAME: 116-H-5
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1965

COORDINATES: N96259 W38546; N96279 W38503; N96240 W38480; N96215 W38523

WASTE TYPES AND AMOUNTS: The site received effluent water from the 107-H Basin.

SITE DESCRIPTION: The unit is a compartmented concrete box that overflowed to the river via a concrete sluiceway. It was designed to provide an escape for the effluent flow from the 107 Retention Basin to the river should the line, which normally carried the effluent to the center of the river, become plugged. If the main line did plug, the effluent would overflow into a spillway that led to the edge of the Columbia River.

CLEANUP ACTIONS: The site was backfilled with 10 ft of soil.

UNIT NAME: 116-H-6
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

TSD: T-1-4
UNIT STATUS: Inactive
START DATE: July 1973
END DATE: November 8, 1985

COORDINATES: N96300 W39300 (centerline)

WASTE TYPES AND AMOUNTS: The facility received routine and nonroutine wastes. The routine wastes consisted of spent acid etch solutions (primarily nitric, sulfuric, hydrofluoric, and chromic acids) generated by the Nuclear Fuel Fabrication process. These acidic solutions were reacted with excess sodium hydroxide before being transported to the 183-H basins. Metal constituents include copper, silicon, zirconium, nickel, aluminum, chromium, manganese, and uranium, which were in the forms of precipitates. Nonroutine wastes consisted of unused chemicals and spent solutions from miscellaneous processes. More detailed descriptions of these wastes and quantities are contained in DOE/RL 88-04, Interim Status Closure/Post-Closure Plan 183-H Solar Evaporation Basins.

SITE DESCRIPTION: Four concrete storage and treatment basins. Each basin consists of a deep subsidence basin and a shallow flocculation basin. The flocculation basin is 45.5 ft wide, 33 ft long, and 9.5 ft deep. This basin was separated from the subsidence basin by a redwood plank weir. The subsidence basin is 53.5 ft wide, 95 ft long, and 16.5 ft deep at the north end and 15.5 ft deep at the south end. The basins have an earthen berm around three sides and an asphalt-covered berm on the north side for tank truck unloading.

UNIT NAME: 116-H-7
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1965

COORDINATES: N96000 W38740, N96000 W38466, N95368 W38466, N95368 W38740

WASTE TYPES AND AMOUNTS: This site received cooling water effluent from the 105-H Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Seventy percent of the total radionuclide inventory is contained within the soil adjacent to the unit. Approximately 10 Ci have leached into the concrete floor and walls.

SITE DESCRIPTION: Concrete-lined rectangular structure. The unit has been backfilled to a depth of ~4 ft above the floor and slopes to the top of the walls.

KNOWN RELEASES: The unit and its ~5-ft-diameter effluent line have developed leaks during their operating life. The leaks have been estimated to be as high as 5,000 to 10,000 gal/m. The extent of contamination from these releases is well within the zone encompassed by the unit and is within the AC-5-40 permanent posting.

UNIT NAME: 116-H-9
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1960
END DATE: 1965

COORDINATES: N94710 W40117

WASTE TYPES AND AMOUNTS: The site received drainage from confinement system 117 Building seal pits.

SITE DESCRIPTION: The unit was filled with gravel and covered to grade with clean soil. A large steel vent marks the site.

UNIT NAME: 126-H-2
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: 1970s

COORDINATES: N96150 W39600

WASTE TYPES AND AMOUNTS: The unit now contains nonhazardous and nonradioactive demolition and inert waste from demolished facilities. This waste includes rubble from such facilities as 190-H, 151-H, and 1701-D.

SITE DESCRIPTION: The unit consists of covered reinforced concrete basins, having a capacity of ~10M gal and separated in the center by a pump room. The pump room was reinforced concrete and largely below grade. The above-ground portion of the pump room has been demolished, and the below-ground portion has been filled with pump room rubble and backfill. Approximately 50% of the east clearwell basin contains waste. The west clearwell remains intact.

UNIT NAME: 132-H-1
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1965

COORDINATES: N95240 W39850

WASTE TYPES AND AMOUNTS: Air moving from the least contaminated zones through increasingly contaminated zones was discharged to the stack unfiltered.

SITE DESCRIPTION: The unit was part of the 105-H Reactor Gas and Exhaust Air system. It was constructed of reinforced concrete.

CLEANUP ACTIONS: In 1983, this site was demolished and buried between the 117-H Building and the 1608-H Building.

UNIT NAME: 132-H-3
UNIT TYPE: Pump Station
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1965

COORDINATES: N95150 W39825

WASTE TYPES AND AMOUNTS: This site received water from reactor building drains and irradiated fuel storage drains containing trace amounts of low-level radionuclides and decontamination chemicals (primarily Turco). Radionuclides were primarily activation and fission products. Turco is a commercial chemical compound with a proprietary composition. Other decontamination chemicals consisted of sodium fluoride, oxalic acid, and citric acid.

SITE DESCRIPTION: The unit was constructed of concrete block walls above ground and reinforced concrete for the remainder. It was 12 ft above grade and 32 ft below grade. The unit included a wastewater collection pit.

CLEANUP ACTIONS: The facility was demolished in situ and backfilled with a minimum of 5 m of clean fill. Water and sludge were removed from the facility, and all incoming piping was sealed prior to demolition. The facility was decommissioned in 1987.

UNIT NAME: 1607-H2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1965

COORDINATES: N98050 W39800

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 182-H, 183-H, 190-H, and all office and maintenance service buildings with "1700" designations, amounts unknown.

SITE DESCRIPTION: The unit includes a tile field.

UNIT NAME: 1607-H4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1965

COORDINATES: N98260 W40348 (center)

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 181-H River Pumphouse, amount unknown. The sewage per capita is 35 gal plus 20% for sludge.

SITE DESCRIPTION: The unit includes a tile field. It has a six-person capacity. The inlet invert elevation is 402.00 and the outlet invert elevation is 401.82. The average detention period is 24 h.

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100-HR-1

Other Waste Units Located Within the Operable Unit Area

118-H-6

Reactor

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Waste Units Assigned to this Operable Unit

118-H-1	Burial Ground
118-H-2	Burial Ground
118-H-3	Burial Ground
118-H-4	Burial Ground
118-H-5	Burial Ground
126-H-1	Ash Pit
128-H-1	Burning Pit
128-H-2	Burning Pit
128-H-3	Burning Pit
132-H-2	Building
1607-H1	Septic Tank
1607-H3	Septic Tank

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UNIT NAME: 118-H-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1965

COORDINATES: N94185 W40650, N94175 W39954, N93835 W39965, N93835 W40680

WASTE TYPES AND AMOUNTS: This site contains dummy elements, process tubing, and miscellaneous solid wastes.

SITE DESCRIPTION: The overall site runs east and west. There are numerous trenches of various dimensions, generally running north and south.

UNIT NAME: 118-H-2
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1965

COORDINATES: N95318 W41129, N95313 W40983, N95268 W40985, N95266 W41128

WASTE TYPES AND AMOUNTS: The site received one stainless steel tube with associated hardware from an H-Reactor Experimental Test Facility in 1955. The second vault was used for disposal of contaminated pipe.

SITE DESCRIPTION: The site runs east-west and contains two in-line concrete vaults.

CLEANUP ACTIONS: The vaults were filled with gravel, and 2 ft of gravel was added on top of the entire site.

UNIT NAME: 118-H-3
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1957

COORDINATES: N94400 W39400

WASTE TYPES AND AMOUNTS: The site contains sections of contaminated 16-in. pipe used as chutes for removal of thimbles from 105-H during outages, reactor hardware, and components from reactor modification programs.

SITE DESCRIPTION: The site runs north-south. The trenches were covered with 6 ft of soil.

UNIT NAME: 118-H-4
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1953

COORDINATES: N95300 W39600

WASTE TYPES AND AMOUNTS: The site contains irradiated material, such as vertical safety rod thimbles and guides, from 105-H during the Ball 3X Program.

SITE DESCRIPTION: The site consists of one trench running north-south. Concrete markers mark the north and south ends.

UNIT NAME: 118-H-5
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1960

COORDINATES: N95000 W39750

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

SITE DESCRIPTION: The site consists of one trench. The site is covered with 5 ft of soil and marked with cement monuments.

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UNIT NAME: 126-H-1
UNIT TYPE: Ash Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1965

COORDINATES: N96600 W41150

WASTE TYPES AND AMOUNTS: Unknown amounts of coal ash were sluiced to the pit with raw river water. The ash has been analyzed using the EP Toxicity Test in accordance with WAC 173-303, and no hazardous materials were found.

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UNIT NAME: 128-H-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1965

COORDINATES: N97750 W41200 (center)

WASTE TYPES AND AMOUNTS: The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents.

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UNIT NAME: 128-H-2
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
END DATE: 1965

WASTE TYPES AND AMOUNTS: The site received combustible materials (vegetation, office waste, paint waste, and chemical solvents).

SITE DESCRIPTION: The site is in a depression and looks like a graded rocky area with little soil. There is little surface evidence; however, there are rocks that have been exposed to fires.

UNIT NAME: 1607-H1
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1948

COORDINATES: N95200 W40800

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 151-H and 105-H buildings. The flow rate to this unit is estimated at 140 gal/d.

SITE DESCRIPTION: The unit includes a tile field.

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UNIT NAME: 1607-H3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1968

COORDINATES: N92974 W39634 (center)

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 1701-H Badge House (security checkpoint), 1720-H Security Patrol Change Room and offices, and 1709-H Fire Station, amounts unknown. The sewage per capita is 35 gal plus 20% for sludge.

SITE DESCRIPTION: The unit includes a tile field. It has a 100-person capacity. The inlet elevation is 405.51 and the outlet elevation is 401.59 (invert). The average detention period is 24 h.

100-IU-1

Waste Units Assigned to this Operable Unit

600 Area Army Munitions Burial Site
Riverland Railroad Car Wash Pit

Burial Ground
Pit

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UNIT NAME: 600 Area Army Munitions Burial Site
UNIT TYPE: Burial Ground
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1971
END DATE: 1976

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

SITE DESCRIPTION: The unit is a shallow cache.

CLEANUP ACTIONS: On May 22, 1986, all items were removed and transported to the Yakima Firing Range for destruction.

RELEASE POTENTIAL: There is no potential for release; the contents of the site have been removed.

UNIT NAME: Riverland Railroad Car Wash Pit
UNIT TYPE: Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1940's

COORDINATES: N65695 W102025, N65870 W102000

WASTE TYPES AND AMOUNTS: The site was used as a steam cleaning and low-level decontamination station for locomotive engines and cars used at Hanford.

SITE DESCRIPTION: The site is trench-like in appearance.

CLEANUP ACTIONS: In 1963, the entire site was decontaminated, released from radiation zone status, and the building auctioned to the general public.

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Waste Units Assigned to this Operable Unit

628-1	Burning Pit
East White Bluffs City Landfill	Landfill
JA Jones 2	Burial Ground
White Bluffs Landfill	Landfill

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UNIT NAME: 628-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N80900 W38450

WASTE TYPES AND AMOUNTS: Soil sampling will be required to determine what contaminants are present.

SITE DESCRIPTION: This unit was covered with sand and gravel (cannot determine if it is natural erosion, backfill, or both). The size is unknown; however, physical evidence (e.g. small pieces of ash, etc.) indicates that the area affected was ~1/4 acre. Vegetation is stressed. Rabbit brush growth is almost nonexistent compared to the growth on the surrounding terrain and tumbleweeds are discolored and stressed. Verification of site coordinates is required; they are based on coordinates for well #81-38.

UNIT NAME: East White Bluffs City Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1850
END DATE: 1943

WASTE TYPES AND AMOUNTS: The site was used to dispose of normal industrial and domestic wastes common for that period.

SITE DESCRIPTION: The unit is an unlined excavation.

CLEANUP ACTIONS: The site has been bulldozed and covered with clean soil.

UNIT NAME: JA Jones 2
UNIT TYPE: Burial Ground
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: 1955

WASTE TYPES AND AMOUNTS: This site contained minor construction equipment used by the J. A. Jones Construction Company, including wood scraps, concrete, and some metallic waste.

CLEANUP ACTIONS: The site was exhumed and its contents taken to a 200 Area burial ground in 1971. The site was then backfilled to grade.

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UNIT NAME: White Bluffs Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1850
END DATE: 1943

COORDINATES: N495000 W36000

WASTE TYPES AND AMOUNTS: The site was used for normal commercial and domestic wastes at the time. It contains no known radioactive constituents.

SITE DESCRIPTION: The unit is an unlined excavation.

CLEANUP ACTIONS: The site has been bulldozed and covered with clean soil.

100-IU-3

Waste Units Assigned to this Operable Unit

USBR 2,4-D Burial Site
Wahluke Slope Nike Missile Base

Landfill
Test Treatment or Support Facility

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UNIT NAME: USBR 2,4-D Burial Site
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1966
END DATE: 1967

COORDINATES: N75000 W10000

WASTE TYPES AND AMOUNTS: In 1966, 2,4-D contaminated soil was generated from leaking storage tanks at a USBR Station in Eltopia, WA. The burial consisted of 900 gal of 2,4-D that had leaked into 50 cu yd of soil. A second burial in 1967 consisted of the ten leaking tanks themselves, which were flattened and buried in the same location.

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UNIT NAME: Wahluke Slope Nike Missile Base
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N515000 W20000

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100-IU-4

Waste Units Assigned to this Operable Unit

Sodium Dichromate Barrel Disposal Landfill Landfill

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UNIT NAME: Sodium Dichromate Barrel Disposal Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1945

COORDINATES: N500000 W45000

WASTE TYPES AND AMOUNTS: The crushed barrels contained sodium dichromate used for water treatment in the 100 Areas. This disposal technique was used only once at this site.

CLEANUP ACTIONS: The site has been backfilled over the drums, but some debris is still exposed.

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100-IU-5

Waste Units Assigned to this Operable Unit

White Bluffs Pickling Acid Crib Crib

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UNIT NAME: White Bluffs Pickling Acid Crib
UNIT TYPE: Crib
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1943
END DATE: 1945

COORDINATES: N495000 W36000

WASTE TYPES AND AMOUNTS: The site was used to pickle galvanized piping for use in the reactor buildings during construction. The process used several thousand gallons of nitric and hydrofluoric acid.

SITE DESCRIPTION: Vent pipes extrude every 18 in. at the surface.

CLEANUP ACTIONS: The surface was covered with large cobbles.

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100-KR-1

Waste Units Assigned to this Operable Unit

116-K-1	Crib
116-K-2	Trench
116-K-3	Outfall Structure
116-KE-4	Retention Basin
116-KW-3	Retention Basin

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UNIT NAME: 116-K-1
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1955

COORDINATES: NK5880 WK3660

WASTE TYPES AND AMOUNTS: The site received reactor coolant water from 107-K Retention Basins during reactor outages due to fuel ruptures.

SITE DESCRIPTION: The unit is a structure within a structure, 200 by 200 ft at the bottom and 400 by 400 ft at the top of diked sides. One foot of gravel outlines the sides and bottom. The unit was backfilled over with earth and a 1-ft layer of gravel across the top. The inner excavation rests within a sand-filled excavation 10 ft wide at the sides, 10 ft deep, parallel to the inner structure. Both have a side slope of 4:1. The 16-in. sewer enters 27 ft below top grade. A 42-in. drain line enters northeast of the 16-in. line, 20 ft below the structure top. The natural ground elevation is 406 ft above MSL. An earth dike with a slope of 4:1 surrounds the unit from 7 ft below grade (bottom of outer structure) to 26 ft above natural ground (top of structure). A 2-ft-thick layer of riprap surrounds the earth dike from natural grade to 11 ft above grade.

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UNIT NAME: 116-K-2
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK5670 WK3221, NK7344 EK494

WASTE TYPES AND AMOUNTS: The site received all contaminated floor drains in the 105 buildings, low volume, and about 500 gal/min of KE and KW Reactors metal storage basin overflow. Until KE and KW shut down about February 1, 1970, an undetermined amount of 107 Basin effluent leaked through 42-in. butterfly valves in the tank bottoms. Leakage was estimated at 10,000 to 20,000 gal/min. The valve leakage showed a history of increase until the 1968 valve and tank renovation. Leakage gradually increased again after these repairs. Other periodic flows included low volume, neutralized, dummy decontamination waste, process-cooling water during charge/discharge, 500 gal/min of metal storage basin flow, occasional special disposals, and occasional tanks of process cooling water that was collected after a fuel cladding failure.

SITE DESCRIPTION: The bottom width is 4 ft. The side slop is 1.5:1. The unit has spoil piles at the surface on both sides and 12-ft top width.

KNOWN RELEASES: During reactor operation, several washout areas were created along the river side of the unit. The unit is at a much higher elevation than the area between it and the Columbia River. The washout areas resulted from extensive seepage through the north side of the unit, which ran along the surface of the ground until reaching the river.

CLEANUP ACTIONS: Prior to 1977, surface contamination extended several hundred feet along the river side of the unit. This surface contamination was covered with up to a few feet of soil and gravel during the summer of 1977 and posted with concrete markers as per Hanford Standard AC-5-40. The concrete post locations have been surveyed.

UNIT NAME: 116-K-3
UNIT TYPE: Outfall Structure
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: NK5650 WK5036

WASTE TYPES AND AMOUNTS: The unit received reactor coolant water from the 107-K Retention Basins. The radionuclide content is unknown; low-level contamination is assumed.

SITE DESCRIPTION: The unit is an open, reinforced concrete water box divided into compartments. Effluent was normally discharged underwater near the center of the river; however, the structure could also discharge to the river through a spillway. The structure is 10 ft above grade and 20 ft below grade.

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UNIT NAME: 116-KE-4
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK5357 WK4268, NK5329 WK4537, NK5300 WK4805

WASTE TYPES AND AMOUNTS: This site received cooling water effluent from the 105-KE Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Eighty percent of the total radionuclide inventory is contained within the soil adjacent to the basin.

SITE DESCRIPTION: Three carbon steel tanks with steel bottoms.

KNOWN RELEASES: The basin and its ~5-ft-diameter effluent line developed leaks during its operating life. The leak rate from the butterfly valves (that went to an adjacent trench) could have been as high as 5,000 to 10,000 gal/min. Most of the basin leakage was diverted to an open canal and disposed to the river.

CLEANUP ACTIONS: The tanks have been backfilled with soil to a depth of ~4 ft.

UNIT NAME: 116-KW-3
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1970

COORDINATES: NK5245 WK6190, NK5245 WK6460, NK5245 WK6730

WASTE TYPES AND AMOUNTS: This site received cooling water effluent from the 105-KW Reactor for radioactive decay and thermal cooling prior to release to the Columbia River. Eighty percent of the total radionuclide inventory is contained within the soil adjacent to the basin.

SITE DESCRIPTION: The unit consisted of three carbon steel tanks.

KNOWN RELEASES: The basin and its ~5-ft-diameter effluent line developed leaks during its operating life. The leak rate from the butterfly valves (that went to an adjacent trench) could have been as high as 5,000 to 10,000 gal/min. Most of the basin leakage was diverted to an open canal and disposed to the river.

CLEANUP ACTIONS: The tanks have been backfilled with soil to a depth of ~4 ft.

9 2 1 2 1 3 7 1 3 3 2

100-KR-2

Waste Units Assigned to this Operable Unit

116-KE-1	Crib
116-KE-2	Crib
116-KE-3	Reverse Well
116-KW-1	Crib
116-KW-2	Reverse Well
118-K-1	Burial Ground
120-KE-8	Brine Pit
120-KW-6	Brine Pit
126-K-1	Demolition and Inert Landfill
130-K-1	Storage Tank
130-K-2	Storage Tank
130-KE-1	Storage Tank
130-KE-2	Storage Tank
130-KW-1	Storage Tank
130-KW-2	Storage Tank
1607-K4	Septic Tank
1607-K6	Septic Tank
UN-100-K-1	Unplanned Release

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9 2 1 2 1 9 7 0 3 3 4

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UNIT NAME: 116-KE-1
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4535 WK5385

WASTE TYPES AND AMOUNTS: The site received condensate and other waste from reactor gas purification systems.

SITE DESCRIPTION: The unit has 6- by 6-ft bottom dimensions. The bottom is filled with coarse gravel to 1 ft above the bottom, backfilled over with dirt to grade. A square, ground-level wooden post marks the site; however, it has been covered over with asphalt paving.

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UNIT NAME: 116-KE-2
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: KW5055 NK4405

WASTE TYPES AND AMOUNTS: The site received wastes from cleanup columns in the 1706-KER loop.

SITE DESCRIPTION: A wooden crib structure rests within the excavation 3 ft above the bottom. The bottom 10 ft is filled with crushed stone and backfilled over. The distribution pipe enters the crib structure 23 ft below grade. The side slope is 1:1.

UNIT NAME: 116-KE-3
UNIT TYPE: Reverse Well
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4691 WK4756

WASTE TYPES AND AMOUNTS: The site was used as an overflow weir for subdrainage from the 105-KE Storage Basin.

SITE DESCRIPTION: The site includes a drain field located 29 ft below grade with an 8-in. steel well casing extending downward to a point 10 ft below the mean water table. The bottom 20 ft of the well casing is perforated. A 4-in. steel test hole extended from the surface to the drain field but is no longer evident on the surface.

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UNIT NAME: 116-KW-1
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4524 WK6375

WASTE TYPES AND AMOUNTS: The site received condensate and other wastewater from reactor gas purification systems.

SITE DESCRIPTION: The bottom is filled with coarse gravel to 10 ft above bottom, backfilled over with dirt to grade. A square, ground-level wooden post marks the site; however, it has been covered with asphalt paving.

UNIT NAME: 116-KW-2
UNIT TYPE: Reverse Well
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4691 WK6757

WASTE TYPES AND AMOUNTS: The site was used as an overflow weir for subdrainage from the 105-KW Storage Basin.

SITE DESCRIPTION: The site includes a drain field located 29 ft below grade with an 8-in. steel well casing extending downward to a point 10 ft below the mean water table. The bottom 20 ft of the well casing is perforated. A 4-in. steel test hole extended from the surface to the drain field but is no longer evident on the surface.

UNIT NAME: 118-K-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1973 (1975)*

COORDINATES: N77375 W66991, N77375 W67286, N77330 W67183, N77323 W66955

WASTE TYPES AND AMOUNTS: This unit contains numerous trenches and vertical steel pipes of various sizes that contain radioactive solid waste from K and N reactors. The incinerator operated for several years burning low-level contaminated combustible material. All contaminated burning was halted in October 1960.

SITE DESCRIPTION: The site runs northwest-southwest and contains numerous pits, trenches, and silos. The trench and pit dimensions vary greatly.

CLEANUP ACTIONS: The incinerator and stack were removed and buried in situ adjacent to the silo ash pit and covered with several feet of soil to the general grade.

* Conflicting Dates

UNIT NAME: 120-KE-8
UNIT TYPE: Brine Pit
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4184 WK4771

WASTE TYPES AND AMOUNTS: The unit contains salt brine and residue. It is believed to have been used for product and not as a disposal site. Salt was off-loaded from rail cars and placed in the pit. Water was then circulated through the pit, and brine was pumped back to the 165-KE Power House for further use.

SITE DESCRIPTION: The unit is a concrete structure with 9 ft below grade and 1 ft above grade. An opening (hatch) into the structure is located in the center of the roof section. Just south of the unit is a valve pit 4 ft in diameter and encased with corrugated galvanized pipe. This valve pit contains residue and apparently was part of the brine operation.

UNIT NAME: 120-KW-6
UNIT TYPE: Brine Pit
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4168 WK6740

WASTE TYPES AND AMOUNTS: The unit contains salt brine and residue. It is believed to have been used for product and not as a disposal site. Salt was off-loaded from rail cars and placed in the pit. Water was then circulated through the pit, and brine was pumped back to the 165-KW Power House for further use.

SITE DESCRIPTION: The unit is a concrete structure with 9 ft below grade and 1 ft above grade. An opening (hatch) into the structure is located in the center of the roof section. Just south of the unit is a valve pit, 4 ft in diameter and encased with corrugated galvanized pipe. This valve pit contains residue and apparently was part of the brine operation.

UNIT NAME: 126-K-1
UNIT TYPE: Demolition and Inert Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: 1970's

COORDINATES: NK4250 WK3175 (southwest corner)

WASTE TYPES AND AMOUNTS: The unit contains demolition and inert waste from 100-K area, Near Surface Test Facility (NSTF) at Gable Mountain, and Exploratory Shaft (ES) site. Primarily, waste consists of concrete, wood, steel pipe, structural steel, conduit, and wire.

SITE DESCRIPTION: This unit is a gravel borrow pit that resulted from 100-K Area construction. The slope of the southwest corner contains demolition waste. This area is covered with pit run backfill material. The bottom contains one ~5 ft layer of demolition and inert waste covered with ~1 ft of pit run backfill material. Approximately 80% of this unit is unused.

UNIT NAME: 130-K-1
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1972

COORDINATES: NK4150 WK5500

WASTE TYPES AND AMOUNTS: The unit was used for storage of gasoline (product).

RELEASE POTENTIAL: The unit was emptied and filled with water when the facilities were deactivated.

UNIT NAME: 130-K-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1972

COORDINATES: NK4150 WK5500

WASTE TYPES AND AMOUNTS: The unit was used for storage of used motor oil.

RELEASE POTENTIAL: A small oil heel remains in the tank.

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UNIT NAME: 130-KE-1
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4458 WK4407

WASTE TYPES AND AMOUNTS: The unit was used for storage of diesel fuel (product).

SITE DESCRIPTION: The unit has a 2,000-gal capacity.

UNIT NAME: 130-KE-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4150 WK4870

WASTE TYPES AND AMOUNTS: The unit was used for storage of oil (product) for the 165-KE boilers.

SITE DESCRIPTION: The unit has a storage capacity of 1,650,000 gal.

RELEASE POTENTIAL: A 2,000-gal oil heel remains in this reinforced concrete tank.

UNIT NAME: 130-KW-1
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4553 WK6390

WASTE TYPES AND AMOUNTS: The unit was used for storage of diesel fuel (product).

SITE DESCRIPTION: The unit has a 2,000-gal capacity.

UNIT NAME: 130-KW-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4150 WK7900

WASTE TYPES AND AMOUNTS: The tank was used for storage of oil (product) for the 165-KW boilers.

SITE DESCRIPTION: The unit has a storage capacity of 1,650,000 gal.

RELEASE POTENTIAL: A 2,000-gal oil heel remains in this reinforced concrete tank.

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UNIT NAME: 1607-K4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: NK4350 WK5690

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from the 1704-K Office Building and the 1717-K Maintenance Shop.

SITE DESCRIPTION: The unit includes a tile field.

UNIT NAME: 1607-K6
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: NK6110 WK4850

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 105-KW Reactor Building, 115-KW Gas Recirculation Building, and 165-KW Powerhouse.

SITE DESCRIPTION: The unit includes a tile field.

UNIT NAME: UN-100-K-1
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: April 1979

COORDINATES: NK4456 WK4407

WASTE TYPES AND AMOUNTS: Fuel storage basin effluent that included debris from fuel cladding failures.

KNOWN RELEASES: The 105-KE pickup chute area (of the 105-KE Fuel Storage Basin) had an estimated release to the ground of more than 450 gal/h for an unknown period of time.

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Other Waste Units Located Within the Operable Unit Area

116-KE-5	Test Treatment or Support Facility
116-KE-6A	Storage Tank
116-KE-6B	Storage Tank
116-KE-6C	Storage Tank
116-KE-6D	Equipment
116-KW-4	Test Treatment or Support Facility
118-KE-1	Reactor
118-KE-2	Storage Facility
118-KW-1	Reactor
118-KW-2	Storage Facility
132-KE-1	Stack
132-KW-1	Stack

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UNIT NAME: 116-KE-5
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK5020 WK4600

WASTE TYPES AND AMOUNTS: Trace amounts of radioactive contamination remain on piping.

SITE DESCRIPTION: The unit consisted of heat exchangers and associated piping on a concrete pad.

CLEANUP ACTIONS: The heat exchangers were removed and are in use in the 105-KE Fuel Storage Facility.

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UNIT NAME: 116-KE-6A
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: T-1-3
UNIT STATUS: Active
START DATE: 1986

COORDINATES: NK4350 WK4850

WASTE TYPES AND AMOUNTS: The unit is used to treat radioactive mixed wastes generated in the laboratories of the 1706-KE Building. The system is used for the treatment of a wide variety of inorganic and organic laboratory wastes. The majority of these wastes are acidic or caustic solutions; thus, the waste can be considered a corrosive dangerous waste.

SITE DESCRIPTION: The unit consists of a 96-gal condensate collection tank.

KNOWN RELEASES: A fire occurred in the waste treatment unit on August 18, 1986. The fire resulted in the forcible ejection of ~30 gal of waste material from the treatment unit.

CLEANUP ACTIONS: The ejected waste material was cleaned up and packaged for low-level burial by operations personnel. The area was cleaned to background radiation levels.

UNIT NAME: 116-KE-6B
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: T-1-3
UNIT STATUS: Active
START DATE: 1986

COORDINATES: NK4350 WK4850

WASTE TYPES AND AMOUNTS: The unit is used to treat radioactive mixed wastes generated in the laboratories of the 1706-KE Building. The system is used for the treatment of a wide variety of inorganic and organic laboratory wastes. The majority of these wastes are acidic or caustic solutions; thus, the waste can be considered a corrosive dangerous waste.

SITE DESCRIPTION: The unit consists of a 30-gal evaporation unit.

KNOWN RELEASES: A fire occurred in the waste treatment unit on August 18, 1986. The fire resulted in the forcible ejection of ~30 gal of waste material from the treatment unit.

CLEANUP ACTIONS: The ejected waste material was cleaned up and packaged for low-level burial by operations personnel. The area was cleaned to background radiation levels.

UNIT NAME: 116-KE-6C
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: T-1-3
UNIT STATUS: Active
START DATE: 1986

COORDINATES: NK4350 WK4850

WASTE TYPES AND AMOUNTS: The unit is used to treat radioactive mixed wastes generated in the laboratories of the 1706-KE Building. The system is used for the treatment of a wide variety of inorganic and organic laboratory wastes. The majority of these wastes are acidic or caustic solutions; thus, the waste can be considered a corrosive dangerous waste.

SITE DESCRIPTION: The unit consists of a 550-gal waste accumulating tank.

KNOWN RELEASES: A fire occurred in the waste treatment unit on August 18, 1986. The fire resulted in the forcible ejection of ~30 gal of waste material from the treatment unit.

CLEANUP ACTIONS: The ejected waste material was cleaned up and packaged for low-level burial by operations personnel. The area was cleaned to background radiation levels.

UNIT NAME: 116-KE-6D
UNIT TYPE: Equipment
WASTE CATEGORY: Mixed Waste

TSD: T-1-3
UNIT STATUS: Active
START DATE: 1986

COORDINATES: NK4350 WK4850

WASTE TYPES AND AMOUNTS: The unit is used to treat radioactive mixed wastes generated in the laboratories of the 1706-KE Building. The system is used for the treatment of a wide variety of inorganic and organic laboratory wastes. The majority of these wastes are acidic or caustic solutions; thus, the waste can be considered a corrosive dangerous waste.

SITE DESCRIPTION: The unit consists of a 5-cu-ft mixed-bed resin ion exchange column.

KNOWN RELEASES: A fire occurred in the waste treatment unit on August 18, 1986. The fire resulted in the forcible ejection of ~30 gal of waste material from the treatment unit.

CLEANUP ACTIONS: The ejected waste material was cleaned up and packaged for low-level burial by operations personnel. The area was cleaned to background radiation levels.

UNIT NAME: 116-KW-4
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK5020 WK6540

WASTE TYPES AND AMOUNTS: Trace amounts of radioactive contamination remain on piping.

SITE DESCRIPTION: The unit consisted of heat exchangers and associated piping on a concrete pad.

CLEANUP ACTIONS: The heat exchangers were removed and are in use in the 105-KW Fuel Storage Facility.

UNIT NAME: 118-KE-1
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4520 WK4520

WASTE TYPES AND AMOUNTS: The unit contains an estimated 58,000 Ci of radionuclides, 167 tons of lead, and 25,000 cu ft of asbestos.

SITE DESCRIPTION: The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building.

KNOWN RELEASES: There may have been some seepage from the fuel storage basins in which case the soil column under the basins may be contaminated. The soil has not been characterized, but the radionuclide inventory is estimated to be low when compared to the total inventory in the reactor.

RELEASE POTENTIAL: The waste is fixed inside the reactor envelope.

UNIT NAME: 118-KE-2
UNIT TYPE: Storage Facility
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4640 WK4300

WASTE TYPES AND AMOUNTS: This site contains trace amounts of radionuclides. The radiation level at the entrance to the cave with the door open is 1 mR/h. The unit was used for temporary storage of radioactive rod tips for radioactive decay pending subsequent disposal.

SITE DESCRIPTION: Concrete tunnel covered with a 5-ft-thick mound of earth.

UNIT NAME: 118-KW-1
UNIT TYPE: Reactor
WASTE CATEGORY: Mixed Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4520 WK6750

WASTE TYPES AND AMOUNTS: This unit contains an estimated 51,000 Ci of radionuclides, 155 tons of lead, and 25,000 cu ft of asbestos.

SITE DESCRIPTION: The unit consists of: 1) a reactor block, which includes the graphite moderator stack, biological and thermal shields, pressure tubes, and the safety and control systems; 2) the irradiated fuel storage basin; and 3) contaminated portions of the reactor building.

RELEASE POTENTIAL: The waste is fixed inside the reactor envelope.

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UNIT NAME: 118-KW-2
UNIT TYPE: Storage Facility
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: N67100 W80000

WASTE TYPES AND AMOUNTS: The unit was used for temporary storage of irradiated and radioactively contaminated horizontal control rods containing unknown quantities of radionuclides. The tunnel contains four rod tips and other rod removal components. The radiation reading at the entrance to the cave with the door open is 50 mR/h.

SITE DESCRIPTION: Concrete tunnel, covered with a 5-ft-thick mound of earth.

UNIT NAME: 132-KE-1
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4500 WK6490

WASTE TYPES AND AMOUNTS: Discharged ventilated air from the 105-KE Building flowed through concrete ducts directly out of the stack.

CLEANUP ACTIONS: The unit was decontaminated and shortened 125 ft in 1980 to 1981. All debris is contained in the below-ground portion of the site.

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UNIT NAME: 132-KW-1
UNIT TYPE: Stack
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

WASTE TYPES AND AMOUNTS: Discharged ventilation air from the 105-KW Building flowed through concrete ducts directly out the exhaust stack.

CLEANUP ACTIONS: The unit was decontaminated and shortened 125 ft in 1980 to 1981. All debris is contained in the below-ground portion of the site.

100-KR-3

Waste Units Assigned to this Operable Unit

120-KE-1	French Drain
120-KE-2	French Drain
120-KE-3	Trench
120-KE-6	Storage Tank
120-KE-9	Brine Pit
120-KW-1	French Drain
120-KW-2	French Drain
120-KW-5	Storage Tank
120-KW-7	Brine Pit
128-K-1	Burning Pit
128-K-2	Burning Pit
130-K-3	Storage Tank
1607-K1	Septic Tank
1607-K2	Septic Tank
1607-K3	Septic Tank
1607-K5	Septic Tank

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UNIT NAME: 120-KE-1
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3150 WK4500

WASTE TYPES AND AMOUNTS: The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

SITE DESCRIPTION: The unit has a wooden cover.

97785

UNIT NAME: 120-KE-2
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3195 WK4480

WASTE TYPES AND AMOUNTS: The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

SITE DESCRIPTION: The unit has an open bottom.

97785

UNIT NAME: 120-KE-3
UNIT TYPE: Trench
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK4500 WK3600

WASTE TYPES AND AMOUNTS: The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

SITE DESCRIPTION: The unit was lined with sand, and the sludge-water slurry was allowed to drain.

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UNIT NAME: 120-KE-6
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3148 WK4483

WASTE TYPES AND AMOUNTS: The unit was used for storage of sodium dichromate.

KNOWN RELEASES: There are no documented releases. There is evidence of residual dichromate in the soil from an accumulation of many years of unloading and handling dichromate.

UNIT NAME: 120-KE-9
UNIT TYPE: Brine Pit
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3200 WK4477

WASTE TYPES AND AMOUNTS: The unit contains salt brine and residue. It is believed to have been used for product material and not for disposal. The salt was used in regenerating water softeners.

SITE DESCRIPTION: The unit is an underground concrete structure consisting of five chambers. The roof of the structure is at ground level with a hatchway into each chamber. Four of the hatchways have wooden covers, and the fifth has a metal cover.

UNIT NAME: 120-KW-1
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK3180 WK6590

WASTE TYPES AND AMOUNTS: The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

SITE DESCRIPTION: The unit has a wooden cover.

UNIT NAME: 120-KW-2
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK3100 WK6510

WASTE TYPES AND AMOUNTS: The site received sulfuric acid sludge that was removed from sulfuric acid storage tanks.

SITE DESCRIPTION: The unit has an open bottom.

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UNIT NAME: 120-KW-5
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3148 WK6492

WASTE TYPES AND AMOUNTS: The unit was used for storage of sodium dichromate (product).

KNOWN RELEASES: There are no documented releases. There is evidence of residual dichromate in the soil from an accumulation of many years of unloading and handling dichromate.

UNIT NAME: 120-KW-7
UNIT TYPE: Brine Pit
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK3200 WK6477

WASTE TYPES AND AMOUNTS: The unit contains salt brine and residue. It is believed to have been used for product material and not for disposal. The salt was used in regenerating water softeners.

SITE DESCRIPTION: The unit is an underground concrete structure consisting of five chambers. The roof of the structure is at ground level with a hatchway into each chamber. Four of the hatchways have wooden covers, and the fifth has a metal cover.

71839

UNIT NAME: 128-K-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3500 WK3500

WASTE TYPES AND AMOUNTS: The site was used for the disposal of nonradioactive, combustible materials, such as paint waste, office waste, and chemical solvents.

12101

UNIT NAME: 128-K-2
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: NK5000 WK9000

WASTE TYPES AND AMOUNTS: A wide variety of trash is exposed on the surface. There is evidence of burning in many places. Most of the material on the surface is scrap metal and glass. Office waste, paint, solvents, laboratory waste have also been found. The area is also covered with nonfriable and friable asbestos.

SITE DESCRIPTION: The site has not been covered with fill. A single chain fence with asbestos warning signs marks the area.

