



0047502

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

JUL 08 1997

97-EAP-540

Mr. Moses N. Jaraysi
200 Area Unit Supervisor
Nuclear Waste Program
State of Washington
Department of Ecology
1315 West Fourth Avenue
Kennewick, Washington 99336-6018



Dear Mr. Jaraysi:

QUARTERLY NOTIFICATION OF CLASS 1 MODIFICATIONS TO THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT (RCRA PERMIT), DANGEROUS WASTE PORTION (DW PORTION) (QUARTER ENDING JUNE 30, 1997 — PERMIT CONDITION I.C.3.)

Condition I.C.3. of the RCRA Permit (DW Portion) addresses Class 1 modifications as defined in Washington Administrative Code (WAC) 173-303-830(4)(a)(i)(A). This condition allows for quarterly notification of Class 1 modifications to be made to the State of Washington, Department of Ecology (Ecology). These modifications are under implementation. A listing of these modifications is maintained in the Hanford Facility Operating Record. The Class 1 modifications are discussed as follows.

The Hanford Facility RCRA Permit (DW Portion) has been modified this quarter to update information in Part I, III, and VI (Enclosure). Part I Class 1 modifications pertain to the General Information Document. Part III Class 1 modifications pertain to the Plutonium Uranium Extraction (PUREX) Storage Tunnels, and the 305-B Storage Facility. Part VI Class 1 modifications pertain to the 300 Area Process Trenches. The Class 1 modifications are being made to ensure that all activities conducted are in compliance with the RCRA Permit (DW Portion).

Should Ecology determine that the enclosed modifications do not qualify as Class 1 modifications as defined in WAC 173-303-830, written authorization to continue operations is requested until the appropriate level of modification can be accomplished.

In accordance with a teleconference held with Moses Jaraysi of Ecology on March 3, 1995, a transmittal letter signed by the permittees is sufficient to authorize the submittal of the Quarterly Notification of Class 1 Modifications to the Hanford Facility RCRA Permit (DW Portion) and to meet the intent of Permit Condition I.F., Signatory Requirement.

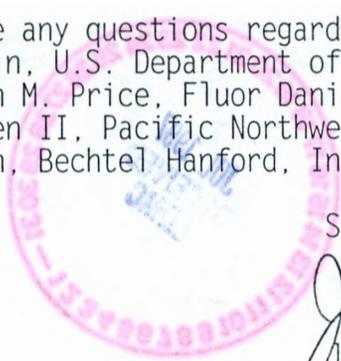
JUL 08 1997

Mr. Moses N. Jaraysi
97-EAP-540

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Should you have any questions regarding this information, please contact Ellen M. Mattlin, U.S. Department of Energy, Richland Operations Office, on 376-9333; Susan M. Price, Fluor Daniel Hanford, Inc., on 376-1653; Harold T. Tilden II, Pacific Northwest National Laboratory, on 376-0499, or Roger J. Landon, Bechtel Hanford, Inc., on 372-9209.

Sincerely,



James E. Rasmussen, Director
Environmental Assurance, Permits,
and Policy Division
DOE Richland Operations Office

EAP:EMM



William D. Adair, Director
Environmental Protection
Responsible Party for
Fluor Daniel Hanford, Inc.



Kenneth C. Brog, Director *for KCB*
Environment, Safety, and Health
Pacific Northwest National Laboratory



for Michael C. Hughes, Vice President
Operations
Bechtel Hanford, Inc.

Enclosure:
Class 1 Modifications to
the Hanford Facility
RCRA Permit (DW Portion)
(Quarter Ending June 30, 1997)

cc w/encl:
EDMC, H6-08
R. Jim. YIN
L. Johnson, ERC
R. Landon, BHI
D. Powaukee, NPT
S. Price, FDH
H. Tilden, PNNL
J. Wilkinson, CTUIR

cc w/o encl:
W. Adair, FDH
K. Brog, PNNL
M. Hughes, BHI
S. McKinney, Ecology
D. Sherwood, EPA
E. Skinnarland, Ecology

**QUARTERLY NOTIFICATION OF CLASS 1 MODIFICATIONS TO
THE HANFORD FACILITY RCRA PERMIT,
DANGEROUS WASTE PORTION
(Quarter Ending June 30, 1997)**

Page 1 of 17

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PART I CLASS 1 MODIFICATIONS:
Attachment 33: General Information Document, Revision 3

1. Hanford Facility RCRA Permit, Revision 3A, Page 5 of 78, line 20: Delete "Revision 2, July 1996" and replace with "Revision 3, April 1997, and Class 1 Modifications submitted Quarter Ending June 30, 1997".

Reason: This change is latest reference to Attachment 33, Hanford Facility Dangerous Waste Permit Application, General Information Portion (DOE/RL-91-28, Revision 3).

2. Page 9-6, Lines 22-26: Removed and replaced with the attached page. The listed address changed from:

Public Access Room H6-08
Westinghouse Hanford Company
P.O. Box 1970
Richland, WA 99352
(509) 372-3411

to: Hanford Sitewide RCRA Permit
Facility Operating Record
Fluor Daniel Hanford, Inc.
P.O. Box 1000; Mail Stop H6-23
Richland, WA 99352
(509) 376-9876

Reason: Contract change; effective 10/1/96, Fluor Daniel Hanford, Inc. has the responsibility to maintain the Hanford Sitewide RCRA Permit.

3. Page 15-6, lines 24-30: Removed and replaced with the attached page. The references (PNL, 1992 and PNL, 1994) were changed to read:

PNL, 1992, *Estimation of the Release and Transport of Lead through Soils and Groundwater at the Hanford Site 218-E-12B Burial Ground*, Pacific Northwest Laboratory, Richland, Washington

PNL, 1994, *Estimation of the Release and Transport of Nickel through Soils and Groundwater at the Hanford Site 218-E-12B Burial Ground*, Pacific Northwest Laboratory, Richland, Washington

Reason: The reference list was changed to reflect the correct title of two documents. The phrase "through the soil" has been changed to "through soil".

4. Page 15-7, line 5: The reference "USN, 1995a," was changed to read " USN, 1995.

Reason: No need for a 1995a since the EIS was issued as final in 1996.

5. Page 15-7, lines 10-13: The reference 1995b was changed to read:

USN, 1996, *Final Environmental Impact Statement on the Disposal of Decommissioned, Defueled Cruiser, Ohio Class, and Los Angeles Class Naval Reactor Plants*, U. S. Department of the Navy, Puget Sound Naval Shipyard, Bremerton, Washington

Reason: The subject EIS was issued in April 1996.

**PART I CLASS 1 MODIFICATIONS:
Attachment 33: General Information Document, Revision 3**

Replacement Page for DOE-RL-91-28, Rev. 3

Chapter 9, Page 9-6

1 RCRA (DOE/RL-88-30) (refer to Appendix 2D, Section 1.2). Chapter 2.0,
2 Section 2.5 and Appendix 2D, contain information on these waste management
3 units. The Waste Information Data System (WIDS) is an electronic database
4 that identifies known and reported SWMUs and other waste management units
5 located on the Hanford Site (refer to Appendix 2D, Section 1.1). The WIDS
6 includes the type and location of the unit, when the unit was operated,
7 general dimensions and description of the unit, and general descriptions of
8 waste placed in the unit (including estimated quantities of radionuclides and
9 chemicals contained in some units). The WIDS database is accessible to
10 regulatory agency personnel. Information specific to LLBG and LERF is
11 contained in the WIDS and in the Unit-Specific Portion of this permit
12 application.
13
14

15 9.1.6 Records Produced by Environmental or Health Agencies

16
17 A summary of Notice of Compliance Violations and the associated responses
18 is maintained in the Hanford Facility Operating Record, General Information
19 File (refer to Chapter 12.0, Section 12.1). This summary can be accessed by
20 contacting the following:
21

22 Hanford Sitewide RCRA Permit
23 Facility Operating Record
24 Fluor Daniel Hanford, Inc.
25 P.O. Box 1000; Mail Stop H6-23
26 (509) 376-9876.
27

28 The EPA inspected the Hanford Facility in 1986, 1987, and 1988. Copies
29 of the inspection reports for 1987 and 1988 have been provided to Ecology.
30

31 A 1986 *Consent Agreement and Compliance Order* (Ecology 1986) between the
32 DOE-RL and Ecology provided that a RCRA groundwater monitoring system would be
33 installed around portions of the LLBG that are used for mixed waste. One
34 requirement of the order was that 35 wells would be installed around the LLBG
35 to provide a detection-level groundwater monitoring network. These 35 wells
36 have been installed. An additional 46 wells have been drilled to complete the
37 groundwater monitoring network for a total of 81 wells as of 1994. At the
38 present time, 66 of the 81 wells are monitored routinely. Eleven wells used
39 to monitor the 218-W-6 Burial Ground are not being used because no waste has
40 been received; three wells at the 218-E-12B Burial Ground have gone dry; and a
41 well in the 218-W-4C Burial Ground also has gone dry (refer to DOE/RL-88-20,
42 Chapter 5.0).
43

44 At this time, no records have been produced by environmental or health
45 agencies for the LERF.
46
47

48 9.2 PATHWAY-SPECIFIC INFORMATION

49
50 This section provides information on potential contaminant release
51 pathways. Potential pathways discussed include the following:
52

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PART I CLASS 1 MODIFICATIONS:
Attachment 33: General Information Document, Revision 3

Replacement Pages for DOE-RL-91-28, Rev. 3

Chapter 15, Pages 15-6 and 15-7

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- 1 ICBO, 1991, "Earthquake Regulations," *Uniform Building Code*, UBC Section 2312,
2 International Conference of Building Officials, Whittier, California.
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- 4 ICF KH, 1995, *RCRA Mapping and Marking on the Hanford Site Value Engineering*
5 *Report*, ENG-W-95-2160, Rev. 0, ICF Kaiser Hanford Company, Richland,
6 Washington.
7
- 8 Law, A.G., J.A. Serkowski, and A.L. Schatz, 1987, *Results of the Separations*
9 *Area Ground-Water Monitoring Network for 1986*, RHO-RE-SR-87-24, Rockwell
10 Hanford Operations, Richland, Washington.
11
- 12 Lyman, W.J., W.F. Reehl, and D.H. Rosenblatt, 1982, *Handbook of Chemical*
13 *Property Estimation Methods*, McGraw-Hill Book Company, New York,
14 New York.
15
- 16 NRC, 1982, *Safety Evaluation Report (Related to the Operation of WPPSS Nuclear*
17 *Project No. 2)*, NUREG-0892, Supplement No. 1, U.S. Nuclear Regulatory
18 Commission, Washington, D.C.
19
- 20 PNL, 1988a, *Hanford Site National Environmental Policy Act (NEPA)*
21 *Characterization*, PNL-6415, Pacific Northwest Laboratory, Richland,
22 Washington.
23
- 24 PNL, 1988b, *Estimation of Ground-Water Travel Time at the Hanford Site:*
5 *Description, Past Work, and Future Needs*, PNL-6328, Pacific Northwest
6 Laboratory, Richland, Washington.
7
- 28 PNL, 1992, *Estimation of the Release and Transport of Lead through Soils and*
29 *Groundwater at the Hanford Site 218-E-12B Burial Ground*, Pacific
30 Northwest Laboratory, Richland, Washington.
31
- 32 PNL, 1994, *Estimation of the Release and Transport of Nickel through Soils and*
33 *Groundwater at the Hanford Site 218-E-12B Burial Ground*, Pacific
34 Northwest Laboratory, Richland, Washington.
35
- 36 PNL, 1995, *Development of a Risk Based Approach to Hanford Site Cleanup*,
37 PNL-10651, Pacific Northwest Laboratory, Richland, Washington.
38
- 39 PNNL, 1996, *Hanford Site Environmental Report for Calendar Year 1995*,
40 PNL-11139, Pacific Northwest National Laboratory, Richland, Washington.
41
- 42 Silka, L.R., 1988, "Simulation of Vapor Transport through the Unsaturated
43 Zone-Interpretation of Soil-Gas Surveys", *Ground Water Monitoring*
44 *Review*, Vol. VIII, No. 2, pp. 115-123.
45
- 46 Skaggs, R.L. and W.H. Walters, 1981, *Flood Risk Analysis of Cold Creek Near*
47 *the Hanford Site*, PNL-4219, Pacific Northwest Laboratory, Richland,
48 Washington.
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- 50 Stone, W.A., J.M. Thorp, O.P. Gifford, and D.J. Hoytink, 1983, *Climatological*
1 *Summary for the Hanford Area*, PNL-4622, Pacific Northwest Laboratory,
2 Richland, Washington.

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- 1 Tallman, A.M., K.R. Fecht, M.C. Marratt, and G.V. Last, 1979, *Geology of the*
2 *Separations Areas, Hanford Site, South-Central Washington*, RHO-ST-23,
3 Rockwell Hanford Operations, Richland, Washington.
4
5 USN, 1995, *Extrapolation of Migration Modeling for Large Metal Components*
6 *Containing Lead and Nickel Alloys at the 218-E-12B Burial Ground*,
7 U.S. Department of the Navy, Puget Sound Naval Shipyard, Bremerton,
8 Washington.
9
10 USN, 1996, *Final Environmental Impact Statement on the Disposal of*
11 *Decommissioned, Defueled Cruiser, Ohio Class, and Los Angeles Class*
12 *Naval Reactor Plants*, U.S. Department of the Navy, Puget Sound Naval
13 Shipyard, Bremerton, Washington.
14
15 WHC, 1989a, *Operational Groundwater Monitoring at the Hanford Site -- 1988*,
16 WHC-EP-0260, Westinghouse Hanford Company, Richland, Washington.
17
18 WHC, 1989b, *Revised Ground-Water Monitoring Plan for the 200 Areas Low-Level*
19 *Burial Grounds*, WHC-SD-EN-AP-015, Rev. 0, Westinghouse Hanford Company,
20 Richland, Washington.
21
22 WHC, 1990a, *Generic Specification Groundwater Monitoring Wells*, WHC-S-014,
23 Rev. 5, Westinghouse Hanford Company, Richland, Washington.
24
25 WHC, 1990b, *Interim-Status Ground-Water Quality Assessment Program Plan for*
26 *Waste Management Area 1 of the 200 Areas Low-Level Burial Grounds*,
27 WHC-SD-EN-AP-021, Westinghouse Hanford Company, Richland, Washington.
28
29 WHC, 1990c, *Interim-Status Ground-Water Quality Assessment Program Plan for*
30 *Waste Management Area 3 of the 200 Areas Low-Level Burial Grounds*,
31 WHC-SD-EN-AP-022, Westinghouse Hanford Company, Richland, Washington.
32
33 WHC, 1991a, *Geology and Hydrology of the Hanford Site: A Standardized Text*
34 *for Use in Westinghouse Hanford Company Documents and Reports*,
35 WHC-SD-ER-TI-0003, Westinghouse Hanford Company, Richland, Washington,
36 updated periodically.
37
38 WHC, 1991b, *Ground Water Maps of the Hanford Site, December 1990*,
39 WHC-EP-0394-2, Westinghouse Hanford Company, Richland, Washington.
40
41 WHC, 1991c, *Interim Status Ground-Water Monitoring Plan for the 200 East Area*
42 *Liquid Effluent Retention Facility*, WHC-SD-AP-024, Rev. 1, Westinghouse
43 Hanford Company, Richland, Washington.
44
45 WHC, 1991d, *Statistical Approach on RCRA Groundwater Monitoring Projects at*
46 *the Hanford Site*, WHC-SA-1124-FP, Westinghouse Hanford Company,
47 Richland, Washington.
48
49 WHC, 1991e, *Final Safety Analysis Report 242-A Evaporator Liquid Effluent*
50 *Retention Facility*, WHC-SD-W105-SAR-001, Rev. 0, Westinghouse Hanford
51 Company, Richland, Washington.
52

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**PART III CLASS 1 MODIFICATIONS:
PUREX Storage Tunnels**

1. Page 2-5, Line 47: Removed and replaced with the attached page. Replaced "(Drawing H-2-79998)" with "(H-13-000264)".

Reason: Topographic map H-13-000264 is the map located in Appendix 2A. This reference was not updated with Revision 4 of the PUREX Storage Tunnels.

2. Removed and replaced Page APP 4A-ii. (Note: New aperture cards will be provided for the drawings below.)

Reason: The following drawings were replaced to reflect existing configurations:

- Page APP 4A-ii, line 23: H-2-55593, Electrical Details, Rev. 2.
- Page APP 4A-ii, lines 25-26: H-2-55594, Shielding Door Fill and Drain Lines Arrangement: Disposal Facility for Failed Equipment, Rev. 3.
- Page APP 4A-ii, lines 28-30: H-2-55599, Electrical Door Control Plan, Elementary Diagram and Miscellaneous Details: Disposal Facility for Failed PUREX Equipment, Rev. 3.
- Page APP 4A-ii, line 32: H-2-58134, Ventilation Details (sheets 1 and 2), Rev. 6
- Page APP 4A-ii, line 36: H-2-58193, Sump Details, Rev. 3.
- Page APP 4A-ii, line 38: H-2-58194, Sump Details, Rev. 4.
- Page APP 4A-ii, line 45: H-2-58208, Fan Details, Rev. 1.

**PART III CLASS 1 MODIFICATIONS:
PUREX Storage Tunnels**

Replacement Page for DOE-RL-90-24, Rev. 4

Chapter 2, Page 2-5

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1 coating compound to inhibit corrosion. The entire storage area is covered
2 with 2.4 meters of earth fill to serve as radiation shielding.
3

4 The nominal inside dimensions of Tunnel Number 2 are 514.5 meters long,
5 7.9 meters high, and 10.4 meters wide. However, because of the arch-shaped
6 cross-section of Tunnel Number 2 and entry clearance at the water-fillable
7 door, the usable storage area (width and height above top-of-rail) is
8 6.7 meters high and 5.8 meters wide, the same dimensions as for Tunnel
9 Number 1. The floor consists of a railroad track laid on a gravel bed. The
10 space between ties is filled to top-of-tie with gravel ballast. Commencing at
11 the ends of the 2.4-meter-long ties, the earth floor is sloped upward on a
12 1 (vertical) to 1 1/2 (horizontal) grade. The tracks are on a 1/10 of
13 1 percent downgrade slope to the south to ensure the railcars remain in their
14 storage position. A railcar bumper is located 2.4 meters from the south end
15 of the tracks to act as a stop. The capacity of the storage area is 40,
16 12.8-meter-long railcars.
17

18 There are 17 tunnel ports located along the ridge of the tunnel roof (for
19 details, refer to Drawing H-2-58195 in Appendix 4A). The ports are on
20 29.3-meter centers. A 7.6-centimeter diameter bar plug is located in the
21 center of each tunnel port and is secured in place with a length of chain and
22 a padlock. Operations administers access control of these tunnel ports.
23

24 The vent shaft, located at the south end of Tunnel Number 2, is
25 approximately 1.5 meters by 1.5 meters in cross-section and is constructed of
26 reinforced concrete. The vent shaft extends approximately 0.3 meter above
27 grade and is capped with an exhaust system consisting of a single-stage, HEPA
28 filter, a 153-cubic meter per minute exhaust fan, and a 6.1-meter-tall exhaust
29 stack. The ventilation system currently is inactive (Chapter 4.0,
30 Section 4.6.1.2); however, when operating the exhaust fan normally is dampered
31 to provide only about 100 cubic meters per minute of exhaust flow. A further
32 discussion of the tunnel ventilation system is provided in Chapter 4.0.
33

34 The first railcar was placed in storage in December 1967. Table 1 in
35 Appendix 3A contains current storage inventory data.
36
37

38 2.1.3 Other Environmental Permits 39

40 Applicable air permits have been issued and are on file. A radioactive
41 air emissions notice of construction for the transfer of waste from the
42 324 Building for storage in PUREX Storage Tunnel Number 2 has been submitted.
43
44

45 2.2 TOPOGRAPHIC MAP [B-2] 46

47 A topographic map (Drawing H-13-000264), showing a distance of at least
48 305 meters around the PUREX Storage Tunnels, is located in Appendix 2A. This
49 map is at a scale of 1 unit equals 2,000 units. The contour interval clearly
50 shows the pattern of surface water flow in the vicinity of each storage
51 tunnel. The map contains the following information:
52

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**PART III CLASS 1 MODIFICATIONS:
PUREX Storage Tunnels**

Replacement Page for DOE-RL-90-24, Rev. 4

Appendix 4A, Page APP 4A-ii

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APPENDIX 4A

ENGINEERING DRAWINGS

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- As-built drawings (aperture cards) for the PUREX Storage Tunnels:
- H-2-55587 218-E-14 Structural Floor Plan and Section, Rev. 7
 - H-2-55588 Structural Sections and Details: Disposal Facility for
Failed Equipment, Rev. 7
 - H-2-55589 Structural Sections and Details: Disposal Facility for
Failed Equipment, Rev. 2
 - H-2-55590 Door and Hoist Details
 - H-2-55591 Door and Hoist Details
 - H-2-55592 Door and Hoist Details
 - H-2-55593 Electrical Details, Rev. 2
 - H-2-55594 Shielding Door Fill and Drain Lines Arrangement: Disposal
Facility for Failed Equipment, Rev. 3
 - H-2-55599 Electrical Door Control Plan, Elementary Diagram and
Miscellaneous Details: Disposal Facility for Failed PUREX
Equipment, Rev. 3
 - H-2-58134 Ventilation Details (sheets 1 and 2) , Rev. 6
 - H-2-58175 PUREX Tunnel: As Built, May 1962, Rev. 2
 - H-2-58193 Sump Details, Rev. 3
 - H-2-58194 Sump Details, Rev. 4
 - H-2-58195 Structural Sections and Details: Equipment Disposal - PUREX,
Rev. 1
 - H-2-58206 Sump Details
 - H-2-58208 Fan Details, Rev. 1
 - H-2-94756 Filter Details
- Note: These drawings are under revision to reflect current configuration.
Revised drawings will be submitted through a Class 1 Modification.

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**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS**

1. Appendix 8-A, page 8A-1: Removed and replaced with the attached page.

Reason: This chart was updated to reflect current staff at the 305-B Facility.

Chapters 8, 11, 12, and 13: Removed and replaced with the Chapters listed below. These Chapters included editorial changes, incorporation of past quarterly Class 1 modifications, and incorporation of specific conditions identified in the Hanford Facility RCRA Permit for the 305-B Storage Facility:

- Chapter 8.0, Personnel Training, Revision 1A
- Chapter 11.0, Closure and Post-Closure Requirements, Revision 2A
- Chapter 12.0, Reporting and Recordkeeping, Revision 1A
- Chapter 13.0, Other Relevant Laws, Revision 1A

The changes for Chapters 8, 11, 12, and 13 are described below:

2. Page 8-1, lines 4, 11, 16, 24, and 41; Page 8-3, lines 43 and 46; and Page 8-4, lines 7, 8, 16, and 49: Replaced "PNL" with "PNNL".

Reason: This change corrected the current acronym for PNNL.

3. Page 8-3, line 29; added to the end of the paragraph "Equivalent training may be taken in place of the training identified in Figure 8-1 with approval from the 305-B Unit Operating Supervisor or the Waste Management Section Manager. Documentation of the training substitution will be placed in the operating record (within seven (7) days after the training was received) accompanied by a narrative explanation, and the date of the training. The documentation shall be made available to the Department or EPA during inspections for assessment. If the Department or EPA determines that the training substitution was not equivalent to the original, the original training will be taken or an acceptable substitution will be found."

Reason: This change incorporated condition III.2.B.ii. of the Hanford Facility RCRA Permit. The original condition was altered only to reflect the current title of the Department Head responsible for 305-B.

4. Page 11-1, line 36: Added to the end of this paragraph "Spill reports and logs shall be consulted to determine potential areas of contamination."

Reason: This change incorporated Condition III.2.B.q. of the Hanford Facility RCRA Permit.

5. Page 11-3, line 16; Before the words "will also be performed," add the following: "or areas of documented spills or releases, ".

Reason: This change incorporated Condition III.2.B.r. of the Hanford Facility RCRA Permit.

**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

6. Page 11-6, lines 37-41; the following language is inserted after the words "Low-Level Radioactive" on line 37 and "Nonregulated" on line 40, respectively, replacing the current language: "Shall be handled in accordance with the Liquid Effluent Consent Order (No. DE91NM-177) and Milestone M-17 of the Hanford Federal Facility Agreement and Consent Order."

Reason: These changes incorporated Condition III.2.B.s. of the Hanford Facility RCRA Permit.
7. Page 11-7, line 5; Before the words "will also be performed," added the following: "or areas of documented spills or releases".

Reason: This change incorporated Condition III.2.B.t. of the Hanford Facility RCRA Permit.
8. Page 11-11, lines 26-27: Deleted the words "annually during closure activities" and replaced with "in accordance with Condition II.H.1 of the Facility Wide Permit".

Reason: This change incorporated Condition III.2.B.u. of the Hanford Facility RCRA Permit.
9. Page 11-11, line 11: Deleted "Field" and replaced with "Operations".

Reason: This change corrected the current name for DOE-RL.
10. Page 11-3, line 34: Deleted "radiation protection technologists (RPTs)" and replaced with "radiological control technicians (RCTs)".

Reason: RCTs reflect the current job title.
11. Page 12-1, line 6: Deleted the sentence beginning with "Many of records . . .".

Reason: This change incorporated Condition III.2.B.v. of the Hanford Facility RCRA Permit.
12. Page 12-8, line 5: Added the following to the end of this sentence "and Condition I.E.15. of the Facility Wide Permit".

Reason: This change incorporated Condition III.2.B.x. of the Hanford facility RCRA Permit.
13. Page 12-6, line 3 and 23: Deleted "WHC" and replaced with PHMC".

Reason: This change corrected the contract change to PHMC.
14. Page 12-4, lines 22 and 24; Page 12-5, line 13; Page 12-6, lines 2 and 22; Page 12-7, line 31; Page 12-8, line 1; Page 12-9, lines 28 and 29; Page 12-10, line 36; and Page 12-11, line 43: Replaced "PNL" with "PNNL".

Reason: This change corrected the current acronym for PNNL.

**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

15. Page 13-2, line 39; Deleted this sentence and replaced with the following: "Wastes containing polychlorinated biphenyls (PCB), which are subject to regulation under the Toxic Substances Control Act (TSCA), are stored in the 305-B Storage Unit. These wastes are stored for periods less than one (1) year before shipment to a disposal facility permitted under TSCA. Storage of PCB wastes in 305-B for periods less than one (1) year will continue to be done in compliance with applicable TSCA regulations in 40 CFR Part 761."

Reason: This change incorporated Condition III.2.B.aa. of the Hanford Facility RCRA Permit.

16. Pages 46-47 of 78: Delete Conditions III.2.B.o., and III.2.B.p..

Reason: These Permit Conditions were incorporated during Class 1 modification for quarter ending March 31, 1996.

17. Pages 47-48 of 78: Delete Conditions III.2.B.q. through III.2.B.aa., and III.2.B.ii.

Reason: These Permit Conditions were incorporated during this Class 1 modification.