1212970800

UNIT NAME: 130-K-3
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK4120 WK5040

WASTE TYPES AND AMOUNTS: The two tanks were used for storage of diesel oil (product).

SITE DESCRIPTION: The unit consisted of two storage tanks with storage capacity of 17,500 gal.

RELEASE POTENTIAL: The tanks are empty.

UNIT NAME: 1607-K1
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: NK2900 WK5900

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 1701-K Badgehouse (security checkpoint), 1720-K Patrol Change Room and offices, and 1721-K Trailer. The flow rate to this unit is estimated at 525 gal/d.

SITE DESCRIPTION: The unit includes a tile field.

12121970851

UNIT NAME: 1607-K2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: NK3240 WK4780

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 183-KE Water Treatment Plant. The flow rate to this unit is estimated at 350 gal/d.

SITE DESCRIPTION: The unit includes a tile field.

UNIT NAME: 1607-K3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK3208 WK6705

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage from 183-KW Water Treatment Plant, amount unknown.

SITE DESCRIPTION: The unit includes a tile field.

977362

UNIT NAME: 1607-K5
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: NK4400 WK3730

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage from 1706-KER Flow Laboratory, 1706-K Water Treatment Laboratory, 165-KE Powerhouse, 105-KE Reactor Building, and 115-KE Gas Recirculation System. The flow rate to this unit is estimated at 700 gal/d.

SITE DESCRIPTION: The unit includes a tile field.

1212

100-KR-3

Other Waste Units Located Within the Operable Unit Area

120-KE-4	Storage Tank
120-KE-5	Storage Tank
120-KW-3	Storage Tank
120-KW-4	Storage Tank
126-KE-2	Storage Tank
126-KE-3	Storage Tank

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UNIT NAME: 120-KE-4
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3130 WK4500

WASTE TYPES AND AMOUNTS: The unit was used for storage of sulfuric acid product.

SITE DESCRIPTION: The unit is located above ground and has a storage capacity of 10,109 gal.

KNOWN RELEASES: The supply pipe from this unit to the point of use inside the 183-KE Building developed a gradual slow leak. Before the leak was detected, an unknown quantity of sulfuric acid leaked into the ground at the northeast corner of 183-KE.

CLEANUP ACTIONS: Soil in the general area of the leak was neutralized, and the unit was drained and neutralized.

UNIT NAME: 120-KE-5
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3130 WK4520

WASTE TYPES AND AMOUNTS: The unit was used for storage of sulfuric acid (product).

SITE DESCRIPTION: The unit is located above ground and has a storage capacity of 10,109 gal.

CLEANUP ACTIONS: When taken out of service, the unit was drained and neutralized.

UNIT NAME: 120-KW-3
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK3130 WK6500

WASTE TYPES AND AMOUNTS: The unit was used for storage of sulfuric acid (product).

SITE DESCRIPTION: The unit is located above ground and has a storage capacity of 10,109 gal.

KNOWN RELEASES: The supply pipe from this unit to the point of use inside the 183-KW building developed slow leaks that deposited an unknown amount of sulfuric acid in the ground between the tanks and the building.

CLEANUP ACTIONS: Soil in the general area of the leak was neutralized.

RELEASE POTENTIAL: The unit is empty.

UNIT NAME: 120-KW-4
UNIT TYPE: Storage Tank
WASTE CATEGORY: Hazardous Waste

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1970

COORDINATES: NK3126 WK6460

WASTE TYPES AND AMOUNTS: The unit was used for storage of sulfuric acid (product).

SITE DESCRIPTION: The unit is located above ground and has a storage capacity of 10,109 gal.

UNIT NAME: 126-KE-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3087 WK4747

WASTE TYPES AND AMOUNTS: The unit was used for storage of liquid alum.

SITE DESCRIPTION: The unit has a storage capacity of 180,000 gal.

126-12-970857

UNIT NAME: 126-KE-3
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1971

COORDINATES: NK3087 WK4693

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Waste Units Assigned to this Operable Unit

116-N-1	Crib
116-N-2	Storage Tank
116-N-3	Crib
116-N-4	Storage Tank
118-N-1	Silo
120-N-1	Pond
120-N-2	Neutralization Unit
120-N-3	French Drain
120-N-5	Neutralization Unit
120-N-6	French Drain
120-N-7	French Drain
120-N-8	French Drain
124-N-1	Septic Tank
124-N-2	Septic Tank
124-N-3	Septic Tank
124-N-4	Septic Tank
124-N-5	Septic Tank
124-N-6	Septic Tank
124-N-7	Septic Tank
124-N-8	Septic Tank
124-N-9	Septic Tank
124-N-10	Sewer
128-N-1	Burning Pit
130-N-1	Pond
UN-100-N-1	Unplanned Release
UN-100-N-2	Unplanned Release
UN-100-N-3	Unplanned Release
UN-100-N-4	Unplanned Release
UN-100-N-5	Unplanned Release
UN-100-N-6	Unplanned Release
UN-100-N-7	Unplanned Release
UN-100-N-8	Unplanned Release
UN-100-N-9	Unplanned Release
UN-100-N-10	Unplanned Release
UN-100-N-11	Unplanned Release
UN-100-N-12	Unplanned Release
UN-100-N-13	Unplanned Release
UN-100-N-14	Unplanned Release
UN-100-N-15	Unplanned Release
UN-100-N-17	Unplanned Release
UN-100-N-18	Unplanned Release
UN-100-N-19	Unplanned Release
UN-100-N-20	Unplanned Release
UN-100-N-21	Unplanned Release
UN-100-N-22	Unplanned Release
UN-100-N-23	Unplanned Release
UN-100-N-24	Unplanned Release
UN-100-N-25	Unplanned Release
UN-100-N-26	Unplanned Release

100-NR-1 (Continued)

Waste Units Assigned to this Operable Unit

UN-100-N-29	Unplanned Release
UN-100-N-30	Unplanned Release
UN-100-N-31	Unplanned Release
UN-100-N-32	Unplanned Release
UN-100-N-33	Unplanned Release
UN-100-N-34	Unplanned Release
UN-100-N-35	Unplanned Release
UN-600-17	Unplanned Release

1212 971370

UNIT NAME: 116-N-1
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

TSD: D-1-2
UNIT STATUS: Inactive
START DATE: 1964
END DATE: 1985

COORDINATES: NN7200 WN5925 (center)

WASTE TYPES AND AMOUNTS: The unit received radioactive water containing activation and fission products and small quantities of corrosive liquids and laboratory chemicals at an average flow rate of ~1,500 gal/min. The crib received radioactive effluent streams from 105-N and 109-N. After 1965, the trench received the same wastes as the crib.

SITE DESCRIPTION: The unit is a rectangular basin. The bottom is filled with 3 ft of large stones. An extension trench for the unit measured 50 ft by 1,600 ft. The trench surface had been covered with concrete slabs, but there was a flow of waste underground from the unit into the trench.

RELEASE POTENTIAL: More information regarding this unit may be found in Rokkan (1986), Diediker and Hall (1985) and DOE-RL (1986).

UNIT NAME: 116-N-2
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1964

COORDINATES: NN6775 WN5985

SITE DESCRIPTION: The unit is a collecting tank for N Reactor primary piping decontamination wastes.

UNIT NAME: 116-N-3
UNIT TYPE: Crib
WASTE CATEGORY: Hazardous Waste

TSD: D-1-2
UNIT STATUS: Active
START DATE: October 1983

COORDINATES: NN7335 WN4615

WASTE TYPES AND AMOUNTS: This unit receives radioactive activation and fission products and small quantities (below regulatory limits) of corrosive liquids and laboratory chemicals.

SITE DESCRIPTION: This unit consists of a rectangular concrete diversion box with 250- by 240-ft dimensions, a concrete header box, and ~1,200 ft of 36-in.-diameter pipeline connecting the diversion box to the header box. The unit is covered with precast, prestressed concrete panels. An extension trench for the unit is 3,000 ft long, 10 ft wide, and 7 ft deep. The trench is divided into 4 equal sections and is covered with precast, prestressed concrete panels.

KNOWN RELEASES: On May 10, 1989, unreacted hydrazine was released to this unit. The amount was estimated to range between 2.0 and 11.9 lb (WHC-UO-89-100N-01). On August 8, 1989, ~1.3 lb of hydrazine was discharged to this unit (WHC-CM-89-042-100N-03).

RELEASE POTENTIAL: More information on the unit may be found in Rokkan (1986) and in Diediker and Hall (1985).

12121970372

UNIT NAME: 116-N-4
UNIT TYPE: Storage Tank
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1963
END DATE: 1973

COORDINATES: NN6050 WN6775 (center)

WASTE TYPES AND AMOUNTS: This site receives steam blowdown from 105-N steam generators containing low levels of radioactive activation and fission products. The unit handled ~82,000 gal/mo. The unit no longer receives wastewater from the steam generators. The water level is maintained with clean water. The 109-N blowdown was routed to the Emergency Dump Tank.

SITE DESCRIPTION: The unit is steel-lined and has a 1,000,000 gal capacity.

1 2 1 2 1 3 7 1 8 7 3

UNIT NAME: 118-N-1
UNIT TYPE: Silo
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1963

COORDINATES: NN6346 WN6707

WASTE TYPES AND AMOUNTS: This site receives radioactive metallic fuel spacers (byproduct) from the reactor, quantities variable based upon reactor operation. Radioactively contaminated fuel spacers are temporarily stored in the underground silos and then shipped to the 200 Area Low-Level Burial Grounds for disposal. No water was released to this facility after 1984.

SITE DESCRIPTION: The unit is a temporary storage facility containing 3 silos, each 16 ft in diameter. When the silos are filled, the contents are shipped to the 200 Area Burial Grounds, where they are permanently buried.

RELEASE POTENTIAL: Silos are constructed of concrete. Two of the silos have open bottoms. When removing spacers in 1984, two fire hoses were hooked up and used to spray water into the unit to prevent airborne contamination. This practice gave potential for washing radionuclides into the soil. Now paint is used for contamination control.

UNIT NAME: 120-N-1
UNIT TYPE: Pond
WASTE CATEGORY: Hazardous Waste

TSD: T-1-2
UNIT STATUS: Active
START DATE: August 1977

COORDINATES: NN5400 WN5700

WASTE TYPES AND AMOUNTS: Until 1983, the site received corrosive wastes and filter backwash water. From 1983 to May 1986, the site received corrosive wastes only, while filter backwash water was routed to the 130-N-1 (183-N Filter Backwash Pond). From May 1986 to November 1988, the unit received neutralized wastewater from the 120-N-2 (1324-N Surface Impoundment) at a rate of 324,000 gal per demineralizer regeneration cycle. After November 1988, the unit has received neutralized wastewater between a maximum range of pH 4 and 11.

SITE DESCRIPTION: The total volume is ~2M gal.

KNOWN RELEASES: This site received intermittent releases of corrosive liquids from the 163-N Demineralized Water Treatment Plant prior to May 1986.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

UNIT NAME: 120-N-2
UNIT TYPE: Neutralization Unit
WASTE CATEGORY: Hazardous Waste

TSD: T-1-2
UNIT STATUS: Inactive
START DATE: May 13, 1986
END DATE: November 7, 1988

COORDINATES: NN5400 WN5800

WASTE TYPES AND AMOUNTS: The unit received sodium hydroxide and sulfuric acid from the 163-N Demineralized Water Treatment Plant. The unit holds ~324,000 gal of demineralization regeneration waste that was neutralized before being pumped to the 120-N-1 (1324-NA Percolation Pond).

SITE DESCRIPTION: The unit is double-lined with 45-mil Hypalon.

RELEASE POTENTIAL: A leak detection and leachate collection system was installed in 1988. An elementary neutralization system to be installed in the 163-N Demineralized Water Treatment Plant was completed in November 1988. This unit is no longer used.

UNIT NAME: 120-N-3
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1963
END DATE: March 1988

COORDINATES: NN5630 WN6484

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of corrosive liquids, such as sodium hydroxide and sulfuric acid.

KNOWN RELEASES: Intermittent small releases of sulfuric acid and sodium hydroxide from the 163-N Demineralized Water Treatment Plant day-storage tanks.

CLEANUP ACTIONS: In 1987, the unit was characterized to determine the presence or absence of hazardous materials. Acids and caustic wastes were found. Four to six inches of soil were removed and replaced with clean fill. In May 1988, the drain lines were rerouted to a sealed containment.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

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UNIT NAME: 120-N-5
UNIT TYPE: Neutralization Unit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1963

COORDINATES: NN5590 WN6470; NN5463 WN6470; NN5463 WN6040; NN5549 WN6040

WASTE TYPES AND AMOUNTS: The unit receives sodium hydroxide and sulfuric acid from transfer pipes contained in a concrete trench.

SITE DESCRIPTION: The unit is a concrete pit lined with polymer concrete.

KNOWN RELEASES: Intermittent small releases have occurred over the years of operation. In January 1976, the pit sealed itself and liquid backed up to the piping level, subsequently corroding the caustic and acid drain lines.

CLEANUP ACTIONS: The liquid was neutralized and pumped to the adjacent clearwell overflow sump. Corroded piping was cut out and replaced, and new drain valves were installed. In 1986, the neutralization pit was pumped out, and 368,000 lb of soil were removed for treatment and disposal offsite as hazardous waste.

RELEASE POTENTIAL: Subsequent to cleanup actions, a new pit was installed and lined with polymer concrete to prevent leakage. The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

12121970076

UNIT NAME: 120-N-6
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1963
END DATE: March 1988

COORDINATES: NN5487 WN6040, NN5505 WN6040, NN5517 WN6040

WASTE TYPES AND AMOUNTS: The units received unknown amounts of condensate from sulfuric acid tanks and transfer lines in intermittent discharges. Each discharge is estimated to have averaged less than 1 gal of liquid.

SITE DESCRIPTION: Five French drains associated with condensate from sulfuric acid tanks.

CLEANUP ACTIONS: All five units were characterized to determine the presence or absence of hazardous constituents in 1987. No acid or heavy metal wastes were found. They have since been taken out of service and removed for disposal. Four to six inches of soil were removed and replaced with clean fill.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

7
7
0
8
7
7

UNIT NAME: 120-N-7
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1963
END DATE: March 1987

COORDINATES: NN5476 WN5920

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of sulfuric acid in intermittent discharges. Each discharge is estimated to have averaged less than 1 gal of liquid.

CLEANUP ACTIONS: This unit was characterized to determine the presence or absence of hazardous constituents in 1987. Acid and lead waste was found, and an engineering request was written to take the unit out of service and replace it with a sealed containment.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

1
2

UNIT NAME: 120-N-8
UNIT TYPE: French Drain
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1963
END DATE: March 1988

COORDINATES: NN5653 WN6474

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of sulfuric acid in intermittent discharges. Each discharge is estimated to have averaged less than 1 gal of liquid.

KNOWN RELEASES: Intermittent small releases of sulfuric acid from 163-N Demineralized Water Treatment Plant day storage tank.

CLEANUP ACTIONS: In 1987, the unit was characterized to determine the presence or absence of hazardous materials. No acid or heavy metal wastes were found. An engineering planning request was written to take the unit out of service and reroute the drain line to a sealed containment. This ECN was completed in May 1988. Four to six inches of soil were removed and replaced with clean fill.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

UNIT NAME: 124-N-1
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1963

COORDINATES: NN5543 WN6372 (east side)

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage, ~1,400 gal/d.

SITE DESCRIPTION: The unit includes a seepage pit, has 200 sq ft of infiltration area, and 2,300 gal of fluid storage space.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

UNIT NAME: 124-N-2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1963

COORDINATES: NN5590 WN6643

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage, ~200 gal/d.

SITE DESCRIPTION: The unit includes a seepage pit with 200 sq ft of infiltration surface area and 2,300-gal storage capacity.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

12121971879

UNIT NAME: 124-N-3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1982

COORDINATES: NN6312 WN6830

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage, ~45 gal/d.

SITE DESCRIPTION: The unit is a cesspool with a solid cover, resting on 2 ft of crushed stone, and consisting of a 500-gal precast concrete perforated pipe.

UNIT NAME: 124-N-4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive
COORDINATES: NN6757 WN5852 (west side south tank)
NN6772 WN5852 (west side north tank)

SWMU: No
UNIT STATUS: Inactive
START DATE: 1963
END DATE: February 1987

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage, ~30,000 gal/d.

SITE DESCRIPTION: The unit includes a drain field. Two septic tanks had a total capacity of 14,000 gal, and the total infiltration surface area of the drain field was 8,900 sq ft.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

12121970330

UNIT NAME: 124-N-5
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive
COORDINATES: NN5600 WN5110

SWMU: No
UNIT STATUS: Inactive
START DATE: 1981
END DATE: February 1987

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage, ~3,800 gal/d.

SITE DESCRIPTION: The unit includes a drain field. Tank volume was 3,700 gal, and the drain field infiltration surface area was 960 sq ft.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

UNIT NAME: 124-N-6
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1979
END DATE: 1984

COORDINATES: NN5800 WN5340

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage, unknown amount.

SITE DESCRIPTION: The unit includes a drain field. The tank volume was 2,000 gal, and the drain field infiltration surface area was 600 sq ft.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

UNIT NAME: 124-N-7
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1984
END DATE: February 1987

COORDINATES: NN5617 WN5300

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage, ~5,200 gal/d.

SITE DESCRIPTION: The unit includes a drain field. The tank volume was 7,500 gal, and the drain field infiltration surface area was 5,500 sq ft.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

UNIT NAME: 124-N-8
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1983
END DATE: February 1987

COORDINATES: NN5503 WN4938

WASTE TYPES AND AMOUNTS: This unit received sanitary sewage, ~900 gal/d.

SITE DESCRIPTION: The unit includes a drain field. The tank volume was 5,000 gal, and the drain field has a infiltration surface area of 1,650 sq ft.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

12131970812

UNIT NAME: 124-N-9
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1985

COORDINATES: NN6198 WN4778

WASTE TYPES AND AMOUNTS: This unit receives sanitary sewage, ~2,200 gal/d.

SITE DESCRIPTION: The unit includes a drain field. The tank volume was 3,000 gal, and the drain field has an infiltration surface area of 3,500 sq ft.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

UNIT NAME: 124-N-10
UNIT TYPE: Sewer
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: February 1987

COORDINATES: NN4410 WN6183

WASTE TYPES AND AMOUNTS: The unit receives sanitary sewage, ~50,000 gal/d.

SITE DESCRIPTION: Sewage lagoon.

RELEASE POTENTIAL: More information on this unit may be found in Gydesen (1985).

70833

UNIT NAME: 128-N-1
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1963
END DATE: 1989

COORDINATES: NN6500 NW3000

WASTE TYPES AND AMOUNTS: Combustible materials, such as nuisance vegetation and combustible wastes (office waste, tools and hardware, possible paints and solvents), have been burned at this site, amounts unknown. Since the establishment of the Hanford Central Landfill (in the early 1970's), this unit has been used for burning nuisance vegetation only.

SITE DESCRIPTION: The site shows evidence of burning: trash and cans. Most of the site has been backfilled.

RELEASE POTENTIAL: The sole potential for a release is through incomplete combustion of wastes.

12

UNIT NAME: 130-N-1
UNIT TYPE: Pond
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: 1983

COORDINATES: NN5120 WN7164

WASTE TYPES AND AMOUNTS: The unit receives filter backwash containing polyacrylamide and aluminum sulfate.

12131971814

UNIT NAME: UN-100-N-1
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: March 27, 1974

COORDINATES: NN6114 WN6890

WASTE TYPES AND AMOUNTS: The leak consisted of filtered water containing 0.2 Ci of radioactive constituents.

KNOWN RELEASES: Radioactive water leaked onto the ground due to a line leak from the inlet valve box near the 1304-N Emergency Dump Tank. The water flowed down the bank from the emergency dump tank, covered the roadway below the tank, and extended to the front of the 181-N Building.

CLEANUP ACTIONS: Contaminated soil reading greater than 1,000 ct/min was removed, and the remainder was covered with clean fill.

UNIT NAME: UN-100-N-2
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: February 19, 1980

COORDINATES: NN6114 WN6890

WASTE TYPES AND AMOUNTS: The release consisted of primary coolant water containing less than 1 Ci of beta/gamma.

KNOWN RELEASES: A crack in a 1-in. body relief drain line from the FLV858 valve leaked thermally hot water onto the ground. The leak rate was estimated at 10 gal/min and was determined to be due to corrosion of the valve.

CLEANUP ACTIONS: The 2-in. line was excavated and repaired, and the groundwater was monitored. Contaminated soil that was accessible was removed and replaced with clean fill. The valve was installed to isolate the return line. This portion of the line is no longer used. Contaminated dirt was sent to a 200 Area burial ground.

UNIT NAME: UN-100-N-3
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: March 8, 1978

COORDINATES: NN6200 WN6700 (general area)

WASTE TYPES AND AMOUNTS: The release consisted of storage basin water with an estimated radionuclide release of 0.07 Ci of Co-60, 0.8 Ci of Sr-90, 0.25 Ci of Cs-137, 0.14 Ci of CePr-144, 0.0004 Ci Pu-239, and 1.0 Ci of H-3 (assumed).

KNOWN RELEASES: A leak developed in the dummy fuel spacer transfer line, a 3-in. reinforced plastic pipe extending from the 100-N Fuel Storage Basin to the dummy disposal pit. The leak rate was estimated to be 25 gal/min. It was not known how long the leak had been occurring. However, due to the size of the sink hole, it was judged to have occurred within the week prior to its identification.

CLEANUP ACTIONS: The line was repaired and the contaminated soil removed from the excavation to the 200 Area Burial Ground for disposal. The sink hole was filled, and the area was covered with clean soil.

UNIT NAME: UN-100-N-4
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: May 7, 1977

COORDINATES: NN6968 WN6133 (general area)

WASTE TYPES AND AMOUNTS: Radioactive water. The total activity was 0.5 mCi.

KNOWN RELEASES: The 1322-A sump overflowed and radioactive water was released to the soil.

CLEANUP ACTIONS: Most of the contaminated soil was removed and replaced with clean fill.

UNIT NAME: UN-100-N-5
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 27, 1972

COORDINATES: NN6800 WN6050

WASTE TYPES AND AMOUNTS: The leak consisted of radioactive wastewater containing decontaminated chemicals. The waste contained 35 Ci of activity, of which 26 Ci were Co-60. The solution had a pH of -9.

KNOWN RELEASES: A leak occurred in the piping at the radioactive chemical waste handling facility, and radioactive waste was discharged to the ground.

CLEANUP ACTIONS: Contaminated soil reading greater than 1,000 ct/min was removed and taken to 200 Area for disposal, and the remainder was covered with clean fill.

UNIT NAME: UN-100-N-6
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 10, 1985

COORDINATES: NN6700 WN6174 (general area)

WASTE TYPES AND AMOUNTS: The release consisted of radiologically contaminated water containing an estimated 0.2 Ci Co-60, 0.04 Ci Mn-54, 0.003 Ci Ru-103, and 0.003 Ci of Cs-137.

KNOWN RELEASES: The buried 1.5-in. line leaked contaminated water.

CLEANUP ACTIONS: The leaking line was repaired and ~590 cu ft of contaminated soil reading 7,000 to 25,000 ct/min was removed from four locations along the line. The excavation was backfilled with clean soil.

RELEASE POTENTIAL: The contaminated soil was removed, which effectively removed any potential for further release from this location.

UNIT NAME: UN-100-N-7
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: April 23, 1985

COORDINATES: NN6150 WN6800

WASTE TYPES AND AMOUNTS: The release consisted of radioactive effluent water containing an estimated 1.0 Ci Na-24, 0.5 Ci Co-60, 0.09 Ci Ru-103, 0.4 Ci Cr-51, 0.2 Ci Zr-95, 0.3 Ci Te-132, 0.30 Ci Mn-54, 0.1 Ci Nb-95, 0.5 Ci I-131, 1.2 Ci Fe-59, 0.2 Ci Ce-141, 0.2 Ci Ce-144, and 0.8 Ci Tc-99.

KNOWN RELEASES: Adjacent groundwater monitoring wells detected increased levels of I-131, indicating a nearby leak to ground.

CLEANUP ACTIONS: Approximately 1,130 cu ft of contaminated soil were removed and the hole backfilled with clean soil. Groundwater monitoring wells were sampled daily until concentrations of I-131 had returned to background levels.

RELEASE POTENTIAL: All nuclides except Mn-54, Co-60, and Ce-144 have undergone more than ten half-lives and are no longer present. The three remaining nuclides bind readily to soil particles and are not present in groundwater monitoring samples.

UNIT NAME: UN-100-N-8
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: May 11, 1975

COORDINATES: NN6968 WN6133

WASTE TYPES AND AMOUNTS: The release contained radioactive water. The total activity was 0.5 mCi.

KNOWN RELEASES: The 1322-A Sump overflowed, and radioactive water was released to the soil.

CLEANUP ACTIONS: Most of the contaminated soil was removed and replaced with clean fill.

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UNIT NAME: UN-100-N-9
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: October 14, 1974

COORDINATES: NN6710 WN6580

WASTE TYPES AND AMOUNTS: The release contained contaminated water with ~500,000 pCi. The water was released from the 119-N cooling water drain line.

KNOWN RELEASES: A backhoe mistakenly hooked onto a buried 2-in. valve in a drain line during exploratory digging.

CLEANUP ACTIONS: Repair was completed on the 2-in valve and drain line. The contaminated excavation spoils were removed to a 200 Area burial ground, and the area was filled with clean soil.

UNIT NAME: UN-100-N-10
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: May 13, 1975

COORDINATES: NN6200 WN6700 (general area)

WASTE TYPES AND AMOUNTS: The release contained 0.001 Ci of mixed fission and activation products.

KNOWN RELEASES: Contaminated water leaked to the ground during preparations for the removal of a check valve in the gravity drain line to the lift station.

CLEANUP ACTIONS: Pumps were shut down, and a small dirt dam was built to confine the water within the existing radiation zone boundary.

UNIT NAME: UN-100-N-11
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 2, 1975

COORDINATES: NN4364 WN6454

WASTE TYPES AND AMOUNTS: Measured 5 to 10 R where the valve bonnet came to rest on the field. Measures of 1,000 mR where it hit the road; 20,000 to 5,000 ct/min on 200 sq ft of road; 25,000 to 50,000 on surface of field adjacent to valve bonnet.

KNOWN RELEASES: A contaminated 500-lb valve bonnet fell from a truck onto the road and into a field adjacent to the roadway.

CLEANUP ACTIONS: 8 cu yd of soil and 0.5 cu yd of blacktop were removed and transported to the 200 West Area Burial Ground for disposal.

UNIT NAME: UN-100-N-12
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: February 27, 1979

COORDINATES: NN6200 WN6700 (general area)

WASTE TYPES AND AMOUNTS: The pipe contained fuel spacers. The soil was checked for radioactivity and read 50 to 100 mR/h. Basin water containing 0.19 Ci of Co-60, 0.4 Ci of Cs-137, and 0.00057 Ci of Pu-239/240 was discharged.

KNOWN RELEASES: A leak in the spacer transport line was discovered when a sink hole was noticed in a previously backfilled zone.

CLEANUP ACTIONS: The line was repaired, and the sink hole was filled with clean soil.

UNIT NAME: UN-100-N-13
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 24, 1973

COORDINATES: NN6923 WN6656

WASTE TYPES AND AMOUNTS: The release consisted of spent decontamination solution containing 0.011 Ci.

KNOWN RELEASES: N Plant Operations personnel were filling a railroad waste tank car. After ~7,000 gal of solution had been pumped into the 20,000-gal waste tank car, solution began overflowing from the tank car fittings. The tank car loading pump was turned off, and solution began to flow up through the drain in the catch basin beneath the car. The catch basin overflowed into the adjacent dry well, which also filled and overflowed. Approximately 100 gal of solution flowed out of the dry well and covered 20 sq ft of ground.

CLEANUP ACTIONS: The contaminated soil was properly packaged and shipped to a 200 Area burial ground. Some of the contaminated soil was covered with clean fill.

UNIT NAME: UN-100-N-14
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: August 5, 1974

COORDINATES: NN6710 WN6580

WASTE TYPES AND AMOUNTS: The release consisted of effluent water containing 0.0008 Ci of beta/gamma activity.

KNOWN RELEASES: While maintenance personnel were working on the 119-N drain system, backflow from the drain occurred. Effluent water was discharged to the ground near the building.

CLEANUP ACTIONS: Soil contaminated over 1,000 ct/min was removed and shipped to the 200 Area for disposal. Soil under 1,000 ct/min was covered with clean fill.

UNIT NAME: UN-100-N-15
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: March 20, 1981

COORDINATES: NN5551 WN6063

WASTE TYPES AND AMOUNTS: The release consisted of sulfuric acid.

SITE-DESCRIPTION: The size of the affected area was less than 50 cu ft.

KNOWN RELEASES: Sulfuric acid and rinse water from a spill inside the 108-N Building was pumped to an outside neutralizing sump. When the first sump was filled, the liquid was transferred to a second sump. The transfer line developed a leak to the ground.

CLEANUP ACTIONS: The area outside the building was roped off, and the acid was neutralized with soda ash.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

UNIT NAME: UN-100-N-17
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: August 1966

COORDINATES: NN6860 WN6497

WASTE TYPES AND AMOUNTS: The leak consisted of diesel oil.

KNOWN RELEASES: External corrosion caused leakage in the 166-N Diesel oil supply line. The oil drained through the soil to groundwater, where it migrated to the Columbia River.

CLEANUP ACTIONS: The line was excavated and repaired in September 1966. Oil near the river was collected in an interceptor trench and periodically burned off during 1967.

71392

UNIT NAME: UN-100-N-18
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: August 1973

COORDINATES: NN6032 WN6107 (general area)

WASTE TYPES AND AMOUNTS: The leak consisted of diesel oil.

KNOWN RELEASES: External corrosion caused leakage in the 4-in. diesel oil supply line.

CLEANUP ACTIONS: The line was excavated and repaired.

UNIT NAME: UN-100-N-19
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: April 1984

COORDINATES: NN6091 WN6125

WASTE TYPES AND AMOUNTS: The release consisted of No. 6 fuel oil.

KNOWN RELEASES: The day tank was overfilled, and fuel oil spilled onto the ground.

CLEANUP ACTIONS: The oil was removed from the surface of the ground and the tank impoundment area was cleaned up.

RELEASE POTENTIAL: The migration of highly viscous oil such as fuel oil is a very slow process. Extremely large volumes may be required to penetrate the groundwater.

71093

UNIT NAME: UN-100-N-20
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: June 1985

COORDINATES: NN6878 WN6330

WASTE TYPES AND AMOUNTS: The release consisted of No. 2 diesel oil.

KNOWN RELEASES: External-corrosion caused the 2-in. diesel oil return line to leak.

CLEANUP ACTIONS: The 2-in. line was excavated and repaired and the groundwater was monitored. Oil-contaminated soil was removed, and a valve was installed to isolate the return line. This portion of the line is no longer used.

RELEASE POTENTIAL: Diesel oil migration through soils is influenced by soil permeability, porosity, gravitational forces, capillary forces, groundwater gradients, and other factors.

7122

UNIT NAME: UN-100-N-21
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: April 25, 1986

COORDINATES: NN6091 WN6125

WASTE TYPES AND AMOUNTS: The release consisted of No. 2 diesel oil.

KNOWN RELEASES: Failure of the tank-level annunciator caused overflowing of the day tank during oil transfer.

CLEANUP ACTIONS: The level annunciator was repaired and 650 gal of oil was removed from the tank impoundment area. Groundwater monitoring wells were sampled, and no oil was detected.

RELEASE POTENTIAL: Diesel oil migration through soils is influenced by soil permeability, porosity, and other factors.

UNIT NAME: UN-100-N-22
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: June 23, 1986

COORDINATES: NN6032 WN6107 (general area)

WASTE TYPES AND AMOUNTS: The release consisted of No. 2 diesel oil.

KNOWN RELEASES: External corrosion caused the diesel oil supply line to leak.

CLEANUP ACTIONS: The line has been excavated and rerouted. Oil-contaminated soil was removed. Oil has been pumped from adjacent groundwater monitoring wells. Groundwater wells were sampled, and oil was detected in an adjacent well (N-16) in July 1986. Subsequently, residual oil was pumped from the groundwater through this monitoring well.

RELEASE POTENTIAL: Diesel oil migration through soils is influenced by soil permeability, porosity, and other factors.

UNIT NAME: UN-100-N-23
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: January 10, 1987

COORDINATES: NN6091 WN6125

WASTE TYPES AND AMOUNTS: The release consisted of No. 2 diesel oil.

KNOWN RELEASES: External corrosion of the piping system was the cause of the leak. The leak was detected through inventory discrepancy.

CLEANUP ACTIONS: The line was isolated and excavated. Groundwater wells were sampled, and residual diesel oil is being pumped from the groundwater.

RELEASE POTENTIAL: Diesel oil migration through soils is influenced by soil permeability, porosity, and other factors.

UNIT NAME: UN-100-N-24
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: February 1, 1987

COORDINATES: NN6768 WN6396

WASTE TYPES AND AMOUNTS: An unknown amount of No. 6 fuel oil.

KNOWN RELEASES: The leak was caused by external corrosion brought on by a leaking heat trace line. Leakage occurred during routine oil transfer, and waste oil was periodically removed.

CLEANUP ACTIONS: The leaks were scheduled for repair during the 1987 reactor standdown and will be repaired prior to restart.

RELEASE POTENTIAL: Migration of highly viscous oil such as fuel oil is a very slow process and may require extremely large volumes to penetrate the groundwater at 100-N Area.

UNIT NAME: UN-100-N-25
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: May 15, 1975

COORDINATES: NN6775 WN5985

WASTE TYPES AND AMOUNTS: The release consisted of primary loop water and decontamination solution containing phosphoric acid and diethylthiourea.

KNOWN RELEASES: The 1310-N Tank was vented, releasing reactor decontamination solution to the ground.

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UNIT NAME: UN-100-N-26
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 7, 1978

COORDINATES: NN6912 WN6638

WASTE TYPES AND AMOUNTS: The release consisted of reactor decontamination solution containing phosphoric acid and diethylthiourea.

KNOWN RELEASES: Reactor decontamination solution backflowed while being pumped into a tank car, contaminating the floor of the valve pit at the 1314-N Radioactive Liquid Waste Load-Out Facility.

CLEANUP ACTIONS: The remaining solution was absorbed and sent to a 200 Area burial ground.

UNIT NAME: UN-100-N-29
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: April 23, 1974

COORDINATES: NN6100 WN6900

WASTE TYPES AND AMOUNTS: The leak consisted of primary coolant water containing radioactive fission and activation products, mostly Mn-56 and Na-24.

KNOWN RELEASES: A leaking check valve caused a release of primary coolant water.

CLEANUP ACTIONS: The contaminated soil was removed and sent to the 200 Area Burial Ground for disposal, and the contaminated area was covered with clean fill.

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UNIT NAME: UN-100-N-30
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: July 22, 1974

COORDINATES: NN6100 WN6900

WASTE TYPES AND AMOUNTS: The release consisted of primary coolant water containing fission and activation products contaminating the area to a maximum of 500 ct/min.

KNOWN RELEASES: During a drawdown test, the 1304-N Emergency Dump Tank overflowed, spilling primary coolant water. No water reached the river.

CLEANUP ACTIONS: The contaminated area was marked as a radiation zone. The contaminated soil has been stabilized in place using sand and fines as a cover.

UNIT NAME: UN-100-N-31
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: July 22, 1974

COORDINATES: NN7030 WN6095

WASTE TYPES AND AMOUNTS: The release consisted of radioactive effluent containing fission and activation products. The gross beta/gamma concentration of the spilled water was 700 dis/min/mL.

KNOWN RELEASES: While sample lines were being installed in a 6-in. steel casing through the berm on the west side of the 1301-N Crib, the water level in the crib was raised 15 to 18 in. as a result of an EDT drawdown test. The increased water line allowed water to flow through the casing, contaminating 2,025 sq ft of soil.

CLEANUP ACTIONS: The contaminated soil was removed and transported to the 200 Area for disposal. Clean fill was used to restore the area.

UNIT NAME: UN-100-N-32
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste

SWMU: No
OCCURRENCE DATE: September 16, 1974

COORDINATES: NN6100 WN6900

WASTE TYPES AND AMOUNTS: The release consisted of radioactive effluent water containing fission and activation products. A mud sample read 20,000 ct/min. The water was analyzed for gross activity to provide an estimate of activity of less than 10 mCi of radioactive material remaining on the ground.

KNOWN RELEASES: A leaking check valve in the Emergency Dump Tank bypass line released radioactive effluent water to the ground.

CLEANUP ACTIONS: The contaminated soil was removed and disposed of in the 200 Area Burial Ground. Some of the contaminated soil was covered in place.

UNIT NAME: UN-100-N-33
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: November 9, 1981

COORDINATES: NN5476 WN5920

WASTE TYPES AND AMOUNTS: The spill consisted of 97% sulfuric acid.

KNOWN RELEASES: Acid was spilled during an acid transfer from a rail car to the storage tank at 108-N. This spill exceeded the current CERCLA requirement of 1,000 lb for sulfuric acid.

CLEANUP ACTIONS: The spilled acid was neutralized using sodium hydroxide and soda ash.

RELEASE POTENTIAL: The alkaline Hanford soils act as a buffer to help neutralize acidic wastes.

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UNIT NAME: UN-100-N-34
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: May 12, 1980

COORDINATES: NN5463 WN6470

WASTE TYPES AND AMOUNTS: The release was 94% sulfuric acid.

KNOWN RELEASES: WPPSS supervision called the 105-N Control Room and reported a large cloud of steam in the vicinity of the WPPSS trestle. An investigation revealed liquid spurting several feet into the air from a sulfuric acid-sodium hydroxide line encasement at the encasement sump. The weekly sulfuric acid transfer from 108-N to 163-N was in process. It was subsequently determined that the sulfuric acid had been transferred from the storage tank at 108-N, and none had been received at the 163-N Storage Tank.

CLEANUP ACTIONS: The acid in the encasement was neutralized with 50% sodium hydroxide and pumped to the clearwell overflow. The acid that overflowed to the surrounding ground was neutralized with soda ash and liquid sodium hydroxide. Arrangements were made for delivery of sulfuric acid by tank truck until the line could be repaired.

UNIT NAME: UN-100-N-35
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Low-Level Waste
COORDINATES: NN6200 WN6560

SWMU: No
START DATE: February 28, 1986
END DATE: November 1986

WASTE TYPES AND AMOUNTS: The release consisted of radioactively contaminated water containing an estimated 1.6 Ci Mn-5, 0.4 Ci Co-60, 0.3 Ci Nb-95, 0.1 Ci I-131, 0.4 Ci Cs-137 and 0.3 Ci Ce-144.

KNOWN RELEASES: Routine sampling of the 100-N Area groundwater wells detected slightly elevated levels of I-131. Drawdown tests on the basin determined that the leak was not from the basin. Further tests and investigations determined the intermittent leak to be coming from a sub-basin drain line ~28 ft below the ground. The leak, estimated to be less than 3 gal/min, occurred only during feed and bleed (addition of water) of the 100-N Fuel Basin.

CLEANUP ACTIONS: On December 5 and 8, 1986, the southwest basin weir and drain line was grouted and sealed off.

UNIT NAME: UN-600-17
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: August 17, 1986

WASTE TYPES AND AMOUNTS: The release consisted of 450 lb of gasoline.

KNOWN RELEASES: Gasoline was spilled inside a patrol boat during refueling operations, and gasoline was discharged from the boat to the shoreline.

100-NR-1

Other Waste Units Located Within the Operable Unit Area

116-N-8	Storage Pad
120-N-4	Staging Area

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UNIT NAME: 116-N-8
UNIT TYPE: Storage Pad
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: December 1986

COORDINATES: NN5415 WN6199, NN5415 WN6046, NN5353 WN6199, NN5353 WN6046

WASTE TYPES AND AMOUNTS: This site receives radioactively contaminated oil and miscellaneous hazardous process chemicals in drums and containers, amounts variable based on operations.

SITE DESCRIPTION: Containers are stored on a curbed and fenced concrete pad.

KNOWN RELEASES: No spills have been recorded.

UNIT NAME: 120-N-4
UNIT TYPE: Staging Area
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: November 1985

COORDINATES: NN6600 WN6025 (northeast corner)

WASTE TYPES AND AMOUNTS: Typical wastes in staging consists of nonradioactive, chemically contaminated oil and miscellaneous process chemicals. Quantities are variable depending on reactor operations.

SITE DESCRIPTION: The waste is stored in drums and containers, which are stored on a curbed concrete pad.

KNOWN RELEASES: No hazardous spills have been reported.

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4.0 200 AGGREGATE AREA OPERABLE UNITS

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200-BP-1

Waste Units Assigned to this Operable Unit

216-B-43	Crib
216-B-44	Crib
216-B-45	Crib
216-B-46	Crib
216-B-47	Crib
216-B-48	Crib
216-B-49	Crib
216-B-50	Crib
216-B-57	Crib
216-B-61	Crib
UN-200-E-9	Unplanned Release
UN-200-E-63	Unplanned Release
UN-200-E-89	Unplanned Release
UN-200-E-110	Unplanned Release

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UNIT NAME: 216-B-43
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1954
END DATE: November 1954

COORDINATES: N46375 W53359

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

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UNIT NAME: 216-B-44
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1954
END DATE: March 1955

COORDINATES: N46460 W53359

WASTE TYPES AND AMOUNTS: The site received scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

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UNIT NAME: 216-B-45
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1955
END DATE: June 1955

COORDINATES: N46545 W53359

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

UNIT NAME: 216-B-46
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1955
END DATE: December 1955

COORDINATES: N46630 W53359

WASTE TYPES AND AMOUNTS: The site received scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

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UNIT NAME: 216-B-47
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1955
END DATE: September 1955

COORDINATES: N46375 W53499

WASTE TYPES AND AMOUNTS: The site received scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

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UNIT NAME: 216-B-48
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: November 1955

COORDINATES: N46460 W53499

WASTE TYPES AND AMOUNTS: The site received scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

UNIT NAME: 216-B-49
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: December 1955

COORDINATES: N46545 W53499

WASTE TYPES AND AMOUNTS: The site received scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

UNIT NAME: 216-B-50
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1965
END DATE: January 1974

COORDINATES: N46630 W53499

WASTE TYPES AND AMOUNTS: The site received the waste storage tank condensate from the ITS #1 unit in the 241-BY Tank Farm.

SITE DESCRIPTION: Four 4-ft-diameter by 4-ft-long concrete pipes placed vertically, 7 ft below grade, on a 5-ft bed of 3-in. gravel (380 cu yd). Pipes are arranged in a square with the centers spaced 15 ft apart in a 30- by 30- by 15-ft-deep excavation. Each culvert is fed by an 8-in. steel pipe coming from a main and forming a chevron pattern. Each culvert has a concrete cover.

CLEANUP ACTIONS: The surface above and near the unit was covered with 10-mil plastic. The plastic was covered with 6 in. of sand for padding against puncture by rocks or other sharp objects and covered by 12 in. of topsoil. The ground surface was fertilized with 60 lb/acre of 16-20-0 fertilizer and seeded over the plastic area with 20 lb/acre of cheatgrass and over the remainder of the ground surface of the radiation zone with cheatgrass and Siberian wheatgrass. In 1991, the site was interim stabilized with 2 ft of clean fill after the surface contamination from the surrounding area was consolidated in the low area between adjacent cribs.

UNIT NAME: 216-B-57
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: February 1968
END DATE: June 1973

COORDINATES: N46160 W53775, N46360 W53775 (centerline)

WASTE TYPES AND AMOUNTS: The site received the waste storage tank condensate from the ITS #2 unit in 241-BY Tank Farm.

SITE DESCRIPTION: The site was filled to 4 ft above the bottom with gravel (~620 cu yd). A perforated, 12-in. corrugated pipe runs the length of the unit, 3 ft above the bottom. The side slope is 1.5:1.

CLEANUP ACTIONS: In 1991, the site was interim stabilized with 2 ft of clean fill.

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UNIT NAME: 216-B-61
UNIT TYPE: Crib
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive

COORDINATES: N46650 W54175, N46650 W54350

SITE DESCRIPTION: The site is gravel-filled.

UNIT NAME: UN-200-E-9
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 15, 1955

COORDINATES: N46340 W53414

WASTE TYPES AND AMOUNTS: The 216-B-47 Flush Tank leaked supernatant waste from the TBP Building to the ground.

CLEANUP ACTIONS: Most of the waste was removed to a site south of 216-B-43 and covered with 2 ft of clean soil. The contamination left near the flush tank was covered with 10 ft of clean soil. Additional corrective action may have been provided.

UNIT NAME: UN-200-E-63
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 4, 1981

COORDINATES: N46500 W53275

WASTE TYPES AND AMOUNTS: The tumbleweeds were contaminated to 100,000 ct/min with beta/gamma readings to 6,000 dis/min.

KNOWN RELEASES: Tumbleweeds were contaminated by uptake of radionuclides from the BC crib and trench. They were then blown to the gravel pull and contaminated the ground surface between the two areas.

CLEANUP ACTIONS: The contaminated vegetation was removed, and a spraying program was initiated to control future growth of tumbleweeds.

UNIT NAME: UN-200-E-89
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1978

COORDINATES: N46500 W53800

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 500 to 2,000 ct/min.

KNOWN RELEASES: Airborne particulate matter from activities associated with the 241-BX Tank Farm during the number of years of its operations spread from the farm onto the Baltimore Avenue roadway at the subject site.

CLEANUP ACTIONS: The affected area was zoned off against casual entry. The area was interim stabilized in 1991.

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UNIT NAME: UN-200-E-110
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: August 7, 1955

COORDINATES: N46050 W53800

WASTE TYPES AND AMOUNTS: First-cycle waste from the 112 Tank.

KNOWN RELEASES: Several employees potentially overexposed as a result of the approach of an undiscovered spread of process waste at the 241-BY Tank Farm. A crescent-shaped ground area of ~25,000 sq ft around the 112-BY Pit was contaminated to 22 R/h. A fire hose and two workers' gloves also received contamination.

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Waste Units Assigned to this Operable Unit

216-B-14	Crib
216-B-15	Crib
216-B-16	Crib
216-B-17	Crib
216-B-18	Crib
216-B-19	Crib
216-B-20	Trench
216-B-21	Trench
216-B-22	Trench
216-B-23	Trench
216-B-24	Trench
216-B-25	Trench
216-B-26	Trench
216-B-27	Trench
216-B-28	Trench
216-B-29	Trench
216-B-30	Trench
216-B-31	Trench
216-B-32	Trench
216-B-33	Trench
216-B-34	Trench
216-B-52	Trench
216-B-53A	Trench
216-B-53B	Trench
216-B-54	Trench
216-B-58	Trench
UN-200-E-83	Unplanned Release

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9 2 1 2 1 9 7 1 9 1 3

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UNIT NAME: 216-B-14
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: February 1956

COORDINATES: N35845 W53309 (center)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building during uranium recovery operations. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is a dispersion structure, 10 ft by 10 ft by 3 ft high, made of wood, cinder block, and steel, over a 5-ft bed of 3-in. gravel, with a 14-in. inlet pipe located 6 ft below grade. Bottom dimensions of the excavation are 40 ft by 40 ft. The side slope is 2:1.

CLEANUP ACTIONS: The site was interim stabilized in 1991. It was revegetated and weed growth is controlled with selective herbicide.

7091

UNIT NAME: 216-B-15
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1956
END DATE: December 1957

COORDINATES: N35935 W53447 (center)

WASTE TYPES AND AMOUNTS: The site received scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is a dispersion structure, 10 ft by 10 ft by 3 ft high, made of wood, cinder block and steel, located over a 5-ft bed of 3-in. gravel, with a 14-in. inlet pipe located 8 ft below grade. Bottom dimensions of the excavation are 40 by 40 ft. The side slope is 1:2.

CLEANUP ACTIONS: The site was interim stabilized in 1991. It was revegetated and weed growth is controlled with selective herbicide.

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6

UNIT NAME: 216-B-16
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1956
END DATE: August 1956

COORDINATES: N35716 W53389 (center)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is a dispersion structure, 10 by 10 by 3 ft high, made of wood, cinder block and steel, located over a 5-ft bed of 3-in. gravel. Bottom dimensions of the excavation are 40 by 40 ft. The side slope is 1:2. A 14-in. inlet pipe is located 6 ft below grade.

CLEANUP ACTIONS: The site was interim stabilized in 1991. It was revegetated and weed growth is controlled with selective herbicide.

UNIT NAME: 216-B-17
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: January 1956

COORDINATES: N35796 W53527 (center)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is a dispersion structure, 10 by 10 by 3 ft high, made of wood, cinder block and steel, located over a 5-ft bed of 3-in. gravel, with a 14-in. inlet pipe located 7 ft below grade. Bottom dimensions of the excavation are 40 by 40 ft. The side slope is 1:2.

CLEANUP ACTIONS: The site was interim stabilized in 1991. It was revegetated and weed growth is controlled with selective herbicide.

UNIT NAME: 216-B-18
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1956
END DATE: April 1956

COORDINATES: N35577 W53469 (center)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is a dispersion structure, 10 by 10 by 3 ft high, made of wood, cinder block and steel, located over a 5-ft bed of 3-in. gravel, with a 14-in. inlet pipe located 9 ft below grade. Bottom dimensions of the excavation are 40 by 40 ft. It is 16 ft deep with a side slope of 1:2.

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UNIT NAME: 216-B-19
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: February 1957
END DATE: October 1957

COORDINATES: N35657 W53607 (center)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is a dispersion structure, 10 by 10 by 3 ft high, made of wood, cinder block and steel, located over a 5-ft bed of 3-in. gravel, with a 14-in. inlet pipe placed 9 ft below grade. Bottom dimensions of the excavation are 40 by 40 ft. The side slope is 1:2.

2 1 9

UNIT NAME: 216-B-20
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: August 1956
END DATE: September 1956

COORDINATES: N36000 W55940, N35540 W54190 (centerline)

WASTE TYPES AND AMOUNTS: The site received scavenged waste from uranium recovery (TBP solvent extraction from the 221-U Building). The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit was divided into 62.5-ft sections by 2-ft-high earthen dams. The side slope is 1:1.5. The depth was designed to be 10 ft but is often documented as 6 ft.

CLEANUP ACTIONS: In 1969, the unit was covered with 6 in. of gravel.

UNIT NAME: 216-B-21
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1956
END DATE: October 1956

COORDINATES: N36000 W54055, N35540 W54305 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit was divided into 62.5-ft sections by 2-ft-high earthen dams. The side slope is 1:1.5. The depth was designed to be 10 ft but is often documented as 6 ft.

CLEANUP ACTIONS: In 1969, the unit was covered with 6 in. of gravel.

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UNIT NAME: 216-B-22
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1956
END DATE: October 1956

COORDINATES: N36000 W54171, N35540 W54420 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit was divided into 62.5-ft sections by 2-ft earth dams. The side slope is 1:1.5. The depth was designed to be 12 ft, but some documents report ~6 ft.

CLEANUP ACTIONS: In 1969, the unit was covered with 6 in. of gravel.

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UNIT NAME: 216-B-23
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1956
END DATE: October 1956

COORDINATES: N35300 W54244, N35300 W54744 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into eight 62.5-ft sections by 4-ft-high earth dams. The unit has a 1:1.5 side slope.

CLEANUP ACTIONS: Because of the possibility of plant uptake of radionuclides, the unit was covered with sand and gravel in 1969.

UNIT NAME: 216-B-24
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1956
END DATE: November 1956

COORDINATES: N35200 W54244, N35200 W54744 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into eight 62.5-ft sections by 4-ft-high earthen dams. It has a 1.5:1 side slope.

CLEANUP ACTIONS: The potential of plant uptake has been recognized. A layer of sand and a layer of gravel were placed over the unit in 1969.

UNIT NAME: 216-B-25
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1956
END DATE: December 1956

COORDINATES: N35100 W54244, N35100 W54744 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into eight 62.5-ft sections by 4-ft-high earthen dams. It has a 1.5:1 side slope.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Sand covered with gravel was placed over the unit.

9 2 1 2 0 9 7 0 9 2 4

UNIT NAME: 216-B-26
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1956
END DATE: February 1957

COORDINATES: N35000 W54244, N35000 W54744 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into eight 62.5-ft sections by 4-ft-high earthen dams. It has a 1.5:1 side slope.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit to bring it up to 10 ft above the bottom.

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UNIT NAME: 216-B-27
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: February 1957
END DATE: April 1957

COORDINATES: N34900 W54244, N34900 W54744 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into eight 62.5-ft sections by 4-ft-high earthen dams. It has a 1.5:1 side slope.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit to bring it up to 10 ft above the bottom.

UNIT NAME: 216-B-28
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1957
END DATE: June 1957

COORDINATES: N34800 W54244, N34800 W54744 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into eight 62.5-ft sections by 4-ft-high earthen dams. It has a 1.5:1 side slope.

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UNIT NAME: 216-B-29
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: June 1957
END DATE: July 1957

COORDINATES: N35972 W54900, N35972 W55400 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 ft wide at the top.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit.

UNIT NAME: 216-B-30
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: July 1957
END DATE: July 1957

COORDINATES: N35847 W54900, N35847 W55400 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 ft wide at the top. The side slope is 1.75:1.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit.

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UNIT NAME: 216-B-31
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: July 1957
END DATE: August 1957

COORDINATES: N35722 W54900, N35722 W55400 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 ft wide at the top. The side slope is 1.75:1.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit.

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UNIT NAME: 216-B-32
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: August 1957
END DATE: September 1957

COORDINATES: N35597 W54900, N35597 W55400 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 ft wide at the top. The side slope is 1.75:1.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit.

UNIT NAME: 216-B-33
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1957
END DATE: October 1957

COORDINATES: N35472 W54900, N35472 W55400 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 ft wide at the top. The side slope is 1.75:1.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit.

UNIT NAME: 216-B-34
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1957
END DATE: October 1957

COORDINATES: N35347 W54900, N35347 W55400 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 ft wide at the top. The side slope is 1.75:1.

CLEANUP ACTIONS: In 1969, action was taken to preclude plant uptake. Layers of sand and gravel were put over the unit to bring it up to 10 ft above the bottom.

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UNIT NAME: 216-B-52
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1957
END DATE: January 1958

COORDINATES: N35415 W54170, N35415 W54750 (centerline)

WASTE TYPES AND AMOUNTS: The site received scavenged waste from the uranium recovery process in 221-U (TBP solvent extraction). The waste is high salt and neutral/basic.

SITE DESCRIPTION: The unit is divided in half by an earthen dam at the center, 5 ft high and 5 ft wide at the top. The side slope is 1.25:1.

CLEANUP ACTIONS: The area has been stabilized with gravel and weed growth controlled by a sterilant.

UNIT NAME: 216-B-53A
UNIT TYPE: Trench
WASTE CATEGORY: TRU-Contaminated Soil Site/Mixed

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1965
END DATE: November 1965

COORDINATES: N35973 W54583, N35973 W54750 (centerline)

WASTE TYPES AND AMOUNTS: The site received waste from the 300 Area Hanford Laboratories operations. The waste is neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 in. wide at the top. The side slope is 1.75:1.

CLEANUP ACTIONS: The area has been stabilized with gravel and weed growth controlled by a sterilant.

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UNIT NAME: 216-B-53B
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1962
END DATE: March 1963

COORDINATES: N35937 W54583, N35916 W54723 (centerline)

WASTE TYPES AND AMOUNTS: The site received waste from Hanford Laboratories Operations (321 Building) in the 300 Area. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 in. wide at the top. The side slope is 1.75:1.

UNIT NAME: 216-B-54
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1963
END DATE: October 1965

COORDINATES: N35772 W54550, N35772 W54750 (centerline)

WASTE TYPES AND AMOUNTS: The site received waste from Hanford Laboratories operations in the 300 Area. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into two sections by an earthen dam at the center. The dam is 5 ft high and 5 in. wide at the top. The side slope is 1.75:1.

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UNIT NAME: 216-B-58
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1965
END DATE: June 1967

COORDINATES: N35672 W54550, N35672 W54750 (centerline)

WASTE TYPES AND AMOUNTS: The site received PNL waste from the 300 Area. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit is divided into 25-ft sections by 4-ft-high earthen dams. Each section has a wooden cover. A 48-in.-diameter STL pipe runs along the bottom. The pipe is corrugated with five 4-in.-diameter holes around the bottom half.

UNIT NAME: UN-200-E-83
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: Yes
OCCURRENCE DATE: May 1958

COORDINATES: N36000 W53000, N36000 W55800, N34400 W55800, N34400 W53000

WASTE TYPES AND AMOUNTS: Radioactive feces from coyotes and rabbits. Sr-90 (81 Ci) and Cs-137 (14 Ci), which is remaining fixed in the feces. This is a low activity site.

KNOWN RELEASES: Radioactive rabbit and coyote feces were found scattered over the ground surface of the desert as far as 2.5 mi south, east, and west of the B-C cribs. It is postulated that a badger or some other animal burrowed into the 216-B-23 Trench and exposed a radioactive salt layer. Rabbits ingested the contaminated salts and defecated over ~4 sq mi of undisturbed sagebrush land. Sagebrush and cheat grass cover the range land, with surface contamination from scattered animal feces.

CLEANUP ACTIONS: Monthly and quarterly surveillance reports indicate the contamination to be fixed beneath a good growth of vegetation. There is no significant evidence of resuspension of the radioactive particulate matter.

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Waste Units Assigned to this Operable Unit

216-B-35	Trench
216-B-36	Trench
216-B-37	Trench
216-B-38	Trench
216-B-39	Trench
216-B-40	Trench
216-B-41	Trench
216-B-42	Trench

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UNIT NAME: 216-B-35
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: February 1954
END DATE: March 1954

COORDINATES: N45273 W53850, N45273 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received first-cycle supernatant waste from 221-B Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

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UNIT NAME: 216-B-36
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1954
END DATE: April 1954

COORDINATES: N45323 W53850, N45323 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received first-cycle supernatant waste from 221-B Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

UNIT NAME: 216-B-37
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: August 1954
END DATE: August 1954

COORDINATES: N45413 W53850, N45413 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received first-cycle bottom supernatant waste from the 242-B Waste Evaporator. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

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UNIT NAME: 216-B-38
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: July 1954
END DATE: 1954

COORDINATES: N45503 W53850, N45503 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received first-cycle supernatant waste from 221-B Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

UNIT NAME: 216-B-39
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1953
END DATE: November 1954

COORDINATES: N45593 W53840, N45595 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received first-cycle supernatant waste from 221-B Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

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UNIT NAME: 216-B-40
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1954
END DATE: July 1954

COORDINATES: N45683 W53850, N45683 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received first-cycle supernatant waste from the 221-B Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

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UNIT NAME: 216-B-41
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1954
END DATE: November 1954

COORDINATES: N45573 W53850, N45773 W54102 (centerline)

WASTE TYPES AND AMOUNTS: The site received the first-cycle supernatant waste from the 221-B Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

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UNIT NAME: 216-B-42
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1955
END DATE: February 1955

COORDINATES: N45273 W54152, N45273 W54404 (centerline)

WASTE TYPES AND AMOUNTS: The site received the scavenged TBP supernatant waste from the 221-U Building. The waste is high salt and neutral/basic.

SITE DESCRIPTION: The site has a side slope of 1.5:1 and has been backfilled. The unit is covered.

Waste Units Assigned to this Operable Unit

216-B-7 A & B	Crib
216-B-8TF	Crib
216-B-11A & B	Reverse Well
216-B-51	French Drain

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UNIT NAME: 216-B-7 A & B
UNIT TYPE: Crib
WASTE CATEGORY: TRU-Contaminated Soil Site/Mixed

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1946
END DATE: May 1967

COORDINATES: N45602 W52764 (center of A), N45648 W52790 (center of B)

WASTE TYPES AND AMOUNTS: Until 10/47, the site received the liquid waste from 224-B via overflow of 201-B Settling Tank. From 10/47 to 8/48, same as above plus the cell drainage and other liquid waste via Tank 5-6 in 221-B. From 8/48 to 12/54, the site received liquid waste from 224-B. From 12/54 to 10/61, the site received Cell 5-6 drainage and equipment cleanout waste from 224-B. From 10/61 to 5/67, the site received decontamination construction waste from 221-B. The waste is low salt, neutral/basic, and contains TRU fission products.

SITE DESCRIPTION: The unit consists of two wooden structures placed side by side, each 12 by 12 by 4 ft high, each located in a 14 by 14-ft excavation. Wooden frames for each structure consist of 6-in. by 6-in. timbers (72 linear ft). Effluent drained into 216-B-7A and 216-B-7B simultaneously by using a T-fitting in the pipe. The side slope is 1.5:1.

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UNIT NAME: 216-B-8TF
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1948
END DATE: July 1953

COORDINATES: N45880 W52840 (center), N45880 W52840, N46143 W52695 (tile field)

WASTE TYPES AND AMOUNTS: Until 7/51, the site received second-cycle waste supernatant from 221-B Building. From 7/51 to 12/51, the site received the above plus cell drainage and other liquid waste via Tank 5-6 in 221-B Building. From 12/51 to 12/52, the site received decontamination and cleanup waste generated during the shutdown of 224-B. The waste is high salt, neutral/basic, and contains TRU waste and fission products.

SITE DESCRIPTION: The unit includes a tile field. The unit is a 12- by 12- by 7-ft-high structure made of 6-in. by 6-in. timbers. It is located in a 14- by 14- by 22.5-ft-deep excavation. The tile field is 300 ft long and 100 ft wide. The main trunk is 12-in. VCP running northeast of the crib. Eight side pipes branch from the main trunk, two each leaving at 40 ft, 110 ft, 180 ft and 250 ft. Each extends 70 ft at a 45 degree angle to trunk. There is 4 ft of gravel below and 6 in. of gravel above the pipe. The excavation for the tile field has 4-ft bottom dimensions and a 1:1.5 side slope.

CLEANUP ACTIONS: The effluent line to the unit was blanked.

UNIT NAME: 216-B-11A & B
UNIT TYPE: Reverse Well
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1951
END DATE: December 1954

COORDINATES: N45674 W52619, N45734 W52619 (center)

WASTE TYPES AND AMOUNTS: The site received process condensate from the 242-B Evaporator. The waste is low salt and neutral/basic.

SITE DESCRIPTION: Two units. Each is a 30-ft-long corrugated culvert, buried vertically, 10 ft below the ground. The culverts are perforated with 1/2-in. holes, 6 in. (on center) horizontally and 12 in. (on center) vertically, starting 6 in. from the bottom. The culverts are in 8-ft-diameter excavations that are filled with 3-in. rock. The rock goes from 10 to 40 ft deep (42 cu yd).

UNIT NAME: 216-B-51
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: January 1958

COORDINATES: N46366 W52567 (center)

WASTE TYPES AND AMOUNTS: The site received flush drainage from the BC Crib pipeline. The site contains less than 10 Ci total beta.

SITE DESCRIPTION: The unit consists of sections of concrete pipe stacked vertically from 1 ft above to 14 ft below grade. The pipe is filled to 13 ft with 3- to 6-in. gravel (9.5 cu yd). The unit is covered with a 3-in. T&G treated wood cover with vent holes.

Waste Units Assigned to this Operable Unit

216-B-5	Reverse Well
216-B-9TF	Crib
216-B-56	Crib
216-B-59	Retention Basin
241-B-154	Diversion Box
241-B-302B	Catch Tank
241-B-361	Settling Tank
UN-200-E-7	Unplanned Release
UN-200-E-45	Unplanned Release

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UNIT NAME: 216-B-5
UNIT TYPE: Reverse Well
WASTE CATEGORY: TRU-Contaminated Soil Site/Mixed

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1945
END DATE: October 1947

COORDINATES: N43480 W52855 (center)

WASTE TYPES AND AMOUNTS: Until 9/46, the site received supernatant overflow from 241-B-361 Settling Tank waste via Tank 5-6 in 221-B Building and liquid waste from 224-B Building. From 9/46 to 10/47, the site received the cell drainage and other liquid waste via Tank 5-6 in 221-B. The 224-B effluent was rerouted to the new 216-B-7A cribs. The waste was low salt and neutral/basic.

SITE DESCRIPTION: The unit is 302 ft long, composed of vertical piping with various sizes in section: 16-in. piping from ground level to 13 ft; 12-in. piping placed inside 16-in. sections, extending to 100 ft; 10-in. piping placed inside 12-in. sections, extending to 242 ft; 8-in. piping placed inside 10-in. sections, extending to 302 ft below grade. The lowest 50-ft section of the 8-in. pipe is perforated.

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UNIT NAME: 216-B-9TF
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: August 1948
END DATE: July 1951

COORDINATES: N43757 W52617 (crib), N43764 W52575, N43764 W52660, N43951 W52660

WASTE TYPES AND AMOUNTS: The site received cell drainage and other liquid waste via Tank 5-6 in 221-B Building. The waste is low salt, neutral/basic, and contains TRU and fission products.

SITE DESCRIPTION: The unit is a wooden structure, 14 by 14 ft (bottom surface) by 8 ft high, located in an excavation. The timbers are 6 in. by 6 in. The tile field, 180 ft by 84 ft, is 540 linear ft of 6-in. clay tile pipe, with each leg in a trench 4 ft wide at the bottom. Pipes are buried 12 ft deep at head and 6 ft at end. Above and below the pipes are 18 in. of gravel. Roofing felt covers the top side of the pipes. Three legs branch from each side of clay pipe, leaving at 45 degrees to the trunk. The side slope is 1:1.5.

UNIT NAME: 216-B-56
UNIT TYPE: Crib
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N42885 W52600, N42955 W52600

WASTE TYPES AND AMOUNTS: Future use: to receive organic waste from 221-B Building.

SITE DESCRIPTION: Gravel filled. Pipeline to the unit is not installed.

UNIT NAME: 216-B-59
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: December 1967

COORDINATES: N43001 W52787, N43284 W52504 (centerline)

WASTE TYPES AND AMOUNTS: The unit has received diverted cooling water from the 221-B Building. Only one diversion occurred (3/68) before the unit was lined. The unit still receives diverted wastes only. Then they are pumped back into the building and processed.

SITE DESCRIPTION: A 15-in. inlet pipe enters the southwest end of the unit 4 ft above the bottom surface. The unit is concrete-lined and compartmented into 3 sections and covered for retention of radioactive water over prescribed limits.

UNIT NAME: 241-B-154
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N42543 W52758

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation. Contamination is estimated to be high in alpha, beta, and gamma.

SITE DESCRIPTION: The unit is a reinforced concrete structure with 2-ft-thick walls. There are 24 nozzles (3" Hanford style) housed in this unit.

KNOWN RELEASES: UPR-200-E-77.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to single-shell tanks. This unit has been isolated and weather covered. It is designed to contain leaks from transfers and drainage from operations within the unit. Multiple transfer pipelines remain in place between the unit and processing plants and storage tank.

UNIT NAME: 241-B-302B
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: July 1985

COORDINATES: N42600 W52758

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: This unit was isolated in 1985.

UNIT NAME: 241-B-361
UNIT TYPE: Settling Tank
WASTE CATEGORY: TRU-Contaminated Soil Site/Mixed

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1945
END DATE: September 1947

COORDINATES: N43400 W52890

WASTE TYPES AND AMOUNTS: The unit received low salt, alkaline radioactive liquid wastes from cell washings collected in the 5-6W Cell in 221-B and from the 224-B Building. The unit is now estimated to contain 32,000 gal of sludge (2.46 kg of plutonium; 1,060 Ci beta/gamma). The tank solids present are primarily bismuth phosphate.

SITE DESCRIPTION: The unit is constructed of 6-in. reinforced, prestressed concrete. The top of the unit is 6 ft below grade. Eleven risers are visible above grade. One is equipped with a manual tape, a second contains two dip tubes, a third vents the unit, and the eight remaining are blanked off.

CLEANUP ACTIONS: This unit was interim stabilized in 1985.

UNIT NAME: UN-200-E-7
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 30, 1954

COORDINATES: N43757 W52617

WASTE TYPES AND AMOUNTS: The release consisted of cell wash water. The maximum dose rate was 1.7 R/h.

KNOWN RELEASES: A leak in the waste line from the 221-B Building to 241-B-361

CLEANUP ACTIONS: The contamination was covered, and the area was posted as "Underground Contamination".

UNIT NAME: UN-200-E-45
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: August 26, 1974

COORDINATES: N42529 W52725

WASTE TYPES AND AMOUNTS: Beta/gamma with readings up to 50,000 ct/min.

KNOWN RELEASES: A cleanup operation at the 241-B-154 Diversion Box inadvertently contaminated an area in the immediate vicinity.

CLEANUP ACTIONS: The contaminated roadway was washed off with water, and the borrow pit slopes were bladed. The contaminated soil was collected and placed in a burial trench.

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UNIT NAME: 216-B-4
UNIT TYPE: Reverse Well
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1945
END DATE: December 1949

COORDINATES: N42363 W53603 (center)

WASTE TYPES AND AMOUNTS: Until 8/47, the site received 291-B Stack drainage. After 8/47 the site received floor drainage from 292-B Building. The waste is neutral/basic, low salt, transuranic fission products.

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UNIT NAME: 216-B-6
UNIT TYPE: Reverse Well
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1945
END DATE: December 1949

COORDINATES: N42403 W53870 (center)

WASTE TYPES AND AMOUNTS: The site received decontamination sink and sample slurper waste from 222-B Building. The site contains less than 10 Ci total beta. Waste is acidic, TRU fission products.

SITE DESCRIPTION: The lower 25 ft of casing is perforated with 1/2-in. holes every foot. The vent pipe was cut below grade. A 4-ft concrete post marks the location of this site.

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UNIT NAME: 216-B-10A
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1949
END DATE: January 1952

COORDINATES: N42195 W53868 (center)

WASTE TYPES AND AMOUNTS: Until 12/51, the site received the decontamination sink and sample slurper waste from 222-B Building and floor drainage from 292-B Building. After 12/51, the site received the same as above minus the 222-B Building waste. The waste is acidic and contains transuranics and fission products.

SITE DESCRIPTION: The unit is a 12- by 12- by 3.5-ft wooden structure in an excavation. The side slope is 1:1.

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UNIT NAME: 216-B-10B
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: June 1969
END DATE: October 1973

COORDINATES: N42195 W53943 (center)

WASTE TYPES AND AMOUNTS: The site received the decontamination sink and shower waste from 221-B Building. During 216-B-10A service years, some waste cascaded into this unit. The site contains low activity.

SITE DESCRIPTION: The unit is a 12-ft by 12-ft by 3.5-ft wooden structure in an excavation. The side slope is 1:1.

UNIT NAME: 216-B-13
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: August 1947
END DATE: June 1976

COORDINATES: N42336 W53547 (center)

WASTE TYPES AND AMOUNTS: The site received the 291-B-1 Stack drainage. In 6/76, the stack drainage was rerouted to a catch tank, jetted to the wind tunnel, drained to a sump, and then pumped to a cell drainage sample tank. The waste is low salt and neutral/basic. The site contains less than 0.004 g/m³ potential Pu.

SITE DESCRIPTION: The unit consists of two 4-ft-diameter by 5-ft-tall V.C. tile pipes, stacked vertically and filled with crushed limestone. A piece of plywood buried 8 ft below grade covers the top. 2.5 tons of limestone fills the culvert and serves as a base beneath the culverts. Presently, only the I.D. post can be located.

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UNIT NAME: 216-B-60
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1967
END DATE: November 1967

COORDINATES: N42573 W54178, N42583 W54178 (centerline)

WASTE TYPES AND AMOUNTS: The site received the cell cleanout solid and liquid waste from the 24-in. sewer in the 221-B Building.

SITE DESCRIPTION: The unit consists of two steel caissons positioned side by side (standing on end). The south caisson overflows to the north.

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UNIT NAME: 218-E-6
UNIT TYPE: Burial Ground
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: Fall 1955
END DATE: Fall 1955

COORDINATES: N42225 W53360

WASTE TYPES AND AMOUNTS: At one time, the site contained buried contamination consisting of a shack and other wooden items that were removed from the 291-B Stack area during a cleanup of the exclusion area.

SITE DESCRIPTION: A 4-ft-deep trench was dug, the items burned, and the ashes covered.

CLEANUP ACTIONS: The unit was exhumed and released from radiation zone status.

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UNIT NAME: 218-E-7
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1947
END DATE: 1952

COORDINATES: N42269 W53826 (Vault 1), N42269 W53806 (Vault 2),
N43364 W53776 (Vault 3)

WASTE TYPES AND AMOUNTS: This site received mixed MFP/TRU wastes.

SITE DESCRIPTION: The site consists of three underground vaults. The first was built in 1945, filled by 1950, and was still in use in 1952. The second vault was constructed in 1950. These two original wooden vaults are 10 sq ft by 12 ft deep and are made of 2-in. by 2-in. wooden planking with the top 5 ft below grade and open at the bottom. The third replacement vault is an 8-ft-diameter concrete culvert pipe encasement, 25 ft 2 in. deep. The encasement has a 9-in. concrete cover and a 12-in.-thick concrete floor. The site is covered with heavy vegetation.

UNIT NAME: 241-BX-154
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: July 1985

COORDINATES: N42527 W53759

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: A reinforced concrete structure, 13 ft tall. All nozzles are 3-in. Hanford style.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. This unit has been isolated and weather covered.

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UNIT NAME: 241-BX-155
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: June 1984

COORDINATES: N44230 W53222

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: A reinforced concrete structure, 13 ft tall. All nozzles are 3-in. Hanford style.

KNOWN RELEASES: UPR-200-E-78.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. This unit has been isolated and weather covered.

UNIT NAME: 241-BX-302B
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: July 1985

COORDINATES: N42540 W53800

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: This unit was isolated in 1985.

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UNIT NAME: 241-BX-302C
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: July 1985

COORDINATES: N44210 W53186

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: This unit was isolated in 1985.

UNIT NAME: 241-ER-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1945

COORDINATES: N42081 W54238

WASTE TYPES AND AMOUNTS: The unit transports radioactive waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: The unit consists of 1-ft-thick walls of reinforced concrete, ~15 ft deep. Nozzles 1 through 4 are 3-in. PUREX style, and Nozzle 5 is 4-in. PUREX style.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks.

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UNIT NAME: 270-E Condensate Neutralization Tank
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
END DATE: 1976

COORDINATES: N42600 W54400

WASTE TYPES AND AMOUNTS: The unit contains ~3,800 gal of sludge. Radiation readings show less than 100 ct/min direct and smearable; less than 0.5 mR/h penetrating plus nonpenetrating at risers.

SITE DESCRIPTION: The unit is 9 ft high. A 40-in. changing chute and 6-in. riser extend from the stainless steel unit to 1 ft below grade.

UNIT NAME: 2607-E3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N43200 W54150

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 14.4 cu m/d.

SITE DESCRIPTION: This unit includes a drain field. It is 12 ft 6 in. deep, constructed of reinforced concrete, and has a 292-person capacity (35 gal per capita) with an average detention period of 24 h. The walls and floor are 10 in. thick. The tile field is constructed of 4-in. vitrified pipe, concrete pipe, or drain tile with minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: 2607-E4
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N42750 W53450

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.24 cu m/d.

SITE DESCRIPTION: This unit includes a drain field. It is 8 ft 4 in. deep, constructed of reinforced concrete, and has a 8-person capacity (35 gal per capita) with an average detention period of 24 h. The walls are 8 in. thick, and the floor is 6 in. thick. The tile field is constructed of vitrified pipe, concrete pipe, or drain tile with minimum of 8 linear feet per capita. The laterals are open jointed and spaced 8 ft apart.

UNIT NAME: Tile Field South of 218-E-4
UNIT TYPE: Drain Field
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N43500 W53850

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UNIT NAME: UN-200-E-1
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1966

COORDINATES: N42535 W53780

WASTE TYPES AND AMOUNTS: Beta/gamma.

KNOWN RELEASES: Soil contamination resulted from a failed process line from 221-B.

CLEANUP ACTIONS: The area above the waste lines was covered with several feet of gravel.

UNIT NAME: UN-200-E-41
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: July 19, 1972

COORDINATES: N42675 W53875

WASTE TYPES AND AMOUNTS: An estimated 30 Ci of Cs-137 with readings of 12.5 R/h.

KNOWN RELEASES: Waste line leakage contaminated the stairwell at the 271-B Building.

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UNIT NAME: UN-200-E-44
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: August 16, 1972

COORDINATES: N42450 W53350

WASTE TYPES AND AMOUNTS: Beta/gamma. The dirt was contaminated with readings of 10,000 to 20,000 ct/min. The pipe was contaminated with readings up to 20 mR/h.

KNOWN RELEASES: The BCS Crib line contaminated the soil from leakage south of the R-17 Change House.