**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

Replacement Page for DOE-RL-90-01

Appendix 8A, Page 8A-1

305-B UNIT OPERATIONS PERSONNEL

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TITLE	NAME	WORK PHONE
Unit Operating Supervisor	CJ Simiele	373-9349
Waste Management Engineer	GM Bartel-Bailey	376-4189
Waste Management Specialist	EL Grohs	373-7759
Waste Management Specialist	DL McMullin	373-5575
Waste Management Specialist	KA Poeppel	376-2090
Waste Management Specialist	DS Rilling	373-7758
Waste Management Specialist	LD Upton	376-9726
Waste Management Technician	HK Schnebly	372-2745
Waste Management Clerk	BG Anderson	376-3599

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**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

Replacement Chapter for DOE-RL-90-01

Chapter 8, Revision 1A

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8.0 PERSONNEL TRAINING [H]

The information contained in this chapter outlines the Personnel Training Program for PNNL personnel associated with the operation of the 305-B Storage Unit. The program is instituted in accordance with WAC 173-303-330. A copy of this training plan is kept at 305-B.

8.1 OUTLINE OF TRAINING PROGRAM [H-1]

The training program for personnel at 305-B is instituted to meet the requirements of WAC 173-303-330. PNNL combines classroom instruction and on-the-job training to teach all personnel to perform their duties (specific to each job classification) in a way that ensures the facility's compliance with WAC 173-303, teaches personnel dangerous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed, and ensures that personnel are able to respond effectively to emergencies. The training requirements for 305-B operating personnel are depicted graphically in Figure 8.1. PNNL personnel not assigned to the 305-B facility may, on an occasional basis, assist with specific operations at this TSD unit. Proper training for the job will be given to the personnel in these situations before the beginning of any unsupervised work. This training shall be documented by the training coordinator and kept on file for future reference.

8.1.1 Job Titles and Job Descriptions [H-1a]

The Unit Operating Supervisor is responsible for the daily operation of 305-B in compliance with regulations administered under RCRA, the State of Washington Dangerous Waste Regulations (WAC 173-303), and PNNL waste operating procedures.

The Unit Operating Supervisor is ultimately responsible for assessing 305-B compliance, conducting inspections and overseeing any corrective actions which may result from them, ensuring waste handling and storing procedures are followed, and serving as BED to implement proper emergency procedures when necessary. In addition to the responsibilities mentioned above, it is the role of the Unit Operating Supervisor to direct new employees so that successful completion of introductory and on-the-job training will be accomplished in the first six months of employment.

The RMW Waste Management Engineer is responsible for the mixed waste operation of 305-B. This staff member must review all mixed waste disposal requests and ensure their accuracy and reliability. In addition, the RMW Waste Management Engineer will dispatch a pickup team and oversee mixed waste pickup and transportation to the 305-B Storage Unit. When adequate volumes of mixed waste have accumulated to warrant disposal of the waste, the RMW Waste Management Engineer is responsible for readying the waste for shipment. These duties include packaging, labeling, manifesting, and recordkeeping.

The Waste Management Engineers are responsible for evaluating unit compliance, managing the PNNL PCB waste stream, managing the waste designation data base, and overseeing waste designations. Waste Management Engineers also perform waste management operations such as pickup and lab packing of small containers. They also oversee offsite shipping of wastes and ensure compliance with DOT regulations.

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STAFF POSITION:

TRAINING COURSE NAME	OS	E	TS	C
Building Emergency/Contingency Plan	A ²	A	A	A
Handheld Radio Operator	I	I	I	I
General Radiation Safety	B	B	B	N
Radiation Safety for Females ³	I	I	I	I
Respiratory Protection	A	A	A	N
TSD Operator (24 hour w/8-hour refresher)	I/A	I/A	I/A	I/A
SCBA Training	A	A	A	N
Fire Extinguisher Use	A	A	A	A
Worker Right-To-Know	I	I	I	I
Vehicle Accident Prevention	T	T	T	T
Crane, Hoist and Rigging Safety	N	N	T	N
Safe Forklift Operation	N	N	T	N
Hazardous Waste Shipment Certification	T	T	T	N
Radioactive Material Shipping Representative	N	B ⁴	N	N
305-B Safe Operating Procedures	A	A	A	A
Hazardous and Mixed Waste Generator	A	A	A	A
Hazardous Waste Operations Supervisor	I	N	N	N
Waste Designation Training	I	I	N	N

¹Staff Position Key: OS – Unit Operations Supervisor
 E – RMW and Waste Management Engineers
 TS – Waste Management Technicians and Technical Specialists
 C – Waste Management Clerks

²Requirements Key: A – Annually; B – Biennially; T – Triennially; I – Initially upon assignment to the unit;
 N – Not Required.

³Required for female staff only.

⁴Required for RMW Engineers only.

Figure 8-1. 305-B Training Requirements.

1 Waste Management Technical Specialists and Technicians are responsible for the physical operations at 305-B.
2 The persons in these positions are responsible for packaging, labeling, and preparing wastes for shipment to
3 disposal facilities and will assist in any sampling activities and/or waste pickups. One or more of these staff
4 members will also serve as alternate BEDs and zone wardens for 305-B in the event of an off-normal event or an
5 emergency. As zone warden, the primary responsibility is to account for the safe evacuation of plant personnel and
6 report this to the BED. They are also responsible for performing minor maintenance and upkeep of the 305-B
7 building.

8
9 Waste Management Clerks are responsible for recordkeeping and database maintenance at the 305-B Storage Unit.
10 It is the role of the Waste Management Clerk to enter data and update the databases as required. Verification of
11 waste inventories is also the clerk's responsibility; other roles include reporting, preparation of labels, manifests and
12 associated paperwork, and unit upkeep.

13
14 The operations supervisor and all engineer positions require, at a minimum, a college science or engineering
15 degree. The technical specialist positions require, at a minimum, a high school diploma or equivalent, with one year
16 of college science/chemistry or an equivalent year of job specific experience. The technician positions require, at a
17 minimum, a high school diploma or equivalent, with college level science/chemistry or equivalent job experience.
18 The clerk position requires, at a minimum, a high school diploma or equivalent. For all positions, requisite skills, and
19 qualifications required are: (1) previous experience performing similar tasks, as detailed in the job description, and/or
20 (2) specific specialized course work intended to train and qualify the individual for tasks similar or equal to those
21 detailed in the specific job description.

22
23 A current list of the personnel filling the above-mentioned positions can be found in Appendix 8A. The personnel list
24 will be updated as the names of responsible personnel change.

25 26 **8.1.2 Training Content, Frequency, and Techniques [H-1b]**

27
28 A number of training courses are required of 305-B personnel on periodic basis. A brief description of required
29 courses is given in this chapter (Figure 8-1). Equivalent training may be taken in place of the training identified in
30 Figure 8-1 with approval from the 305-B Unit operating Supervisor or the Environmental Management Services
31 Department Manager. Documentation of the training substitution will be placed in the operating record (within
32 7 days after the training was received), accompanied by a narrative explanation, and the date of the training. The
33 documentation shall be made available to Ecology or EPA during inspections for assessment. If Ecology or EPA
34 determines that the training substitution was not equivalent to the original, the original training will be taken or an
35 acceptable substitution will be found.

36
37 New employees at 305-B must successfully complete the training program within 6 months after their employment at
38 or assignment to the unit. At a minimum, the training familiarizes personnel with emergency equipment and
39 procedures, unit operations, and Occupational Safety and Health Administration (OSHA) regulations.

40 41 **8.1.3 Training Coordinator [H-1c]**

42
43 Training at PNNL is provided by a number of specialists in their fields, including a Training Coordinator from the
44 waste management organization who is responsible for coordinating dangerous waste training. The position of
45 Training Coordinator is filled by an engineer or specialist having "hands-on" experience with handling chemical
46 wastes. PNNL also has a unit which tracks and monitors training for PNNL employees. This coordination includes a
47 system for "flagging" affected employees when additional training and/or follow-up is warranted.
48

1 **8.1.4 Relevance of Training to Job Position [H-1d]**
2

3 Titles and job descriptions of personnel involved in operating 305-B are set forth in Section 8.1.1. All training is
4 relevant to the positions in which the unit personnel are employed; for normal operating conditions the training
5 includes:
6

- 7 • Hazardous and Mixed Waste Generator – Annual: This training covers internal PNNL hazardous and mixed
8 waste procedures and issues, and regulatory requirements applicable to PNNL operations.
9
- 10 • Worker Right-to-Know – Initial: This course familiarizes the employee with their rights under the right-to-know
11 statutes. Information on material safety data sheets and their availability and on standard industrial hygiene
12 terms is also covered.
13
- 14 • Vehicle Accident Prevention – Initial (2 hours) and triennial refresher (30 minutes): This course is intended
15 to familiarize employees with safe driving rules and with the requirements for operation of
16 government-owned and PNNL-owned vehicles.
17
- 18 • General Radiation Safety – Biennial: This course gives staff members information on the basic
19 characteristics of radiation, natural and manmade sources, biological effects and risks of radiation
20 exposure, ALARA, contamination control, and warnings and alarms.
21
- 22 • NCRP Report 39 – Initial: For female radiation workers only. The briefing informs the female radiation
23 worker of the potential hazards of radiation to women of reproductive age.
24
- 25 • 305-B Safe Operating Procedures – Annual or whenever procedure content is revised, whichever is more
26 frequent: This requirement is fulfilled by reading and studying the written procedures.
27
- 28 • Hazardous Waste Shipment Certification – Triennial: This course provides training to those who supervise
29 and prepare hazardous waste shipments and who certify that these shipments have been properly
30 prepared in compliance with applicable laws and regulations. This training ensures that these persons
31 understand their responsibilities and liabilities in the shipment of hazardous waste and that they have a
32 basic understanding of which regulations are applicable and how they must achieve compliance.
33
- 34 • Radioactive Material Shipping Representative – Biennial: This course provides training in the onsite
35 radioactive material shipping procedures and requirements. Successful completion of this course is
36 required to receive authorization to sign for onsite radioactive shipments (onsite RSRs).
37
- 38 • Crane Hoist and Rigging Safety – Triennial: This course provides instruction in the safe operation of cranes
39 and in proper rigging techniques.
40
- 41 • Safe Forklift Operation – Triennial: This course provides instruction in the safe operation of forklifts.
42
- 43 • Hazardous Waste Operations Supervisor Training – This course gives hazardous waste operation
44 instruction from a managers standpoint.
45
- 46 • Waste Designation Training – This course gives instruction on proper designation of waste in accordance with
47 WAC 173-303.
48

49 Training is tracked and documented by FNNL and by the unit training coordinator. Training records and class
50 documentation are held on file in the waste management operations office in 305-B as part of the Operating Record.
51 The waste organization manager is responsible for ensuring the necessary training is provided to the 305-B staff.

1 **8.1.5 Training for Emergency Response [H-1e]**
2

3 Training is adequate to ensure that personnel are able to respond effectively to emergencies and are familiar with
4 emergency procedures, emergency equipment, and emergency systems. Emergency response training includes,
5 but is not limited to:
6

- 7 • Using, inspecting, repairing, and replacing unit emergency and monitoring equipment
- 8
- 9 • Activating and responding to communications and alarm systems
- 10
- 11 • Response to fires and explosions
- 12
- 13 • Shutdown of operations.
- 14

15 Procedures for Using, Inspecting, Repairing, and Replacing Unit Emergency and Monitoring Equipment. Personnel
16 operating 305-B are adequately trained to ensure prompt and effective response to emergency situations that may
17 arise during operation of the unit. The following required safety courses outline procedures for using, inspecting,
18 repairing, and replacing unit emergency and monitoring equipment.
19

- 20 • Building Emergency Preparedness (contingency plan): conducted annually or when changes are made,
21 whichever is more frequent, to familiarize the employee with the written contingency plan and specific
22 responsibilities of emergency procedures.
23
- 24 • Hand-Held Radio Operator: conducted initially, this briefing makes the employee familiar with the operation
25 of the hand-held and truck-mounted radios for both everyday and emergency operation. This briefing also
26 includes a discussion on radio etiquette.
27
- 28 • Respiratory Protection (SAF-RP-001): conducted annually, the course familiarizes the operating staff with
29 the proper use of air purifying respirators and their limitations. It also makes the staff aware of potential
30 respiratory hazards, how to recognize them, and what actions to take.
31
- 32 • Treatment, Storage, or Disposal (TSD) Facility Operator Safety (SAF-WM-007): consists of 24-hour initial
33 training and an 8-hour annual refresher. This course provides extensive instruction on the use of field
34 survey instruments such as combustible gas indicators, oxygen meters, detector tube systems, photo and
35 flame ionization instruments, organic vapor analyzer (OVA) meters, and atmospheric sampling
36 instruments. Other topics covered include heat-induced illnesses, OSHA's Emergency Response
37 Standards, lists of personal protective equipment, hazardous materials classification systems, confined
38 space work practices, liquid storage tanks, contamination control, toxicology, medical monitoring, and many
39 others.
40
- 41 • SCBA: conducted annually, this course instructs the employee of the advantages and limitations of the
42 SCBA equipment. Key items covered include equipment inspection, modes of operation, donning
43 procedures, recognition and response to malfunctions, maintenance and repair, and practical
44 demonstrations.
45
- 46 • Fire Extinguisher Use: conducted annually, this 30-minute course consists of a videocassette, lecture, and
47 reading materials. Its intent is to familiarize all personnel with proper discharging, inspecting, and
48 maintenance procedures for fire extinguishers to be used during an emergency.
49

50 Key Parameters for Automatic Waste Feed Cut-Off Systems. This section is not applicable because there are no
51 automatic waste feed systems at 305-B.