CLEANUP ACTIONS: The resultant cave-in was immediately barricaded and roped off as a radiation zone.

UNIT NAME: UN-200-E-52
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: August 1, 1975

COORDINATES: N42650 W53750

WASTE TYPES AND AMOUNTS: Beta/gamma with readings up to 20,000 ct/min.

KNOWN RELEASES: The steam pressure valve at the E-5-2 strontium concentrator contaminated the soil in a area just below the drain.

CLEANUP ACTIONS: About 4 cu ft of contaminated dirt was packaged and sent to the burial ground. The area is posted as an underground radiation zone.

UNIT NAME: UN-200-E-54
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: July 20, 1977

COORDINATES: N42675 W54325

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 10,000 ct/min and 10 to 25 mR/h.

KNOWN RELEASES: Water used to decontaminate a manipulator inside the 225-B Building was spilled outside an exit door, contaminating the concrete door pad and the soil.

CLEANUP ACTIONS: The contaminated soil was packaged for disposal. The contaminated concrete was removed and a new pad poured.

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UNIT NAME: UN-200-E-55
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: April 27, 1979

COORDINATES: N42525 W54200

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 5,000 to 30,000 ct/min.

KNOWN RELEASES: Wind spread contamination from an adjacent radiation zone near the 212-B Building.

CLEANUP ACTIONS: The area was isolated as a temporary zone, cleanup up, and released.

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UNIT NAME: UN-200-E-69
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 19, 1984

COORDINATES: N42675 W53825

WASTE TYPES AND AMOUNTS: The contamination consists of beta/gamma, with readings to 4,000 to 20,000 ct/min.

KNOWN RELEASES: The flush water was drained from the railroad burial cars.

UNIT NAME: UN-200-E-80
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 17, 1946

COORDINATES: N42575 W53450

WASTE TYPES AND AMOUNTS: Metal waste from 221-B. This is a Low-Activity site with ~10 Ci of fission products at the time of release with less than 5 Ci of fission products remaining.

KNOWN RELEASES: Leakage from an underground metal waste line south of the 221-B Building resulted in the spread of an unknown quantity of contaminated liquid. The ground above the leak caved in but was subsequently backfilled with several feet of clean gravel.

CLEANUP ACTIONS: During subsequent construction work, the major portion of the contaminated soil was removed and placed in the 200-E Dry Waste Burial Ground.

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UNIT NAME: UN-200-E-85
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: July 20, 1972

COORDINATES: N42500 W53850

WASTE TYPES AND AMOUNTS: This is a fission product disposal site containing high salt and neutral/basic wastes. The radionuclide content of Cs-137 at the time of discharge was ~15 Ci; on 12/31/73, ~14 Ci.

KNOWN RELEASES: During a routine survey of the R-13 Pit, high radiation levels of 15 R/h were discovered in the northwest corner of the pit bottom (2 in. from source). Excavation of the unencased line (near the pit) that runs from Tank 18-1 in 221-B Building to the 241-BX-154 Diversion Box disclosed the process waste leak causing the radiation levels.

UNIT NAME: UN-200-E-87
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Pre-1970 TRU/Mixed Waste

SWMU: No
OCCURRENCE DATE: 1945 to 1953

COORDINATES: N42325 W53980

WASTE TYPES AND AMOUNTS: ~75 g of Pu-239. This is a TRU disposal site.

KNOWN RELEASES: Plutonium ground contamination on south side of 224-B Building. It is believed that during the years of process operation, alpha-laden moisture seeped through the underground pipe joints (that entered the back of the building to feed the 224-B Building cells) and grossly contaminated the subsoil.

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UNIT NAME: UN-200-E-90
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 1980

COORDINATES: N42300 W53300

KNOWN RELEASES: The reference site is an operational zone established because of high gamma dose rates emitting from the 291-B Stack area. It was mistakenly designated as an unplanned release site. The date this dose rate first appeared is unknown.

UNIT NAME: UN-200-E-103
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 8, 1972

COORDINATES: N42450 W53350

WASTE TYPES AND AMOUNTS: Beta/gamma readings to 1,500 ct/min.

KNOWN RELEASES: The BCS Crib line contaminated the soil from leakage south of the R-17 Change House.

CLEANUP ACTIONS: The hole in the line was sealed with a filter and the area was barricaded as a radiation zone.

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UNIT NAME: UN-200-E-140
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: April 23, 1986

COORDINATES: N42800 W54180

WASTE TYPES AND AMOUNTS: The release consisted of oil with a PCB concentration of 1 to 38 p/m.

KNOWN RELEASES: The PCB-contaminated oil was spilled to ground.

CLEANUP ACTIONS: Soil was removed and drummed for disposal as PCB contaminated waste.

RELEASE POTENTIAL: No potential for release from this spill site exists; contamination has been removed.

Other Waste Units Located Within the Operable Unit Area

217-B Neutralization Unit	Neutralization Tank
221-B Nitric Acid Neutralization Unit	Neutralization Unit
221-B Sodium Hydroxide Neutralization Unit	Neutralization Unit
221-B-TK-26-1	Storage Tank
221-B-TK-27-3	Storage Tank
221-B-TK-27-4	Storage Tank
221-B-TK-28-3	Storage Tank
221-B-TK-28-4	Storage Tank
221-B TK-29-4	Storage Tank
221-B TK-30-3	Storage Tank
224-B Concentration Facility	Test Treatment or Support Facility
226-B HWSA	Staging Area
B Plant Filter	Equipment
B Plant Settle and Decant Tank	Settling Tank
B Plant Storage	Storage Facility
B Plant Waste Piles	Storage Facility

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UNIT NAME: 217-B Neutralization Unit
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1985

COORDINATES: N42750 W53510

WASTE TYPES AND AMOUNTS: Water demineralizer regeneration effluent from two columns: 2,500 gal/regeneration of 2% to 4% sulfuric acid is neutralized with 1,300 lb/yr of sodium carbonate and 2,500 gal/regeneration of 4% sodium hydroxide is neutralized with 1,300 lb/regeneration of monosodium phosphate. During B Plant shutdown, regeneration occurs approximately 4 times per year. When operational, it occurs approximately once every 2 to 3 weeks.

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UNIT NAME: 221-B Nitric Acid Neutralization Unit
UNIT TYPE: Neutralization Unit
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N42280 W54050

WASTE TYPES AND AMOUNTS: Approximately 400 gal/yr of 1M nitric acid is neutralized with 350 lb/yr of sodium carbonate.

SITE DESCRIPTION: Chemical sewer.

UNIT NAME: 221-B Sodium Hydroxide Neutralization Unit
UNIT TYPE: Neutralization Unit
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1984

COORDINATES: N42280 W54050

WASTE TYPES AND AMOUNTS: Approximately 400 gal/yr of 2M sodium hydroxide is neutralized with 800 lb/yr of monosodium phosphate.

SITE DESCRIPTION: Chemical sewer.

UNIT NAME: 221-B-TK-26-1
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Neutralized Current Acid Waste (NCAW) intermediates.

UNIT NAME: 221-B-TK-27-3
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Neutralized Current Acid Waste (NCAW) intermediates.

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UNIT NAME: 221-B-TK-27-4
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Neutralized Current Acid Waste (NCAW) intermediates.

UNIT NAME: 221-B-TK-28-3
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Neutralized Current Acid Waste (NCAW) intermediates.

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UNIT NAME: 221-B-TK-28-4
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Neutralized Current Acid Waste (NCAW) intermediates.

UNIT NAME: 224-B Concentration Facility
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
END DATE: 1976

COORDINATES: N42270 W54040

WASTE TYPES AND AMOUNTS: This unit contains radioactively contaminated equipment and concrete. Hazardous constituents include radionuclides, mercury, PCBs, and residual quantities of cleaning chemicals (~35 Ci Pu, 5.2 Ci Am-241, 2.1 Ci Sr-90, 3.6 Ci Co-60, and 1 Ci Cs-137).

SITE DESCRIPTION: Concrete and concrete block structure, 70 ft high. Major equipment consists of 42 tanks, 22 agitators, and miscellaneous scales, pumps, motors, and instrument control panels.

UNIT NAME: 226-B HWSA
UNIT TYPE: Staging Area
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: May 30, 1985

COORDINATES: N42520 W54210

WASTE TYPES AND AMOUNTS: Typical wastes contained in staging over the past year: ~184 kg of halogenated, extremely hazardous hydrocarbons, 2,280 kg of sodium hydroxide and alkaline liquids, 800 kg of antifreeze, 1.84 kg of acids, 580 kg of miscellaneous toxic process chemicals, 1,155 kg of meth ethyl ketone and flammable solvents, 83 kg of combustible liquids, 75 kg of nitrates and other oxidizers, and 0.5 kg of mercury.

UNIT NAME: B Plant Filter
UNIT TYPE: Equipment
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Polishing filtration is accomplished with a sintered metal filter. The cesium is removed from the decant stream by ion exchange.

SITE DESCRIPTION: The design capacity is 3,500 gal/d.

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UNIT NAME: B Plant Settle and Decant Tank
UNIT TYPE: Settling Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53460

WASTE TYPES AND AMOUNTS: Neutralized Current Acid Waste (NCAW). The settle-decant tank operations are used for the primary solid/liquid separations and solid washing steps.

UNIT NAME: B Plant Storage
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53810

WASTE TYPES AND AMOUNTS: Radioactively contaminated lead and chromium-based paint wastes and radioactively contaminated spent sodium and mercury vapor light bulbs are stored in 55-gal drums. Design capacity is 13,475 gal.

UNIT NAME: B Plant Waste Piles
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

TSD: TS-2-3
UNIT STATUS: Active
START DATE: April 15, 1945

COORDINATES: N42590 W53810

WASTE TYPES AND AMOUNTS: Radioactive process jumpers with lead counter balances are stored on the canyon deck and in process cells.

SITE DESCRIPTION: The design capacity is 5 cu m.

Waste Units Assigned to this Operable Unit

241-B-101	Single-Shell Tank
241-B-102	Single-Shell Tank
241-B-103	Single-Shell Tank
241-B-104	Single-Shell Tank
241-B-105	Single-Shell Tank
241-B-106	Single-Shell Tank
241-B-107	Single-Shell Tank
241-B-108	Single-Shell Tank
241-B-109	Single-Shell Tank
241-B-110	Single-Shell Tank
241-B-111	Single-Shell Tank
241-B-112	Single-Shell Tank
241-B-151	Diversion Box
241-B-152	Diversion Box
241-B-153	Diversion Box
241-B-201	Single-Shell Tank
241-B-202	Single-Shell Tank
241-B-203	Single-Shell Tank
241-B-204	Single-Shell Tank
241-B-252	Diversion Box
241-B-301B	Catch Tank
241-BR-152	Diversion Box
241-BX-101	Single-Shell Tank
241-BX-102	Single-Shell Tank
241-BX-103	Single-Shell Tank
241-BX-104	Single-Shell Tank
241-BX-105	Single-Shell Tank
241-BX-106	Single-Shell Tank
241-BX-107	Single-Shell Tank
241-BX-108	Single-Shell Tank
241-BX-109	Single-Shell Tank
241-BX-110	Single-Shell Tank
241-BX-111	Single-Shell Tank
241-BX-112	Single-Shell Tank
241-BX-153	Diversion Box
241-BX-302A	Catch Tank
241-BXR-151	Diversion Box
241-BXR-152	Diversion Box
241-BXR-153	Diversion Box
241-BY-101	Single-Shell Tank
241-BY-102	Single-Shell Tank
241-BY-103	Single-Shell Tank
241-BY-104	Single-Shell Tank
241-BY-105	Single-Shell Tank
241-BY-106	Single-Shell Tank
241-BY-107	Single-Shell Tank
241-BY-108	Single-Shell Tank
241-BY-109	Single-Shell Tank
241-BY-110	Single-Shell Tank

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200-BP-7 (Continued)

Waste Units Assigned to this Operable Unit

241-BY-111	Single-Shell Tank
241-BY-112	Single-Shell Tank
241-BYR-152	Diversion Box
241-BYR-153	Diversion Box
241-BYR-154	Diversion Box
242-B-151	Diversion Box
244-BXR Vault	Receiving Vault
2607-EB	Septic Tank
UN-200-E-43	Unplanned Release
UN-200-E-76	Unplanned Release
UN-200-E-79	Unplanned Release
UN-200-E-101	Unplanned Release
UN-200-E-105	Unplanned Release
UN-200-E-109	Unplanned Release

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UNIT NAME: 241-B-101
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: May 1945
END DATE: 1974

COORDINATES: N45237 W52552

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; PUREX coating waste; B Plant high-level waste (Cell 23); and supernatant containing evaporator bottoms from 241-B tanks. Until February 1973, the unit provided storage for B Plant, Cell 23 evaporator bottoms, and waste en route to in-tank solidification. The resulting solids remaining in this tank (based on core samples) contain an estimated 4M Ci of strontium (92,000 BTU/h).

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-102
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: October 1945
END DATE: 1978

COORDINATES: N45337 W52552

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; PUREX coating waste; and supernatant containing B Plant low-level waste, ion exchange waste, and evaporator bottoms from 241-B, -BX, and -C tank farms.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

KNOWN RELEASES: UPR-200-E-108.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-103
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: December 1953
END DATE: 1977

COORDINATES: N45437 W52552

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; PUREX coating waste; and supernatant containing ion exchange waste, N Reactor waste, organic wash waste; PNL waste, REDOX high-level waste, coating waste, evaporator bottoms, B Plant low-level waste, decontamination waste, tributyl phosphate waste, and laboratory waste from 241-B, -BX, and -C tank farms.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

CLEANUP ACTIONS: Supernatant pumping was initiated January 29, 1985, and completed in February 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-104
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: August 1946
END DATE: 1972

COORDINATES: N45437 W52652

WASTE TYPES AND AMOUNTS: Bismuth phosphate second-cycle waste; evaporator bottoms, bismuth phosphate first-cycle waste; and supernatant containing evaporator bottoms from the 241-B tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-105
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: January 1947
END DATE: 1972

COORDINATES: N45337 W52652

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle and second-cycle waste and flush water containing evaporator bottoms from the 241-B tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-106
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: September 1947
END DATE: 1977

COORDINATES: N45437 W52652

WASTE TYPES AND AMOUNTS: Bismuth phosphate second-cycle waste; Hanford Laboratory operations waste; bismuth phosphate first-cycle waste; and supernatant containing tributyl phosphate waste; 224-U wastes, PNL waste, evaporator bottoms, B Plant low-level waste, ion exchange waste, and bismuth phosphate first-cycle waste from 241-B, -BX, -BY, and -C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-107
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: May 1945
END DATE: 1969

COORDINATES: N45237 W52752

WASTE TYPES AND AMOUNTS: PUREX coating waste; bismuth phosphate first-cycle waste; and supernatant containing bismuth phosphate first-cycle waste, bismuth phosphate second-cycle waste, and evaporator bottoms from the 241-B tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

KNOWN RELEASES: UPR-200-E-127.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-108
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1977

COORDINATES: N45337 W52752

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; PUREX coating waste; and supernatant containing evaporator bottoms and ion exchange waste from the 241-B and -BY tank farms.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-109
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: January 1946
END DATE: 1977

COORDINATES: N45437 W52752

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; PUREX coating waste; and supernatant containing evaporator bottoms and ion exchange waste, 244-U waste, and coating waste from the 241-B, -BY, and -S tank farms.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-B-110
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: May 1945
END DATE: 1971

COORDINATES: N45237 W52852

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; bismuth phosphate second-cycle wastes; fission product waste; B Plant high-level waste (waste fractionization); B Plant waste from cells 5 and 6; B Plant flushes; and ion exchange waste.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

KNOWN RELEASES: UPR-200-E-128.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-111
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: November 1945
END DATE: 1976

COORDINATES: N45337 W52852

WASTE TYPES AND AMOUNTS: Bismuth phosphate second-cycle waste; ion exchange waste (Waste Fractionization); fission product waste; and B Plant waste from cells 5 and 6.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-112
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: April 1946
END DATE: 1977

COORDINATES: N45437 W52852

WASTE TYPES AND AMOUNTS: Bismuth phosphate second-cycle waste; B Plant waste from cells 5 and 6; and supernatant containing B Plant wastes from cells 5 and 6, fission product waste, ion exchange waste, and evaporator bottoms from the 241-B and -BX tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N44967 W52913

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: A reinforced concrete structure 15 ft high.

KNOWN RELEASES: UPR-200-E-4, UPR-200-E-73.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. These inactive units have been isolated and weather covered.

UNIT NAME: 241-B-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N44994 W52956

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: Reinforced concrete structure 15 ft high. All nozzles are 3-in. Hanford style.

KNOWN RELEASES: UPR-200-E-74, UPR-200-E-38.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. These inactive units have been isolated and weather covered.

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UNIT NAME: 241-B-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N45113 W52884

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: Reinforced concrete structure 34 ft high. All nozzles are 3-in. Hanford style.

KNOWN RELEASES: UPR-200-E-6, UPR-200-E-75.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. These inactive units have been isolated and weather covered.

UNIT NAME: 241-B-201
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1971

COORDINATES: N45537 W52727

WASTE TYPES AND AMOUNTS: 224-U wastes (lanthanum fluoride).

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell, 29 ft high, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is located below grade for shielding purposes.

KNOWN RELEASES: UPR-200-E-129.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-202
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1977

COORDINATES: N45537 W52777

WASTE TYPES AND AMOUNTS: 244-U wastes (lanthanum fluoride) and B Plant high-level waste.

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell, 29 ft high, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is located below grade for shielding purposes.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

61617

UNIT NAME: 241-B-203
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1977

COORDINATES: N45537 W52827

WASTE TYPES AND AMOUNTS: 224-U wastes (lanthanum fluoride).

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell, 29 ft high, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is located below grade for shielding purposes.

KNOWN RELEASES: UPR-200-E-130.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-B-204
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1977

COORDINATES: N45537 W52877

WASTE TYPES AND AMOUNTS: 224-U wastes (lanthanum fluoride) and B Plant flushes.

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell, 29 ft high, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is located below grade for shielding purposes.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-B-252
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N45500 W52976

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: Reinforced concrete structure 16 ft high.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

UNIT NAME: 241-B-301B
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N45470 W52978

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: The unit was isolated in 1985.

RELEASE POTENTIAL: The unit was designed to contain leaks from transfers and drainage. It has been weather covered.

UNIT NAME: 241-BR-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: June 1984

COORDINATES: N45200 W53200

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

UNIT NAME: 241-BX-101
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: January 17, 1948
END DATE: 1972

COORDINATES: N45400 W53250

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; evaporator bottoms; B Plant low-level waste; ion exchange waste (waste fractionization); organic wash waste; REDOX ion exchange waste; and supernatant containing B Plant low-level waste, tributyl phosphate waste, inorganic wash waste, coating waste, and REDOX ion exchange waste from 241-BY, -BX, -B, and -C tanks tanks. The unit received an inadvertant transfer of ~1,800 gal of ARC-359 organic ion exchange resin in early 1972.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

9212.971972

UNIT NAME: 241-BX-102
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: June 10, 1948
END DATE: 1971

COORDINATES: N45500 W53250

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; diatomaceous earth; and supernatant containing tributyl phosphate waste, metal waste, coating waste, B Plant low-level waste, and evaporator bottoms from 241-BX, -BY, -B, and -C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

KNOWN RELEASES: UPR-200-E-131, UPR-200-E-132, UPR-200-E-5.

CLEANUP ACTIONS: The unit has been interim stabilized (11-78) with diatomaceous earth and subsequently interim isolated (5-81).

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

921277

UNIT NAME: 241-BX-103
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: September 30, 1948
END DATE: 1977

COORDINATES: N45600 W53250

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste and supernatant containing metal waste; tributyl phosphate waste; coating waste; organic wash waste; decontamination waste; ion exchange waste; PUREX low-level, high-level, and sludge supernatant wastes; PNL waste; N Reactor waste; laboratory waste; evaporator bottoms; REDOX ion exchange waste; and B Plant low-level waste from 241-B, -BX, -BY, -C, BXR-002, and ER-311 tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

KNOWN RELEASES: The contaminated soil in the vicinity of dry wells 21-03-03, -05, and -12 is believed to have been caused by tank overflow and spillage a number of years ago. 30,000 to 90,000 gal of waste spilled on the ground between 102- and 103-BX in 1951.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BX-104
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1980

COORDINATES: N45400 W53350

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; PUREX coating waste; ion exchange waste (waste fractionization); evaporator bottoms; and supernatant containing REDOX high-level waste, complexed and noncomplexed waste; double-shell slurry feed, tributyl phosphate waste, B Plant low-level waste, and ion exchange waste from 241-B, -BX, -BY, -C, and -SX.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BX-105
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1980

COORDINATES: N45500 W53350

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste and supernatant containing metal waste; tributyl phosphate waste; coating waste; ion exchange waste; evaporator bottoms, complexed and noncomplexed waste; and double-shell slurry feed from 241-BX, -BY, -C, -S, and -SX tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BX-106
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1977

COORDINATES: N45600 W53350

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste and supernatant containing metal waste; tributyl phosphate waste; coating waste; ion exchange waste; evaporator bottoms; B Plant low-level waste; organic wash waste; and REDOX ion exchange waste from 241-B, -BX, and -BY tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

CLEANUP ACTIONS: This tank is scheduled for interim stabilization during 1990.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BX-107
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: September 1948
END DATE: 1977

COORDINATES: N45400 W53450

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; tributyl phosphate waste; and supernatant containing ion exchange waste from 241-BX Tank Farm.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BX-108
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1974

COORDINATES: N45500 W53450

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste and supernatant containing tributyl phosphate waste, coating waste, and ion exchange waste from 241-BX and -C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

KNOWN RELEASES: UPR-200-E-133.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

77997

UNIT NAME: 241-BX-109
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1974

COORDINATES: N45600 W53450

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste, tributyl phosphate waste, and ion exchange waste (waste fractionization) and supernatant containing tributyl phosphate waste from 241-BY and -C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

211

UNIT NAME: 241-BX-110
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1949
END DATE: 1977

COORDINATES: N45400 W53550

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; ion exchange waste (waste fractionization); evaporator bottoms; and supernatant containing coating waste, evaporator bottoms, and B Plant first-cycle waste from 241-B and -C tank farms. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

CLEANUP ACTIONS: This unit was interim stabilized in August 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

9212.97998

UNIT NAME: 241-BX-111
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1977

COORDINATES: N45500 W53550

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; evaporator bottoms; in-tank solidification (ITS-2) bottoms and recycle system; and supernatant containing ion exchange waste, coating waste, and first-cycle waste from 241-BX tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

CLEANUP ACTIONS: This unit is scheduled for interim stabilization during 1990.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BX-112
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1977

COORDINATES: N45600 W53550

WASTE TYPES AND AMOUNTS: Ion exchange waste (waste fractionization); evaporator bottoms; and supernatant containing evaporator bottoms waste, coating waste, and first-cycle waste from 241-C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell, 30 ft high, with a capacity of 533,000 gal. The bottom is 37 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original single-shell design, having a dished bottom and a 17-ft operating depth.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BX-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: June 1983

COORDINATES: N45300 W53320

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: Reinforced concrete structure 15 ft high. All nozzles are 3-in. Hanford style.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

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UNIT NAME: 241-BX-302A
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: July 1985

COORDINATES: N45290 W53205

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: This unit was isolated in 1985.

RELEASE POTENTIAL: The unit was designed to contain leaks from transfers and drainage from operations within the unit. The unit has been weather covered.

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UNIT NAME: 241-BXR-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: June 1984

COORDINATES: N45200 W53430

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

UNIT NAME: 241-BXR-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: June 1984

COORDINATES: N45200 W53235

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

71001

UNIT NAME: 241-BXR-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1948
END DATE: June 1984

COORDINATES: N45200 W53330

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

9211

92121971072

UNIT NAME: 241-BY-101
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: January 1950
END DATE: 1971

COORDINATES: N45898 W53247

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste and supernatant containing tributyl phosphate waste and evaporator bottoms from 241-BY and -C tank farms. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

CLEANUP ACTIONS: P-10 saltwell pumping was completed in December 1978. Jet pumping was initiated May 20, 1983, and completed on January 28, 1984. This unit was interim stabilized in May 22, 1984.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BY-102
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: July 1950
END DATE: 1977

COORDINATES: N46000 W53247

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste and supernatant containing tributyl phosphate waste, coating waste; and evaporator bottoms from 241-C, -BX, and -BY tanks. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BY-103
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: November 1950
END DATE: May 1973

COORDINATES: N46102 W53247

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; PUREX coating waste; and supernatant containing evaporator bottoms, coating waste, tributyl phosphate waste, and PUREX high-level and organic wash wastes from 241-BX, -BY, -C, and -B tanks. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

KNOWN RELEASES: UPR-200-E-134; The unit leaked an undetermined but small quantity of waste in 1973.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BY-104
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1977

COORDINATES: N45898 W53349

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; tributyl phosphate waste; and supernatant containing coating waste, tributyl phosphate waste, ion exchange waste, and evaporator bottoms from 241-BY, -BX, and -C tanks. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

CLEANUP ACTIONS: Jet pumping was initiated May 20, 1983, and completed on November 1, 1984. This unit was interim stabilized in January 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BY-105
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: June 1951
END DATE: 1974

COORDINATES: N46000 W53349

WASTE TYPES AND AMOUNTS: Tributyl phosphate wastes; bismuth phosphate metal wastes; and supernatant containing tributyl phosphate waste, coating waste, and evaporator bottoms from 241-BY and -C tanks farms. Concrete was added in 1977. In November 1966, 63 tons of Portland cement were added to this unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

CLEANUP ACTIONS: This unit was interim stabilized in December 1984.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BY-106
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1977

COORDINATES: N46102 W53349

WASTE TYPES AND AMOUNTS: First-cycle waste; tributyl phosphate waste; and supernatant containing coating waste, tributyl phosphate waste, bismuth phosphate first-cycle waste, and evaporator bottoms from 241-BY and -C tank farms. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BY-107
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: December 1950
END DATE: 1974

COORDINATES: N45898 W53451

WASTE TYPES AND AMOUNTS: Tributyl phosphate waste; bismuth phosphate first-cycle waste; and supernatant containing tributyl phosphate waste, coating waste, and evaporator bottoms from 241-BY and -C tank farms. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

CLEANUP ACTIONS: This unit was interim isolated on December 15, 1982, and was interim stabilized in July 1979.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BY-108
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: April 1951
END DATE: 1972

COORDINATES: N46000 W53451

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; tributyl phosphate waste; and supernatant containing tributyl phosphate waste and evaporator bottoms from 241-BY and -C tank farms. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

KNOWN RELEASES: UPR-200-E-135.

CLEANUP ACTIONS: P-10 pumping was completed in August 1978. Jet pumping was initiated January 9, 1984, and completed December 9, 1984. This unit was interim stabilized in February 6, 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

9 2 1 2 0 9 7 1 0 0 6

UNIT NAME: 241-BY-109
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1979

COORDINATES: N46102 W53451

WASTE TYPES AND AMOUNTS: Supernatant containing tributyl phosphate waste; PUREX coating waste; bismuth phosphate metal wastes; evaporator bottoms; and PUREX organic wash waste from 241-B, -BX, -BY, and -C tank farms. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

7100

UNIT NAME: 241-BY-110
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1979

COORDINATES: N45898 W53553

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; tributyl phosphate waste; and supernatant containing evaporator bottoms, tributyl phosphate waste, and coating waste from 241-BY and -C tank farms and WR-241 Tank.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

CLEANUP ACTIONS: P-10 pumping was completed in 1977. Jet pumping was initiated on May 20, 1983, and completed on December 23, 1984. This unit was interim stabilized in January 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-BY-111
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1952
END DATE: 1977

COORDINATES: N46000 W53553

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; tributyl phosphate; PUREX coating waste; organic wash waste; and supernatant containing evaporator bottoms, tributyl phosphate waste, coating waste, and organic wash waste from 241-BY and -C tanks. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

CLEANUP ACTIONS: P-10 saltwell pumping was completed in December 1978. Jet pumping was initiated on September 15, 1983, and completed November 16, 1984. This unit was interim stabilized in January 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BY-112
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1951
END DATE: 1976

COORDINATES: N46102 W53553

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; tributyl phosphate waste; and supernatant containing tributyl phosphate, coating waste, and evaporator bottoms from 241-B, -BX, -BY, and -C tanks. This is an ITS-2 unit.

SITE DESCRIPTION: The unit is comprised of carbon steel liner within a reinforced concrete shell, 37 ft high, with a capacity of 758,000 gal. The bottom of the unit is 45 ft below grade, and the dome is located below grade for shielding purposes. This type was built to the original design, having a dished bottom but with an increased operating depth of 23 ft.

KNOWN RELEASES: UPR-200-E-116.

CLEANUP ACTIONS: P-10 saltwell pumping was completed in July 1976. Jet saltwell pumping was initiated on September 22, 1983, and completed on May 7, 1984. This unit was interim stabilized in May 1985.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-BYR-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: June 1984

COORDINATES: N45200 W53275

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

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UNIT NAME: 241-BYR-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: June 1984

COORDINATES: N45200 W53380

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

UNIT NAME: 241-BYR-154
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1950
END DATE: June 1984

COORDINATES: N45200 W53260

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. This unit has been isolated and weather covered.

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UNIT NAME: 242-B-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1945
END DATE: June 1984

COORDINATES: N45152 W52720

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UNIT NAME: 244-BXR Vault
UNIT TYPE: Receiving Vault
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1948
END DATE: July 1985

COORDINATES: N45260 W53500

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: 001-BXR, 002-BXR, 003-BXR and 011-BXR tank sumps were interim stabilized in 1985.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. This unit has been isolated and weather covered.

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UNIT NAME: 2607-EB
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1951

COORDINATES: N46100 W53675

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.02 cu m/d.

SITE DESCRIPTION: The unit includes a drain field.

UNIT NAME: UN-200-E-43
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: January 10, 1972

COORDINATES: N46050 W53725

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 1,000 to 100,000 ct/min.

KNOWN RELEASES: While in transit for burial, the 102-BY pump contaminated a section of the road from the 241-BY Tank Farm to the burial ground.

CLEANUP ACTIONS: Decontamination of the affected area began immediately.

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UNIT NAME: UN-200-E-76
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: January 4, 1968

COORDINATES: N45100 W52900

WASTE TYPES AND AMOUNTS: The release consisted of solution from the 9-2 Tank in B Plant containing Ce-144 with 4,780 Ci, Ru-106 with 340 Ci, and Zr-95/Nb with 850 Ci. This is a fission product disposal site containing high salt and neutral/basic waste.

KNOWN RELEASES: Soil near the 241-B-153 Diversion Box was contaminated by a leak in the line that connects the 9-2 Tank in the 221-B Plant to the 110-B Underground Storage Tank.

CLEANUP ACTIONS: The contaminated soil was covered with clean gravel.

UNIT NAME: UN-200-E-79
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 1953

COORDINATES: N44950 W52600

WASTE TYPES AND AMOUNTS: This is a low activity site containing ~10 Ci mixed fission products (MFP).

KNOWN RELEASES: Five leaks were discovered in the waste line that runs from 242-B to 207-B.

CLEANUP ACTIONS: The area was backfilled with about two inches of clean earth. No signs mark the area.

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UNIT NAME: UN-200-E-101
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1986

COORDINATES: N45100 W52600

WASTE TYPES AND AMOUNTS: Radioactive contamination, amount unknown.

UNIT NAME: UN-200-E-105
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 15, 1952

COORDINATES: N45875 W53425

WASTE TYPES AND AMOUNTS: The release consisted of first-cycle waste. The exposure rate was measured at 715 rep/h.

KNOWN RELEASES: Liquid leaked from the 107-BY manifold header at the 107-BY Tank Farm.

CLEANUP ACTIONS: After evaluation, the contaminated area was covered with concrete.

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UNIT NAME: UN-200-E-109
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 11, 1953

COORDINATES: N45375 W52725

WASTE TYPES AND AMOUNTS: Tributyl phosphate waste. Exposure rates of 18 rep/h at 6 in. and 0.1 rep/h at 30 ft were reported.

KNOWN RELEASES: The soil around a jammed riser was contaminated at the 241-B Tank Farm.

CLEANUP ACTIONS: The area was roped off and restricted. It was stabilized with asphalt.

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200-BP-7

Other Waste Units Located Within the Operable Unit Area

242-B Evaporator	Evaporator
244-BX Receiver Tank	Receiving Vault

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9 12 1 2 4 9 7 1 0 1 3

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UNIT NAME: 242-B Evaporator
UNIT TYPE: Evaporator
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 14, 1951
END DATE: 1987

COORDINATES: N45100 W52450

WASTE TYPES AND AMOUNTS: Until October 1954, the treatment unit received byproduct cake solution and waste solution from the first decontamination waste cycle. This contained ~10% of original fission product, 1% Plutonium, and the remainder of miscellaneous chemicals. The major chemical component was bismuth phosphate. Over its active life, the unit processed 7,172,000 gal of waste.

SITE DESCRIPTION: The facility is equipped with a wind tunnel and a radioactive aerosol release tank (RART) for conducting experiments on radioactive components such as uranium and plutonium.

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UNIT NAME: 244-BX Receiver Tank
UNIT TYPE: Receiving Vault
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1983

COORDINATES: N45300 W53530

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation. It contains 26,705 gal of waste.

SITE DESCRIPTION: The unit is constructed of carbon steel and has a design capacity of 31,000 gal. It sets lengthwise in a reinforced concrete, steel-lined vault. The bottom of the vault is 28 ft below grade.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

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200-BP-8

Waste Units Assigned to this Operable Unit

207-B Retention Basin	Retention Basin
216-B-2-1	Ditch
216-B-2-2	Ditch
216-B-2-3	Ditch
216-B-63	Ditch
2607-E9	Septic Tank

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9 4 1 2 3 9 7 1 0 2 2

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UNIT NAME: 207-B Retention Basin
UNIT TYPE: Retention Basin
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: April 1945

COORDINATES: N44600 W52500

WASTE TYPES AND AMOUNTS: The unit has been receiving process cooling water from process equipment jackets in the 221-B Building. Normally, activity levels are low, and the water is discharged to the 216-B-3 Pond via the 216-B-3-3 Ditch and underground pipeline.

SITE DESCRIPTION: The unit is divided and concrete-lined with ~1M gal capacity. The bottom dimensions for each section are 106 by 106 ft. Total overall dimensions, including bottom, sloped side section, and top ledge are 246 by 123 ft. The surface area of the unit is 2,076 sq ft.

KNOWN RELEASES: UPR-200-E-32: On November 7, 1963, a coil leak developed in the 221-B Building 6-1 Tank, which was utilized for storing the cerium-rare earth fraction of the fission product stream, which resulted in gross contamination of this unit and the head end of the 216-B-2-1 Ditch. After damming off the ditch ~1,000 ft downstream from the head end discharge pipe, the contaminated basin water was flushed into the ditch.

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UNIT NAME: 216-B-2-1
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1945
END DATE: November 1963

COORDINATES: N44975 W51900 (head), N44175 W48550 (end)

WASTE TYPES AND AMOUNTS: Until 3/52, the site transported steam condensate, process cooling water, and chemical sewer from 221-B waste and water from 284-E Powerhouse toward 216-B-3 Pond. After 3/52, same as above plus 241-CR Vault cooling water.

SITE DESCRIPTION: The side slope is 2.5:1.

KNOWN RELEASES: UPR-200-E-32: On November 7, 1963, a coil leak developed in the 221-B Building 6-1 Tank, which was utilized for storing the cerium-rare earth fraction of the fission product stream, which resulted in gross contamination of the 207-B Water Retention Basin and the head end of this unit. After damming off the site ~1,000 ft downstream from the head end discharge pipe, the contaminated basin water was flushed into the unit.

CLEANUP ACTIONS: The site was backfilled in 1964. Action was taken to cover the unit with a plastic weed root barrier. The work was finished in the fall of 1973 and included leveling the ground surface of the site, spreading a 4-in. sand cushion on which 10-mil-thick plastic sheeting was laid, spreading an 18-in. cover of sand and a 4-in. topping of gravel to prevent erosion by wind.

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UNIT NAME: 216-B-2-2
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1963
END DATE: May 1970

COORDINATES: N44930 W51990 (head), N44180 W48525 (end)

WASTE TYPES AND AMOUNTS: Until 1/65, the site transported and percolated the 284-E Powerhouse waste, 241-CR Vault cooling water, 221-B cooling water and steam condensate (replacing 216-B-2-1), and chemical sewer toward 216-B-3 Pond. From 1/65 to 11/67, same as above with the addition of 241-BY Tank Farm ITS Unit 1 cooling water. From 11/67 to 2/68, same as above minus 284-E Powerhouse waste, minus steam condensate. From 2/68 to 4/70, same as above plus 241-BY Tank Farm ITS Unit 2. After 4/70, the site received cleanup waste from 207-B Retention Basin.

SITE DESCRIPTION: The unit has a side slope of 2.5:1.

KNOWN RELEASES: UPR-200-E-138: On March 22, 1970, an estimated 1,000 Ci Sr-90 release occurred during an attempted measurement of the liquid level in the Sr-90 Product Storage Tank 8-1.

CLEANUP ACTIONS: This unit was backfilled in 1970.

UNIT NAME: 216-B-2-3
UNIT TYPE: Ditch
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1970
END DATE: 1987

COORDINATES: N44650 W52325 (head), N44175 W48575 (end)

WASTE TYPES AND AMOUNTS: From 4/70 to 7/73, the site transported and percolated the 241-CR Vault cooling water, 221-B Plant cooling water, and condenser cooling water from 241-BY Tank Farm ITS Units 1 and 2. The waste flowed into the 216-B-3 Pond. After 7/73, the ditch functioned as above minus 241-BY Tank Farm ITS Units 1 and 2.

SITE DESCRIPTION: 3,500 ft by 6 ft wide at the bottom and 2 ft deep. The unit has been used to transport liquid waste from B-Plant to 216-B-3 Pond since contamination of 216-B-2-2 Ditch in 1970. The side slope is 2.5:1.

CLEANUP ACTIONS: The unit was backfilled and the surface stabilized in 1987.

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UNIT NAME: 216-B-63
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

TSD: D-2-6
UNIT STATUS: Active
START DATE: March 1970

COORDINATES: N45110 W51793, N44635 W50254 (centerline)

WASTE TYPES AND AMOUNTS: The site has received effluent from the 221-B, 225-B, and 271-B Building floor drains and chemical sewer wastes. The unit has not received dangerous waste since September 1985.