1 Communications or Alarm Systems. Personnel operating 305-B are properly trained in both handling
2 communication devices and alarm systems and recognizing alarm sirens as to their meaning. A Hand-Held Radio
3 Operator training course (outlined above) is required to be a part of all 305-B employee training. In addition, the
4 Contingency Plan, also required reading for all the operating staff at 305-B, details communication and alarm
5 systems, as well as proper response to each system during an emergency.
6

7 Response to Fires. Personnel at 305-B are adequately trained to respond to fires at the unit. All staff is trained
8 annually in implementation of the contingency plan which outlines each person's immediate and sequential actions
9 in case of a fire emergency. In addition, all staff receives training for proper handling, maintenance, and discharge
10 of on-site fire extinguishers, and proper activation of alarm and fire suppressant systems.
11

12 Response to Groundwater Contamination Incidents. This section is not applicable because groundwater monitoring
13 is not required at 305-B.
14

15 Shutdown of Operations. Procedures for shutdown of operations of 305-B because of an emergency situation are
16 outlined in the contingency plan. As mentioned previously, all staff is trained annually in implementation of the
17 contingency plan. The person responsible for the decision to shut down is the BED or alternate.
18
19

20 **8.2 IMPLEMENTATION OF TRAINING PROGRAM [H-2]**

21

22 The training program is currently being implemented. All employees will receive training within six months of their
23 date of hire or their transfer to a new position at the unit. Personnel will not work in unsupervised positions until they
24 successfully complete the training course. Records of each individual's formal training are maintained at the 305-B
25 unit; backup files are kept at the office of the Laboratory Training Coordinator. Training records of current
26 employees will be kept until closure of the unit. Records of former employees are kept for at least three years from
27 the date the employee last worked at the unit.
28

29 The training outline is on file in the Laboratory Training Coordination office and at 305-B and is available for review
30 by all waste handling and management personnel, emergency response personnel, and all regulatory agencies.
31 Provisions are made for updating and reviewing courses, as necessary, to ensure compliance with WAC 173-303.
32

**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

Replacement Chapter for DOE-RL-90-01

Chapter 11, Revision 2A

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11.0 CLOSURE AND POST-CLOSURE REQUIREMENTS [I]

This chapter is submitted in accordance with the requirements of WAC 173-303- 806(4)(a)(xiii) to demonstrate that DOE-RL has developed a plan to ensure safe closure of the 305-B unit. In accordance with WAC 173-303-610, copies of the closure plan and all revisions will be maintained at 305-B until certification of closure completeness has been submitted and accepted by Ecology. A post-closure plan is not required because 305-B is not a disposal unit and all dangerous wastes and dangerous waste residues will be removed at the time of closure.

11.1 CLOSURE PLANS [I-1]

This plan presents the activities required for final closure of the 305-B Storage Unit at its maximum extent of operation. The wastes included are those regulated as dangerous waste and RMW. Partial closure will not be conducted. Closure activities are presented in sufficient detail such that the closure process is understandable and a closure schedule can be developed.

11.1.1 Closure Performance Standard [I-1a]

The 305-B Storage Unit will be closed in a manner that will minimize the need for further maintenance and eliminate post-closure release of dangerous/mixed wastes or dangerous/mixed waste constituents which could pose a risk to human health or the environment. This standard will be met by removal of all dangerous/mixed wastes and dangerous/mixed residues from the unit.

Closure activities will return the 305-B site to the appearance and use of surrounding land areas. After closure, the 305-B unit will be in a condition suitable for use to support research and development activities. This use is consistent with the surrounding land use.

If there is any evidence of spills or leaks from the unit into the environment, samples will be taken and analyzed to determine the extent of contamination in the soil, and if necessary, in groundwater. Evidence of spills or leaks will be obtained through sampling of unit structures accessible to the environment (e.g., floors) and through inspection of all barriers designed to prevent migration to the environment (e.g., sumps). If this sampling program indicates that contamination is present, the potential for migration of contamination to the environment will be evaluated. If potential migration appears likely, additional samples will be taken. In addition, if the inspections identify any potential contaminant migration routes (e.g., cracks in sumps), additional samples will be collected to determine whether migration has occurred. Spill reports and logs shall be consulted to determine potential areas of contamination.

Any contaminated soil will be excavated, removed, and disposed as dangerous or mixed waste (determination of dangerous or mixed waste status will be based on waste radioactivity). Soil will be decontaminated to the following levels, as required under WAC 173-303-610(2)(b):

- Background environmental levels for wastes which are listed under WAC 173-303-081 or WAC 173-303-082
- Background environmental levels for wastes which are characteristic dangerous wastes under WAC 173-303-090
- Designation limits for wastes which are designated under WAC 173-303-084, or WAC 173-303-101 through WAC 173-303-103.

1 Equipment and structural components will be decontaminated using the procedures described in Section 11.1.4. All
2 residues resulting from decontamination will be sampled and analyzed, as described in Section 11.1.4.3, to determine
3 whether they are dangerous wastes. All residues will be removed from the unit and transferred to a facility having the
4 necessary permits. Residues containing listed wastes, having dangerous waste characteristics, or exceeding dangerous
5 waste designation limits will be disposed as dangerous wastes.
6

7 **11.1.2 Partial and Final Closure Activities [I-1b]**

8
9 This plan identifies the steps necessary to perform final closure of the unit in order to meet the aforementioned closure
10 performance standard (Section 11.1). Closure activities involve removal of dangerous and mixed wastes from the unit
11 and decontamination of the unit. These activities can be implemented at any point during the active life of the unit.
12 Partial closure of the unit will not be conducted. The entire 305-B Storage Unit will be in use at all times prior to closure.
13 The entire unit, therefore, represents the maximum extent of the operation which will be unclosed during the unit's active
14 life.
15

16 **11.1.3 Maximum Waste Inventory [I-1c]**

17
18 The 305-B Storage Unit is used to store a variety of different research-related wastes. The maximum inventory of wastes
19 in storage at any time will be constrained by three factors:
20

- 21 • The total amount of dangerous/mixed waste in storage at 305-B at any time will not exceed the design
22 capacity of 30,000 gal (it is typically 2,000 to 5,000 gal)
- 23
- 24 • The total amount of any particular dangerous/mixed waste in storage during any given year will not exceed
25 the amounts given in the Part A permit application for 305-B (see Part A application)
- 26
- 27 • The total amount of dangerous/mixed waste by hazard class in storage at any one time will not exceed
28 Uniform Building Code Class B Hazardous Material Quantity Restrictions (see Table 4-1).
29

30 Except on the relatively rare occasion when 85-gal overpacks are used, approximately 90% of all dangerous wastes
31 shipped from the unit are contained in 55-gal drums, with the remaining 10% consisting of 30-gal and smaller containers.
32

33 **11.1.4 Inventory Removal, Disposal or Decontamination of Equipment, Structures, and Soils [I-1d]**

34
35 Steps for removing or decontaminating all dangerous/mixed waste containers, residues, and contaminated equipment
36 are described below.
37

38 **11.1.4.1 Inventory Removal.** Closure activities will be initiated by removal of the dangerous/mixed waste inventory
39 present at 305-B at the time of closure. Inventory removal procedures will be identical to the waste handling, packaging,
40 and manifesting activities associated with normal operation of the unit. All dangerous wastes present will be placed into
41 proper containers according to currently accepted waste handling procedures; mixed waste will be placed into containers
42 and meet Hanford specifications outlined in WHC-EP-0063, *Hanford Radioactive Solid Waste Packaging, Storage, and*
43 *Disposal Requirements*. To the extent possible, chemicals will be bulked into larger containers. If wastes are bulked,
44 containers will be emptied in compliance with WAC 173-303-160 so that they are not dangerous wastes. Small quantity
45 laboratory chemicals that cannot be bulked will be packaged into labpack containers in compliance with the requirements
46 of WAC 173-303-161. All containers of dangerous/mixed waste will be manifested, and custody transferred to a
47 dangerous waste transporter having a proper dangerous waste identification number. Wastes will be transported to a
48 permitted dangerous waste facility for treatment or disposal.
49

1 **11.1.4.2 Decontamination of Building Equipment and Structures.** All equipment and structures in dangerous/mixed
2 waste handling and storage areas will be decontaminated at the time of closure. Equipment and structures to be
3 decontaminated include:

- 4
- 5 • Floors and walls of the four dangerous waste storage cells
- 6 • Floors, walls, and ceiling of high bay and flammable liquid bulking module areas
- 7 • Floors and walls of remainder of first floor except for offices, work area, and lavatories/change rooms
- 8 • Floors, walls, and ceiling of basement except equipment storage room
- 9 • Interior surfaces of all secondary containment trenches
- 10 • Fork lift and loading hoist
- 11 • Asphalt ramp outside north high bay door.

12
13 Prior to decontamination, sampling and analysis will be performed to determine decontamination requirements. In most
14 cases, minimal decontamination consisting of washing or wiping will be performed unless the sampling and analysis
15 indicates the presence of high levels of contamination. In order to determine whether such contamination exists, a
16 systematic sampling approach designed to identify the presence of "hot spots" will be employed. Structures (i.e., floors,
17 walls, ceilings) to be sampled prior to decontamination will be sampled on a regular grid with a spacing of 5 ft. This
18 spacing provides an 80% probability of detecting a circular area of contamination having a radius of 2.5 ft or larger
19 (Gilbert 1987, pp. 119-125). Biased sampling of areas more likely to have been contaminated by unit operations, such
20 as cracks or seams in the concrete floor or any visible stains, or areas of documented spills or releases, will also be
21 performed. If any areas of contamination are detected, more thorough decontamination procedures will be used in those
22 areas.

23
24 Structural surfaces will be sampled by collecting wipe samples at each grid point. At each sample location, two samples
25 will be collected within adjacent 1 ft square templates. One sample will be collected using a gauze pad wetted with dilute
26 nitric acid for extraction of inorganic contaminants. The other sample will be collected with a gauze pad wetted with
27 hexane for extraction of organic contaminants. The procedure for collecting wipe samples is given in Appendix 11A.
28 Decontamination of equipment and structures will take place as described below. The magnitude of each phase of the
29 operation and estimated time for completion is included.

30
31 **11.1.4.2.1 Decontamination of Basement.** Once the RMW room has been completely emptied of stored waste, any
32 visible residues present will be scraped, vacuumed and/or swept up until visibly clean. All residues thus obtained will be
33 placed in open top drums and disposed of as appropriate. All waste materials generated during the decontamination
34 process of the RMW room will be surveyed by radiological control technicians (RCTs) to determine whether the wastes
35 generated from decontamination should be handled as RMW. After the above process is completed, wipe samples will
36 be collected at various points along the floors, walls, and ceiling of the basement.

37
38 Swab samples will be collected from the RMW room to test for dangerous waste contamination resulting from storage
39 activities. Any dangerous waste contamination found during this testing will be presumed to have come from storage
40 activities unless otherwise documented. Random and biased sampling locations will be selected using the procedures
41 noted in Section 11.4.4.

42
43 The swab samples will be analyzed to determine if the RMW storage area has been radioactively contaminated. Baseline
44 smears will have been documented prior to introduction of RMW. Radioactivity has been selected as an indicator of
45 contamination since it is present in the RMW and is easily detected. Once the results from the testing are known, a
46 decision can be made as to the appropriate decontamination procedures.

1 If no contamination is found on the swab samples, decontamination procedures will consist of dusting, vacuuming, and
2 wiping with soap and water. Vacuuming is performed using a commercial or industrial vacuum equipped with a
3 high-efficiency particulate air (HEPA) filter. The vacuum cleaner bag containing captured particulates is disposed of as
4 appropriate.

5
6 Dusting/wiping is done with a damp cloth or wipe (soaked with water or solvent) to remove dust from surfaces not
7 practically treatable with a vacuum. The cloth or wipe is also disposed of as appropriate. Brushing or sweeping is used
8 to clean up coarse debris.

9
10 Minimal time will be required for setup of the equipment. Labor requirements for the process should be moderate.
11 Minimal time will also be required for packaging debris and dismantling and removing cleaning equipment. Little
12 wastewater (only the contents of the buckets) will be generated by this procedure. However, if contamination is found on
13 the swab samples, more sophisticated decontamination procedures must be implemented. The entire RMW storage
14 room will be extensively treated via steam cleaning. The ceiling, all four walls, and the floor will be treated by applying
15 steam from a hand-held wand to remove all residues from the surfaces. The contaminated wastewater generated by this
16 activity will be contained by the designed spill controls already in place for waste storage areas. Pumps or vacuums will
17 be used to empty the wastewater from the containment area into polyethylene-lined, closed top drums. These containers
18 will be transported for proper management at an approved dangerous waste or RMW TSD facility.

19
20 Although this procedure will require more time than the dusting, vacuuming, and wiping procedures outlined above, time
21 requirements are still considered to be minimal for the steam cleaning approach. Wastewaters generated by this
22 procedure are not anticipated to exceed 100 gal.

23
24 Following completion of decontamination, sampling will be performed, as described in Section 11.1.4.4, to verify that
25 decontamination is complete.

26
27 **11.1.4.2.2 Decontamination of Waste Handling Equipment.** All equipment will be decontaminated first by solvent
28 washing followed by steam cleaning, or disposed of as dangerous waste at an approved disposal facility. The decision
29 to dispose or decontaminate equipment will be made at the time of closure. Whichever option, in the opinion of the
30 Building Supervisor, is most environmentally and economically feasible will be chosen. If the equipment is not
31 considered to be substantially contaminated, the solvent washing may not be performed. In this case, the equipment will
32 be cleaned by the steam cleaning technique only.

33
34 All equipment to be decontaminated will be placed in one of the fully contained storage cells and subjected to the solvent
35 wash deemed most effective for the removal of the suspected contamination. The equipment is then subjected to a final
36 washing and rinsing by a steam cleaning unit. All wastewaters will be collected in the storage cell sumps, pumped to
37 polyethylene-lined closed top drums, and transported and disposed of as dangerous waste.

38
39 The time required for completion and wastewaters generated by these processes are largely dependent upon the amount
40 of equipment which needs to be treated. However, at this time, minimal time and effort are anticipated. In addition,
41 wastes to be generated are not anticipated to exceed 50 gal.