SITE DESCRIPTION: The unit has an earth shielding berm. The side slope is 1.5:1.

UNIT NAME: 2607-E9
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1951

COORDINATES: N44875 W52350

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.02 cu m/d.

SITE DESCRIPTION: This unit includes a drain field.

Waste Units Assigned to this Operable Unit

200 Area Construction Pit	Pit
216-B-12	Crib
216-B-55	Crib
216-B-62	Crib
216-B-64	Retention Basin
241-ER-151	Diversion Box
241-ER-311	Catch Tank
UN-200-E-64	Unplanned Release

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UNIT NAME: 200 Area Construction Pit
UNIT TYPE: Pit
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1955

COORDINATES: N43250 W57000, N44750 W57000 (centerline)

WASTE TYPES AND AMOUNTS: Several truckloads of broken blocks of concrete foundations and other structures have been dumped into this gravel pit during the past several years. There have been no known chemicals dumped into this unit.

SITE DESCRIPTION: A large gravel pit.

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UNIT NAME: 216-B-12
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1952
END DATE: November 1973

COORDINATES: N42980 W55000, N43140 W55000 (centerline of width)

WASTE TYPES AND AMOUNTS: Until 12/57, the site received the process condensate from the waste evaporators in 221-U and 224-U buildings. From 12/57 to 5/67, the site was inactive. From 5/67 to 11/67, the site received construction waste from 221-B Building. After 11/67, the site received process condensate from 221-B Building. The waste is low salt and neutral/basic.

SITE DESCRIPTION: A series of 3 cascading, 16-ft by 16-ft by 10-ft high wooden boxes in an excavation. A 1/2-in. rock backfill lies in the bottom 12 ft of the excavation and beneath each box is ~4 ft of this rock. The lumber is primarily 6-in. by 8-in. Douglas fir. The site contains 3,800 cu yd of 12-in. gravel. The side slope is 1:1.

CLEANUP ACTIONS: The site was backfilled in 1973. The fill line was capped in March 1974.

UNIT NAME: 216-B-55
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: September 1967

COORDINATES: N42497 W54810, N42920 W55431 (centerline)

WASTE TYPES AND AMOUNTS: The site has received steam condensate from 221-B Building. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit is filled with 4 ft of gravel (~1,800 cu yd). A perforated 12-in. galvanized pipe runs the length of the unit 3 ft above the bottom. The side slope is 1.5:1.

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UNIT NAME: 216-B-62
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: November 1973

COORDINATES: N43580 W54995, N43934 W55349 (centerline)

WASTE TYPES AND AMOUNTS: The site has received process condensate from the 221-B Building Separations Facilities.

SITE DESCRIPTION: 4 ft of gravel fill on the bottom. A perforated, 6-in.-diameter fiberglass, reinforced epoxy pipe runs the length of the unit, 3 ft above the bottom.

UNIT NAME: 216-B-64
UNIT TYPE: Retention Basin
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N42572 W54614, N42773 W54548 (centerline)

WASTE TYPES AND AMOUNTS: Since 1974, the unit was intended to receive steam condensate from the 221-B Building that exceeded release limits.

SITE DESCRIPTION: The unit is divided into two 20-ft by 65-ft sections. Each has a liner placed on 3 in. of sand. The side slope is 2:1, and it is covered.

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UNIT NAME: 241-ER-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1945

COORDINATES: N41985 W54724

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: This unit is a reinforced concrete structure that has a main section and an attached enclosure for pipe housing. The main section is 43 ft long by 10 ft wide by 16.67 ft deep. It houses 23 nozzles of the 3-in. Hanford style and one nozzle that is electrical (U8). The adjacent pipe housing structure is attached to the main section flush on the west side. Its dimensions are 31.5 ft along the north side by 10 ft by 16.67 ft deep.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-ER-311
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1945

COORDINATES: N41937 W54702

WASTE TYPES AND AMOUNTS: This unit is used for transfer of waste solutions from processing and decontamination operations. Volumes are variable according to specific plant operation. It contains 1,630 gal of waste.

KNOWN RELEASES: UPR-200-E-84.

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UNIT NAME: UN-200-E-64
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 12, 1984

COORDINATES: N42550 W54600

WASTE TYPES AND AMOUNTS: The contamination consists predominately of Cs-137 and Sr-90, with readings to 60,000 ct/min.

KNOWN RELEASES: Ants burrowed into contaminated soil that was caused by leakage from the 270-E-1 Tank.

CLEANUP ACTIONS: The area has been chained and posted as a surface contamination zone. No cleanup action has been undertaken.

Other Waste Units Located Within the Operable Unit Area

Hanford Waste Vitrification Plant

Test Treatment or Support Facility

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UNIT NAME: Hanford Waste Vitrification Plant
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

TSD: TS-2-5
UNIT STATUS: Inactive

COORDINATES: N42250 W55900

WASTE TYPES AND AMOUNTS: The site is designed to treat 8,000 gal/d of waste,
producing 220 lb/h of glass.

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Waste Units Assigned to this Operable Unit

218-E-2	Burial Ground
218-E-2A	Burial Ground
218-E-4	Burial Ground
218-E-5	Burial Ground
218-E-5A	Burial Ground
218-E-9	Burial Ground
UN-200-E-61	Unplanned Release
UN-200-E-95	Unplanned Release
UN-200-E-112	Unplanned Release

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UNIT NAME: 218-E-2
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1953

COORDINATES: N44827 W53425, N44826 W53909, N44407 W53426, N44408 W53911

WASTE TYPES AND AMOUNTS: This site received 0.0031 cu m of mixed MFP/TRU dry wastes, which were backfilled over.

SITE DESCRIPTION: The site consists of 9 industrial waste trenches. The estimated lengths of the trenches range from 90 ft to 465 ft, and the bottom widths are 11 ft.

CLEANUP ACTIONS: The site has been stabilized.

UNIT NAME: 218-E-2A
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1955

COORDINATES: N44300 W53800, N44300 W53450, N44250 W53800, N44250 W53450

WASTE TYPES AND AMOUNTS: The site stored regulated equipment.

SITE DESCRIPTION: The site contains one trench. It was also used as an above-ground storage site.

CLEANUP ACTIONS: The site has been stabilized.

UNIT NAME: 218-E-4
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: February 1955
END DATE: 1956

COORDINATES: N43783 W53503, N43685 W53677, N44241 W54142, N44313 W54110

WASTE TYPES AND AMOUNTS: This site received repair and construction wastes from the 221-B Building modifications.

SITE DESCRIPTION: The site was previously thought to have contained two trenches; however, load testing performed during preliminary stabilization work failed to indicate any clearly defined trenches. All contaminated equipment previously stored above ground here was removed.

CLEANUP ACTIONS: The site is stabilized.

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UNIT NAME: 218-E-5
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1954
END DATE: 1956

COORDINATES: N44826 W54209, N44408 W53911, N44407 W54165, N44826 W53909

WASTE TYPES AND AMOUNTS: This site received industrial dry waste and small boxes. The north end contains railroad boxcars contaminated with UNH.

SITE DESCRIPTION: The site contains 2 trenches. Trench #1 is 325 ft long and 11 ft wide (bottom dimensions). Trench #2 is 325 ft long and 125 ft wide (estimated bottom dimensions) and composed of several trenches running north-south.

CLEANUP ACTIONS: In 1979, these trenches were covered with additional fill and stabilized as one trench.

UNIT NAME: 218-E-5A
UNIT TYPE: Burial Ground
WASTE CATEGORY: Pre-1970 TRU/Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1956
END DATE: 1959

COORDINATES: N44827 W54309, N44495 W54164, N44494 W54309, N44826 W54209

WASTE TYPES AND AMOUNTS: This site received waste from L Cell, referred to as the 202-A Burial Package, in the form of 4 large boxes containing failed equipment and industrial wastes. One of the boxes was damaged during unloading. The contents were pushed into the trench. The D-2 column from PUREX K Cell was also buried in this site.

SITE DESCRIPTION: Backfilled trenches with a surface area of 220,000 sq ft.

CLEANUP ACTIONS: The site has been stabilized.

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UNIT NAME: 218-E-9
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1958

COORDINATES: N44827 W53400, N44400 W53400, N44827 W53500, N44400 W53500

WASTE TYPES AND AMOUNTS: This unit was a storage site for fission product equipment that became contaminated in the uranium recovery program at the tank farm.

SITE DESCRIPTION: The site is considered an above-ground storage site, covering 62,000 sq m.

CLEANUP ACTIONS: The site was re-stabilized in 1991 after contaminated tumbleweeds were found growing on the site.

UNIT NAME: UN-200-E-61
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 31, 1981

COORDINATES: N44875 W56075

WASTE TYPES AND AMOUNTS: The unloading ramp was contaminated to 100,000 ct/min with beta/gamma.

KNOWN RELEASES: Radioactive contamination of the ground resulted from railroad burial car operations.

CLEANUP ACTIONS: The burial ground right-of-way was decontaminated to background radiation levels.

RELEASE POTENTIAL: There is no potential for further release from this spill site; only background levels of radiation remain.

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UNIT NAME: UN-200-E-95
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 1980

COORDINATES: N44425 W53400 to W54100

WASTE TYPES AND AMOUNTS: Beta/gamma with a maximum reading of 100,000 ct/min.

KNOWN RELEASES: The date this release occurred is unknown. It was established as a site in September 1980.

UNIT NAME: UN-200-E-112
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: February 12, 1979

COORDINATES: N44300 W54550

WASTE TYPES AND AMOUNTS: Beta/gamma with readings to 80,000 ct/min.

KNOWN RELEASES: While en route for burial, a failed cesium ion exchange column contaminated a section of the railroad track.

CLEANUP ACTIONS: The contaminated section of track and the Atlantic Ave. crossing were cleaned by noon February 12, 1979.

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200-BP-10

Other Waste Units Located Within the Operable Unit Area

200-E8 Borrow Pit Demolition Site
218-E-10

Ash Pit
Burial Ground

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UNIT NAME: 200-E8 Borrow Pit Demolition Site
UNIT TYPE: Ash Pit
WASTE CATEGORY: Hazardous Waste

TSD: T-2-1
UNIT STATUS: Active
START DATE: August 1984

COORDINATES: N4480 W56670

WASTE TYPES AND AMOUNTS: This unit had the following detonations: 1984:
Isopropyl Ether 8 L, 1,4-Dioxane 1,250 mL, 2-Butoxyethanol 19 L, Methyl Ethyl
Ketone 177 mL, Hydrogen Peroxide 11.36 L, Dioxane 946 mL, Sodium Azide 473 mL,
Phosphoric Acid 189 L; 1985: None; 1986: None.

SITE DESCRIPTION: Thermal treatment (detonation) pit.

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UNIT NAME: 218-E-10
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

TSD: D-2-9
UNIT STATUS: Active
START DATE: February 1960

COORDINATES: N44398 W54660, N45880 W54700, N45880 W56725, N45180 W56725

WASTE TYPES AND AMOUNTS: The site has been receiving PUREX failed equipment and mixed industrial wastes. The trench, running east to west, contains 69 PUREX cover blocks and 4 PUREX centrifuge blocks. The tops of the bails are 18 in. below grade.

SITE DESCRIPTION: The site consists of 17 trenches running north and south and 1 trench running east-west. Trench #1 is 24 ft deep with bottom dimensions of 1,300 ft long by 15 ft wide. Trenches #2 to #17 are 15 ft deep, 16 ft wide at bottom, and vary in length from 805 ft to 1,145 ft. The trench running east-west has bottom dimensions of 100 ft long by 15 ft wide.

CLEANUP ACTIONS: The site is partially stabilized.

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200-BP-11

Waste Units Assigned to this Operable Unit

216-B-3	Pond
216-B-3A	Pond
216-B-3B	Pond
216-B-3C	Pond
216-B-3-1	Ditch
216-B-3-2	Ditch
216-B-3-3	Ditch
216-E-28	Pond
UN-200-E-14	Unplanned Release
UN-200-E-92	Unplanned Release

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UNIT NAME: 216-B-3
UNIT TYPE: Pond
WASTE CATEGORY: Mixed Waste

TSD: D-2-5
UNIT STATUS: Active
START DATE: April 1945

COORDINATES: N43600 W44370, N42850 W39950, N41000 W39350, N41000 W40500

WASTE TYPES AND AMOUNTS: Waste streams flow from the 216-A-29 and 216-B-3-3 ditches into the 216-B-3 Pond. Discharges to 216-B-3 via 216-B-3-3 include: 221-B Building steam condensate and process cooling water; 284-E Powerhouse water; 244-CR Vault cooling water; 244-AR Vault and 242-A Evaporator cooling water; 202-A process cooling water, condenser cooling water, and air sampler vacuum pumps seal cooling water; 241-BY Tank Farm condenser cooling water; and Waste Encapsulation Storage Facility cooling water. Discharges to 216-B-3 via 216-A-29 include 202-A chemical sewer and acid fractionator condensate.

SITE DESCRIPTION: Roughly rectangular, with a surface area of 40 acres. The unit has been expanded with three additional lobes, 216-B-3A, -3B, and -3C with areas of 10 acres, 10 acres, and 41 acres, respectively.

KNOWN RELEASES: In addition to routine flows, the following process upsets have added to the inventory of the pond: UPR-200-E-32: In November 1963, a coil leak developed in the 221-B Building 6-1 Tank; UPR-200-E-34: In June 1964, a cooling coil leak developed in the F-15 process waste tank in PUREX; UPR-200-E-138: In March 1970, a leaking manometer sensing line from the 221-B Building 8-1 Tank.

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UNIT NAME: 216-B-3A
UNIT TYPE: Pond
WASTE CATEGORY: Mixed Waste

TSD: D-2-5
UNIT STATUS: Active

COORDINATES: N43600 W41850, N43550 W41500, N42500 W41500, N42550 W41950

SITE DESCRIPTION: The unit is roughly rectangular with ~10 acres surface area.
It has two overflow structures to route water to the second and third lobes.

UNIT NAME: 216-B-3B
UNIT TYPE: Pond
WASTE CATEGORY: Mixed Waste

TSD: D-2-5
UNIT STATUS: Active

COORDINATES: N42950 W41400, N42950 W40750, N42250 W40800, N42250 W41200

SITE DESCRIPTION: The unit is roughly rectangular with ~10 acres surface area.
It is dry and unused after being dredged in 1986.

UNIT NAME: 216-B-3C
UNIT TYPE: Pond
WASTE CATEGORY: Mixed Waste

TSD: D-2-5
UNIT STATUS: Active
START DATE: 1985

COORDINATES: N42000 W40500, N42000 W41025, N41000 W40750, N41000 W40500

WASTE TYPES AND AMOUNTS: The site currently disposes of essentially all of the B-3 Pond System's flow.

SITE DESCRIPTION: The unit is roughly rectangular with ~41 acres surface area. It was excavated into a very coarse gravel layer with a very high percolation rate.

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UNIT NAME: 216-B-3-1
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: April 1945
END DATE: July 1964

COORDINATES: N43700 W47000 (head), N43645 W45760 (end)

WASTE TYPES AND AMOUNTS: Until 3/62, the site percolated and transported 221-B Plant steam condensate, process cooling water, chemical sewer waste, and 284-E Powerhouse waste. From 3/52 to 11/55, same as above plus 241-CR Vault cooling water. From 11/55 to 12/57, same as above plus effluent from 216-A-29 Ditch. Wastes include 202-A process cooling water and chemical sewer waste. From 12/57 to 2/58, same as above minus 202-A process cooling water. From 2/58 to 12/62, same as above plus 202-A acid fractionator condensate. From 12/62 to 12/63, same as above plus 202-A seal cooling water from air sampler vacuum pumps. After 12/63, same as above minus 202-A seal cooling water.

SITE DESCRIPTION: 216-A-29 Ditch joined this unit resulting in the unit widening into a swamp ~80 ft wide before entering the pond. The side slope is 2.5:1.

KNOWN RELEASES: UPR-200-E-34: A cooling leak in F-15 (process waste tank in PUREX) put an estimated 2,500 Ci of fission products into this unit and 216-B-3 Pond. Much activity was concentrated in the algae growing in the unit.

CLEANUP ACTIONS: The unit was backfilled in 1964. In 1971, the ground was leveled and cleaned of all foreign objects that might puncture a plastic sheet. Ten-mil-thick plastic sheets were placed on a 4-in. cushion of sand. They were overlapped 2 ft to provide an effective root barrier. The sheeting was covered with 18 in. of sand and topped with 4 in. of gravel to prevent surface erosion by the wind. The entire unit was treated in this manner except the first 100 ft at the head end near the diverter station. At the eastern end, where the unit had widened into a swamp, the treated area is ~100 ft wide. The west end is ~32 ft wide.

RELEASE POTENTIAL: The plastic barrier has been effective in limiting radioactive weed growth.

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UNIT NAME: 216-B-3-2
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: July 1964
END DATE: September 1970

COORDINATES: N43700 W47000 (head), N43250 W43650 (end)

WASTE TYPES AND AMOUNTS: Until 1/65, the site transported 221-B Plant process cooling water, steam condensate, and chemical sewer; 241-CR Vault cooling water; 284-E Powerhouse water; and received and transported 202-A chemical sewer waste and fractionator condensate from 216-A-29 Ditch. From 1/65 to 1/66, same as above plus 241-TY Tank Farm ITS Unit 1 condenser cooling water. From 1/66 to 11/67, same plus condenser cooling water and air sampler vacuum pump seal cooling water from 202-A Building. From 11/67 to 2/68, same minus 284-E Powerhouse wastewater. After 2/68, same plus 241-BY Tank Farm ITS Unit 2 condenser cooling water.

SITE DESCRIPTION: The unit is open from the diverter station to the 216-B-3 Pond, -4 to 8 ft deep. It was backfilled in July 1970 after a release of Sr-90 from 221-B Plant. The 216-A-29 Ditch entered this unit -1,000 ft above the 216-B-3 outfall.

KNOWN RELEASES: On March 22, 1970, an estimated 1,000 Ci Sr-90 release occurred at B Plant during an attempted measurement of the liquid level in Tank 8-1.

UNIT NAME: 216-B-3-3
UNIT TYPE: Ditch
WASTE CATEGORY: Low-Level Waste

TSD: D-2-5
UNIT STATUS: Active
START DATE: September 30, 1970

COORDINATES: N43700 W47000 (head), N43075 W43350 (end)

WASTE TYPES AND AMOUNTS: Until 7/73, the site transported and percolated 221-B cooling water, 202-A chemical sewer from 216-A-29 Ditch, 241-BY Tank Farm ITS Units 1 and 2 cooling water, and 244-CR Vault cooling water. From 7/73 to 5/78, the site received the same as above minus ITS Units 1 and 2 cooling water. Since 5/78, the site has received 221-B cooling water and 202-A chemical sewer from the 216-A-29 Ditch.

SITE DESCRIPTION: The unit is open from the diverter station to the 216-B-3 Pond. The unit is 4 to 8 ft deep and 3 ft wide at the bottom. The 216-A-29 Ditch feeds into this unit -1,000 ft above the 216-B-3 Pond outfall.

KNOWN RELEASES: UPR-200-E-51.

UNIT NAME: 216-E-28
UNIT TYPE: Pond
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N45950 W45820

WASTE TYPES AND AMOUNTS: The unit was constructed to provide emergency capacity in case of a failure in the B-Pond System. The unit has not received any waste.

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UNIT NAME: UN-200-E-14
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1958

COORDINATES: N43375 W41875

KNOWN RELEASES: A break in the dike at 216-B-3 Pond caused ground contamination.

CLEANUP ACTIONS: The contamination zone was covered with clean soil. The area was removed from radiation zone status in December 1970.

UNIT NAME: UN-200-E-92
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 1980

COORDINATES: N43850 to N46800 W47250

WASTE TYPES AND AMOUNTS: Strontium and cesium.

KNOWN RELEASES: This site is the result of contaminated Russian thistle being blown from their growth sites in some of the 200 East Area waste sites and lodging against the east perimeter fence. Over a number of years, the thistles have decomposed and released small amounts of strontium and cesium radioactivity into the blown sand along the bottom of the fence.

CLEANUP ACTIONS: During the spring of 1981, the contaminated sand was removed from the bottom of the fence and buried in the excavation pit north of 216-A-24 Crib. The site was released from zone posting.

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200-IU-1

Waste Units Assigned to this Operable Unit

600 Area Exploratory Shaft HWSA	Staging Area
600 Area Exploratory Shaft Septic Tank	Septic Tank
6607-3	Septic Tank

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UNIT NAME: 600 Area Exploratory Shaft HWSA
UNIT TYPE: Staging Area
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1983
END DATE: 1987

WASTE TYPES AND AMOUNTS: Approximately 300 gal of nonregulated, used oils and 180 gal of unknown solvent and degreasers were accumulated over the past 3 yr.

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UNIT NAME: 600 Area Exploratory Shaft Septic Tank
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1981
END DATE: 1988

WASTE TYPES AND AMOUNTS: The unit received ~1,200 gal/wk of sanitary wastewater.

CLEANUP ACTIONS: The unit was drained and removed in May 1988.

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UNIT NAME: 6607-3
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1940's
END DATE: 1950's

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of sanitary sewage.

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Waste Units Assigned to this Operable Unit

600 Area Near Surface Test Facility Septic Tank
600 Area Near Surface Test Facility Underground Tank
628-2
1607-FSM

Septic Tank
Storage Tank
Burning Pit
Septic Tank

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UNIT NAME: 600 Area Near Surface Test Facility Septic Tank
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No

UNIT STATUS: Inactive
START DATE: 1981

WASTE TYPES AND AMOUNTS: The unit receives ~1,000 gal/wk of sanitary wastewater and is emptied every other week.

29017

UNIT NAME: 600 Area Near Surface Test Facility Underground Tank
UNIT TYPE: Storage Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No

UNIT STATUS: Inactive
START DATE: 1981
END DATE: 1988

WASTE TYPES AND AMOUNTS: The tank receives ~1,000 gal/wk of sanitary wastewater and is emptied every other week.

CLEANUP ACTIONS: The unit was drained and removed in May 1988.

UNIT NAME: 628-2
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
END DATE: 1985

COORDINATES: N72500 W58500 Based on Hanford Land Coord. per Hanford Site Map H-6-951

WASTE TYPES AND AMOUNTS: Available information (no supporting written documentation) indicates that mainly motor oil and diesel fuel contaminated with water or deemed unusable were burned. According to the Fire Chief, toluene is an example of a hazardous chemical burned at this site. Soil sampling will be required to determine what contaminants are present.

SITE DESCRIPTION: Information indicates that this unit was ~3 to 4 ft deep by 6 ft in diameter; however, physical evidence (e.g. ash, debris, soil discoloration, etc.) indicates that the area affected by the burning activities is considerably larger (~1/4 acre). Composition of the pit is sand and dirt. Vegetation is sparse and shows definite signs of stress. The area is not marked and is covered with soil. Verification (survey) of coordinates is required.

UNIT NAME: 1607-FSM
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1960

WASTE TYPES AND AMOUNTS: The unit receives ~550 gal/wk of sanitary wastewater.

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Waste Units Assigned to this Operable Unit

600 Area Central Landfill	Landfill
600 Area Nonradioactive Dangerous Waste Landfill	Landfill
600 Area Original Central Landfill	Landfill
6607-1	Septic Tank
6607-2	Septic Tank
UN-600-12	Unplanned Release

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UNIT NAME: 600 Area Central Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Active
START DATE: July 1973

WASTE TYPES AND AMOUNTS: The unit receives 1.5M cu ft of nonradioactive, nonhazardous solid waste annually.

KNOWN RELEASES: On December 14, 1983, 670 gal of 90% leaded gasoline, 10% water was released in the unit.

RELEASE POTENTIAL: This facility is not lined.

71069

UNIT NAME: 600 Area Nonradioactive Dangerous Waste Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

TSD: D-6-1
UNIT STATUS: Inactive
START DATE: 1980
END DATE: May 20, 1988

COORDINATES: N46D30M40S W119D27M50S

WASTE TYPES AND AMOUNTS: The unit contains nonradioactive dangerous wastes from process operations, research and development laboratories, and maintenance and transportation functions throughout the Hanford Site. These wastes may consist of listed wastes, wastes from nonspecific sources, characteristic wastes, and state-only wastes. Approximately 100,000 lb/yr of wastes were received at the unit.

RELEASE POTENTIAL: No bulk liquids or free liquids (other than lab packs packed with absorbents) have been allowed into the landfill.

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UNIT NAME: 600 Area Original Central Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1973
END DATE: 1973

COORDINATES: N25000 W25000

WASTE TYPES AND AMOUNTS: This site contains general office wastes, some glass, electrical wastes, and minimal metal wastes. Radioactive contamination was found at this site around 1986 during investigative activities. The site is now posted as Underground Radioactive Material.

SITE DESCRIPTION: This site contains one trench.

CLEANUP ACTIONS: The site has been backfilled to grade.

UNIT NAME: 6607-1
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1940's
END DATE: 1950's

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of sanitary sewage.

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UNIT NAME: 6607-2
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Inactive
START DATE: 1940's
END DATE: 1950's

WASTE TYPES AND AMOUNTS: The unit received unknown amounts of sanitary sewage.

71071

UNIT NAME: UN-600-12
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 30, 1954

WASTE TYPES AND AMOUNTS: UNH solution in soil with less than 10 nCi/g and a maximum dose rate at the surface of 60 mR/h.

KNOWN RELEASES: A tractor-trailer overturned on the 200 East hill, spilling the solution.

CLEANUP ACTIONS: A portion of the contamination was recovered and the rest was washed off the road and covered with dirt. The road was resurfaced and the area posted. The area was removed from radiation zone status in March 1971.

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Waste Units Assigned to this Operable Unit

213-J & K	Crib
213-J & K Storage Facility	Storage Facility
Hanford Townsite Landfill	Landfill
Hanford Trailer Camp Landfill	Landfill
P-11	Crib
UN-600-16	Unplanned Release
UN-600-18	Unplanned Release
UN-600-19	Unplanned Release

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UNIT NAME: 213-J & K
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1944
END DATE: 1958

COORDINATES: N54675 W34855, N54675 W34745

WASTE TYPES AND AMOUNTS: Very little water solution ever entered this unit. The distributor piping was removed and inspected. Rust scale taken from the interior of the pipes was found to be free of radioactivity above world fallout levels. The unit was removed from radiation-zone status on November 11, 1974.

SITE DESCRIPTION: The unit consisted of two small cribs, one on each side of the storage vaults. Each had a black iron distributor pipe, 2 in. diameter, running its length ~4 ft below ground level. They were filled with gravel and capped over with a 2-in.-thick concrete dome.

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UNIT NAME: 213-J & K Storage Facility
UNIT TYPE: Storage Facility
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1944

COORDINATES: N5500 W3500

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WASTE TYPES AND AMOUNTS: The unit was originally constructed for the storage of explosives. Vault 213-J contains cans of soil samples from various locations in the United States. All samples are nonradioactive. Vault 213-K contains packages of equipment contaminated with radioactive sodium. General background readings in the vault (2/14/78) ranged from 2 to 5 mR/h. No smearable radioactivity was detected on any of the surfaces inside the vaults. The contaminated sodium was removed sometime in the past.

SITE DESCRIPTION: 213-J and 213-K are identical concrete storage vaults located side by side, 50 ft apart, and sharing a common retaining wall. Each vault is 40 ft 6 in. deep (horizontally into the mountain), 12 ft wide, and 8 ft high, lined on each side with shelves (50 lb per sq-ft capacity). There are two metal access doors, and a loading dock for each vault. Between the docks is a wooden building housing ventilation equipment. Several vent risers are visible above grade over each vault. Visual inspection of each building's exterior revealed minor cracks and spalling in the concrete.

UNIT NAME: Hanford Townsite Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1850
END DATE: 1943

WASTE TYPES AND AMOUNTS: The site was used to dispose of normal industrial and domestic wastes common for the period.

SITE DESCRIPTION: The site consisted of an unlined excavation.

CLEANUP ACTIONS: The site has since been backfilled and covered with clean soil.

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UNIT NAME: Hanford Trailer Camp Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1943
END DATE: 1945

WASTE TYPES AND AMOUNTS: The unit was used for typical domestic wastes that were used during construction of the Hanford Site facilities.

CLEANUP ACTIONS: The site was bulldozed and covered with clean soil.

UNIT NAME: P-11
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1951
END DATE: December 1951

COORDINATES: N63343 W25821 (center)

WASTE TYPES AND AMOUNTS: The site received low-level plutonium waste from the 120 Building (Critical Assembly Room, Chemistry Laboratory, Storage and Tank Room, and Change Room).

SITE DESCRIPTION: Formerly a wooden structure, 5 ft high, with 10-in. concrete outside walls, cover, and base. The distribution pipe was 5 ft below grade.

CLEANUP ACTIONS: The site was exhumed in 1974.

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UNIT NAME: UN-600-16
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 4, 1951

COORDINATES: N63343 W25821 (center of area)

WASTE TYPES AND AMOUNTS: An estimated amount of 1 to 4 g of plutonium was deposited.

KNOWN RELEASES: A fire spread gross plutonium contamination.

CLEANUP ACTIONS: Initially, the contaminated area was covered with 2 to 2.5 ft of clean soil and gravel and enclosed by a wire fence posted with radiation signs. In 1974, the entire site was exhumed and has been released from radiation zone status.

UNIT NAME: UN-600-18
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: April 16, 1987

WASTE TYPES AND AMOUNTS: The release consisted of 7 gal of #2 diesel oil, 112 gal of unleaded gasoline, 10 gal of thylene glycol, and 226 gal of leaded gasoline.

KNOWN RELEASES: The tank truck left the road and rolled onto its right side. The liquid leaked out of the service hatches on the top of the tank.

CLEANUP ACTIONS: Six soil samples were taken from the road shoulder and ditch and analysis is pending. The plan is to excavate 20 cu yd of soil and dispose the soil as indicated by analysis and characterization.

RELEASE POTENTIAL: The release potential will be eliminated upon subsequent removal of contaminated soil.

UNIT NAME: UN-600-19
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE:

KNOWN RELEASES: An old wooden barrel of lime-sulfur pesticide was broken, and the contents remain on the ground.

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200-IU-5

Waste Units Assigned to this Operable Unit

600 Area Batch Plant HWSA	Staging Area
622-1	Dumping Area
622-R Septic Tank	Septic Tank
2607-FSN	Septic Tank
Old Central Shop Area	Test Treatment or Support Facility

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UNIT NAME: 600 Area Batch Plant HWSA
UNIT TYPE: Staging Area
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1984

WASTE TYPES AND AMOUNTS: Roofing, insulating, and protective coating materials are stored in this area.

SITE DESCRIPTION: Waste is stored in drums and pails on a concrete pad.

71031

UNIT NAME: 622-1
UNIT TYPE: Dumping Area
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N40000 W70000

WASTE TYPES AND AMOUNTS: This unit is a posted asbestos dust hazard area. Some 55-gal, 5-gal, and 1-gal containers are also present.

UNIT NAME: 622-R Septic Tank
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1965

WASTE TYPES AND AMOUNTS: The unit receives ~9 gal/h of sanitary wastewater.

SITE DESCRIPTION: The unit has a 1,500-gal capacity.

UNIT NAME: 2607-FSN
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1960

WASTE TYPES AND AMOUNTS: The unit receives ~1,250 gal/wk of sanitary wastewater.

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UNIT NAME: Old Central Shop Area
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive

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200-IU-5

Other Waste Units Located Within the Operable Unit Area

241-EW-151	Catch Tank
616 Nonradioactive Dangerous Waste Storage	Storage Facility

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UNIT NAME: 241-EW-151
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1952

WASTE TYPES AND AMOUNTS: The unit transports radioactive waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation. It contains 584 gal of waste.

SITE DESCRIPTION: This unit is constructed of stainless steel with a design capacity of 800 gal. It is in an 11-ft by 11.5-ft by 11-ft vault. The bottom of the vault is 16 ft below grade.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

71037

UNIT NAME: 616 Nonradioactive Dangerous Waste Storage
UNIT TYPE: Storage Facility
WASTE CATEGORY: Hazardous Waste

TSD: S-6-1
UNIT STATUS: Active
START DATE: September 1986

WASTE TYPES AND AMOUNTS: The facility provides container storage for nonradioactive dangerous wastes generated in the research and development laboratories, process operations, maintenance, and transportation functions throughout the Hanford Site. These wastes consist of listed wastes, wastes from nonspecific sources, characteristic wastes, and state-only wastes.

SITE DESCRIPTION: The facility is capable of storing up to 26,500 gal of waste in U. S. Department of Transportation approved containers. Wastes are only stored until arrangements can be made to ship the waste to a permitted offsite treatment, storage, or disposal facility.

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200-IU-6

Waste Units Assigned to this Operable Unit

216-A-25	Pond
216-N-8	Pond

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UNIT NAME: 216-A-25
UNIT TYPE: Pond
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1957
END DATE: 1987

COORDINATES: N51748 W47095, N54191 W50490 (centerline)

WASTE TYPES AND AMOUNTS: Until 5/58, the unit received the process cooling water from 202-A Building (PUREX Plant). From 5/58 to 1960, the unit received the above plus cooling water from the contact condenser in the 241-A-431 Building. In 1960, the unit received the above plus the surface condensator cooling water in the 241-A-401 Building (A Tank Farm). From 11/67 to 1/68, the unit received the above plus the wastewater from the 284-E Powerhouse. From 1/68 to 3/69, the unit received the above plus the cooling water and steam condensate from the 244-AR Vault. In 3/69, the pipeline to the contact condenser cooling system from the 241-A-431 Building Vault was valved out. After 3/77, the unit received the above plus the 242-A Evaporator steam condensate cooling water and B Plant cooling water.

SITE DESCRIPTION: The unit has a 71-acre surface area. The average depth of the unit is 5 ft, with a maximum depth of 9 ft.

KNOWN RELEASES: UPR-200-E-34: On June 11, 1964, cooling water from a cooling coil of a process waste inventory tank (F-15) at PUREX developed a leak and discharged highly radioactive wastewater into this unit and the 216-B-3-1 Ditch. Approximately 100,000 Ci of fission products were released. For a detailed description of this incident, see RL-SA-15.

CLEANUP ACTIONS: Decommissioning began in 7/84 and was completed in 12/88. The unit was backfilled with clean pit run soil and cobble to a minimum of 2 ft above the original shoreline. One foot of top soil was added, and the site was revegetated.

UNIT NAME: 216-N-8
UNIT TYPE: Pond
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N60000 W55000, N58000 W54000

WASTE TYPES AND AMOUNTS: Prior to the appearance of West Pond, this area was used as a disposal site for sewage sludge from the early Hanford construction camp. High alkaline and phosphate levels, as well as elevated pH values, may be attributed to this use of the pond area. Even though this unit never received direct discharges of contaminated effluents, it contains relatively high amounts of radionuclides (1,055 to 1,098 pCi/L, 1976), having the highest gross alpha (naturally occurring except for H-3) concentrations of all the 200 Area ponds. The actual source of existing activity is unknown. A possible main contributor is the leaching of naturally occurring radionuclides from the soil that has been concentrated by evaporation during the entire history of the unit.

SITE DESCRIPTION: This site covers 77,800 sq m with a volume of 31,100 cu m.

212197102

200-N0-1

Waste Units Assigned to this Operable Unit

216-N-1	Pond
216-N-2	Trench
216-N-3	Trench
216-N-4	Pond
216-N-5	Trench
216-N-6	Pond
216-N-7	Trench

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9 4 1 2 : 9 7 1 0 9 4

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UNIT NAME: 216-N-1
UNIT TYPE: Pond
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1944
END DATE: June 1952

COORDINATES: N53700 W65050 (head), N54125 W65475 (end)

WASTE TYPES AND AMOUNTS: The site received the basin overflow from the 212-N Building (released from radiation zone status). The waste type is low activity.

71095

UNIT NAME: 216-N-2
UNIT TYPE: Trench
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1947
END DATE: April 1947

COORDINATES: N55485 W65788 (center)

WASTE TYPES AND AMOUNTS: The site received the basin water and sludge cleanout when it was drained for special tests. The waste type is low activity.

UNIT NAME: 216-N-3
UNIT TYPE: Trench
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: May 1952
END DATE: June 1952

COORDINATES: N55455 W65838 (center)

WASTE TYPES AND AMOUNTS: The site received basin water and sludge cleanout from the 212-N Building when the area was shut down. The waste type is low activity.

212121971096

UNIT NAME: 216-N-4
UNIT TYPE: Pond
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1944
END DATE: June 1952

COORDINATES: N53400 W62600 (head), N54300 W62700 (end)

WASTE TYPES AND AMOUNTS: The site received the basin overflow waste from the 212-P Building. The site was retired when the 212-P Building was shut down. The waste type is low activity.

UNIT NAME: 216-N-5
UNIT TYPE: Trench
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: May 1952
END DATE: June 1952

COORDINATES: N55408 W63130, N55495 W63225 (diagonally)

WASTE TYPES AND AMOUNTS: The site received the basin water and sludge cleanout from the 212-P Basin during shutdown of the area. The waste type is low activity.

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UNIT NAME: 216-N-6
UNIT TYPE: Pond
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1944
END DATE: June 1952

COORDINATES: N53600 W60030 (head), N54350 W60115 (end)

WASTE TYPES AND AMOUNTS: The site received the normal overflow from the 212-R Basin. The site was retired when 212-R was shut down. The waste type is low activity.

UNIT NAME: 216-N-7
UNIT TYPE: Trench
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: May 1952
END DATE: June 1952

COORDINATES: N55399 W60505, N55482 W60605 (diagonally)

WASTE TYPES AND AMOUNTS: The site received the basin water and sludge cleanout waste from 212-R Basin. The site was retired when 212-R was shut down. The waste type is low activity.

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Other Waste Units Located Within the Operable Unit Area

212-N Storage Facility	Storage Facility
212-P Storage Facility	Storage Facility
212-R Storage Facility	Storage Facility

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9 2 1 2 1 2 7 1 1 0 0

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UNIT NAME: 212-N Storage Facility
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1972

COORDINATES: N55300 W65700

WASTE TYPES AND AMOUNTS: Originally, the unit was built to provide underwater storage of irradiated slugs from the 100 Areas. Slugs were stored in the 20-ft reinforced concrete basins. After 1970, the building stored several wooden boxes containing hoods and equipment used for the fabrication of fuels for the Plutonium Recycle Test Reactor (PRTR). This waste is transuranically contaminated with an estimated 40 g plutonium (byproduct). Total waste volume is 7,651 cu ft.