42
43 Following completion of decontamination, sampling will be performed, as described in Section 11.1.4.4, to verify that
44 decontamination is complete.

45
46 **11.1.4.2.3 Decontamination of Dangerous Waste Storage Cells.** Any visible contamination present in the storage
47 cells will be scraped and/or swept until visibly clean. All residues obtained from the scraping/sweeping exercise will be
48 placed in open top drums and disposed of as dangerous waste. Each of the four storage cells will be steam cleaned and
49 the generated wastewaters collected in each of the storage cell's individual sumps. The wastewaters will be pumped
50 from the sumps to polyethylene-lined, closed top drums in preparation for disposal. No wastewaters will be mixed with

1 scrapings, sweepings, or wastewaters from other storage cells. Each sump area will be re-rinsed with water. This water
2 will similarly be pumped to containers for disposal.

3
4 The containerized wastewaters will be analyzed to determine if they are designated as dangerous waste under
5 WAC 173-303-070. If designated as dangerous, the wastewaters will be handled, transported, and disposed of as
6 dangerous waste. If not dangerous waste, the wastewater will be managed appropriately. Total decontamination of the
7 storage cells should be completed in no more than 2 weeks. Each of the storage cells should have approximately 30 gal
8 of wastewater generated during the cleaning and rinsing process; therefore, a total of 120 gal of wastewater will need to
9 be analyzed and disposed.

10
11 Following completion of decontamination, sampling will be performed, as described in Section 11.1.4.4, to verify that
12 decontamination is complete.

13
14 **11.1.4.2.4 Decontamination of High Bay, Flammable Liquid Bulking Module and Other First Floor Areas.** Wipe
15 samples will be collected at various points along the floors, walls, and ceiling of the entire first floor, except for the office,
16 supply/office area, lunch room, and rest room. The wipe samples will be analyzed to determine if these areas have been
17 contaminated with dangerous waste constituents. Once the results from the testing are known, a decision can be made
18 as to the appropriate decontamination procedures.

19
20 If no contamination is found on the wipe samples, decontamination procedures will consist of dusting, vacuuming, and
21 wiping. Vacuuming is performed using a commercial or industrial vacuum equipped with a HEPA filter. The vacuum
22 cleaner bag containing captured particulates is disposed of as appropriate.

23
24 Dusting/wiping is done with a damp cloth or wipe (soaked with water or solvent) to remove dust from surfaces not
25 practically treatable with a vacuum. The cloth or wipe is also disposed of as appropriate. Brushing or sweeping is used
26 to clean up coarse debris.

27
28 Minimal time will be required for setup of the equipment. Labor requirements for the process should be moderate.
29 Minimal time will also be required for packaging debris and dismantling and removing cleaning equipment. Little
30 wastewater (only the contents of the buckets) will be generated by this procedure.

31
32 On the other hand, if contamination is found on the wipe samples, more sophisticated decontamination procedures must
33 be implemented. The affected areas will be extensively treated via steam cleaning. Such areas will be treated by
34 applying steam with a hand-held wand to remove all residues from the surfaces. The contaminated wastewater
35 generated by this activity will be contained by the designed spill controls already in place for the waste storage areas.
36 Pumps will be used to empty the wastewater from the containment area into polyethylene-lined closed top drums. These
37 containers will be transferred for proper treatment or disposal at an approved dangerous waste facility. Although this
38 procedure will require more time than the dusting, vacuuming, and wiping procedures outlined above, time requirements
39 are still considered to be minimal for the steam cleaning approach. Wastewaters generated by this procedure are not
40 anticipated to exceed 200 gal.

41
42 Following completion of decontamination, sampling will be performed, as described in Section 11.1.4.4, to verify that
43 decontamination is complete.

44
45 **11.1.4.2.5 Decontamination of Sumps.** All collection sumps located at 305-B, including those lining the storage cells
46 on the west side of the unit, the sump along the east side inside wall, and those protecting the exits on the north and
47 south ends, will be decontaminated by steam cleaning. Wastewaters collected in each sump from the implementation of
48 the cleaning process will be pumped into polyethylene-lined, closed top drums and analyzed as to whether or not they
49 are designated as dangerous waste under WAC 173-303-070. If designated, they will be disposed of as dangerous

1 waste. If they are not dangerous waste, the wastewaters will be discharged to the 300 Area process sewer system. The
2 steam cleaning of all the sumps should take minimal time and generate approximately 100 gal of wastewater.

3
4 Following completion of decontamination, sampling will be performed, as described in Section 11.1.4.4, to verify that
5 decontamination is complete.

6
7 **11.1.4.3 Management of Decontamination Wastes.** Liquid decontamination wastes will be placed in drums and
8 sampled to determine disposal requirements. Grab samples will be collected from drums using COLIWASA samplers. In
9 order to properly designate the decontamination wastes under WAC 173-303-070, grab samples from each drum will be
10 analyzed for the following:

- 11 • Corrosivity using the methods described in SW-846.
- 12 • Flash point using methods described in SW-846.
- 13 • Toxicity characteristic using the toxicity characteristic leaching procedure described in SW-846 (includes
14 analysis for metals, volatile organics, and semi-volatile organics including chlorinated pesticides)
- 15 • Total radioactivity using gross alpha, gross beta, and gamma scans.

16
17
18
19
20
21 The results of sample analysis will be used to determine how to dispose of liquid decontamination wastes. The results of
22 volatile and semi-volatile organic analysis of the liquid performed as part of the TCLP will be used to determine the
23 presence of potential listed [WAC 173-303-081(1) and WAC 173-303-082(1)] dangerous waste constituents above
24 background. (Background levels will be determined by analysis of the tap water used for makeup of the decontamination
25 solutions.) Those liquid wastes with listed waste constituents above background will be designated as dangerous
26 wastes. The results of the ignitability, corrosivity, and TCLP analyses will be used to determine if liquid wastes are
27 characteristic dangerous wastes [WAC 173-303-090]. Organic and inorganic analytical results will also be used to
28 determine if liquid wastes are dangerous waste mixtures [WAC 173-303-084]. These results will also be used to
29 determine whether the wastes are LDR [WAC 173-303-140(4) and 40 CFR 268]. The results of the radiological analyses
30 will be used to determine whether any of the liquid wastes are low-level liquid radioactive wastes or radioactive mixed
31 wastes. Depending on designation, liquid decontamination wastes will be disposed of as follows:

- 32 • Dangerous—Manifested and shipped to a permitted dangerous waste TSD facility
- 33 • Radioactive Mixed—Manifested and shipped to a permitted radioactive mixed waste TSD facility
- 34 • Low-level Radioactive—Shall be handled in accordance with the Liquid Effluent Consent Order
35 (No. DE91NM-177) and Milestone M-17 of the Hanford Federal Facility Agreement and Consent Order.
- 36 • Nonregulated—Shall be handled in accordance with the Liquid Effluent Consent Order (No. DE91NM-177) and
37 Milestone M-17 of the Hanford Federal Facility Agreement and Consent Order.

38
39
40
41
42
43 All non-liquid wastes generated during decontamination of dangerous waste storage areas and equipment
44 (e.g., personnel protective clothing) will be collected in 55-gal open-head drums and managed as dangerous wastes. All
45 non-liquid wastes generated during decontamination of RMW storage areas and equipment will be similarly collected and
46 managed as RMW.

47
48 **11.1.4.4 Methods for Sampling and Testing to Demonstrate Success of Decontamination.** A series of wipe
49 samples will be collected at various points along floors, walls, ceilings, and equipment of areas at which decontamination
50 activities were conducted. These samples will be analyzed and used to verify whether decontamination procedures were

1 effective. To verify decontamination, a systematic sampling approach designed to identify the presence of "hot spots"
2 will be employed. Samples will be collected on a regular grid with a spacing of 5 ft. This spacing provides an 80%
3 probability of detecting a circular "hot spot" having a radius of 2.5 ft or larger (Gilbert 1987, pp. 119-125). Biased
4 sampling of areas more likely to have been contaminated by unit operations, such as cracks or seams in the concrete
5 floor or any visible stains, or areas of documented spills or releases, will also be performed. If any "hot spots" are
6 detected, additional decontamination will be performed.

7
8 Decontaminated surfaces will be sampled by collecting wipe samples at each grid point. At each sample location, two
9 samples will be collected within adjacent 1 ft square templates. One sample will be collected using a gauze pad wetted
10 with dilute nitric acid for extraction of inorganic contaminants. The other sample will be collected with a gauze pad
11 wetted with hexane for extraction of organic contaminants.

12
13 **11.1.4.5 Closure of Containers [I-1d(1)].** At closure, all containers will be removed from the 305-B unit. All dangerous
14 waste residues will be removed from the containment system components. Contaminated equipment, floors, walls, and
15 loading areas will be decontaminated or removed. All decontamination equipment and rinsate will be containerized,
16 tested, and properly disposed. Sampling and analysis will be conducted to ensure that no contamination remains around
17 the storage area and containment system. Additional details for closure and decontamination are provided in Sections
18 11.1.4.1 through 11.1.4.3.

19
20 **11.1.4.6 Closure of Tanks [I-1d(2)].** This section is not applicable to the 305-B Storage Unit because wastes are not
21 stored or treated in tanks.

22
23 **11.1.4.7 Closure of Waste Piles [I-1d(3)].** This section is not applicable to the 305-B Storage Unit because wastes are
24 not stored in waste piles.

25
26 **11.1.4.8 Closure of Surface Impoundments [I-1d(4)].** This section is not applicable to the 305-B Storage Unit
27 because wastes are not placed in surface impoundments.

28
29 **11.1.4.9 Closure of Incinerators [I-1d(5)].** This section is not applicable to the 305-B Storage Unit because wastes are
30 not incinerated.

31
32 **11.1.4.10 Closure of Land Treatment Facilities [I-1d(6)].** This section is not applicable to the 305-B Storage Unit
33 because wastes are not treated in land treatment units.

34
35 **11.1.5 Closure of Disposal Facilities [I-1e]**

36
37 This section is not applicable to the 305-B Storage Unit because it will not be closed as a dangerous waste disposal unit.

38
39 **11.1.6 Closure Schedule [I-1f]**

40
41 Closure of 305-B is not expected to begin during the term of the Part B permit. When closure begins, the inventory of
42 dangerous and radioactive mixed waste will be removed within 90 days from receipt of the final volume of wastes. All
43 closure activities will be completed within 180 days of receipt of the final volume of waste. The Director of the
44 Washington Department of Ecology will be notified by DOE-RL at least 45 days before the final closure activities are
45 begun. Closure activities are summarized in Table 11-1. A detailed schedule of closure activities is provided in
46 Figure 11-1.
47

11.1.7 Extension of Closure Time Frame [I-1g]

The inventory of dangerous and radioactive mixed wastes will be removed from the 305-B Storage Unit within 90 days of receipt of the last volume of waste. The closure activities described in this plan will be completed within 180 days of receipt of the final volume of waste. No extension to the time frame for initiation and completion of closure is currently expected to be necessary. Extensions to the time frames for closure would only be necessary if unexpected conditions were encountered during closure of the unit. If it becomes apparent that all wastes cannot be removed within 90 days, Ecology will be so notified at least 30 days prior to expiration of the 90-day period. This notification will demonstrate why more than 90 days is required for removal of the wastes and will demonstrate that steps have been taken to prevent threats to human health and the environment and that the unit is in compliance with applicable permit standards. If it becomes apparent that closure cannot be completed within 180 days after approval of this plan, Ecology will be so notified at least 30 days prior to expiration of the 180-day period. This notification will demonstrate why more than 180 days is required for closure and will demonstrate that steps have been taken to prevent threats to human health and the environment and that the unit is in compliance with applicable permit standards.

11.1.8 Amendments to Closure Plan

If changes are deemed necessary to the approved closure plan, DOE-RL will submit a written request to Ecology for authorizing a change to the approved plan. The written request will include a copy of the amended plan, in accordance with WAC 173-303-610(3)(b).

Table 11-1. Summary of Closure Activities.

Closure Activity Description	Expected Duration
Receipt of final volume of dangerous and/or mixed waste	N/A
Notify EPA and Ecology that closure will begin	N/A
Remove waste inventory – package all dangerous and mixed wastes, manifest, and transfer to permitted facility for treatment and/or disposal	45 days
Obtain wipe samples from structural surfaces and equipment to identify areas of contamination and determine level of decontamination needed	10 days
Analyze wipe samples	25 days
Decontaminate structural surfaces and equipment using procedures based on results of wipe sampling	35 days
Obtain wipe samples to verify decontamination	25 days
Analyze verification samples	35 days
Analyze decontamination wastes to determine proper methods of treatment/disposal	25 days
Dispose of decontamination wastes based on results of waste analysis	20 days

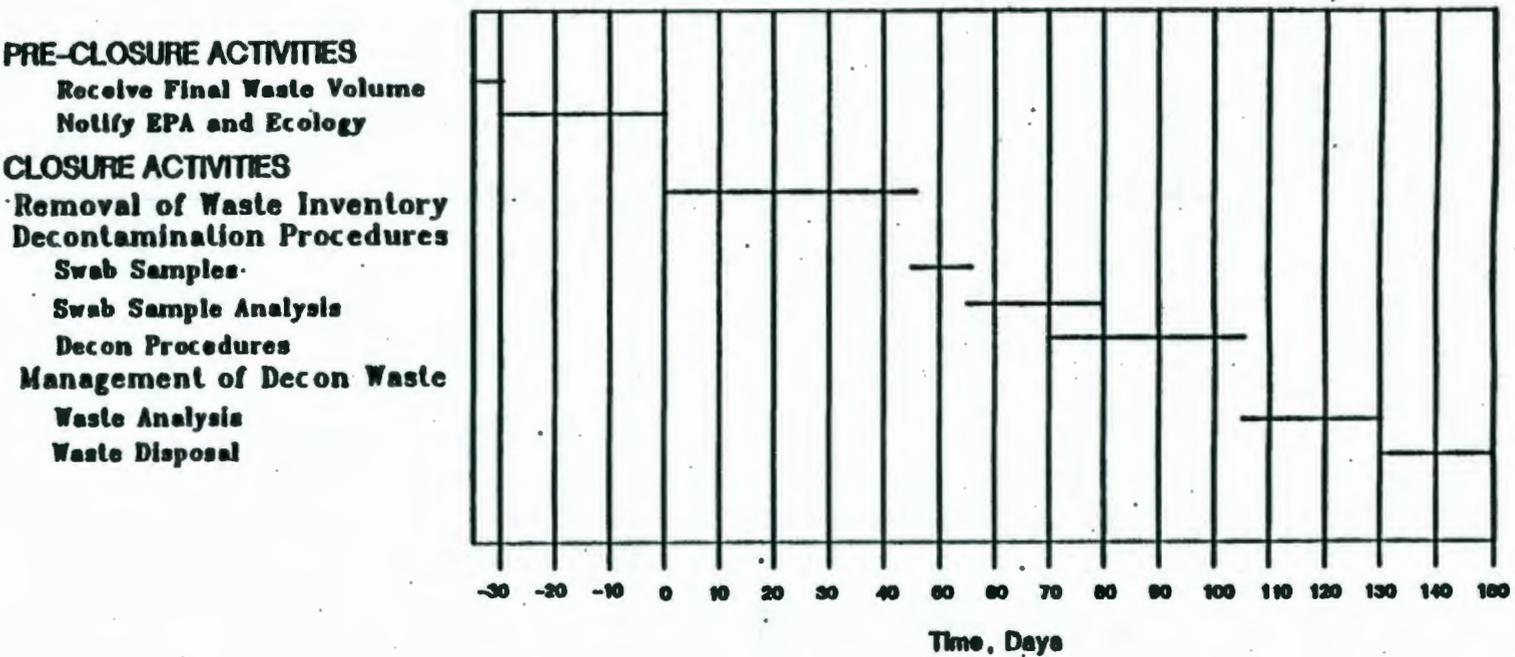


Figure 11-1. Detailed Schedule of Closure.

1 **11.2 CERTIFICATION OF CLOSURE**
2

3 Within 60 days of completion of the final closure activities described in this plan, a certification of closure will be
4 submitted to Ecology. This certification will indicate that the 305-B Storage Unit has been closed as described in this
5 plan and that the closure performance standards given in Section 11. 1 have been met. The certification will be
6 submitted by registered mail and will be signed by DOE-RL and an independent Professional Engineer registered in the
7 State of Washington as described below.
8

9 The DOE-RL will self-certify with the following document or a document similar to it:

10
11 I, (name), an authorized representative of the U.S. Department of Energy-Richland Operations Office located
12 at the Federal Building, 825 Jadwin Avenue, Richland, Washington, hereby state and certify that the 305-B
13 Storage Unit at the 300 Area, to the best of my knowledge and belief, has been closed in accordance with the
14 attached approved closure plan, and that the closure was completed on (date).
15

16 (Signature and date)
17

18 The DOE-RL will engage an independent Professional Engineer registered in the State of Washington to inspect closure
19 activities, to verify that closure activities are being conducted according to this plan, and to certify that closure has been
20 performed in accordance with this plan.
21

22 The engineer will inspect 305-B at least weekly while closure activities are being performed. During these inspections
23 the engineer will observe closure activities to determine whether they are being performed according to this plan.
24 Inspections will include, but not be limited to:

- 25
- 26 • Inspection of dangerous and radioactive mixed waste containment structures and systems to determine
27 whether releases of wastes to the environment have occurred
 - 28
 - 29 • Verification that the dangerous and radioactive mixed waste inventory has been removed within 90 days of
30 receipt of the last waste shipment
 - 31
 - 32 • Inspection of manifests and Operating Record to verify that these wastes were disposed of in compliance with
33 WAC 173-303
 - 34
 - 35 • Inspection of decontamination operations to verify that they are being performed using the procedures
36 described in this plan
 - 37
 - 38 • Inspections of the Operating Record to verify that samples of liquid decontamination wastes were collected
39 and analyzed using the procedures described in this plan
 - 40
 - 41 • Inspection of the Operating Record to verify that decontamination wastes were properly designated in
42 compliance with WAC 173-303-070 and properly disposed.
43

44 Inspections by the engineer will be documented in a bound notebook. Notations will include the date and time of the
45 inspection, the areas inspected, the activities inspected, applicable closure plan requirements inspected, status of
46 observed activities with respect to plan requirements, corrective actions required, status of past corrective actions, and
47 name and signature of inspector. This inspection notebook will be made available to Ecology upon request.
48

1 Upon completion of closure according to the plan, the DOE-RL will require the engineer to sign the following document or
2 a document similar to it:
3
4

5 I, (name), a certified Professional Engineer, hereby certify, to the best of my knowledge and belief, that I have
6 made visual inspection(s) of the 305-B Storage Unit at the 300 Area and that closure of the aforementioned
7 unit has been performed in accordance with the attached approved closure plan.
8

9 (Signature, date, state Professional Engineer license number, business address, and phone number.)
10
11

12 **11.3 POST-CLOSURE PLAN [I-2]**
13

14 This section and subsequent subsections are not applicable because the 305-B Storage Unit is not to be closed as a
15 dangerous waste disposal unit.
16
17

18 **11.4 NOTICE IN DEED [I-3]**
19

20 This section is not applicable because the 305-B Storage Unit is not to be closed as a dangerous waste disposal unit.
21
22

23 **11.5 CLOSURE COST ESTIMATE [I-4]**
24

25 It is DOE-RL's understanding that federal facilities are not required to comply with WAC 173-303-620. However,
26 projections of anticipated costs for closure will be provided in accordance with Condition II.H.1. of the Facility Wide
27 Permit.
28
29

30 **11.6 FINANCIAL ASSURANCE MECHANISM FOR CLOSURE [I-5]**
31

32 In accordance with 40 CFR 264.140(c) and WAC 173-303, this section is not required for federal facilities. The Hanford
33 Site is a federally-owned facility for which the federal government is an operator and this section is therefore not
34 applicable to the 305-B Storage Unit.
35
36

37 **11.7 POST-CLOSURE COST ESTIMATE [I-6]**
38

39 A post-closure cost estimate is not required for the 305-B Storage Unit because it will not be closed as a dangerous
40 waste disposal facility.
41
42

43 **11.8 FINANCIAL ASSURANCE MECHANISM FOR POST-CLOSURE CARE [I-7]**
44

45 Post-closure financial assurance is not required for the 305-B Storage Unit because it will not be closed as a dangerous
46 waste disposal facility.
47

1 **11.9 LIABILITY REQUIREMENTS [I-8]**
2

3 In accordance with 40 CFR 264.140(c) and WAC 173-303, this section is not required for federal facilities. The Hanford
4 Site is a federally-owned facility for which the federal government is an operator and this section is therefore not
5 applicable to the 305-B Storage Unit.
6

**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

Replacement Chapter for DOE-RL-90-01

Chapter 12, Revision 1A

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4 **12.0 REPORTING AND RECORDKEEPING**

5 This chapter summarizes the reporting and recordkeeping requirements from the other sections of the Part B permit
6 application. The reports are submitted to Ecology and/or the EPA as required by applicable regulations, and required
7 records are maintained at the 305-B Storage Unit. A general reporting requirement applicable to all dangerous waste
8 management facilities (e.g., notification) is described, as well as reporting and recordkeeping requirements for
9 generators, transporters, and treatment, storage, and/or disposal facilities. Reports and records applicable to the 305-B
10 Storage Unit are summarized in Table 12-1.

11
12 **12.1 NOTIFICATION OF HAZARDOUS WASTE ACTIVITIES**

13
14 Facilities generating or transporting dangerous waste and the owner and operators of treatment, storage, and/or disposal
15 facilities must have current EPA/State Identification Numbers. The 305-B unit operates under EPA/State Identification
16 Number WA7890008967, issued to the Hanford Facility.

17
18
19 **12.2 GENERATOR REQUIREMENTS**

20
21 The 305-B Storage Unit generates only minor amounts of waste during the cleanup of container spills or leaks and this
22 waste is handled together with other waste generated on the Hanford Site. Hanford Site waste generation records and
23 required reports (e.g., annual reports) are compiled and issued as single records or reports for the entire Hanford Site;
24 information on waste generated by the 305-B unit is compiled and provided together with other Hanford Site generator
25 records and reports.

26
27 **12.2.1 Recordkeeping**

28
29 Generator records maintained by the Hanford Site include the following:

- 30
31
- 32 • Records of waste generated onsite
 - 33 • Records of waste packaged to be shipped offsite
 - 34 • A copy of each annual report
 - 35 • Land disposal restriction records.

36
37 Waste generation records are retained as required by WAC 173-303-210 and 40 CFR 268.7.

38 **12.2.2 Reporting**

39
40 Generator reports required by WAC 173-303-220 submitted by the Hanford Site include the annual report, exception
41 reports, and any required additional reports.

42
43 Table 12-1. Reports and Records. The Hanford Site submits an annual report of waste generation activities to Ecology.
44 The annual report is submitted on the "Generator Annual Dangerous Waste Report-Form 4." All dangerous waste
45 generated at the 305-B unit is included in the annual report.

Table 12-1. Reports and Records.

Item	STORAGE	
	Retention Time	Location
Notification of dangerous waste activities	Life of facility	Facility File
GENERATOR REPORTS AND RECORDS:		
Annual report	5 years after last waste shipment	Hanford Site ¹
Exception report	5 years after last waste shipment	Hanford Site
Additional reports and records as required (i.e., inspection logs)	5 years after closure	Hanford Site
Test and Waste Analysis Results:		
Waste generated onsite	5 years after last waste shipment	Hanford Site
Waste packaged for offsite shipment	5 years after last waste shipment	Hanford Site
Waste Manifest Reports and Records:		
Manifests	5 years after last waste shipment	Hanford Site
Manifest discrepancy	5 years after last waste shipment	Hanford Site
Unmanifested waste	Not required	N/A ²
Land Disposal Restriction Records:		
Extension to an effective date	At least 5 years from the date of shipment	Hanford Site
Petition for a variance	At least 5 years from the date of shipment	Hanford Site
Notice and certification of treatment standards	At least 5 years from the date of shipment	Hanford Site
Demonstration and certification for a temporary extension to the effective date	At least 5 years from the date of shipment	Hanford Site
TRANSPORTER REPORTS AND RECORDS:		
None required	N/A	N/A
TREATMENT, STORAGE, AND/OR DISPOSAL REPORTS AND RECORDS:		
Permit Application Plans:		
Waste analysis plan	Life of facility	Hanford Site
Contingency plan and amendments	Life of facility	Hanford Site
Training plan	Life of facility	Hanford Site
Closure plan	Life of facility	Hanford Site
Post-closure plan	Not Required	N/A
Inspection plans	Life of facility	Hanford Site
Operating Reports and Records		
Waste description and quantity	Life of facility	Hanford Site
Waste location	Until closure	Hanford Site
Waste analysis data	Life of facility	Hanford Site

Table 12-1. Reports and Records.

Item	STORAGE	
	Retention Time	Location
Inspection records	5 years after inspection	Hanford Site
Certification of waste minimization efforts	Life of facility	Hanford Site
Land Disposal Restriction Records:		
Extension to an effective date	At least 5 years from the date of shipment	Hanford Site
Petition for a variance	At least 5 years from the date of shipment	Hanford Site
Notice and certification of treatment standards	At least 5 years from the date of shipment	Hanford Site
Demonstration and certification for a temporary extension to the effective date	At least 5 years from the date of shipment	Hanford Site
Waste Manifest Reports and Records:		
Manifests	5 years after receipt of waste	Hanford Site
Manifest discrepancy	5 years after receipt of waste	Hanford Site
Unmanifested waste	Not required	N/A
Groundwater Monitoring Reports and Records:		
None required	N/A	N/A
Contingency Plan Incident Reports and Records:		
Immediate notification--Event Fact Sheet	Life of facility	Hanford Site
Assessment report	Life of facility	Hanford Site
Facility restart notification	Life of facility	Hanford Site
Spills, Discharges, and Leaks Reports and Records:		
Immediate notification	Life of facility	Hanford Site
Closure Reports and Records:		
Certification of closure	Life of facility	Hanford Site
Survey plat	Not required	N/A
Closure cost estimates	Not required	N/A
Post-Closure Reports and Records:		
None required	N/A	N/A
Miscellaneous Support Reports and Records:		
Annual report	5 years from due date	Hanford Site
Biennial report	Life of facility	Hanford Site
Training documentation	Life of facility	Hanford Site
Liability coverage documentation	Not required	N/A

¹Hanford Site: Records pertaining to the 305-B Storage Unit will be retained at the unit until completion of closure. Documents requiring longer retention, as specified, will be retained in the Hanford Facility File.

²N/A: Not Applicable

1 If a copy of the manifest is not returned with the signature of the owner/operator of a permitted unit designated to receive
2 nonradioactive dangerous waste offsite within 35 days, the 305-B unit staff will contact the initial transporter or facility to
3 determine the status of the waste shipment. If a copy of the manifest with the handwritten signature of the designated
4 facility's owner/operator is not received by 305-B staff within 45 days of the date the waste was offered to the initial
5 transporter, an exception report will be submitted to Ecology. The report will include the following:

- 6
- 7 • A legible copy of the manifest for which delivery was not confirmed
- 8 • A cover letter explaining the efforts to locate the waste and the results of those efforts.