SITE DESCRIPTION: The building is composed of two main sections and a heater room. Each section has a concrete slab and roof and walls constructed of concrete and concrete block. Exterior dimensions of the high roof section are 27 ft by 74 ft by 30 ft high. The low roof section is 49 ft by 72 ft by 12 ft high. The heater room is 14 ft by 26 ft by 12 ft high. Total area is 5,970 sq ft, the storage basin is 3,300 sq ft, and the transfer basin is 400 sq ft.

RELEASE POTENTIAL: The boxes were stacked inside the building and covered with a mound of commercial insulating material.

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UNIT NAME: 212-N Storage Facility
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1972

COORDINATES: N55300 W65700

WASTE TYPES AND AMOUNTS: Originally, the unit was built to provide underwater storage of irradiated slugs from the 100 Areas. Slugs were stored in the 20-ft reinforced concrete basins. After 1970, the building stored several wooden boxes containing hoods and equipment used for the fabrication of fuels for the Plutonium Recycle Test Reactor (PRTR). This waste is transuranically contaminated with an estimated 40 g plutonium (byproduct). Total waste volume is 7,651 cu ft.

SITE DESCRIPTION: The building is composed of two main sections and a heater room. Each section has a concrete slab and roof and walls constructed of concrete and concrete block. Exterior dimensions of the high roof section are 27 ft by 74 ft by 30 ft high. The low roof section is 49 ft by 72 ft by 12 ft high. The heater room is 14 ft by 26 ft by 12 ft high. Total area is 5,970 sq ft, the storage basin is 3,300 sq ft, and the transfer basin is 400 sq ft.

RELEASE POTENTIAL: The boxes were stacked inside the building and covered with a mound of commercial insulating material.

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UNIT NAME: 212-R Storage Facility
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1952

COORDINATES: N55300 W60400

WASTE TYPES AND AMOUNTS: Originally the unit was built to provide underwater storage of irradiated slugs from the 100 Areas. Slugs were stored in the 20-ft reinforced concrete basins.

SITE DESCRIPTION: The building is composed of two main sections and a heater room. Each section has a concrete slab and roof and walls constructed of concrete and concrete block. Exterior dimensions of the high roof section are 27 ft by 74 ft by 30 ft high. The low roof section is 49 ft by 72 ft by 12 ft high. The heater room is 14 ft by 26 ft by 12 ft high. Total area is 5,970 sq ft; the storage basin is 3,300 sq ft and the transfer basin is 400 sq ft.

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9 2 1 2 1 9 7 1 9 0 4

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Waste Units Assigned to this Operable Unit

216-A-3	Crib
216-A-9	Crib
216-A-11	French Drain
216-A-12	French Drain
216-A-13	French Drain
216-A-14	French Drain
216-A-22	French Drain
216-A-26	French Drain
216-A-26A	French Drain
216-A-28	French Drain
216-A-32	Crib
216-A-33	French Drain
216-A-35	French Drain
216-A-40	Trench
216-A-41	Crib
218-E-1	Burial Ground
218-E-13	Burial Ground
241-A-151	Diversion Box
241-A-302A	Catch Tank
2607-E6	Septic Tank
2607-EA	Septic Tank
UN-200-E-10	Unplanned Release
UN-200-E-11	Unplanned Release
UN-200-E-12	Unplanned Release
UN-200-E-15	Unplanned Release
UN-200-E-19	Unplanned Release
UN-200-E-20	Unplanned Release
UN-200-E-26	Unplanned Release
UN-200-E-28	Unplanned Release
UN-200-E-31	Unplanned Release
UN-200-E-33	Unplanned Release
UN-200-E-42	Unplanned Release
UN-200-E-49	Unplanned Release
UN-200-E-58	Unplanned Release
UN-200-E-60	Unplanned Release
UN-200-E-65	Unplanned Release
UN-200-E-88	Unplanned Release
UN-200-E-96	Unplanned Release
UN-200-E-114	Unplanned Release
UN-200-E-142	Unplanned Release

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9 2 1 2 4 9 7 1 1 0 6

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UNIT NAME: 216-A-3
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: April 1981

COORDINATES: N40530 W48540 (center)

WASTE TYPES AND AMOUNTS: Until November 1967, the site received wastes from the silica-gel regeneration in the 203-A Building, the UNH storage pit drainage, and the liquid waste from the 203-A Pump House. After November 1967, the site received UNH Storage Pit drainage, liquid drainage, liquid waste from the 203-A Building enclosure sumps, and the heating coil condensate from the P1 through P4 UNH tanks. Between 1967 and 1970, the site discontinued receiving discharge from silica-gel regeneration wastes. The above wastes are reworked through the uranium cycle and any resulting waste with low radioactivity are sent to 216-A-29.

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SITE DESCRIPTION: The unit contains a 4-in. SCH 10 perforated 304SS pipe placed horizontally 8 ft below grade and two 20-ft lengths of this pipe placed perpendicularly to the first pipe, forming an H pattern. The site has ~8 ft (10,000 cu ft) of gravel fill and has been backfilled. The side slope surface to 7 ft deep is 1.5:1 and from 7 ft to the site bottom, 2:1.

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UNIT NAME: 216-A-9
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1956
END DATE: August 1969

COORDINATES: N41000 W48355, N41297 W48652 (centerline)

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WASTE TYPES AND AMOUNTS: Until 2/58, the site received the acid fractionator condensate and the condenser cooling water from the 202-A Building. From 2/58 to 4/66, the site was inactive. From 4/66 to 10/66, the site received N Reactor decontamination waste via a manhole at the site. From 10/66 to 8/69, the site was inactive. In 8/69, the site received the acid fractionator condensate from the 202-A Building. The waste is acidic.

SITE DESCRIPTION: The site contains a 10-in. SCH 30 steel perforated pipe, placed horizontally, 9 ft below grade. The site has 5 ft (65,000 cu ft) of gravel fill and has been backfilled. The side slope is 2:1.

CLEANUP ACTIONS: The truck unloading station at this site was stabilized in 1991.

UNIT NAME: 216-A-11
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: 1972

COORDINATES: N39780 W48050 (center)

WASTE TYPES AND AMOUNTS: The site received the Trap Pit #1 drainage from the 202-A Building. The waste was low salt and neutral/basic. The site contains less than 50 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of two reinforced concrete pipes placed vertically end to end. The excavation is 10 ft in diameter and extends to a depth of 5 ft below the bottom. Both the drain and the excavation are filled with 3-in. rock to the top and are backfilled over. This site is identifiable only through its I.D. post.

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UNIT NAME: 216-A-12
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: 1972

COORDINATES: N39780 W48503 (center)

WASTE TYPES AND AMOUNTS: The site received the Steam Trap Pit #3 drainage from the 202-A Building. The waste was low salt and neutral/basic. The site contains less than 50 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of two reinforced concrete tile pipes placed vertically end to end. The excavation is 10 ft in diameter and extends 5 ft below the bottom. Both the drain and the excavation are filled with gravel to the top of the unit and backfilled over. Assumes a side slope of 1:1. This site cannot be located.

UNIT NAME: 216-A-13
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: December 1962

COORDINATES: N39814 W49010 (center)

WASTE TYPES AND AMOUNTS: The site received the seal water from the air sampler vacuum pumps in the 202-A Building. The waste is low salt, neutral/basic, and contains less than 1 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of two lengths of concrete pipe placed vertically end to end. The unit is filled to a depth of 3 ft with 2- to 3-in. rock. This unit has a bed of gravel around the lower section of pipe extending a minimum of 1 ft away from the pipe in all directions. Assume a 1:1 side slope. No I.D. post at site. The inside of the site is in common with underground radiation zone associated with 216-A-35.

71109

UNIT NAME: 216-A-14
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: 1972

COORDINATES: N39742 W48551 (center)

WASTE TYPES AND AMOUNTS: The site receives the vacuum cleaner filter and blower pit drainage from the 202-A Building. The waste was low salt, neutral/basic, and contains less than 1 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of two reinforced concrete pipes placed vertically end to end. The excavation is 10 ft in diameter and extends to a depth of 5 ft below the bottom. Both the drain and the excavation are filled with 3-in. rock to the top and backfilled over. Assume a 1:1 side slope.

UNIT NAME: 216-A-22
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1956
END DATE: December 1958

COORDINATES: N40330 W48560 (center)

WASTE TYPES AND AMOUNTS: The site received the drainage from the 203-A Building truck loadout apron, the sump waste from the 203-A Building enclosure, and the heating coil condensate from the P-1 through P-4 UNH tanks. The waste is low salt, neutral/basic, and contains less than 1 Ci total beta activity.

SITE DESCRIPTION: Two 4-in. U3-CD effluent pipes. One enters the site from above; however, it is not visible from grade. The other one enters the site horizontally, 8 ft below grade. The excavation is 16 ft in diameter at grade and 6 ft in diameter at the bottom, with a side slope of 2:1. Approximately 10 ft (1,600 cu ft) of gravel fills the excavation bottom, and the site is backfilled over.

KNOWN RELEASES: UPR-216-E-17.

UNIT NAME: 216-A-26
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: July 1965

COORDINATES: N39535 W48208 (center)

WASTE TYPES AND AMOUNTS: The site has been receiving the floor drainage from the 291-A Fan Control House. The waste is low salt and neutral/basic and contains less than 1 Ci of total beta activity.

SITE DESCRIPTION: The unit is composed of three tiles, each 5 ft long.

9 2 1 2 1 9 7 1 1 1 0

UNIT NAME: 216-A-26A
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: March 1959
END DATE: July 1965

COORDINATES: N39550 W48208 (center)

WASTE TYPES AND AMOUNTS: The site received the floor drainage from the 291-A fan control room. The waste is low salt and neutral/basic and contains less than 1 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of three 5-ft sections of tile pipe, placed vertically end to end below grade.

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UNIT NAME: 216-A-28
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1958
END DATE: November 1967

COORDINATES: N40340 W48575 (center)

WASTE TYPES AND AMOUNTS: The site received the liquid waste from the 203-A Building enclosure sumps and the heating coil condensate from the P1 through P4 UNH tanks. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit contains a 4-in. SST 304 perforated pipe, 17 ft long, extending horizontally 4 ft below grade. The excavation has a 20-ft diameter at grade and a 10-ft bottom diameter, with a truncated cone shape. The excavation has ~9 ft (1,100 cu ft) of gravel fill and has been backfilled.

CLEANUP ACTIONS: In 1981, the center of the unit was excavated and removed for burial for installation of a PUREX security system. When the site was covered, no posting or ID was placed. A riser was hit by a vehicle, broke off, and became lost -- (Environmental Surveillance & Control Group).

UNIT NAME: 216-A-32
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1959
END DATE: 1972

COORDINATES: N40148 W47811, N40212 W47782 (centerline)

WASTE TYPES AND AMOUNTS: The site received the 202-A crane maintenance facility floor, sink, and shower drainage. The site contains less than 1 Ci total beta activity.

SITE DESCRIPTION: The unit contains 77.5 ft of 6-in. perforated V.C.P. placed horizontally, 5 ft below grade. The excavation has 5 ft (6,000 cu ft) of gravel fill and has been backfilled. The side slope is 1:1.5.

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UNIT NAME: 216-A-33
UNIT TYPE: French Drain
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: July 1964

COORDINATES: N39617 W48310 (center)

WASTE TYPES AND AMOUNTS: The site received the bearing coolant waste from the 291-A-1 Stack electrical exhaust fans. The waste is low salt and neutral/basic and contains less than 1 Ci of total beta activity.

UNIT NAME: 216-A-35
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1963
END DATE: January 1966

COORDINATES: N39800 W49003 (center)

WASTE TYPES AND AMOUNTS: The site received the seal cooling water from the air sampler vacuum pumps in the 202-A Building. The waste is low salt and neutral/basic and contains less than 1 Ci of total beta activity.

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UNIT NAME: 216-A-40
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1968
END DATE: May 1979

COORDINATES: N41519 W48209, N41868 W48404 (centerline)

WASTE TYPES AND AMOUNTS: The site received the diverted cooling water and steam condensate from the 244-AR Vault.

SITE DESCRIPTION: The unit is open, lined and compartmented into 3 sections. A 12-in. SCH 40 pipe runs horizontally, 74 ft through the south end of the unit, 12 ft below grade. A 5-ft pipe section is connected perpendicularly to the 12-in. pipe, forming a T. The side slope is 1:1.5.

KNOWN RELEASES: UPR-200-E-59

UNIT NAME: 216-A-41
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1968
END DATE: 1974

COORDINATES: N41420 W48082 (center)

WASTE TYPES AND AMOUNTS: The site received the 296-A-13 Stack drainage. The waste is potentially slightly acidic and contains less than 1 Ci total beta activity.

SITE DESCRIPTION: The site contains six 8-in. by 8-in. by 16-in. bond beam concrete blocks placed end to end to form the dispersion structure, 4 ft below grade. The excavation has 2 ft (290 cu ft) of gravel fill, and the site has been backfilled. The side slope is 1:1.

9212097114

UNIT NAME: 218-E-1
UNIT TYPE: Burial Ground
WASTE CATEGORY: Pre-1970 TRU/Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1945
END DATE: 1953

COORDINATES: N39821 W49847, N39817 W49494, N39532 W49850, N39526 W49494

WASTE TYPES AND AMOUNTS: This unit received mixed MFP/TRU dry waste.

SITE DESCRIPTION: The unit consists of fifteen 200-ft-long trenches running north and south, ranging from 16 to 20 ft wide. All sunken trenches in the unit have been filled to ground level with cinders from 200 East Power Plant and then covered with coarse gravel. The site is backfilled.

KNOWN RELEASES: UPR-200-E-53.

UNIT NAME: 218-E-13
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
OCCURRENCE DATE: August 1966

COORDINATES: N40180 W49100 (center of pit)

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

SITE DESCRIPTION: This site was unplanned, ~40 ft by 46 ft, covering an area of 170 sq m.

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UNIT NAME: 241-A-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1956

COORDINATES: N39745 W48714

WASTE TYPES AND AMOUNTS: The unit transports solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

KNOWN RELEASES: UN-200-E-26, UN-200-E-65.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. Multiple transfer pipelines connect each of these facilities with processing plants and storage tanks.

UNIT NAME: 241-A-302A
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1956

COORDINATES: N39750 W48300

WASTE TYPES AND AMOUNTS: This unit is used for transfer of waste solutions from processing and decontamination operations. Volumes are variable according to specific plant operation. It contains 3,605 gal of waste.

RELEASE POTENTIAL: It is designed to contain leaks from transfers and drainage from operations within the unit.

9212097116

UNIT NAME: 2607-E6
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1954

COORDINATES: N41050 W49300

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 43.5 cu m/d.

SITE DESCRIPTION: This unit includes a drain field.

UNIT NAME: 2607-EA
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1976

COORDINATES: N41225 W48400

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.06 cu m/d.

SITE DESCRIPTION: This unit includes a drain field.

UNIT NAME: UN-200-E-10
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 23, 1957

COORDINATES: N41000 W48000

KNOWN RELEASES: PUREX tube bundles in transit for burial provide some spotty ground contamination.

CLEANUP ACTIONS: Extensive decontamination was required.

UNIT NAME: UN-200-E-11
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1957

COORDINATES: N40680 W48100, N45200 W56800

WASTE TYPES AND AMOUNTS: Fission products.

KNOWN RELEASES: Contamination spots were found along the railroad track.
Specific release details are unknown.

CLEANUP ACTIONS: Most of the contamination was removed. The tracks were marked
with stakes and radiation zone signs on either side of the tracks.

UNIT NAME: UN-200-E-12
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 23, 1957

COORDINATES: N41200 W48200

WASTE TYPES AND AMOUNTS: Beta/gamma with readings from 40 to 1,700 mR/h.

KNOWN RELEASES: Contaminated liquid dripped from a burial box in transit to the
burial ground.

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UNIT NAME: UN-200-E-15
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: January 21, 1959

COORDINATES: N39558 W48150

WASTE TYPES AND AMOUNTS: Beta/gamma with readings up to 8 R/h.

KNOWN RELEASES: The 216-A-4 Crib became plugged during the jetting of the 216-A-2 Catch Tank, causing ground contamination.

UNIT NAME: UN-200-E-19
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1959

COORDINATES: N39750 W47340

WASTE TYPES AND AMOUNTS: Low-level fission products.

KNOWN RELEASES: A drip in the vent pipe bonnet at the A-6 Proportional Sample Pit contaminated the ground near the 202-A Building.

CLEANUP ACTIONS: The area is marked with stake, chain, and radiation zone signs.

UNIT NAME: UN-200-E-20
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 20, 1959

COORDINATES: N41000 W48000

WASTE TYPES AND AMOUNTS: Readings were to 3 R/h at 18 in.

KNOWN RELEASES: PUREX tube bundles in transit for burial provided some spotty ground contamination.

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UNIT NAME: UN-200-E-26
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 30, 1960

COORDINATES: N39750 W48200

WASTE TYPES AND AMOUNTS: Beta/gamma with readings from 1 to 3 mR/h near the diversion box and just outside the exclusion fence. General contamination was up to 3,000 ct/min.

KNOWN RELEASES: Leakage from the 241-A-151 Diversion Box caused an operator to stop transfer, but the process tank emptied and steam blew out of the jumper connection.

UNIT NAME: UN-200-E-28
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 21, 1961

COORDINATES: N39800 W48100

WASTE TYPES AND AMOUNTS: Fission products.

KNOWN RELEASES: A process vessel steam coil failed, causing ground contamination.

UNIT NAME: UN-200-E-31
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 7, 1961

COORDINATES: N39700 W48150

WASTE TYPES AND AMOUNTS: Beta/gamma with readings from 40,000 to 100,000 ct/min in the vicinity of PUREX. Readings outside of the limited area fence were an order of magnitude lower and decreased to 1,000 ct/min.

KNOWN RELEASES: Leakage from the 241-A-151 Diversion Box.

UNIT NAME: UN-200-E-33
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 20, 1964

COORDINATES: N41000 W48000

KNOWN RELEASES: A leaking tube bundle burial box in transit to the burial ground contaminated a portion of the railroad right-of-way and area adjacent to the 216-A-24 Crib.

CLEANUP ACTIONS: The site was surface stabilized in 1981.

UNIT NAME: UN-200-E-42
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 6, 1972

COORDINATES: N40800 W48100

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 300 to 3,000 ct/min.

KNOWN RELEASES: Surveys revealed contamination thought to be a result of pressurization of a 244-AR Diverter Tank, which was inadvertently left on.

CLEANUP ACTIONS: The area was cleaned.

9 2 1 2 1 9 7 1 1 2 2

UNIT NAME: UN-200-E-49
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: February 7, 1975

COORDINATES: N41625 W48050

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 100,000 ct/min.

KNOWN RELEASES: A thermocouple well being transferred to the burial ground from the 241-AY Tank Farm contaminated a section of the road. Contamination was confined to the snow cover and did not reach the ground surface.

CLEANUP ACTIONS: The contaminated sections of road, immediately northwest of the 241-AY Tank Farm and northeast of the 241-C Tank Farm, were barricaded and cleaned up.

UNIT NAME: UN-200-E-58
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 4, 1980

COORDINATES: N39775 W49475

WASTE TYPES AND AMOUNTS: Beta/gamma with readings to 100,000 ct/min.

KNOWN RELEASES: Contaminated tumbleweeds were detected along the roadway near the 218-E-1 Dry Waste Burial Ground.

CLEANUP ACTIONS: The roadway was cleaned up.

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UNIT NAME: UN-200-E-60
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 3, 1981

COORDINATES: N40650 W48500

WASTE TYPES AND AMOUNTS: Radioactive contamination with beta/gamma readings from 200 to 500 ct/min.

KNOWN RELEASES: Contaminated dirt was spilled from an overfilled dump truck en route to the burial grounds.

CLEANUP ACTIONS: The roadway was decontaminated to background radiation levels.

RELEASE POTENTIAL: There is no potential for further release from this spill site; only background levels of radiation remain.

UNIT NAME: UN-200-E-65
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 1, 1982

COORDINATES: N39725 W48200

WASTE TYPES AND AMOUNTS: The contamination consists of beta/gamma, with spot readings from 600 to 5,000 ct/min.

KNOWN RELEASES: The wind spread contamination from the 241-A-151 Diversion Box.

CLEANUP ACTIONS: The contaminated ground was kept wet until it could be decontaminated to background radiation levels and stabilized. The diversion box cover blocks were sprayed with Turco Fabri-film, which is used to physically fix contamination to a solid surface.

RELEASE POTENTIAL: The potential for release is very low; contamination is physically fixed in place.

UNIT NAME: UN-200-E-88
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: Yes
OCCURRENCE DATE: September 11, 1980

COORDINATES: N41500 W49800, N40200 W49400

KNOWN RELEASES: This large radiation zone associated with the TC-4 railroad spur has been incorrectly designated as an unplanned release site. The original perimeter of the zone was located where gamma dose rates from radioactive equipment parked on the railroad spur would be less than 1 mR/h. The site in question was properly known as a Regulated Equipment Storage Area.

CLEANUP ACTIONS: The site was stabilized, but recontamination has occurred.

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UNIT NAME: UN-200-E-96
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: Yes
OCCURRENCE DATE: September 1980

COORDINATES: N39650 W48150

KNOWN RELEASES: This site originated from the residue contamination from the PUREX 291-A Stack and diversion box work during the operational years of the PUREX Plant.

CLEANUP ACTIONS: Surface contamination, debris, and vegetation were removed from the south side of 202-A (PUREX) to the southern fence during September 1980. The area (~2.5 ac) was covered with 4 to 6 in. of 5/8-in. crushed gravel. The surface contamination posting has been removed, but this area has been recontaminated following the restarting of PUREX.

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UNIT NAME: UN-200-E-114
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 12, 1974

COORDINATES: N39930 W48470

WASTE TYPES AND AMOUNTS: Readings of 8,000 ct/min beta and 1,000 ct/min alpha were detected on an employee.

KNOWN RELEASES: An employee had been working in an area where contamination was found.

9 2 1 2 1 9 7 1 1 2 6

UNIT NAME: UN-200-E-142
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Hazardous Waste

SWMU: No
OCCURRENCE DATE: November 17, 1986

COORDINATES: N39850 W47740

WASTE TYPES AND AMOUNTS: The release consisted of diesel fuel.

KNOWN RELEASES: The tank of a diesel-fueled compressor overflowed during filling.

Other Waste Units Located Within the Operable Unit Area

202-A HWSA	Staging Area
202-A Neutralization Unit	Neutralization Unit
205-A Silica Gel Facility	Test Treatment or Support Facility
211-A Neutralization Unit	Neutralization Unit
PUREX Tank E-F11	Storage Tank
PUREX Tank E5	Neutralization Tank
PUREX Tank F15	Neutralization Tank
PUREX Tank F16	Neutralization Tank
PUREX Tank F18	Neutralization Tank
PUREX Tank G7	Neutralization Tank
PUREX Tank U3	Neutralization Tank
PUREX Tank U4	Neutralization Tank
PUREX Waste Piles	Storage Facility

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UNIT NAME: 202-A HWSA
UNIT TYPE: Staging Area
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1986 only

COORDINATES: N39810 W48600

WASTE TYPES AND AMOUNTS: Typical wastes contained in staging over a 1-yr period include ~1,000 kg of flammable waste oils, 1,900 kg of combustible waste oils, and 1,600 kg of wastes unidentified prior to receipt of analysis.

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UNIT NAME: 202-A Neutralization Unit
UNIT TYPE: Neutralization Unit
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: July 1986

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: Process condensate, nominal flow 72,000 gal/d, is neutralized in line from a pH of between 1 and 2 to a pH of ~4 by addition of potassium hydroxide. This stream then passes through a 7,000-gal underground tank containing 30 tons of calcium carbonate rock (installed January 1987) for neutralization to a final pH of between 6 and 7. It is then discharged to the 216-A-45 Crib.

KNOWN RELEASES: On 4/2/87, 6,300 lb of corrosive (pH < 2.0) solution containing nitric acid was discharged to the 216-A-45 Crib.

RELEASE POTENTIAL: Procedural controls will be implemented to provide for automatic control of system flows and pH.

UNIT NAME: 205-A Silica Gel Facility
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1956
END DATE: 1976

COORDINATES: N39975 W48250

WASTE TYPES AND AMOUNTS: The unit contains silica gel and process solutions. The amount of radionuclides present is not known. There is less than 2,000 ct/min smearable beta/gamma; 5 mR/h nonpenetrating, 1 mrem/h penetrating and detectable alpha. The tanks are assumed to contain silica gel and may contain either process or flush solutions.

SITE DESCRIPTION: The unit is 8 ft high, constructed of transite, with nine tanks of various sizes inside the facility.

RELEASE POTENTIAL: The potential for release of contamination is low.

UNIT NAME: 211-A Neutralization Unit
UNIT TYPE: Neutralization Unit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Active

COORDINATES: N39950 W48800

WASTE TYPES AND AMOUNTS: Within the water demineralizer columns during regeneration, 700 lb/yr of 9% sulfuric acid is combined with 600 lb/yr of sodium hydroxide.

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UNIT NAME: PUREX Tank E-F11
UNIT TYPE: Storage Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: The unit contains ammoniacal RMW which are processed with NaOH and NaNO₃. Prior to 9/87, these wastes were sent to the 216-A-36B Crib. Currently, they go to Tank G7 for neutralization.

SITE DESCRIPTION: The unit has a 2,600 gal capacity.

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UNIT NAME: PUREX Tank E5
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

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WASTE TYPES AND AMOUNTS: The unit contains: 1) decladding wastes; 2) metathesis wastes; or 3) miscellaneous wastes including flushes with similar chemical makeups. Wastes are neutralized with NaNO₃ and KOH or NaOH before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 5,000 gal capacity.

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UNIT NAME: PUREX Tank F15
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: The unit contains high-level acid wastes which are neutralized with sugar, NaOH, and NaNO₂ before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 5,000 gal capacity.

UNIT NAME: PUREX Tank F16
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: The unit contains high-level acid wastes which are neutralized with sugar, NaOH, and NaNO₂ before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 5,000 gal capacity.

UNIT NAME: PUREX Tank F18
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: The unit contains miscellaneous wastes collected from all sections of the plant. The dangerous wastes consist mainly of HNO₃. The wastes are neutralized with NaOH and NaNO₂ to a pH greater than 12.5 before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 5,000 gal capacity.

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UNIT NAME: PUREX Tank G7
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: The unit receives ammonia distillate from Tank E-F11 and is neutralized with NaOH and NaNO₂ before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 14,000 gal capacity.

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UNIT NAME: PUREX Tank U3
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39950 W48070

WASTE TYPES AND AMOUNTS: The unit contains miscellaneous wastes collected from all sections of the plant. The dangerous wastes consist mainly of HNO₃. The wastes are neutralized with NaOH and NaNO₂ to pH of greater than 12.5 before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 8,000 gal capacity.

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UNIT NAME: PUREX Tank U4
UNIT TYPE: Neutralization Tank
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39950 W48070

WASTE TYPES AND AMOUNTS: The unit contains miscellaneous wastes collected from all sections of the plant. The dangerous wastes consist mainly of HNO₃. The wastes are neutralized with NaOH and NaNO₂ to pH of greater than 12.5 before going to double-shell underground storage tanks.

SITE DESCRIPTION: The unit has a 8,000 gal capacity.

UNIT NAME: PUREX Waste Piles
UNIT TYPE: Storage Facility
WASTE CATEGORY: Mixed Waste

TSD: TS-2-6
UNIT STATUS: Active
START DATE: January 15, 1956

COORDINATES: N39860 W48320

WASTE TYPES AND AMOUNTS: Radioactive process jumpers with lead counterweights, equipment containing lead, and lead cut from the jumpers. Wastes are considered regulated due to EP toxicity and toxicity.

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Waste Units Assigned to this Operable Unit

216-A-2	Crib
216-A-4	Crib
216-A-5	Crib
216-A-10	Crib
216-A-15	French Drain
216-A-21	Crib
216-A-27	Crib
216-A-31	Crib
216-A-36A	Crib
216-A-36B	Crib
216-A-38-1	Crib
216-A-45	Crib
299-E24-111	Injection Well
UN-200-E-13	Unplanned Release
UN-200-E-22	Unplanned Release
UN-200-E-25	Unplanned Release
UN-200-E-39	Unplanned Release
UN-200-E-40	Unplanned Release
UN-200-E-97	Unplanned Release
UN-200-E-117	Unplanned Release

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UNIT NAME: 216-A-2
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: January 1963

COORDINATES: N39515 W48278 (center)

WASTE TYPES AND AMOUNTS: The site received organic wastes from the 202-A Building. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit consists of 6-in. perforated V.C.P. lines. Two 20-ft lengths form a cross pattern horizontally, 21 ft below grade. It has ~6 ft (5,000 cu ft) of coarse rock and is backfilled over. The side slope from grade to 21 ft is 1:1.5 and from 21 ft to 27 ft, 2:1.

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UNIT NAME: 216-A-4
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1955
END DATE: December 1958

COORDINATES: N39515 W48158 (center)

WASTE TYPES AND AMOUNTS: The site received the laboratory cell drainage from the 202-A Building and the 291-A-1 Stack drainage. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit consists of two 20-ft lengths of 6-in. perforated V.C.P., forming a cross pattern horizontally, 18 ft below grade. The excavation has 8 ft (10,000 cu ft) of coarse rock fill and has been backfilled. The side slope from the surface to 18 ft deep is 1:1.5 and from 18 ft to the site bottom, 1:2.

KNOWN RELEASES: In December 1958, the unit plugged and flooded an area between the unit and the 291-A Stack, contaminating the ground surface.

CLEANUP ACTIONS: The contaminated soil was removed to a trench along the south boundary of the unit and covered with a foot of soil.

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UNIT NAME: 216-A-5
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1955
END DATE: October 1966

COORDINATES: N39397 W48713 (center)

WASTE TYPES AND AMOUNTS: Until 11/61, the site received the process condensate from the 202-A Building. From 11/61 to 10/66, the site was active but received no waste (backup for the 216-A-10 Crib). In 10/66, the site received the process condensate from the 202-A Building. The waste is acidic.

SITE DESCRIPTION: The unit consists of an 8-in. V.C.P. placed horizontally 24 ft below grade and two 35-ft lengths of 8-in. V.C.P. placed perpendicularly to the first pipe, forming an H pattern. The site is backfilled over by ~8 ft (21,000 cu ft) of coarse rock fill. The side slope from the surface to 24 ft deep is 1:1.5 and from 24 ft to the bottom, 2:1.

CLEANUP ACTIONS: In 11/83, the site was stabilized when PUREX exclusion area fences were put up.

UNIT NAME: 216-A-10
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

TSD: D-2-2
UNIT STATUS: Inactive
START DATE: 1956
END DATE: March 1987

COORDINATES: N39090 W48952, N39370 W48952 (centerline)

WASTE TYPES AND AMOUNTS: During 1956, the site was used only for testing purposes using nonradioactive water. From 1956 to November 1961, the site was inactive. From November 1961 to January 1978, the site received process condensate from the 202-A Building. From January 1978 to October 1981, the site was again inactive. From October 1981 to 1986, the site received the process condensate from the 202-A Building.

SITE DESCRIPTION: The unit consists of an 8-in. SST pipe placed horizontally 30 ft below grade, 27 ft east of the centerline. The site has a wedge-shaped cross section and a side slope of 1:1.5. The excavation has 15 ft (414,000 cu ft) of rock fill, backfilled over.

UNIT NAME: 216-A-15
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: December 1955
END DATE: 1972

COORDINATES: N39516 W48656 (center)

WASTE TYPES AND AMOUNTS: The site received the drainage from the 216-A-10 Process Condensate Sampler Pit. The waste is acidic. The site contains less than 50 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of two lengths of bell-end, reinforced concrete sewer pipes placed vertically end to end. It is filled with 6 ft of stone and has a 1/2-in. carbon steel cover. Assume a 1:1 side slope.

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UNIT NAME: 216-A-21
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: October 1957
END DATE: June 1965

COORDINATES: N39300 W48160 (center)

WASTE TYPES AND AMOUNTS: Until 6/58, the site received sump waste from 293-A Building. From 6/58 to 12/58, the site was inactive. From 12/58 to 6/65, the site received the above effluent, laboratory cell drainage from the 202-A Building, and the 291-A-1 Stack drainage. The waste is low salt and neutral/basic.

SITE DESCRIPTION: A new 4-in. SST distribution line runs horizontally through the length of the site, 7 ft below grade. Branching horizontally from this distribution line are four 4-ft sections of 4-in. tubing. Branching vertically at the same locations are four 8-ft sections of 4-in. SCH 40 perforated pipe running to the bottom of the site. The excavation is V-shaped in cross-section with a side slope of 1:1.5. The excavation has ~6 ft (2,700 cu ft) of gravel fill and is backfilled over.

UNIT NAME: 216-A-27
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: June 1965
END DATE: July 1970

COORDINATES: N39100 W48118, N39100 W48318 (centerline)

WASTE TYPES AND AMOUNTS: The site received the sump waste from the 293-A Building, the lab cell drainage from the 202-A Building, and the 291-A-1 Stack drainage. The waste is low salt and neutral/basic.

SITE DESCRIPTION: A 6-in. SST perforated pipe is placed horizontally the length of the unit, ~10 ft below grade. There is 6 ft (24,000 cu ft) of gravel fill in the excavation bottom, and the site is backfilled over. The side slope is 1:1.5.

UNIT NAME: 216-A-31
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: July 1964
END DATE: November 1966

COORDINATES: N39370 W48290, N39370 W48360 (centerline)

WASTE TYPES AND AMOUNTS: The site received organic waste from 202-A Building. The waste is low salt and neutral/basic. Records show that 8,070 gal of organics have been discharged to the unit since startup.

SITE DESCRIPTION: The unit consists of a 3-in. SCH 10 SST perforated pipe placed horizontally 21 ft below grade. The excavation has 6 ft (9,000 cu ft) of gravel fill and has been backfilled. The side slope is 1:1.5.

UNIT NAME: 216-A-36A
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1965
END DATE: March 1966

COORDINATES: N39000 W48525, N39100 W48525 (centerline)

WASTE TYPES AND AMOUNTS: The site received the ammonia scrubber waste from the 202-A Building. The waste is low salt and neutral/basic.

SITE DESCRIPTION: A 6-in. M-8 perforated pipe is placed horizontally 21 ft below grade. The excavation has 2 ft (4,500 cu ft) of gravel fill, and the site has been backfilled. The side slope is 1:1.5.

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UNIT NAME: 216-A-36B
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

TSD: D-2-4
UNIT STATUS: Inactive
START DATE: March 1966
END DATE: September 6, 1987

COORDINATES: N38500 W48525, N39000 W48525 (centerline)

WASTE TYPES AND AMOUNTS: Until 10/72, the site received the ammonia scrubber waste from the 202-A Building (PUREX). The site was retired in 10/72. In 11/82, the site was reactivated to receive the above wastes when PUREX operations restarted. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit is a gravel structure with a 6-in. M-8 perforated pipe placed horizontally, 23 ft below grade. The excavation has 3 ft (22,000 cu ft) of gravel fill, and the site has been backfilled. The side slope is 1:1.5.

UNIT NAME: 216-A-38-1
UNIT TYPE: Crib
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N39250 W49350

SITE DESCRIPTION: A 6-in. perforated steel pipe narrowing to 4 in. perforated piping is placed horizontally, 33 ft below grade. There is 5 ft of gravel (50,000 cu ft) in the excavation, backfilled over. The side slope is 1:1.

CLEANUP ACTIONS: The site has been stabilized due to cross-contamination from surrounding sites.

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UNIT NAME: 216-A-45
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: March 4, 1987

COORDINATES: N38310 W49020 (head), N38310 W49345 (end)

WASTE TYPES AND AMOUNTS: The unit receives process condensate from the 202-A Building (PUREX).

SITE DESCRIPTION: The unit has an associated drain field consisting of five 4-in.-diameter perforated, fiberglass-reinforced pipes evenly spaced across the width. At the bottom is 5.5 ft of clean rock, 3 in. to 5 in. in diameter. A layered cover consisting of a 6-in. layer of 3- to 5-in.-diameter clean rock, a 6-in. layer of 3/4-in. gravel, a sheet of 10-mil polyethylene, and a 4-in. layer of sand are placed over the unit.

UNIT NAME: 299-E24-111
UNIT TYPE: Injection Well
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 22, 1980
END DATE: February 2, 1981

COORDINATES: N39161 W49425

WASTE TYPES AND AMOUNTS: Eleven 1,000-gal injections of uniform solutions of calcium chloride, calcium nitrate and selected tracers (Cg-134 and Sr-85).

SITE DESCRIPTION: The unit consists of a 15 ft 1-in. pipe inside 15 ft of NX casing, welded together at the lower end. This assembly is cemented inside a 15-ft-deep, 6-in.-diameter schedule 40 steel well.

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UNIT NAME: UN-200-E-13
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 1958

COORDINATES: N39520 W48150

WASTE TYPES AND AMOUNTS: Not identified in reference.

KNOWN RELEASES: The 216-A-4 Crib became plugged and flooded an area between the crib and the PUREX stack.

CLEANUP ACTIONS: The contaminated soil was removed to a trench along the south boundary of the 216-A-4 Crib and covered with a foot of soil.

UNIT NAME: UN-200-E-22
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1959

COORDINATES: N39250 W48500

WASTE TYPES AND AMOUNTS: Mixed fission products.

KNOWN RELEASES: General contamination has built up around the 291-A Stack. The heaviest concentrations are northwest and southeast of the stack within ~300 ft.

CLEANUP ACTIONS: The area was staked and chained off with radiation zone signs.

UNIT NAME: UN-200-E-25
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 5, 1960

COORDINATES: N39515 W48700

WASTE TYPES AND AMOUNTS: Beta/gamma with readings to 100,000 ct/min.

KNOWN RELEASES: Leakage from the 241-A-151 Diversion Box contaminated an area southwest of PUREX.

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UNIT NAME: UN-200-E-39
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: February 6, 1968

COORDINATES: N38750 W48500

WASTE TYPES AND AMOUNTS: Pressurized ammonia scrubber waste containing fission products. The readings were 20 to 450 mR/h.

KNOWN RELEASES: Pressured ammonia scrubber waste was inadvertently released through the vent at the 216-A-36B Crib sampling shack.

071147

UNIT NAME: UN-200-E-40
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: August 5, 1968

COORDINATES: N38800 W48500

WASTE TYPES AND AMOUNTS: Beta/gamma with readings to a maximum of 150 mR/h.