9
10 Copies of waste analysis reports or other documentation relating to the composition of dangerous waste shipped from
11 the 305-B unit will be retained at the unit. Documents relating to land disposal restrictions are discussed in
12 Section 12.4.2.2.7.

13
14 Any additional reports deemed necessary by Ecology or EPA are furnished by the Hanford Site upon request.
15
16

17 12.3 TRANSPORTER REQUIREMENTS

18
19 Transporter recordkeeping and reporting requirements are not strictly applicable to the 305-B unit since 305-B does not
20 transport dangerous wastes offsite. Transporters having their own EPA/State Identification Numbers are used to
21 transport dangerous wastes from 305-B to a permitted off-site treatment, storage, and/or disposal facility. Wastes are
22 transported to 305-B by PNNL waste management organization staff. Wastes transported to 305-B on public roadways
23 or highways are considered to be "off-site" shipments and the PNNL waste management organization complies with
24 transporter recordkeeping and reporting requirements under WAC 173-303-260 and WAC 173-303-270 for these
25 shipments.
26
27

28 12.4 TREATMENT, STORAGE, AND/OR DISPOSAL REQUIREMENTS

29
30 Storage facility reporting and recordkeeping requirements are discussed below.
31

32 12.4.1 Reports

33
34 This section discusses the reporting requirements of WAC 173-303 relating to aspects of dangerous waste. The
35 reporting requirements include the following:

- 36
- 37 • Waste manifest reports
- 38 • Annual reports
- 39 • Groundwater monitoring reports
- 40 • Contingency plan incident reports
- 41 • Spills, discharges, and leaks reports
- 42 • Closure reports
- 43 • Post-closure reports.

44
45 Additional details of these reports are provided below. Copies of these reports are maintained by the 305-B unit or other
46 Hanford Site organizations as appropriate.

1 **12.4.1.1 Waste Manifest Reports.** The waste manifest or lack thereof, is the source of two possible reports, the
2 manifest discrepancy report and the unmanifested waste report.
3

4 **12.4.1.1.1 Manifest Discrepancy.** Each dangerous or mixed waste transfer to the 305-B unit transported on roads
5 accessible to the general public must have a Uniform Hazardous Waste Manifest for the transfer to be approved (see
6 Section 2.). The waste manifests received are checked to verify that they are properly filled out and the waste received
7 is identical to the material described on the manifest. Every effort is made to resolve manifest discrepancies with the
8 generator. If discrepancies are not resolved in 15 days, a report will be submitted to Ecology in accordance with
9 WAC 173-303-370. This report describes the discrepancy and attempts to reconcile it. A copy of the manifest or
10 shipping paper at issue is attached to the report.
11

12 **12.4.1.1.2 Unmanifested Waste.** The 305-B Storage Unit receives only dangerous and mixed wastes generated by
13 DOE-RL- and/or PNNL-sponsored programs. As noted in Section 2.8.4, unmanifested waste which requires a manifest
14 may either be rejected, or an unmanifested waste report will be filed with Ecology within 15 days of receipt of shipment
15 using Ecology Form 6, Unmanifested Dangerous Waste Report.
16

17 The report shall include at least the following information:
18

- 19 1. The EPA/State identification number, name, and address of the facility;
- 20 2. The date the unit received the waste;
- 21 3. The EPA/State identification number, name, and address of the generator and transporter, if available;
- 22 4. A description and the quantity of each unmanifested dangerous waste the unit received;
- 23 5. The method of management for each dangerous waste;
- 24 6. The certification signed by the owner or operator of the unit or the authorized representative; and
- 25 7. A brief explanation of why the waste was unmanifested, if known.
26
27
28
29
30
31
32

33 **12.4.1.2 Annual Report.** The state of Washington, pursuant to WAC 173-303-390, requires an annual overall report for
34 each facility which holds an active EPA/State Identification Number. The report is due to Ecology on March 1 of each
35 year. A single report is prepared for the entire Hanford Site and covers each dangerous waste treatment, storage, and
36 disposal unit at Hanford, including 305-B. The report contents for each unit include the following:
37

- 38 • EPA/State Identification Number
- 39 • Name and address of the unit
- 40 • Calendar year covered by the report
- 41 • Sources of the waste received by the unit
- 42 • Description and quantity of the waste received by the unit
- 43 • Treatment, storage, and/or disposal methods
- 44 • Certification statement signed by an authorized representative.
45

1 The report form and instructions in the "Treatment, Storage, or Disposal Unit Annual Dangerous Waste Report--Form 5"
2 are used for this report. The above information applicable to the 305-B Storage Unit is compiled by the PNNL waste
3 management organization and submitted to PHMC. PHMC is the organization responsible for preparing the Hanford Site
4 annual report.

5
6 **12.4.1.3 Biennial Report.** The EPA requires, pursuant to 40 CFR 264.75, that an overall report describing each
7 dangerous waste facility activity be submitted on March 1 of each even-numbered year. The biennial report is not
8 required by Ecology. As with the annual report described in Section 12.4.1.2, a single report is prepared for the entire
9 Hanford Site covering all dangerous waste treatment, storage, and disposal facilities at Hanford. The report contents for
10 each unit include the following:

- 11 • EPA/State Identification Number
- 12 • Name and address of the unit
- 13 • Calendar year covered by the report
- 14 • Sources of the waste stored at 305-B
- 15 • Description and quantity of the waste received at 305-B
- 16 • Treatment, storage, and/or disposal methods
- 17 • Waste minimization efforts
- 18 • Certification statement signed by an authorized representative.

19
20
21 This information covers activities for the previous calendar year, which is submitted on EPA Form 8700-13B. The above
22 information applicable to the 305-B Storage Unit is compiled by the PNNL waste management organization and
23 submitted to PHMC. PHMC is the organization responsible for preparing the Hanford Site biennial report.

24
25 **12.4.1.4 Groundwater Monitoring Reports.** The 305-B unit is not operated as a dangerous waste surface
26 impoundment, waste pile, land treatment unit, or landfill as defined in WAC 173-303-645-(1)(a). Therefore, no
27 groundwater monitoring or reporting is required for this unit.

28
29 **12.4.1.5 Contingency Plan Incident Reports.** The BED and 305-B unit line management are responsible for making
30 notifications (as detailed in Sections 7.1.3 and 7.8) of all emergency situations requiring contingency plan implementation
31 as required by WAC 173-303-360.

32
33 All situations requiring contingency plan implementation are documented in accordance with Section 7.8.2, DOE Event
34 Reporting. A copy of all such documentation for incidents at 305-B will be retained at the unit as part of the Operating
35 Record.

36
37 If the unit stops operations in response to a fire, explosion, or release that may present a hazard to human health or the
38 environment, the BED notifies DOE-RL, via line management, when the unit and emergency equipment cleanup is
39 complete. The DOE-RL is responsible for three types of notifications: an immediate notification; the incident
40 assessment report; and the unit restart notification. Details of these notifications are provided below.

41
42 **12.4.1.5.1 Immediate Notification.** The DOE-RL will immediately notify Ecology and the individual designated as the
43 on-scene coordinator for the southeastern Washington area of the National Response Center, telephone
44 number (800) 424-8802, if the unit has had a fire, explosion, or release which requires reporting under applicable
45 regulations. The DOE-RL report will contain the following information:

- 46 • Name and telephone number of reporter
- 47

- 1 • Name and address of the unit
- 2 • Time and type of incident
- 3 • Name and quantity of material(s) involved to the extent known
- 4 • Extent of injuries if any
- 5 • Possible hazards to human health or the environment outside the unit.

6
7 **12.4.1.5.2 Incident Assessment Report.** A written report is provided to Ecology within 15 days of any incident that
8 requires implementation of the contingency plan. This report includes the following information:
9

- 10 • Name, address, and telephone number of the owner or operator
- 11 • Name, address and telephone number of the unit
- 12 • Date, time, and type of incident
- 13 • Name and quantity of material(s) involved
- 14 • Extent of injuries if any
- 15 • Assessment of actual or potential hazards to human health or the environment where this is applicable
- 16 • Estimated quantity and disposition of recovered material that resulted from the incident
- 17 • Cause of the incident
- 18 • Description of corrective action taken to prevent recurrence of the incident.

19
20 **12.4.1.5.3 Unit Restart Notification.** If the 305-B unit stops operations in response to a fire, an explosion, or release
21 that may present a hazard to human health or the environment, the DOE-RL will notify Ecology and the appropriate local
22 authorities before normal operations are resumed in the affected area(s) of the unit. The notification will indicate that
23 cleanup procedures are completed and that emergency equipment is cleaned and fit for its intended use.
24

25 **12.4.1.6 Spills, Discharges, and Leak Reports.** This section discusses the reports prepared as a result of unpermitted
26 spills and discharges into the environment.
27

28 **12.4.1.6.1 Spills and Discharges Reports.** In the event of any unplanned release of dangerous materials, the building
29 emergency director will document the incident on an Event Fact Sheet. A copy of the Event Fact Sheet will be retained
30 at the unit. PNNL line management will immediately notify the DOE-RL. The following information will be transmitted to
31 the DOE-RL:
32

- 33 • Name and telephone number of reporter
- 34 • Name and address of the unit
- 35 • Time and type of incident
- 36 • Name and quantities of material(s) involved to the extent known
- 37 • Extent of injuries if any
- 38 • Possible hazards to human health or the environment outside the unit.

39
40 The PNNL waste management organization immediately notifies the DOE-RL of all reportable releases to the
41 environment in accordance with DOE Orders. The DOE-RL will immediately notify Ecology of all spills and discharges of

1 hazardous materials (unless permitted) in accordance with WAC 173-303-145(2) and Condition I.E.15 of the Facility
2 Wide Permit.

3
4 **12.4.1.7 Closure Reports.** Reports regarding the closure of the 305-B unit will be made in accordance with the
5 requirements of WAC 173-303-610(6) and (9).

6
7 **12.4.1.7.1 Certification of Closure.** Within 60 days of completion of closure of the 305-B unit, certification signed by
8 the DOE-RL and an independent registered Professional Engineer will be submitted to Ecology. The certification will be
9 sent by registered mail. The certification will state that the unit was closed in accordance with the approved closure plan.
10 Documentation supporting the independent registered Professional Engineer's certification will be supplied upon request
11 of Ecology.

12
13 **12.4.1.7.2 Survey Plat.** The 305-B Storage Unit is not a disposal facility; therefore, this requirement is not applicable.

14
15 **12.4.1.8 Post-Closure Reports.** Post-closure reports required by WAC 173-303-610(9), (10), and (11) are not required
16 because the 305-B unit is not a disposal facility.

17
18 **12.4.2 Recordkeeping Requirements**

19
20 The records kept by the 305-B unit include plans described in other portions of this permit application, operating records,
21 miscellaneous support records, and records of reports made to Ecology and EPA. These records are described in the
22 following sections.

23
24 **12.4.2.1 Permit Application Plans.** The plans described in other portions of this permit application and kept at the unit
25 include:

- 26
27 • Waste analysis plan
28 • Contingency plan and amendments
29 • Training plan
30 • Closure plan
31 • Inspection plans.

32
33 Copies of the plans described above are included in this permit application. These plans are maintained at the
34 305-B unit during the life of the unit. Modifications or amendments required as a result of changing regulatory or
35 operational requirements or data gathered with the monitoring and sampling programs will be submitted to Ecology and
36 added to the plans maintained at the unit as required.

37
38 **12.4.2.2 Operating Record.** The Operating Record maintained at the 305-B unit includes:

- 39
40 • A description and the quantity of each dangerous waste received and the method(s) and date(s) of storage at
41 the 305-B unit in accordance with WAC 173-303-380
42 • The location of each dangerous waste stored within the unit and the quantity at each location, including the
43 cross-reference to manifest numbers
44 • Waste analysis results
45 • Contingency plan implementation reports
46 • Inspection records

- 1 • Copies of notices from off-site facilities informing 305-B that the off-site facilities have all required permits.

2
3 **12.4.2.2.1 Waste Description and Quantity.** Each dangerous waste received at the 305-B unit is described by its
4 common name and dangerous waste number(s) from WAC 173-303-080 through 173-303-104. When a dangerous waste
5 contains multiple dangerous waste constituents, the waste description includes all applicable dangerous waste numbers.
6 For waste numbers that are not listed in WAC 173-303, the waste description includes the name of the process that
7 generated the waste. The waste description includes the following information:

- 8
9 • Physical form (i., liquid, solid, sludge, or gas)
10 • Weight, or volume and density, using one of the units of measure in WAC 173-303-380(2)(c)
11 • Date and management method for each waste, including handling code specified in WAC 173-303-380(2)(d).

12
13 **12.4.2.2.2 Waste Location.** The location of each dangerous waste container stored within the 305-B unit is
14 documented and maintained. This record provides a cross-reference to associated manifest numbers.

15
16 **12.4.2.2.3 Waste Analysis.** As described in Section 3.2, most of the wastes received at 305-B do not require analysis.
17 Only those wastes which are unknown or for which the generator does not have documentation of contents require
18 analysis. Waste sampling and analysis is performed by the generator. Waste analysis results are submitted to the
19 PNNL waste management organization with the request for disposal form. These results are used by the PNNL waste
20 management organization to designate the waste in accordance with WAC 173-303-070, to determine waste
21 compatibility for proper storage, and to determine waste packaging and labeling requirements. Results of waste
22 analyses submitted with disposal request forms are kept at 305-B and are cross-referenced to manifest numbers.

23
24 Analysis of wastes generated at 305-B would only be required in the case of spill or leak response when it is necessary
25 to determine whether cleanup residuals are dangerous wastes. 305-B staff is responsible for sampling such wastes and
26 having the required analyses performed by on-site or off-site laboratories. If such wastes are determined to be
27 dangerous wastes, copies of the waste analysis results will be kept at 305-B and cross-referenced to manifest numbers.