KNOWN RELEASES: The vent line valve at the 216-A-36B Crib sampling shack was inadvertently left open and contaminated the blacktop outside the shack.

UNIT NAME: UN-200-E-97
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: September 1980

COORDINATES: N39400 W48175

KNOWN RELEASES: Ground contamination from an unknown source was detected south of PUREX near the railroad tunnel.

CLEANUP ACTIONS: Apparently, the surface contamination was removed and the zone eliminated when the double-exclusion fence was built around the 202-A Building. The area was released from zone posting and established as an unplanned release site in 9/80.

UNIT NAME: UN-200-E-117
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: April 20, 1972

COORDINATES: N38695 W48665

WASTE TYPES AND AMOUNTS: Up to 2,000 mR/h of Cs and Sr including 500 mR/h at 1 ft from the liquid.

KNOWN RELEASES: An excavation exposed liquid spurting up out of ground in the 200 East/PUREX Area.

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Other Waste Units Located Within the Operable Unit Area

218-E-14	Burial Ground
218-E-15	Burial Ground

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UNIT NAME: 218-E-14
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

TSD: S-2-1
UNIT STATUS: Inactive
START DATE: June 1960
END DATE: May 1964

COORDINATES: N39555 W48020, N39196 W48020

WASTE TYPES AND AMOUNTS: This site received extremely large, heavy or highly contaminated waste equipment stored on eight railroad flatcars.

SITE DESCRIPTION: Railroad tunnel, 22.5-ft-high, running north-south. The tunnel is constructed of 12-in.-thick concrete and covered with 8 ft of soil. The tunnel consists of 3 areas: a water-filled door, 24.5 ft high, 21.5 ft wide, 7 ft thick; a storage area; and a vent shaft. The tunnel is ventilated by an absolute filtered exhauster at the south end.

UNIT NAME: 218-E-15
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

TSD: S-2-1
UNIT STATUS: Active
START DATE: December 1967

COORDINATES: N39366 W47960, N37670 W47960

WASTE TYPES AND AMOUNTS: The tunnel contains extremely large, heavy or highly contaminated waste equipment stored on railroad flat cars. The tunnel has the capacity to hold 38 cars, but only 9 cars have been stored.

SITE DESCRIPTION: Railroad tunnel, 22 ft high, running north-south. The facility is shaped like a Quonsethut with clearance limits of 14 ft high and 19 ft wide. The tunnel is constructed of 12-in.-thick concrete and is covered with 8 ft of soil. The tunnel consists of 3 areas: a water-filled door, 24.5 ft high, 21.5 ft wide, and 7 ft thick; storage area; and a vent shaft. The tunnel is ventilated by an absolute filtered exhauster at the south end.

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Waste Units Assigned to this Operable Unit

216-A-39	Crib
216-C-8	French Drain
241-A-101	Single-Shell Tank
241-A-102	Single-Shell Tank
241-A-103	Single-Shell Tank
241-A-104	Single-Shell Tank
241-A-105	Single-Shell Tank
241-A-106	Single-Shell Tank
241-A-152	Diversion Box
241-A-153	Diversion Box
241-A-350	Catch Tank
241-A-417	Catch Tank
241-A-A	Diversion Box
241-A-B	Diversion Box
241-AR-151	Diversion Box
241-AX-101	Single-Shell Tank
241-AX-102	Single-Shell Tank
241-AX-103	Single-Shell Tank
241-AX-104	Single-Shell Tank
241-AX-151	Diversion Box
241-AX-152DS	Diversion Box
241-AX-155	Diversion Box
241-AX-501	Valve Pit
241-AX-A	Diversion Box
241-AX-B	Diversion Box
241-C-101	Single-Shell Tank
241-C-102	Single-Shell Tank
241-C-103	Single-Shell Tank
241-C-104	Single-Shell Tank
241-C-105	Single-Shell Tank
241-C-106	Single-Shell Tank
241-C-107	Single-Shell Tank
241-C-108	Single-Shell Tank
241-C-109	Single-Shell Tank
241-C-110	Single-Shell Tank
241-C-111	Single-Shell Tank
241-C-112	Single-Shell Tank
241-C-151	Diversion Box
241-C-152	Diversion Box
241-C-153	Diversion Box
241-C-201	Single-Shell Tank
241-C-202	Single-Shell Tank
241-C-203	Single-Shell Tank
241-C-204	Single-Shell Tank
241-C-252	Diversion Box
241-C-301C	Catch Tank
241-CR-151	Diversion Box
241-CR-152	Diversion Box
241-CR-153	Diversion Box

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200-P0-3 (Continued)

Waste Units Assigned to this Operable Unit

241-ER-153	Diversion Box
2607-ED	Septic Tank
2607-EG	Septic Tank
2607-EJ	Septic Tank
UN-200-E-16	Unplanned Release
UN-200-E-18	Unplanned Release
UN-200-E-27	Unplanned Release
UN-200-E-47	Unplanned Release
UN-200-E-48	Unplanned Release
UN-200-E-68	Unplanned Release
UN-200-E-72	Unplanned Release
UN-200-E-81	Unplanned Release
UN-200-E-82	Unplanned Release
UN-200-E-86	Unplanned Release
UN-200-E-91	Unplanned Release
UN-200-E-94	Unplanned Release
UN-200-E-99	Unplanned Release
UN-200-E-100	Unplanned Release
UN-200-E-107	Unplanned Release
UN-200-E-118	Unplanned Release

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UNIT NAME: 216-A-39
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: June 1966
END DATE: June 1966

COORDINATES: N41860 W47489, N41860 W47399, N41930 W47489, N41930 W47399

WASTE TYPES AND AMOUNTS: The site received the floor drainage from the 241-AX-801-B Building. The waste is low salt, neutral/basic.

SITE DESCRIPTION: A trench ~3 ft deep dug from the door of the 801 Building to the brow of the north hill, then over the hill to the flat ground below, where it extended eastward ~90 ft. A second trench was dug paralleling the first.

KNOWN RELEASES: A trench was dug and a hole was cut through the back side of the 801 Building, where a fire hose was inserted to wash the contamination into the trench.

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UNIT NAME: 216-C-8
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: June 1962
END DATE: June 1965

COORDINATES: N42625 W48168 (center)

WASTE TYPES AND AMOUNTS: The site received the ion exchange waste from the 271-CR Building. The waste volume is unknown. The site contains less than 10 Ci total beta.

SITE DESCRIPTION: The unit is composed of a 6-ft-diameter by 8-ft-long concrete culvert, placed vertically 4 ft below grade. The culvert is filled with gravel and rests in an 8-ft-diameter by 16-ft-deep excavation with a slope of 5.5:1. The excavation is partially filled with gravel and has been backfilled.

CLEANUP ACTIONS: The site was stabilized in 1991.

UNIT NAME: 241-A-101
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: January 24, 1956
END DATE: November 21, 1980

COORDINATES: N41205 W47804

WASTE TYPES AND AMOUNTS: PUREX carbonate wash waste; PUREX organic wash waste; PUREX high-level waste; B Plant high-level waste (Waste Fractionization); and supernatant containing B Plant high-level waste, PUREX high-level waste, double-shell slurry feed, and complexed and noncomplexed waste from 241-A, 241-AX, 241-BX, and 241-SX tank farms.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.25 ft high and has a capacity of 1M gal. The dome is located below grade for shielding, and the bottom of the tank is 50 ft below grade. This is a fourth-generation tank with an increased operating depth to 31 ft and a flat (instead of dished) bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-A-102
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: March 22, 1956
END DATE: November 21, 1980

COORDINATES: N41205 W47702

WASTE TYPES AND AMOUNTS: PUREX carbonate wash waste; PUREX high-level waste; B Plant high-level waste (Waste Fractionization); and supernatant containing PUREX high-level waste, B Plant high-level waste, PUREX sludge supernatant, evaporator waste, noncomplexed and complexed waste, and double-shell slurry feed from 241-A, -AX, -AY, -AZ, -BX, -C, and -SX tank farms and 244-AR Vault.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.25 ft high and has a capacity of 1M gal. The dome is located below grade for shielding, and the bottom of the tank is 50 ft below grade. This is a fourth-generation tank with an increased operating depth to 31 ft and a flat (instead of dished) bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-A-103
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: May 17, 1956
END DATE: August 14, 1980

COORDINATES: N41205 W47600

WASTE TYPES AND AMOUNTS: PUREX carbonate wash waste; PUREX organic wash waste; PUREX high-level waste; B Plant high-level waste (Waste Fractionization); Waste Fractionization ion exchange waste; and supernatant containing B Plant high-level waste, Waste Fractionization ion exchange waste, PUREX high-level waste, PUREX sludge supernatant, and double-shell slurry feed from the 241-A, -AX, -BY, and -C tanks and 244-AR and -CR vaults.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.25 ft high and has a capacity of 1M gal. The dome is located below grade for shielding, and the bottom of the tank is 50 ft below grade. This is a fourth-generation tank with an increased operating depth to 31 ft and a flat (instead of dished) bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-A-104
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1958
END DATE: 1975

COORDINATES: N41307 W47804

WASTE TYPES AND AMOUNTS: PUREX carbonate wash waste; PUREX organic wash waste; PUREX high-level waste; Waste Fractionization (B Plant) ion exchange waste; and supernatant containing PUREX sludge supernatant from the 241-A Tank Farm and 244-AR Vault.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.25 ft high and has a capacity of 1M gal. The dome is located below grade for shielding, and the bottom of the tank is 50 ft below grade. This is a fourth-generation tank with an increased operating depth to 31 ft and a flat (instead of dished) bottom.

KNOWN RELEASES: UPR-200-E-125.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-A-105
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1962
END DATE: 1971

COORDINATES: N41307 W47702

WASTE TYPES AND AMOUNTS: PUREX inorganic wash waste and supernatant containing PUREX high-level waste from the 241-A Tank Farm.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.25 ft high and has a capacity of 1M gal. The dome is located below grade for shielding, and the bottom of the tank is 50 ft below grade. This is a fourth-generation tank with an increased operating depth to 31 ft and a flat (instead of dished) bottom.

KNOWN RELEASES: UPR-200-E-126.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-A-106
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1957
END DATE: August 14, 1980

COORDINATES: N41307 W47600

WASTE TYPES AND AMOUNTS: PUREX organic and inorganic wash waste; PUREX carbonate wash waste; PUREX high-level waste; B Plant high-level waste; and supernatant containing PUREX high-level waste, B Plant high-level waste, and complexed concentrate from the 241-A Tank Farm, 244-AR Vault, and the B-302 tanks.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.25 ft high and has a capacity of 1M gal. The dome is located below grade for shielding, and the bottom of the tank is 50 ft below grade. This is a fourth-generation tank with an increased operating depth to 31 ft and a flat (instead of dished) bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-A-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1956
END DATE: May 1980

COORDINATES: N41220 W47405, N41280 W47405

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: Reinforced concrete box. The unit contains 3-in. PUREX style nozzles.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

UNIT NAME: 241-A-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1956
END DATE: July 1985

COORDINATES: N41268 W47857

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete box.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

UNIT NAME: 241-A-350
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1956

COORDINATES: N41266 W47568

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

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UNIT NAME: 241-A-417
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1956

COORDINATES: N41510 W47600

WASTE TYPES AND AMOUNTS: The unit collects condensate from the 241-A-401 Condenser House. It contains 31,860 gal of 702-A process condensate.

SITE DESCRIPTION: The unit is an above-ground concrete structure, 14 ft high.

UNIT NAME: 241-A-A
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1956

COORDINATES: N41380 W47700

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure with 1-ft-thick walls and floor.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

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UNIT NAME: 241-A-B
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1956

COORDINATES: N41380 W47700

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure with 1-ft-thick walls and floor.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or single-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AR-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1983

COORDINATES: N41350 W48006

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

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UNIT NAME: 241-AX-101
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1965
END DATE: November 12, 1980

COORDINATES: N41731 W47475

WASTE TYPES AND AMOUNTS: Fission product waste; PUREX organic wash waste; PUREX high-level and low-level waste; B Plant high-level waste (waste fractionization); and supernatant containing fission product waste, PUREX sludge supernatant, organic wash waste, and double-shell slurry feed from 241-A and -AX tanks.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.5 ft high and has a capacity of 1M gal. The dome is below grade for shielding, and the bottom is 52 ft below grade. This is a fifth-generation tank having a flat bottom, a 31-ft operating depth, and an additional grid of drain slots beneath the steel liner bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-AX-102
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1966
END DATE: September 8, 1980

COORDINATES: N41629 W47475

WASTE TYPES AND AMOUNTS: PUREX low-level and high-level waste; PUREX organic wash waste; B Plant high-level waste (Waste Fractionization); and supernatant containing PUREX high-level waste, complexant concentrate, B Plant high-level waste, and complexed waste from 241-A, -AX, and -C tanks, 244-AR Vault, and TK-417.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.5 ft high and has a capacity of 1M gal. The dome is below grade for shielding, and the bottom is 52 ft below grade. This is a fifth-generation tank having a flat bottom, a 31-ft operating depth, and an additional grid of drain slots beneath the steel liner bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-AX-103
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1965
END DATE: September 8, 1980

COORDINATES: N41731 W47565

WASTE TYPES AND AMOUNTS: PUREX low-level and high-level waste; PUREX organic and inorganic wash waste; B Plant low-level and high-level waste (Waste Fractionization); and supernatant containing PUREX high-level and sludge supernatant from 241-A, -AX, -AZ, and -C tanks, 244-AR Vault, and AX-152 Tank.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.5 ft high and has a capacity of 1M gal. The dome is below grade for shielding, and the bottom is 52 ft below grade. This is a fifth-generation tank having a flat bottom, a 31-ft operating depth, and an additional grid of drain slots beneath the steel liner bottom.

KNOWN RELEASES: UPR-200-E-115.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-AX-104
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1966
END DATE: 1976

COORDINATES: N41629 W47565

WASTE TYPES AND AMOUNTS: PUREX low-level and high-level waste; PUREX organic and inorganic wash waste; B Plant high-level waste (Waste Fractionization); and supernatant containing PUREX high-level and sludge supernatant waste from 241-A and -AX tanks and 244-AR-002 Tank.

SITE DESCRIPTION: The unit is carbon-steel lined, with a reinforced concrete shell, dome, and base, ~2 ft thick. The structure is 45.5 ft high, 75 ft in diameter, and has a capacity of 1M gal. The dome is below grade for shielding, and the bottom is 52 ft below grade. This is a fifth-generation tank having a flat bottom, a 31-ft operating depth, and an additional grid of drain slots beneath the steel liner bottom.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-AX-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Active

COORDINATES: N40930 W48060

WASTE TYPES AND AMOUNTS: The unit receives wastes from 202-A PUREX Plant.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure. There are four diverter tanks in individual cells and a pump pit. Each cell has a stainless steel liner on the floor that extends ~1 ft up the walls. The cells and pump pit are above and drain into the catch tank below.

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UNIT NAME: 241-AX-152DS
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1965

COORDINATES: N41680 W47656

WASTE TYPES AND AMOUNTS: This unit transports waste solutions from processing and decontamination operations. Volumes are variable according to specific plant operation.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure. There are two diverter tanks in a common cell with a stainless steel liner on the floor that extends about 1 ft up the walls. There is also a pump pit that does not have a stainless steel liner. The cell and pump pit drain to the catch tank below.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AX-155
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1983

COORDINATES: N41790 W47725

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AX-501
UNIT TYPE: Valve Pit
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active

COORDINATES: N41481 W47543

WASTE TYPES AND AMOUNTS: The unit receives and routes tank farm condensate.

SITE DESCRIPTION: The unit is a reinforced concrete structure.

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UNIT NAME: 241-AX-A
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1965

COORDINATES: N41600 W47627

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure with 1-ft-thick walls and floor.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AX-B
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1965

COORDINATES: N41569 W47627

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure with 1-ft-thick walls and floor.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

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UNIT NAME: 241-C-101
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: March 1946
END DATE: 1970

COORDINATES: N42719 W48327

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste, tributyl phosphate waste, and PUREX coating waste.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

KNOWN RELEASES: UPR-200-E-136.

CLEANUP ACTIONS: The unit is equipped with a P-10 saltwell system, and a program for removal of interstitial liquid has been completed. The last pumping in April 1979 yielded zero gallons.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-106
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 6/47 (1951)*
END DATE: 1979

COORDINATES: N42932 W48256

WASTE TYPES AND AMOUNTS: PUREX coating waste; B Plant low-level waste (waste fractionization); supernatant containing PUREX high-level waste, and tributyl phosphate waste from 241-A and -C tanks; and solids containing PUREX sludge supernatant from 241-A tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

* Conflicting Dates

UNIT NAME: 241-C-107
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: April 1946
END DATE: 1978

COORDINATES: N42861 W48469

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; Hot Semiworks waste; tributyl phosphate; PUREX coating waste; Hanford Laboratory Operations waste; and supernatant containing PUREX coating waste, PNL waste, N Reactor waste, laboratory waste, decontamination waste, waste fractionization ion exchange waste, and evaporator bottoms waste from 241-C and -BX tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: P-10 saltwell pumping to remove the interstitial liquid has been completed.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-C-104
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: October 1946
END DATE: 1980

COORDINATES: N42790 W48390

WASTE TYPES AND AMOUNTS: PUREX coating waste; bismuth phosphate metal waste; PUREX low-level and high-level waste; Thoria low-level and high-level waste; PUREX organic wash waste; and supernatant containing metal waste, PUREX organic wash waste, PUREX low-level and high-level waste, coating waste, complexed waste, PNL waste, N Reactor complexed waste, waste fractionization ion exchange waste, decontamination waste, B Plant low-level and high-level waste, evaporator bottoms; REDOX high-level waste, and tributyl phosphate waste from 241-A, -AX, -C, -BY, -TY, and -U tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-105
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 2/46 (1947)*
END DATE: 1979

COORDINATES: N42861 W48327

WASTE TYPES AND AMOUNTS: PUREX coating waste; tributyl phosphate waste; PUREX sludge supernatant; REDOX supernatant; and supernatant containing tributyl phosphate waste, coating waste, PUREX sludge supernatant, REDOX supernatant, PUREX high-level waste, REDOX high-level waste, noncomplexed waste, B Plant waste fractionization low-level and metal wastes from 241-A, -AX, -AY, -B, -C, and -TX tanks; and solids containing PUREX sludge supernatant, coating waste, and cesium feet from 241-AX and -A tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

* Conflicting Dates

UNIT NAME: 241-C-102
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: May 1946
END DATE: 1976

COORDINATES: N42790 W48256

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste; tributyl phosphate waste; PUREX coating waste; thoria high-level waste; PUREX organic wash waste; and supernatant containing organic wash wastes and coating wastes from 241-A, -AX, and -C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: P-10 saltwell pumping was completed in June 1978.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-103
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 8/46 (1953)*
END DATE: 1979

COORDINATES: N42681 W48185

WASTE TYPES AND AMOUNTS: PUREX coating waste; tributyl phosphate waste; and supernatant containing tributyl phosphate waste, coating waste, PUREX high-level waste, B Plant high-level waste, B Plant waste fractionization low-level waste, PUREX sludge supernatant, PUREX low-level waste, waste fractionization PUREX sludge, PUREX organic wash waste, laboratory waste, decontamination waste, REDOX ion exchange waste, REDOX high-level waste, noncomplexed waste, waste fractionization ion exchange waste, N Reactor waste, PNL waste, and evaporator bottoms from 241-A -B, -BX, and -C tank farms. This unit was used as the receiver for operating P-10 saltwell systems within the 241-C Tank Farm.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.
* Conflicting Dates

UNIT NAME: 241-C-108
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: September 1947
END DATE: 1976

COORDINATES: N42932 W48390

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; PUREX coating waste; tributyl phosphate waste; Hot Semiworks waste; and supernatant containing tributyl phosphate waste, coating waste, PUREX organic wash waste, fractionation ion exchange waste, PNL waste; N Reactor waste, laboratory waste, decontamination waste, and REDOX high-level waste from 241-C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: A P-10 saltwell pumping system was installed (2-15-76) to remove interstitial liquid and was completed in June of 1978. This unit was interim isolated on December 15, 1982, and interim stabilized in March of 1984.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-109
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 4/48 (1952)*
END DATE: 1976

COORDINATES: N43002 W48327

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; tributyl phosphate waste; Hot Semiworks waste, PUREX coating waste; and supernatant containing PUREX coating waste, Hot Semiworks waste, evaporator bottoms, and ion exchange waste from 241-C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: P-10 saltwell pumping to remove the interstitial liquid was completed in April 1979. This unit was interim isolated on December 15, 1982, and interim stabilized on November 29, 1983.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

* Conflicting Dates

UNIT NAME: 241-C-110
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: May 1946
END DATE: 1976

COORDINATES: N42932 W48540

WASTE TYPES AND AMOUNTS: Tributyl phosphate waste; bismuth phosphate first-cycle waste; and supernatant containing PUREX organic wash waste, ion exchange waste coating waste, evaporator bottoms, and REDOX ion exchange waste.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: P-10 saltwell pumping to remove the interstitial liquid was completed in March of 1979.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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9 2 1 1 7 2

UNIT NAME: 241-C-111
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: August 1946
END DATE: 1976

COORDINATES: N43002 W48469

WASTE TYPES AND AMOUNTS: Bismuth phosphate first-cycle waste; PUREX organic wash waste; tributyl phosphate waste; PUREX coating waste; evaporator bottoms; Hot Semiworks waste; and supernatant containing evaporator bottoms, coating waste, and tributyl phosphate waste from 241-B and -C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: P-10 saltwell pumping for the removal of interstitial liquid was completed in May 1978. This unit was interim isolated on December 15, 1982, and interim stabilized on March 9, 1984.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-112
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 11/46 (1952)*
END DATE: 1976

COORDINATES: N43075 W48390

WASTE TYPES AND AMOUNTS: Tributyl phosphate waste; PUREX coating waste; Hot Semiworks waste; and supernatant containing coating waste, tributyl phosphate waste, and ion exchange waste from 241-C tanks.

SITE DESCRIPTION: The unit is comprised of a carbon steel liner within a reinforced concrete shell. The capacity is 533,000 gal. The bottom is 37 ft below grade, and the dome is also below grade for shielding purposes. It was built to the original design, having a dished bottom and an operating depth of 17 ft.

CLEANUP ACTIONS: P-10 saltwell pumping for the removal of interstitial liquid was completed (3/79). This unit was interim stabilized in September 1990.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

* Conflicting Dates

UNIT NAME: 241-C-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N42750 W48750

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

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UNIT NAME: 241-C-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N42825 W48750

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

UNIT NAME: 241-C-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N42850 W48660

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

UNIT NAME: 241-C-201
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1977

COORDINATES: N43055 W48239

WASTE TYPES AND AMOUNTS: Wastes received: bismuth phosphate metal waste and Strontium Semiworks waste.

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell. The structure is 25 ft tall, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is also below grade for shielding purposes.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-C-202
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1977

COORDINATES: N43091 W48275

WASTE TYPES AND AMOUNTS: Bismuth phosphate metal waste, Strontium Semiworks waste, and supernatant containing bismuth phosphate metal waste from 241-C-201 Tank.

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell. The structure is 25 ft tall, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is also below grade for shielding purposes.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-203
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1976

COORDINATES: N43126 W48310

WASTE TYPES AND AMOUNTS: PUREX high-level waste.

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell. The structure is 25 ft tall, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is also below grade for shielding purposes.

KNOWN RELEASES: UPR-200-E-137.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

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UNIT NAME: 241-C-204
UNIT TYPE: Single-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1977

COORDINATES: N43161 W48346

WASTE TYPES AND AMOUNTS: PUREX high-level waste.

SITE DESCRIPTION: The unit is comprised of a steel liner within a concrete shell. The structure is 25 ft tall, with a capacity of 55,000 gal. The bottom is 37 ft below grade, and the top of the shell is also below grade for shielding purposes.

RELEASE POTENTIAL: This information is contained in DOE/EIS-0113.

UNIT NAME: 241-C-252
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N43175 W48425

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

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UNIT NAME: 241-C-301C
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N43150 W48400

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

CLEANUP ACTIONS: This unit was isolated in 1985.

UNIT NAME: 241-CR-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive

COORDINATES: N42650 W48475

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-CR-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N42675 W48500

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

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UNIT NAME: 241-CR-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-4
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 1985

COORDINATES: N42675 W48500

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

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UNIT NAME: 241-ER-153
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1945

COORDINATES: N41977 W48561

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 2607-ED
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40600 W47275

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.28 cu m/d.

SITE DESCRIPTION: The unit includes a drain field.

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UNIT NAME: 2607-EG
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1953

COORDINATES: N42600 W48250

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.17 cu m/d.

SITE DESCRIPTION: This unit includes a drain field.

UNIT NAME: 2607-EJ
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40550 W47550

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.32 cu m/d.

SITE DESCRIPTION: This unit includes a drain field.

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UNIT NAME: UN-200-E-16
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1959

COORDINATES: N42900 W48310

WASTE TYPES AND AMOUNTS: PUREX coating waste.

KNOWN RELEASES: The 241-C-105 to 241-C-108 overground transfer line broke and contaminated the soil northeast of the 241-C-105 tank pit.

CLEANUP ACTIONS: The contaminated pipe was buried in a trench near the 241-C fence. The original site was marked with chain and underground radiation zone signs.

UNIT NAME: UN-200-E-18
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1959

COORDINATES: N41320 W47550

WASTE TYPES AND AMOUNTS: Low-level fission products.

KNOWN RELEASES: Moisture dripping from a vent pipe bonnet at the A-8
Proportional Sample Pit contaminated the ground near the 241-A-271 Building.

CLEANUP ACTIONS: The area is marked with stakes, chains, and radiation zone
signs.

UNIT NAME: UN-200-E-27
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 1, 1960

COORDINATES: N42625 W48325

WASTE TYPES AND AMOUNTS: Beta/gamma with readings near the vault on the order of
50 to 100 mR/h. Readings outside the fence area were up to 40,000 ct/min.

KNOWN RELEASES: Near the 244-CR Vault winds provided some spotty ground
contamination beyond the area fence.

UNIT NAME: UN-200-E-47
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 15, 1974

COORDINATES: N41375 W47950

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 500 to 20,000 ct/min from the 241-A Tank Farm.

KNOWN RELEASES: Contaminated soil was detected in the 241-A Tank Farm.

CLEANUP ACTIONS: The contaminated soil was removed and the area released for normal service.

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UNIT NAME: UN-200-E-48
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 22, 1974

COORDINATES: N41300 W47875

WASTE TYPES AND AMOUNTS: Beta/gamma with readings of 1,000 to 2,000 ct/min.

KNOWN RELEASES: The 241-A-106 pump pit contaminated the 241-A Tank Farm parking lot.

CLEANUP ACTIONS: The parking area was cleaned and returned to normal operation by 6:45 p.m. the same day.

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UNIT NAME: UN-200-E-68
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: January 11, 1985

COORDINATES: N41350 W48075

WASTE TYPES AND AMOUNTS: The contamination consisted of beta/gamma, with readings of 2,000 ct/min and dose rates of 5 R/h on the diversion box.

KNOWN RELEASES: Wind-borne contamination spread from the 241-C-151 Diversion Box.

CLEANUP ACTIONS: The affected areas were either decontaminated to background radiation levels or covered for later decontamination. The 241-C-151 Diversion Box was opened, flushed, and sprayed with Turco Fabri-Film, which is used to physically fix contamination to a solid surface.

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UNIT NAME: UN-200-E-72
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: April 20, 1985

COORDINATES: N42625 W48225

WASTE TYPES AND AMOUNTS: The contamination consists of beta/gamma with readings to 7 R/h.

KNOWN RELEASES: Buried contaminated waste was excavated.

CLEANUP ACTIONS: The source of the contamination was stabilized with Turco Fabri-Film, a product used to physically fix contamination to a solid surface, and the area was chained off and posted as a surface contamination area.

RELEASE POTENTIAL: Low; the contamination is physically fixed in place.

UNIT NAME: UN-200-E-81
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: October 1969

COORDINATES: N42600 W48460

WASTE TYPES AND AMOUNTS: PUREX coating waste was lost to the soil, including 360 Ci of Sr-90 720 Ci of Cs-137, 360 Ci of Ce-144, 1,080 Ci of Zr-95/Nb, and 1,080 Ci Ru-103. This is a Transuranic-Fission product disposal site containing high salt and neutral/basic wastes.

KNOWN RELEASES: A puddle of contaminated liquid was discovered near the 241-CR-151 Diversion Box, the source determined as the underground transfer line from the 202-A Building to the 102-C waste storage tank via the diversion box.

CLEANUP ACTIONS: The contamination was covered with earth backfill and clean gravel.

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UNIT NAME: UN-200-E-82
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: December 19, 1969

COORDINATES: N42850 W48750

WASTE TYPES AND AMOUNTS: The leak consisted of waste containing 100 Ci of Cs-134, 11,300 Ci of Cs-137, 260 Ci of Ce-144, 260 Ci of Zr-95/Nb, and 130 Ci of Ru-106. This is a Transuranic-Fission product disposal site containing high salt and neutral/basic wastes.

KNOWN RELEASES: A leak was discovered near the 241-C-152 Diversion Box, the source determined as the feed line that runs from 241-C-105 Tank to the 221-B Building. The leak waste stream flowed through a surface area of ~1 sq ft northeastward, downgrade, until it pooled into an estimated 5-sq-ft area outside the tank farm fence line.

CLEANUP ACTIONS: The contaminated soil was covered with clean gravel. The site was cleaned up during a decontamination outage of the 241-C Tank Farm following the 241-C-151 release in 1985.

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UNIT NAME: UN-200-E-86
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 1971

COORDINATES: N42725 W48745

WASTE TYPES AND AMOUNTS: Waste from the process transfer line containing 25,000 Ci of Cs-137. This is a Transuranic Fission Product waste site containing high salt and neutral/basic waste.

KNOWN RELEASES: During a routine line monitoring near the southwest corner of 241-C Tank Farm, a radiation zone was detected in the vicinity of Line No. 812, which is used to transfer process waste from AR Vault to C Farm. At this location, the No. 812 line is 8 ft deep.

UNIT NAME: UN-200-E-91
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: Yes
OCCURRENCE DATE: September 1980

COORDINATES: N43200 W48050 (center)

KNOWN RELEASES: This condition resulted from the migration of low-level radioactivity from the neighboring 241-C Tank Farm. At one time, wastewater from the equipment decontamination station inside the tank farm seeped downhill to the affected site. Vapor emissions and windblown particulate matter from the contaminated surfaces of the tank farm contributed to the buildup of ground contamination at the site.

CLEANUP ACTIONS: Beginning January 26, 1981, the contaminated soil was removed from the area and placed in the excavation adjacent to the north side of the 216-A-24 Crib. This included the removal of soil from a strip ~30 ft wide inside the northeast perimeter fence of the 241-C Tank Farm, and the decontaminated area was seeded with a variety of drought-resistant grasses. It has been released from the status of an "Unplanned Release" site.

UNIT NAME: UN-200-E-94
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 1979

COORDINATES: N43850 W46450

WASTE TYPES AND AMOUNTS: Residue contamination to 300 ct/min activity was on the ground in the bottom of the gravel pit.

KNOWN RELEASES: Radiation Monitoring was informed on June 13, 1979, about 10:00 a.m., that moisture was being encountered in the excavation east of the 200 East Area perimeter fence adjacent to 216-A-24 Crib, where fill dirt was being obtained for the 241-AN Tank Farm. Follow-up surveys revealed beta contamination to a maximum of 8,000 ct/min in the moisture on the earthmoving equipment and in the newly hauled-in soil around the new 241-AN tanks.

CLEANUP ACTIONS: The contaminated earthmoving equipment was taken to the large gravel pit north of the B-3 Ditch diverter station, where it was decontaminated.

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UNIT NAME: UN-200-E-99
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: Yes
OCCURRENCE DATE: September 1980

COORDINATES: N42275 W48125

KNOWN RELEASES: A portion of the ground surface surrounding the 244-CR Vault became contaminated during the numerous piping changes associated with that facility.

CLEANUP ACTIONS: The site was decontaminated during the summer of 1981 and released from zone posting.

UNIT NAME: UN-200-E-100
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: 1986

COORDINATES: N42300 W48100

WASTE TYPES AND AMOUNTS: Radioactive contamination, amount unknown.

KNOWN RELEASES: Spill to ground.

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UNIT NAME: UN-200-E-107
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: November 26, 1952

COORDINATES: N42650 W48425

WASTE TYPES AND AMOUNTS: Tributyl phosphate waste from the 221-U Building. Contaminated liquid was discharged before the pump could be shut off. A maximum dose of 4.2 rep/h at the surface and 200 mR/h at a depth of 2 in. was observed for the ground contamination.

KNOWN RELEASES: Contamination spread to ground and equipment during a transfer pump installation in the 100-CR Tank in the 241-CR Tank Farm.

UNIT NAME: UN-200-E-118
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: April 20, 1957

COORDINATES: N43000 W48300

WASTE TYPES AND AMOUNTS: Readings to 3,000 ct/min were measured. The highest dose rate at the surface was estimated at 50 mR/h, with one particle deposited per square foot.

KNOWN RELEASES: The 107-C effluent tank released airborne contamination in the 200 East Area.

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Other Waste Units Located Within the Operable Unit Area

204-AR Waste Unloading Station	Test Treatment or Support Facility Building
241-A-431	Double-Shell Tank
241-AN-101	Double-Shell Tank
241-AN-102	Double-Shell Tank
241-AN-103	Double-Shell Tank
241-AN-104	Double-Shell Tank
241-AN-105	Double-Shell Tank
241-AN-106	Double-Shell Tank
241-AN-107	Double-Shell Tank
241-AN-A	Diversion Box
241-AN-B	Diversion Box
241-AP Valve Pit	Valve Pit
241-AP-101	Double-Shell Tank
241-AP-102	Double-Shell Tank
241-AP-103	Double-Shell Tank
241-AP-104	Double-Shell Tank
241-AP-105	Double-Shell Tank
241-AP-106	Double-Shell Tank
241-AP-107	Double-Shell Tank
241-AP-108	Double-Shell Tank
241-AW-101	Double-Shell Tank
241-AW-102	Double-Shell Tank
241-AW-103	Double-Shell Tank
241-AW-104	Double-Shell Tank
241-AW-105	Double-Shell Tank
241-AW-106	Double-Shell Tank
241-AW-A	Diversion Box
241-AW-B	Diversion Box
241-AY-101	Double-Shell Tank
241-AY-102	Double-Shell Tank
241-AY-151	Diversion Box
241-AY-152	Diversion Box
241-AZ-101	Double-Shell Tank
241-AZ-102	Double-Shell Tank
241-AZ-151DS	Diversion Box
241-AZ-152	Diversion Box
241-C-801	Test Treatment or Support Facility
242-A Evaporator	Evaporator
244-A Receiver Tank	Receiving Vault
244-AR Lift Station	Test Treatment or Support Facility
244-AR Vault	Receiving Vault
244-CR Vault	Receiving Vault
Grout Treatment Facility	Test Treatment or Support Facility
Grout Treatment Facility Landfill	Landfill

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UNIT NAME: 204-AR Waste Unloading Station
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

TSD: T-2-3
UNIT STATUS: Active
START DATE: February 2, 1982

COORDINATES: N41100 W48210

WASTE TYPES AND AMOUNTS: The unit receives wastes generated from decontamination and regeneration operations in the 100 Area; from recovery, fuels fabrication, and laboratory operations in the 300 Area; and from decontamination operations in the 400 Area. The waste is chemically adjusted in-line during pumpout to double-shell underground storage tanks to meet corrosion specifications. The unit's catch tank contains 520 gal of waste.

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UNIT NAME: 241-A-431
UNIT TYPE: Building
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1955
END DATE: 1969

COORDINATES: N41172 W47457

WASTE TYPES AND AMOUNTS: The unit contains radioactively contaminated equipment and concrete. Contamination levels are estimated at 6 Ci beta. It provided off-gas deentrainment for the 241-A Tank Farm and also received the 296-A-11 Stack drainage.

SITE DESCRIPTION: The unit is a concrete structure, 25 ft high, with the lower 16 ft below grade. The walls are 8 in. thick. The unit is divided into two sections. One section is 10 ft by 16 ft by 9 ft high and houses the ventilation equipment. The other section is 11 ft by 16 ft by 25 ft high and houses the deentrainment equipment.

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UNIT NAME: 241-AN-101
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42340 W47506

WASTE TYPES AND AMOUNTS: The unit has received 100/300 Area customer waste, salt well liquor, and dilute noncomplexed waste. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AN-102
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42340 W47613

WASTE TYPES AND AMOUNTS: This unit has received dilute and concentrated complexant waste. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; EDTA; HEDTA; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AN-103
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42340 W47720

WASTE TYPES AND AMOUNTS: The unit has received salt well liquor and dilute noncomplexed waste. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AN-104
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42447 W47506

WASTE TYPES AND AMOUNTS: The unit has received dilute noncomplexed waste and double-shell slurry (DSS) feed. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AN-105
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42447 W47613

WASTE TYPES AND AMOUNTS: The unit has received dilute noncomplexed waste and double-shell slurry (DSS) feed. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AN-106
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42447 W47720

WASTE TYPES AND AMOUNTS: This unit has received dilute and concentrated phosphate waste from 100-N Area. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AN-107
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: September 1981

COORDINATES: N42554 W47720

WASTE TYPES AND AMOUNTS: The unit has received dilute and concentrated complexant wastes. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; EDTA; HEDTA; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. The diameter is 75 ft (primary), 80 ft (secondary). It is 47 ft high, and has a capacity of 1M gal. The top of the dome was placed below grade for shielding. This type of tank has an operating depth of 30 ft. This tank has the unusual feature of 21 air lift circulators so that the tank can be used as a boiling waste tank if the need arises.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AN-A
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1981

COORDINATES: N42407 W47674

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AN-B
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1981

COORDINATES: N42378 W47678

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

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UNIT NAME: 241-AP Valve Pit
UNIT TYPE: Valve Pit
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1986

COORDINATES: N40484 W47210

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

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UNIT NAME: 241-AP-101
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: October 1986

COORDINATES: N40660 W47100

WASTE TYPES AND AMOUNTS: The unit receives PUREX ammonia scrubber feed waste. Initially waste transferred to this tank will be dilute noncomplexed customer waste. Prior to interim storage in this tank, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; ICP; and for the specific ions Al, OH, Cl, F, NO₃, NO₃, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit has an outer structure of reinforced concrete, lined with a secondary carbon steel liner extending along the concrete tank haunch and dome to inner tank haunch. The primary tank is carbon steel located within the secondary liner, separated by an annular space. It is 48 ft tall, placed on a 2-ft concrete foundation, with a 75-ft-diameter primary tank and an 80-ft-diameter secondary tank. The dome is below grade for shielding, and it has an operating depth of 35 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AP-102
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: October 1986

COORDINATES: N40666 W46968

WASTE TYPES AND AMOUNTS: The unit is the Grout Treatment Facility (GTF) feed tank. Initially, waste transferred to this unit will be dilute noncomplexed customer waste. Prior to interim storage in this unit, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; ICP; and for the specific ions Al, OH, Cl, F, NO₃, NO₃, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit has an outer structure of reinforced concrete, lined with a secondary carbon steel liner extending along the concrete tank haunch and dome to inner tank haunch. The primary tank is carbon steel located within the secondary liner, separated by an annular space. It is 48 ft tall, placed on a 2-ft concrete foundation, with a 75-ft-diameter primary tank and an 80-ft-diameter secondary tank. The dome is below grade for shielding, and it has an operating depth of 35 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AP-103
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: October 1986

COORDINATES: N40559 W47100

WASTE TYPES AND AMOUNTS: The unit is receiving PUREX ammonia scrubber feed (ASF). Initially, waste is transferred to this tank will be dilute noncomplexed waste. Prior to interim storage in this tank, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; ICP; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit has an outer structure of reinforced concrete, lined with a secondary carbon steel liner extending along the concrete tank haunch and dome to inner tank haunch. The primary tank is carbon steel located within the secondary liner, separated by an annular space. It is 48 ft tall, placed on a 2-ft concrete foundation, with a 75-ft-diameter primary tank and an 80-ft-diameter secondary tank. The dome is below grade for shielding, and it has an operating depth of 35 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AP-104
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: October 30, 1986

COORDINATES: N40559 W46968

WASTE TYPES AND AMOUNTS: The unit is designated as a receiver tank. Waste transferred to this unit is dilute noncomplexed waste. Prior to interim storage in this unit, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; ICP; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit has an outer structure of reinforced concrete, lined with a secondary carbon steel liner extending along the concrete tank haunch and dome to inner tank haunch. The primary tank is carbon steel located within the secondary liner, separated by an annular space. It is 48 ft tall, placed on a 2-ft concrete foundation, with a 75-ft-diameter primary tank and an 80-ft-diameter secondary tank. The dome is below grade for shielding, and it has an operating depth of 35 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AP-107
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: October 1986

COORDINATES: N40286 W47100

WASTE TYPES AND AMOUNTS: Prior to interim storage in this tank, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; ICP; and for the specific ions Al, OH, Cl, F, NO₂, NO₄, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit has an outer structure of reinforced concrete, lined with a secondary carbon steel liner extending along the concrete tank haunch and dome to inner tank haunch. The primary tank is carbon steel located within the secondary liner, separated by an annular space. It is 48 ft tall, placed on a 2-ft concrete foundation, with a 75-ft-diameter primary tank and an 80-ft-diameter secondary tank. The dome is below grade for shielding, and it has an operating depth of 35 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AW-101
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: July 31, 1980

COORDINATES: N40704 W47752

WASTE TYPES AND AMOUNTS: The unit has received double-shell slurry feed and dilute noncomplexed waste. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, a height of 47 ft, and a capacity of 1M gal. The top of the dome is below grade for shielding. This unit has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AW-102
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40704 W47645

WASTE TYPES AND AMOUNTS: The unit is designated as the 242-A Evaporator feed tank. Waste to be processed through the evaporator is staged to this unit for sampling and analysis. Parameters that are routinely tested for are visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, U, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, a height of 47 ft, and a capacity of 1M gal. The top of the dome is below grade for shielding. This unit has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AW-103
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40597 W47752

WASTE TYPES AND AMOUNTS: The unit has received PUREX decladding supernate and TRU sludge. Prior to evaporator processing, the supernate is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, a height of 47 ft, and a capacity of 1M gal. The top of the dome is below grade for shielding. This unit has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AW-104
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40597 W47645

WASTE TYPES AND AMOUNTS: The unit has received double-shell slurry feed and dilute noncomplexed waste. Prior to evaporator processing, the waste is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity; and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, a height of 47 ft, and a capacity of 1M gal. The top of the dome is below grade for shielding. This unit has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AW-105
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40490 W47752

WASTE TYPES AND AMOUNTS: The unit receives supernate and TRU PUREX decladding sludge. Prior to evaporator processing, the supernate is sampled and analyzed for parameters such as visual appearance; percent solids; exotherms; total organic carbon; gamma energy spectrum; pH; weight percent water; specific gravity and for the specific ions Al, OH, Cl, F, NO₂, NO₃, PO₄, SO₄, Na, Pu, and Am.

SITE DESCRIPTION: The unit is comprised of a heat-treated, stress-relieved primary steel liner and a nonstress-relieved outer steel liner, both inside the reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, a height of 47 ft, and a capacity of 1M gal. The top of the dome is below grade for shielding. This unit has an operating depth of 30 ft.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AW-A
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40652 W47713

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AW-B
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1980

COORDINATES: N40652 W47683

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AY-101
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1971

COORDINATES: N41734 W47836

WASTE TYPES AND AMOUNTS: The unit has received strontium- and cesium-depleted, neutralized, high-level waste from B Plant, dilute noncomplexed waste from single-shell tanks and is currently a dilute complexed waste receiver unit. Prior to evaporator processing, samples are taken and analyzed for parameters such as visual appearance; percent solids; exotherms or endotherms; total organic carbon; gamma energy spectrum; weight percent water; pH; specific gravity; viscosity; and for the specific ions Al, OH, Cl, CO₃, F, Na, NO₂, NO₃, Pm, PO₄, Pu, SO₄, Sr, Am, and Np. The unit received PUREX and B Plant high-level waste and supernatant consisting of complexed waste from A and AX tank farms.

SITE DESCRIPTION: The unit is composed of a heat-treated, stress-relieved primary steel liner and a nonstressed-relieved secondary steel liner, both inside a reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, is 47.5 ft high, and has a capacity of 1M gal. The dome is located below grade for shielding purposes.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AY-102
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1972

COORDINATES: N41627 W47836

WASTE TYPES AND AMOUNTS: The unit has received neutralized high-level waste and double-shell slurry feed and is currently a dilute noncomplexed waste receiver tank. Prior to evaporator processing, samples are taken and analyzed for parameters such as visual appearance; percent solids; exotherms or endotherms; total organic carbon; gamma energy spectrum; weight percent water; pH; specific gravity; viscosity; and for the specific ions Al, OH, Cl, CO₃, F, Na, NO₂, NO₃, Pm, PO₄, Pu, SO₄, Sr, Am, and Np. The unit received supernatant consisting of double-shell slurry feed and noncomplexed waste from A and BX tank farms.

SITE DESCRIPTION: The unit is composed of a heat-treated, stress-relieved primary steel liner and a nonstressed-relieved secondary steel liner, both inside a reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, is 47.5 ft high, and has a capacity of 1M gal. The dome is located below grade for shielding purposes.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AY-151
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active

COORDINATES: N41434 W47844 (N41600 W47710)*

SITE DESCRIPTION: This unit is a reinforced concrete structure. It contains four 3-in. PUREX style nozzles.

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* Conflicting Coordinates

UNIT NAME: 241-AY-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Inactive
START DATE: 1971
END DATE: July 1985

COORDINATES: N41606 W47700

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks. They are designed to contain leaks from transfers and drainage from operations within the unit. This unit has been isolated and weather covered.

UNIT NAME: 241-AZ-101
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: November 30, 1976

COORDINATES: N42080 W47506

WASTE TYPES AND AMOUNTS: Until 1983, the unit received dilute high-strontium waste from B Plant, complexed waste, double-shell slurry feed, and noncomplexed waste. In 1983, the unit began receiving NCAW transfers from PUREX. The unit is currently full. Prior to transfers from PUREX, samples were taken and analyzed for parameters such as visual appearance, percent solids, exotherms or endotherms, total organic carbon, gamma energy spectrum, weight percent water; pH; specific gravity; viscosity; and for the specific ions Al, OH, Cl, CO₃, F, Na, NO₂, NO₃, Pm, PO₄, Pu, SO₄, Sr, Am, and Np. The unit received supernatant consisting of complexed waste, double-shell slurry feed, and noncomplexed waste from A, AX, BX, and C tank farms.

SITE DESCRIPTION: The unit is composed of a heat-treated, stress-relieved primary steel liner and a nonstressed-relieved secondary steel liner, both inside a reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, is 47.5 ft high, with a capacity of 1M gal. The dome is below grade for shielding purposes.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

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UNIT NAME: 241-AZ-102
UNIT TYPE: Double-Shell Tank
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1976

COORDINATES: N42080 W47613

WASTE TYPES AND AMOUNTS: Until 1986, the unit received dilute high-strontium waste from B Plant and complexed waste. In 1986, the tank was cleaned in preparation for receipt of aging waste (NCAW) from PUREX. Prior to transfers from PUREX, samples were taken and analyzed for parameters such as visual appearance; percent solids; exotherms or endotherms; total organic carbon; gamma energy spectrum; weight percent water; pH; specific gravity; viscosity; and for the specific ions Al, OH, Cl, CO₃, F, Na, NO₂, NO₃, Pm, PO₄, Pu, SO₄, Sr, Am, and Np. The unit received supernatant consisting of complexed waste from AX tank farm.

SITE DESCRIPTION: The unit is composed of a heat-treated, stress-relieved primary steel liner and a nonstressed-relieved secondary steel liner, both inside a reinforced concrete shell. It has a diameter of 75 ft primary, 80 ft secondary, is 47.5 ft high, with a capacity of 1M gal. The dome is below grade for shielding purposes.

RELEASE POTENTIAL: The unit is designed to provide containment of radioactive waste for a minimum of 50 yr. Operating specification limits are set to prevent excessive corrosion and structural stresses. A leak from the primary tank would be contained in the annular space between the two tanks and detected early by annulus exhaust monitoring, annulus conductivity probes, primary tank liquid-level devices, etc.

UNIT NAME: 241-AZ-151DS
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1976

COORDINATES: N42000 W47700

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation. It contains 2,650 gal of waste.

SITE DESCRIPTION: The unit is an underground reinforced concrete structure. There are two diverter tanks in a common cell and a pump pit. The diverter cell has a stainless steel liner on the floor that extends ~1 ft up the walls. The diverter cell and pump pit are above and drain into the catch tank below. The catch tank is completely lined with 16 GA stainless steel.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-AZ-152
UNIT TYPE: Diversion Box
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1977

COORDINATES: N41950 W47640

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure. All nozzles are 4-in. PUREX style.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or to double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 241-C-801
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1962
END DATE: 1976

COORDINATES: N42950 W48100

WASTE TYPES AND AMOUNTS: The unit is a radioactively contaminated structure. Contamination levels are estimated at 30 Ci beta.

SITE DESCRIPTION: The bottom 9.5 ft of the building is constructed of concrete walls and foundations ~1 ft thick. This part of the structure is covered with earth. The remainder of the building is standard 22 gauge prefabricated metal, 12 ft high. Main sections include the loadout room (32 by 14 by 20 ft), the operating room (14 by 12 by 20 ft), and the valve pit (8 by 7 by 8 ft). Visual inspection of the exterior revealed no deficiencies.

UNIT NAME: 242-A Evaporator
UNIT TYPE: Evaporator
WASTE CATEGORY: Mixed Waste

TSD: T-2-6
UNIT STATUS: Active
START DATE: March 18, 1977

COORDINATES: N41020 W47620

WASTE TYPES AND AMOUNTS: Dilute noncomplexed radioactive waste: ~2M gal/yr; PUREX dilute miscellaneous waste: ~1M gal/yr; PUREX cladding removal waste (CRW): ~1M gal/yr; complexed radioactive waste. Hazardous chemicals used: NaNO_3 is used to regenerate ion exchange column, Turco 4518 or NaOH is used for decontamination applications, a Dow-Corning antifoam agent is used in the evaporator vessel

RELEASE POTENTIAL: Effluents from this unit are stored in active double-shell tanks.

UNIT NAME: 244-AR Vault
UNIT TYPE: Receiving Vault
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Active
START DATE: 1977

COORDINATES: N41307 W48150

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: The unit is a reinforced concrete structure ~27 ft deep. It extends ~36 ft above grade, making a total height of 63 ft. The walls are 2 ft thick. The unit is a two-level, multi-cell structure. The lower cell contains the process vessels, while the upper cells contain the attending piping and equipment.

KNOWN RELEASES: UPR-200-E-59.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: 244-CR Vault
UNIT TYPE: Receiving Vault
WASTE CATEGORY: Mixed Waste

TSD: S-2-3
UNIT STATUS: Inactive
START DATE: 1946
END DATE: July 22, 1988

COORDINATES: N42515 W48368

WASTE TYPES AND AMOUNTS: The unit transports waste solutions from processing and decontamination operations. Quantities are variable according to specific plant operation.

SITE DESCRIPTION: This structure is built of reinforced concrete. The walls are 2 ft thick. It is a two-level, multi-cell structure constructed below present grade. The lower cell contains the process vessels. Upper cells contain the attendant piping and equipment. The structure is roofed over by cover blocks which, when removed, allow access to the upper cells. It contains four process vessels: TK-CR-001 and TK-CR-011 with diameters of 20 ft and heights of 19 ft, 2 in. each; TK-CR-002 and TK-CR-003 with diameters of 14 ft and heights of 12 ft each.

RELEASE POTENTIAL: Diversion boxes and receiving vaults drain to catch tanks or double-shell tanks. They are designed to contain leaks from transfers and drainage from operations within the unit.

UNIT NAME: Grout Treatment Facility
UNIT TYPE: Test Treatment or Support Facility
WASTE CATEGORY: Mixed Waste

TSD: TD-2-1
UNIT STATUS: Active
START DATE: December 15, 1986

COORDINATES: N40050 W45900

WASTE TYPES AND AMOUNTS: This unit treats waste by mixing it with grout, forming solids in an in-line mixer. The wastes are characteristically corrosive (pH 12.5), EP Toxic (cadmium, chromium, lead, and silver), and extremely hazardous waste (EHW). The process forms a slurry that is then pumped to a concrete disposal vault. The unit has the capacity to treat 101,000 gal/d.

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UNIT NAME: Grout Treatment Facility Landfill
UNIT TYPE: Landfill
WASTE CATEGORY: Mixed Waste

TSD: TD-2-1
UNIT STATUS: Active

COORDINATES: N40600 W44000

WASTE TYPES AND AMOUNTS: Following treatment in the Grout Treatment Facility, wastes disposed of in the vaults are considered dangerous waste due to toxicity. The process forms a slurry that is then pumped to a concrete disposal vault. The vault is operated as a surface impoundment while the slurry hardens. When hard, the vault is sealed and then closed as a landfill. This unit has the capacity to dispose of 185 acre-ft of grouted waste.

SITE DESCRIPTION: Individual vaults are underground and composed of reinforced concrete with cover blocks. They are lined with an asphalt coating and have a perforated leachate collection pipe beneath them. The inside dimensions are 123.5 ft long by 50.5 ft wide by 34 ft high.

200-P0-4

Waste Units Assigned to this Operable Unit

216-A-6	Crib
216-A-30	Crib
216-A-37-1	Crib
216-A-37-2	Crib
216-A-42	Retention Basin
2607-EL	Septic Tank

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UNIT NAME: 216-A-6
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: January 1970

COORDINATES: N39880 W47000 (center)

WASTE TYPES AND AMOUNTS: Until 1/61, the site received the steam condensate, the equipment disposal tunnel floor drainage, the water-filled door drainage and the slug storage basin overflow waste from the 202-A Building. From 1/61 to 3/66, the site was inactive. After 3/66, the site received the previously mentioned effluents again. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit contains a 15-in. V.C.P. placed horizontally 12 ft below grade the length of the unit. Five 100-ft lengths of perforated 6-in. V.C.P. are placed perpendicularly to the first pipe at 20-ft intervals. The site contains ~7 ft (91,000 cu ft) of coarse gravel fill, backfilled over. The side slope from the surface to 7 ft is 1:1 and from 7 ft to the site bottom, 2:1.

KNOWN RELEASES: UPR-200-E-21, UPR-200-E-29.

CLEANUP ACTIONS: The ground became contaminated from numerous overflows of the unit. The ground surface was covered with 6 in. of sand and topped with 10-mil plastic sheeting to act as plant root barrier. The sheeting was covered with 18 in. of sand and 4 in. of gravel (completed July 1972). The five liquid level risers were cut off ~2 ft below grade and filled with concrete (completed November 1972).

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UNIT NAME: 216-A-30
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: January 1961

COORDINATES: N39150 W44990, N39735 W46260 (centerline)

WASTE TYPES AND AMOUNTS: Until 11/65, the site received the steam condensate, equipment disposal tunnel floor and water-filled door drainage, and the slug storage basin overflow waste from 202-A Building. From 11/65 to 1/70, the 216-A-6 Crib was restored to service to receive some of the above effluents because the effluent flow rate had exceeded the infiltration capacity of this unit. Since 1/70, the site has been receiving the above effluents because the 216-A-6 Crib was deactivated. The waste is low salt and neutral/basic.

SITE DESCRIPTION: The unit includes two distribution pipes: one 15-in. corrugated perforated pipe running ~4 ft below grade to the center of the unit, the other a 16-in. steel pipe running parallel to the other, 4 ft below grade to the center of the unit, then angling 45 degrees and changing to a 15-in. corrugated, perforated pipe running 7 to 8 ft below grade to the end of the unit. It is filled with 5 ft (123,000 cu ft) of gravel, and the site has been backfilled. The side slope is 1.5:1.

UNIT NAME: 216-A-37-1
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

TSD: D-2-10
UNIT STATUS: Active
START DATE: March 1977

COORDINATES: N39856 W45816, N40157 W46449 (centerline)

WASTE TYPES AND AMOUNTS: The site receives process condensate from the 242-A Evaporator.

SITE DESCRIPTION: The unit is a gravel structure with a 10-in. corrugated, galvanized, perforated pipe located horizontally, 7 ft below grade. The excavation contains 5 ft (5,300 cu ft) of gravel fill and has been backfilled over. The side slope is 1:1.

UNIT NAME: 216-A-37-2
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: 1983

COORDINATES: N39118 W44414, N39791 W45678 (centerline)

WASTE TYPES AND AMOUNTS: The site receives steam condensate from PUREX (parallel operation of this unit and 216-A-30).

SITE DESCRIPTION: There are two 8-in. steel drain pipes: one is perforated and runs the length of the unit, and the other is unperforated and runs from west to east only to the center of the unit, 5 ft above the bottom. Two vents are located at the center and at the east end. Two liquid-level gage wells are located 350 ft from the ends of the unit. A 5.5-ft bed of gravel on the bottom has been covered with a 20-mil PVC barrier cover. The entire area has been backfilled over with earth.

UNIT NAME: 216-A-42
UNIT TYPE: Retention Basin
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: September 1978

COORDINATES: N40179 W46749, N39900 W46500

WASTE TYPES AND AMOUNTS: The unit receives chemically or radioactively contaminated diversions from PUREX chemical sewer line, cooling water line, and steam condensate discharge. Depending upon the treatment required for the waste, it can be released from the unit to the 216-A-30 and 216-A-37-2 cribs, to PUREX process piping, or to the tank farms.

SITE DESCRIPTION: The facility consists of three holding basins, each rubber lined. The capacity of the three basins is in excess of 1.6M gal. One end of each basin has an 8-in. steam condensate pipe, and the other end has a 36-in. cooling water pipe. Both lines enter at 9.5 ft below grade.

KNOWN RELEASES: UPR-200-E-66.

UNIT NAME: 2607-EL
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1983

COORDINATES: N40000 W47300

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 7.9 cu m/d.

SITE DESCRIPTION: The unit includes a drain field.

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Waste Units Assigned to this Operable Unit

207-A Retention Basin	Retention Basin
216-A-1	Crib
216-A-7	Crib
216-A-8	Crib
216-A-16	French Drain
216-A-17	French Drain
216-A-18	Trench
216-A-19	Trench
216-A-20	Trench
216-A-23A	French Drain
216-A-23B	French Drain
216-A-24	Crib
216-A-29	Ditch
216-A-34	Ditch
216-A-524	Control Structure
241-A-302B	Catch Tank
2607-EC	Septic Tank
UN-200-E-56	Unplanned Release
UN-200-E-67	Unplanned Release

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UNIT NAME: 207-A Retention Basin
UNIT TYPE: Retention Basin
WASTE CATEGORY: Hazardous Waste

TSD: S-2-7
UNIT STATUS: Active
START DATE: March 1977

COORDINATES: N41220 W46890, N41220 W47105, N40900 W47105, N40900 W46890

WASTE TYPES AND AMOUNTS: The site has been receiving two liquid waste streams from the 242-A Evaporator (intermittently when evaporator is used): 1) Steam condensate is sent to the three north basins and then goes to 216-A-25 Pond; 2) Process condensate is sent to the three south basins and then goes to 216-A-37-1 Crib. TSD permits only apply to the three south basins.

SITE DESCRIPTION: The unit consists of six rubber-lined holding basins, each with an operating capacity of 54,370 gal, each 55 ft long and 10 ft wide at the bottom and 7 ft deep. A 4-in. fill line enters each basin, and a 3-in. drain line exits.

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UNIT NAME: 216-A-1
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: December 1955

COORDINATES: N41330 W47150 (center)

WASTE TYPES AND AMOUNTS: The site received the depleted uranium waste from the cold startup run in the 202-A Building.

SITE DESCRIPTION: The site is composed of 6-in. perforated VCP, 30 ft long, running horizontally at 9 ft below grade, with two 30-ft lengths of 6-in. perforated VCP placed perpendicularly to the first length of pipe, forming an H pattern. There is ~6 ft (11,000 cu ft) of coarse rock in the excavation bottom. Distance from waste release point to the site bottom is 17 ft. The side slope, surface to 7 ft deep, is 1:1.5, 7 ft to site bottom is 1:2. The site is located in the same radiological area as 216-A-7.

UNIT NAME: 216-A-7
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: November 1966

COORDINATES: N41205 W47200 (center)

WASTE TYPES AND AMOUNTS: Until 7/59, the site received the catch tank overflow waste, the sump waste, and the pump pit drainage from the 241-A-152 Diversion Box. From 7/59 to 11/66, the site received the catch tank overflow waste and the pump pit drainage from the 241-A-152 Diversion Box. In 11/66, the site received the TBP-solntrol organic inventory from the 202-A Building. The waste is low salt and neutral/basic.

SITE DESCRIPTION: A 6-in. perforated V.C.P. is placed horizontally 10 ft below grade. A 10-ft length of 6-in. perforated V.C.P. is perpendicular to the first pipe, forming a cross pattern. It is 16 ft deep and is filled with ~7 ft (3,500 cu ft) of coarse rock. The site has been backfilled. The side slope from the surface to 10 ft is 1:1 and from 10 ft to the bottom, 2:1.

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UNIT NAME: 216-A-8
UNIT TYPE: Crib
WASTE CATEGORY: Low-Level Waste

SWMU: Yes
UNIT STATUS: Active
START DATE: November 1955

COORDINATES: N41640 W46734, N41779 W45870 (centerline)

WASTE TYPES AND AMOUNTS: Until 12/57, the site received condensate from the waste storage tanks in the 241-A and -AX farms. From 12/57 to 5/58, the site received the above effluents and cooling water from the contact water from the contact condenser in the 241-A-431 Building. From 5/58 to 1/66, the site was inactive--it approached radionuclide capacity and was valved out. The condensate was rerouted to the 216-A-24 Crib and the cooling water rerouted to the 216-A-25 Pond. From 1/66 to 4/76, the site was reactivated to receive the condensate from 241-A and -AX farms. From 5/76 to 1/78, the site did not receive waste. From 1/78 to 4/78, the site received 241-A, -AX and -AY farm condensate. From 5/78 to 10/83, the site was inactive. In 10/83, the unit was reactivated to receive the 241-AY and -AZ farm condensate. From 10/83 to 3/84, the unit was inactive; flow was diverted to 417 Tank due to high radiation alarms. In 3/84, the site was reactivated (same as 10/83). The waste is currently being routed to double-shell tanks pending DOE-RL approval to route it to this unit.

SITE DESCRIPTION: A 24-in. SCH 20 perforated distribution pipe is placed horizontally 7 ft below grade. The site contains 7 ft (206,000 cu ft) of gravel fill and has been backfilled. The side slope is 1:2.

CLEANUP ACTIONS: This site was surface stabilized in September 1990.

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UNIT NAME: 216-A-16
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: March 1969

COORDINATES: N41191 W47443 (center)

WASTE TYPES AND AMOUNTS: The site received the floor drainage and the 296-A-11 Stack drainage from the 241-A-431 Building. The waste is low salt, neutral/basic, and contains less than 10 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of bell-end concrete pipe, 6 ft long, placed vertically 11 ft below grade. The unit is rock-filled with a 3/4-in. carbon steel cover. Assume a 1:1 side slope.

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UNIT NAME: 216-A-17
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: January 1956
END DATE: March 1969

COORDINATES: N41181 W47453 (center)

WASTE TYPES AND AMOUNTS: The site received the floor drainage and the 296-A-11 Stack drainage from the 241-A-431 Building. The waste is low salt, neutral/basic, and contains less than 1 Ci total beta activity.

SITE DESCRIPTION: The unit is composed of bell-end concrete pipe, 6 ft long, placed vertically 11 ft below grade. The unit is rock-filled with a 3/4-in. carbon steel cover. Assume a 1:1 side slope.

UNIT NAME: 216-A-18
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: January 1956

COORDINATES: N41860 W47000 (center)

WASTE TYPES AND AMOUNTS: The site received the depleted uranium waste from the cold start-up run at 202-A Building.

SITE DESCRIPTION: The site was an excavation only (crib never built). The side slope is 1:2.

CLEANUP ACTIONS: This site was surface stabilized in September 1990.

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UNIT NAME: 216-A-19
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: January 1956

COORDINATES: N41900 W46680 (center)

WASTE TYPES AND AMOUNTS: The site received the 241-A-431 Building contact condenser cooling water via the 216-A-34 Ditch and the depleted uranium waste from the cold start-up run at the 202-A Building.

CLEANUP ACTIONS: This site was surface stabilized in September 1990.

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UNIT NAME: 216-A-20
UNIT TYPE: Trench
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: January 1956

COORDINATES: N41875 W46540 (center)

WASTE TYPES AND AMOUNTS: The site received the 241-A-431 Building contact condenser cooling water via the 216-A-34 Ditch and the depleted uranium waste from the cold start-up run at the 202-A Building.

CLEANUP ACTIONS: This site was surface stabilized in September 1990.

UNIT NAME: 216-A-23A
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1957
END DATE: March 1969

COORDINATES: N41171 W47462 (center)

WASTE TYPES AND AMOUNTS: The site received the deentrainer tank condensate and the back flush waste from the 241-A-431 Building. The waste is low salt, neutral/basic and contains less than 50 Ci total beta activity.

SITE DESCRIPTION: The unit is made of a bell-end concrete pipe, placed vertically 7 ft below grade. The unit is filled with 3 ft of rock and has a 3/4-in. carbon steel cover.

UNIT NAME: 216-A-23B
UNIT TYPE: French Drain
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: September 1957
END DATE: March 1969

COORDINATES: N41171 W47472 (center)

WASTE TYPES AND AMOUNTS: The site received the deentrainer tank condensate and the backflush waste from the 241-A-431 Building. The waste is low salt, neutral/basic and contains less than 5 Ci total beta activity.

SITE DESCRIPTION: The unit is made of a bell-end concrete pipe, placed vertically 7 ft below grade. The unit is filled with 3 ft of rock and has a 3/4-in. carbon steel cover. Assume a 1:1 side slope.

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UNIT NAME: 216-A-24
UNIT TYPE: Crib
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: May 1958
END DATE: January 1966

COORDINATES: N42256 W46920, N42512 W45278 (centerline)

WASTE TYPES AND AMOUNTS: The site received the condensate from the waste storage tanks in the 241-A and 241-AX Tank Farms. The waste is low salt and neutral/basic. The crib was believed to have been valved out in 1/66. However, it was still open in 1979 (Occurrence Report #79-113). The valve has since been closed. Because of this inadvertent use, the radionuclide inventory is unknown for 1967 through 1979.

SITE DESCRIPTION: A 15-in.-diameter (perforated bottom half), galvanized, corrugated pipe, is placed horizontally ~10 ft below grade. The excavation has ~4 ft (146,000 cu ft) of gravel fill and is backfilled over. The side slope is 1.5:1.

CLEANUP ACTIONS: This site was surface stabilized in September 1990.

UNIT NAME: 216-A-29
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

TSD: D-2-3
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: 1991

COORDINATES: N40685 W46350, N43050 W44750 (centerline)

WASTE TYPES AND AMOUNTS: The unit receives wastes from 202-A chemical sewer, acid fractionator condensate and condenser cooling water that flow to 216-B-3 Pond. Until 12/57, the site received process cooling water and chemical sewer waste from 202-A. From 12/57 to 2/58, the site received the above minus the process cooling water, which was rerouted to 216-A-25 Pond. From 2/58 to 12/62, the site received the above plus acid fractionator condensate from 202-A. From 12/62 to 12/63, the site received the above plus seal cooling water from air sampler vacuum pumps in 202-A. From 12/63 to 1/66, the site received the above minus vacuum pump cooling water, which was rerouted to 216-A-35 French Drain.

SITE DESCRIPTION: The unit is man-made, earthen, and uncovered. The banks vary from 2 to 3 ft high at the head end to 15 ft high at the lower end. The first 10 ft from the point of influent is a concrete spillway for erosion.

KNOWN RELEASES: 10/2/84: Hydrazine - 280 lb, Hydroxylamine nitrate - 407 lb;
12/2/84: Potassium hydroxide - 62,683 lb; 1/18/85: Nitric acid - 6,236 lb;
2/8/85: Sodium nitrite - 160 lb; 5/27/85: Nitric acid - 223 lb; 6/25/85: Nitric acid - 24,189 lb, Ammonium fluoride - 5,368 lb, Ammonium nitrate - 1,016 lb;
8/6/85: Sodium hydroxide - 42,440 lb; 10/28/85: Nitric acid - 1,181 lb;
12/18/85: Cadmium nitrate - 35 lb; 7/7/86: Hydrazine - 6 lb.

CLEANUP ACTIONS: The site was interim stabilized and revegetated in 1991.

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UNIT NAME: 216-A-34
UNIT TYPE: Ditch
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: November 1955
END DATE: December 1957

COORDINATES: N41710 W46800 (head) N41900 W46680 (end)

WASTE TYPES AND AMOUNTS: The site received the cooling water from the contact condenser in the 241-A-431 Building en route to 216-A-19 and 216-A-20 trenches. The site contains less than 1 Ci total beta activity.

SITE DESCRIPTION: A 15-in. inlet pipe is placed 2 ft below grade. The excavation is 30 ft wide at the east end and 10 ft wide at the west end. The side slope is 1:2.

CLEANUP ACTIONS: This site was surface stabilized in September 1990.

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UNIT NAME: 216-A-524
UNIT TYPE: Control Structure
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1957
END DATE: January 1966

COORDINATES: N42300 W46900

WASTE TYPES AND AMOUNTS: The unit contains radioactively contaminated piping and cement. The amounts of radionuclides present is not known. There is 500 ct/min smearable contamination, 10,000 ct/min direct beta/gamma, 40 mR/h nonpenetrating, and 0.7 mrem/h penetrating radiation.

SITE DESCRIPTION: Reinforced concrete box, extending 6 in. above grade to 10 ft below grade. The opening into the unit is covered by a 6-in.-thick, 4-ft by 12-ft concrete cover fitted with lifting eyes. The walls and floor are 1-ft-thick reinforced concrete.

CLEANUP ACTIONS: This unit was isolated and interim stabilized in 1989.

RELEASE POTENTIAL: Prioritization of this facility for decommissioning classifies the relative radiological hazard as medium in comparison with other 200 Area surplus facilities.

UNIT NAME: 241-A-302B
UNIT TYPE: Catch Tank
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive

COORDINATES: N41280 W47355

WASTE TYPES AND AMOUNTS: This unit was used for transfer of waste solutions from processing and decontamination operations. Volumes were variable according to specific plant operation. It contains 3,240 gal of waste.

CLEANUP ACTIONS: This unit was isolated in 1985 and interim stabilized in 1990.

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UNIT NAME: 2607-EC
UNIT TYPE: Septic Tank
WASTE CATEGORY: Nonhazardous/Nonradioactive

SWMU: No
UNIT STATUS: Active
START DATE: 1955

COORDINATES: N40900 W47500

WASTE TYPES AND AMOUNTS: Sanitary wastewater and sewage. Estimated rate of waste generation is 0.45 cu m/d.

SITE DESCRIPTION: This unit includes a drain field.

UNIT NAME: UN-200-E-56
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: June 13, 1979

COORDINATES: N42450 W47150

WASTE TYPES AND AMOUNTS: Beta/gamma with readings up to 8,000 ct/min.

KNOWN RELEASES: Contaminated soil was found during an excavation for clean soil to be used around the 241-AN tanks.

CLEANUP ACTIONS: The area was zoned off and posted.

71241

UNIT NAME: UN-200-E-67
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: May 7, 1984

COORDINATES: N40900 W47375

WASTE TYPES AND AMOUNTS: The contamination consists of beta/gamma, with readings from 1,000 to 1,500 mR/h.

KNOWN RELEASES: An old, contaminated pipe encasement was encountered during the excavation.

CLEANUP ACTIONS: The area was decontaminated to background radiation levels and stabilized.

RELEASE POTENTIAL: No potential for release from this spill site exists; only background levels of radiation remain.

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200-P0-6

Waste Units Assigned to this Operable Unit

200-E Burning Pit	Burning Pit
218-E-8	Burial Ground
218-E-12A	Burial Ground
UN-200-E-62	Unplanned Release

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UNIT NAME: 200-E Burning Pit
UNIT TYPE: Burning Pit
WASTE CATEGORY: Hazardous Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1950
END DATE: 1970

COORDINATES: N45000 W48000

WASTE TYPES AND AMOUNTS: This site received construction and office waste (1,500 cu m), paint wastes, and chemical solvents (1,000 cu m).

KNOWN RELEASES: UPR-200-E-62, UPR-200-E-106

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UNIT NAME: 218-E-8
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1958
END DATE: 1959

COORDINATES: N45285 W48527, N45281 W48409, N44882 W48418, N44885 W48534

WASTE TYPES AND AMOUNTS: The site received MFP/TRU waste, including repair and construction wastes from 293-A and the PUREX new crane addition.

SITE DESCRIPTION: The site consists of an unknown number of trenches. The trenches are backfilled.

KNOWN RELEASES: On February 21, 1979, residue from broken tumbleweeds blown in along the west boundary line of this site was found to be reading greater than 100,000 ct/min beta/gamma activity.

UNIT NAME: 218-E-12A
UNIT TYPE: Burial Ground
WASTE CATEGORY: Mixed Waste

SWMU: Yes
UNIT STATUS: Inactive
START DATE: 1953
END DATE: 1967

COORDINATES: N44136 W48500, N43211 W48531, N43272 W49580, N43201 W49519,
N44246 W49582

WASTE TYPES AND AMOUNTS: Trenches 1-3, 12-14, and 17-25 contain predominately dry waste packaged in cardboard boxes and plastic bags; Trenches 4-11, 15-16, and 26-28 contain predominately acid-soaked material. Specific contents of Trench 28 are unlisted.

SITE DESCRIPTION: The site contains 28 dry waste burial trenches. Operational experience indicates that the trenches were often 40 ft wide rather than 30 ft wide, as shown in the drawings. Also, the backfill was substantially less than the present requirement of 4 ft. Visual observations confirmed that some waste was visible at the surface prior to stabilization efforts.

KNOWN RELEASES: UPR-200-E-30, UPR-200-E-24.

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UNIT NAME: UN-200-E-62
UNIT TYPE: Unplanned Release
WASTE CATEGORY: Mixed Waste

SWMU: No
OCCURRENCE DATE: March 19, 1982

COORDINATES: N44800 W48525

WASTE TYPES AND AMOUNTS: Contamination consisted of beta/gamma readings to 350 mR/h.

KNOWN RELEASES: Radioactive liquid was spilled from a pressure test assembly while in transit.

CLEANUP ACTIONS: The ground contamination was picked up, placed in barrels, and removed to the burial ground. The area was released from area posting (down to background radiation levels) on March 22, 1982.

RELEASE POTENTIAL: There is no potential for further release from this spill site; only background levels of radiation remain.

200-P0-6

Other Waste Units Located Within the Operable Unit Area

218-E-12B

Burial Ground

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UNIT NAME: 218-E-12B
UNIT TYPE: Burial Ground
WASTE CATEGORY: Pre-1970 TRU/Mixed Waste

TSD: D-2-9
UNIT STATUS: Active
START DATE: 1967

COORDINATES: N46775 W51475, N46775 W47445, N46675 W47345, N45523 W47345,
N45485 W48523, N44485 W48542, N44504 W49661, N45220 W51475

WASTE TYPES AND AMOUNTS: As of September 1982, 27 of the trenches were completely full, 2 were partially filled, and the remaining 109 trenches were empty. The trenches are filled with miscellaneous waste. A special study showed MFP in part of Trench 28 and TRU in parts of Trenches 17 and 27. Not included in Part B is Trench 94, which is used for burial of a Navy reactor compartment. The Navy reactor compartment is composed of various types of steel and contains 392 tons of lead shielding. Refer to the U. S. Environmental Protection Agency information request for Dry Waste Units, Volume 1, U. S. Department of Energy, Richland Operations Office, October 1, 1986, for more information.

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SITE DESCRIPTION: The unit contains 138 trenches running north and south. 61 of the trenches are 1,212 ft long, 31 of the trenches are 960 ft long, and the remaining trenches vary in length from 307 ft to 1,901 ft. All of the trenches are 16 ft deep with 2 ft of stabilization backfill and range in bottom width by up to 10 ft.

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RELEASE POTENTIAL: The Navy reactor compartment doubly contains the lead shielding. The anticipated minimum life expectancy of the containment is 300 yr.

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