28
29 **12.4.2.2.4 Contingency Plan Implementation Report.** Records documenting the details of any incidents requiring the
30 implementation of the contingency plan, as described in Chapter 7.0 and Section 12.4.1.5, are maintained as part of the
31 305-B unit Operating Record as required by WAC 173-303-380.

32
33 **12.4.2.2.5 Inspection Records.** Records of the 305-B unit general inspections are maintained at the unit for at least
34 five years from the inspection date. The records include the following:

- 35
36 • The date and time of inspection
37 • The inspector's printed name and handwritten signature
38 • Notations of observations
39 • The date and nature of any repairs or other remedial actions.

40
41 **12.4.2.2.6 Waste Minimization Certification.** Annually, a certification by DOE-RL that the 305-B unit has a program in
42 place to reduce the volume and toxicity of hazardous waste is inserted into the 305-B unit Operating Record as required
43 by 40 CFR 264.3(b)(9).
44

1 **12.4.2.2.7 Land Disposal Restrictions Records.** Records related to storage of waste subject to land disposal
2 prohibitions are maintained as required by 40 CFR 264.73(b)(10) and (16). Records potentially include:
3

- 4 • Records of waste placed in land disposal units under an extension to the effective date of any land disposal
5 restriction granted pursuant to 40 CFR 268.
- 6 • Records of waste placed in land disposal units under a petition granted pursuant to 40 CFR 268.
- 7 • Records of the applicable notice and certification required by 40 CFR 268.(a)
- 8 • Records of the demonstration and certification required by 40 CFR 268.8, if applicable, for waste subject to land
9 disposal prohibitions or restriction.

10
11 Additional discussion of land disposal records is provided in the following sections.

12
13 **12.4.2.2.7.1 Date Extension.** The 305-B Storage Unit will not apply for an extension to the effective date of a land
14 disposal restriction. The Hanford Site generator or the permitted off-site disposal facility may apply for an extension if
15 required. If such an extension is approved by EPA, the generator or permitted off-site disposal facility, as appropriate,
16 will provide a copy of the approval indicating the waste subject to the extension. Copies of these records, as well as the
17 quantities and the date of placement (information the permitted off-site disposal facility is requested to provide to 305-B
18 following disposal) for each shipment of waste subject to the date of the extension will be maintained in the 305-B files.
19

20 **12.4.2.2.7.2 Petition.** The 305-B Storage Unit will not petition to allow land disposal of a waste subject to a land
21 disposal restriction under 40 CFR 268, Subpart C. The permitted off-site disposal facility may petition to the regulatory
22 authority for a variance to allow disposal of a restricted or prohibited waste if required. If such a petition is approved by
23 EPA for waste shipped by 305-B, the disposal facility will be requested to provide information related to the petition so
24 that 305-B may ensure that the waste shipped complies with the petition. Copies of the records of the petition, as well as
25 the waste quantities and date of placement (information on the permitted off-site disposal facility is requested to provide
26 to 305-B following disposal) for each waste shipment covered by the petition will be maintained in the 305-B files.
27

28 **12.4.2.2.7.3 Notice and Certification.** Each waste generator is required to provide the PNNL waste management
29 organization with adequate waste characterization data for the waste management organization to determine whether the
30 waste is subject to land disposal restrictions. The waste management organization determines whether the waste is
31 subject to land disposal restrictions prior to transporting the waste offsite from 305-B. If wastes are determined to be
32 subject to land disposal restrictions, the required notices and certifications are included with waste shipments from 305-B
33 to off-site treatment, storage, and/or disposal facilities. Such notifications are made as described below. Copies of
34 notifications, certifications, demonstrations, and supporting documentation for each shipment of waste subject to a land
35 disposal restriction or prohibition are maintained at 305-B.
36

37 Waste Does Not Meet Applicable Treatment Standards or Exceeds Applicable Prohibition Levels. If the waste does not
38 meet the applicable treatment standards or exceeds an applicable prohibition level set forth in 40 CFR 268.32 or
39 Section 3004(d) of RCRA, a notice is provided with each shipment of waste containing the following information:
40

- 41 • The EPA Hazardous Waste Number
- 42 • Corresponding treatment standards and all applicable prohibitions set forth in 40 CFR 268.32 or Section 3004(d)
43 of RCRA
- 44 • The waste manifest number associated with the shipment of waste
- 45 • Waste analysis data where available or a statement of the basis of the determination with supporting data.
46

1 Waste Meets the Applicable Treatment Standards. If the waste meets the applicable treatment standards and can be
2 land-disposed without further treatment, a notice and certification is provided by the 305-B unit with each shipment of
3 waste. The notice contains the following information:
4

- 5 • The EPA Hazardous Waste Number
- 6 • Corresponding treatment standards and all applicable prohibitions set forth in 40 CFR 268.32 or Section 3004(d)
7 of RCRA
- 8 • The manifest number associated with the waste shipment
- 9 • Waste analysis data where available or a statement of the basis of determination with supporting data.

10
11 In addition, the shipment will be accompanied by the certification required under 40 CFR 268.7(a)(2)(ii) that the waste
12 complies with treatment standards and prohibitions.
13

14 **12.4.2.2.7.4 Demonstration and Certification.** Certain wastes may be land-disposed without treatment under certain
15 conditions which comply with 40 CFR 268. If such wastes are shipped from 305-B for land disposal, the initial shipment
16 will be accompanied by the demonstration and certification required under 40 CFR 268.8(a). Each additional shipment
17 will be accompanied only by the certification provided that the conditions covered by the original certification have not
18 changed.
19

20 **12.4.2.3 Miscellaneous Support Records.** Miscellaneous support records include the following:
21

- 22 • Training records
- 23 • Liability coverage documentation
- 24 • Closure and post-closure cost estimates
- 25 • Report records.

26
27 **12.4.2.3.1 Training Documentation.** The training plan is maintained at 305-B.

28 The name of each employee and the 305-B unit waste management position held is maintained by the unit. Training
29 records document that employees have received the training or have work experience required for that position. The
30 records are maintained by the unit. Training records on current employees are kept until closure of the unit. Training
31 records on former employees are kept for three years from the date the employee last worked at the unit. Auditable
32 copies of these records are maintained by the PNNL training organization.
33

34 **12.4.2.3.2 Liability Coverage Documentation.** Financial assurance and liability coverage mechanisms are not
35 required for federal facilities. Therefore, this requirement is not applicable to the 305-B unit.
36

37 **12.4.2.3.3 Closure and Post-closure Cost Estimates.** Financial assurance mechanisms for closure and post-closure
38 costs are not required for federal facilities. However, projections of anticipated costs for closure will be provided annually
39 in accordance with Section 11.5.
40

41 **12.4.2.4 Report Records.** The reports described in Sections 12.1, 12.2.2, and 12.4.1 are contained in records
42 maintained either by the 305-B unit or by other Hanford Site organizations as noted in Table 12-1. Copies of the reports
43 will be made available upon the request of Ecology or EPA.
44

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**PART III CLASS 1 MODIFICATIONS:
305-B STORAGE FACILITY UNIT-SPECIFIC CONDITIONS (cont.)**

Replacement Chapter for DOE-RL-90-01

Chapter 13, Revision 1A

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4 **13.0 OTHER RELEVANT LAWS [J]**

5 The 305-B Storage Unit was constructed, and is operated, in compliance with applicable laws and regulations. Relevant
6 environmental laws and regulations have been reviewed, necessary notifications have been made, and approvals or
7 permits obtained. Aside from submission of a SEPA checklist, no additional approvals or permits for 305-B requiring
8 action by either Ecology or EPA have been identified.

9 This chapter provides a summary of the regulatory review performed to assist Ecology in determining that 305-B has met
10 its obligations with respect to other federal or state environmental laws. The major environmental laws evaluated include
11 the following:

- 12
- 13 • Clean Air Act of 1955, as amended
 - 14 • Clean Water Act of 1977, as amended
 - 15 • Coastal Zone Management Act of 1972, as amended
 - 16 • Endangered Species Act of 1973, as amended
 - 17 • Fish and Wildlife Coordination Act of 1934, as amended
 - 18 • National Historic Preservation Act of 1966, as amended
 - 19 • Wild and Scenic Rivers Act of 1968, as amended
 - 20 • Toxic Substances Control Act of 1976, as amended

21
22 In addition, a summary of other requirements that may apply is provided. Full references for each of these acts are
23 included in Chapter 15.0.

24
25
26 **13.1 Clean Air Act**

27
28 Since the 305-B Storage Unit is an existing unit within an existing facility, permitting under the Clean Air Act does not
29 apply to the unit. The unit has a responsibility to comply with any emissions generated which are regulated under the
30 NESHAP program, including asbestos, benzene, and radionuclides. Except during a catastrophic incident, the potential
31 to emit these materials from the 305-B unit is minimal. Catastrophic incidents are dealt within the unit contingency plan
32 in Chapter 7. At the Hanford Site, the Tri-County Air Pollution Control Authority oversees site compliance with CAA
33 regulations dealing with hazardous materials; the Washington Department of Health oversees compliance with
34 radionuclide CAA regulations.

35
36
37 **13.2 Clean Water Act**

38
39 Operation of the 305-B Storage Unit will not result in any point source or nonpoint source discharges to surface waters.
40 As such, National Pollutant Discharge Elimination System permits are not required. Spill reporting requirements of the
41 CWA are covered in the unit contingency plan in Chapter 7.
42

1 **13.3 Coastal Zone Management Act of 1972**
2

3 The 305-B Storage Unit is not located in a coastal zone or shoreline area as defined by this statute. Therefore, no
4 permits or reviews pursuant to this statute are applicable.
5

6
7 **13.4 Endangered Species Act of 1973**
8

9 The 305-B Storage Unit is located in the 300 Area of the Hanford Site (see Chapter 2.0 for site location information). The
10 site for 305-B cannot be considered an undisturbed area or a major habitat for native plant and animal species. Also,
11 this area constitutes a very small fraction of the Hanford Site and, hence, would not play a significant role in the ecology
12 of the Site. No listed or proposed endangered or threatened species or their habitats are expected to be affected by
13 305-B activities.
14

15
16 **13.5 Fish and Wildlife Coordination Act of 1934**
17

18 The 305-B Storage Unit will not involve the impoundment, diversion, or other control or modification of any body of water.
19 Therefore, no permits or reviews pursuant to this statute are applicable.
20

21
22 **13.6 National Historic Preservation Act of 1966**
23

24 The 305-B Storage Unit affects no areas that are eligible for nomination to the National Register of Historic Places. All
25 activities at Hanford involving excavation require review for the presence of archaeological resources in accordance with
26 regulations issued pursuant to, or other regulations of, the American Antiquities Preservation Act of 1906; the American
27 Indian Religious Freedom Act of 1978; the Historic Sites, Buildings, and Antiquities Act of 1935; the Archaeological and
28 Historic Preservation Act of 1960; and the Archaeological Resources Protection Act of 1979. No known cultural resource
29 impacts have occurred from 305-B activities.
30

31
32 **13.7 Wild and Scenic Rivers Act of 1968**
33

34 The 305-B Storage Unit does not affect any rivers presently designated under the Wild and Scenic Rivers Act of 1968.
35
36

37 **13.8 Toxic Substances Control Act**
38

39 Wastes containing polychlorinated biphenyls (PCB), which are subject to regulation under the Toxic Substances Control
40 Act (TSCA), are stored in the 305-B Storage Unit. These wastes are stored for periods less than one (1) year before
41 shipment to a disposal facility permitted under TSCA. Storage of PCB wastes in 305-B for periods less than one (1) year
42 will continue to be done in compliance with applicable TSCA regulations in 40 CFR Part 761.
43

44
45 **13.9 Other Requirements**
46

47 The application of insecticides and herbicides on or in the immediate vicinity of the 305-B Storage Unit will be conducted
48 in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act of 1975, TSCA, and the applicable provisions
49 of the Washington State Water Quality Standards, WAC 173-201.
50

**PART VI CLASS 1 MODIFICATIONS:
300 AREA PROCESS TRENCHES UNIT-SPECIFIC CONDITIONS**

1. Page 7-6, Section 7.3.1, lines 13-15: Deleted "A copy of SAP and QAPjP , or portion applicable to the TSD unit closure, will be added to this closure plan as Appendix 7A after approval."

Reason: The Sampling and Analysis Plan (SAP) will not be added to the closure plan as previously stated, because it will be separately approved by letter from Ecology.

2. Page 77 of 78, lines 8-9, Condition VI.1.B.b.: Delete "the Operation and Monitoring Work Plan,".

Reason: The Operation and Monitoring Work Plan will not be reviewed and approved by Ecology, because there is no expectation to prepare a 300-FF-1 Operable Unit Operation and Monitoring Work Plan.

3. Page 78 of 78, lines 17-19, Condition VI.1.B.p.: Delete "Design will occur during the CERCLA RD/RA process. Implementation of SCD will occur through the Department approval of pertinent sections of the CERCLA Operations and Maintenance Plan."

Reason: The Operations and Maintenance Plan will not be approved by Ecology because there is no expectation to prepare a 300-FF-1 Operable Unit Operation and Monitoring Work Plan.

**PART VI CLASS 1 MODIFICATIONS:
300 AREA PROCESS TRENCHES UNIT-SPECIFIC CONDITIONS**

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1 **7.3.1 Data Quality Objectives and the Sampling and Analysis Plan**

2
3 RCRA regulators will be involved with CERCLA regulators in the DQO process from which the
4 CERCLA SAP will evolve. The method for involving RCRA regulators in the DQO process is
5 discussed in Section 1.2.4.
6

7 The DQO process will resolve TSD unit sampling issues such as analytes of interest, sample
8 location, number of samples, number and frequency of field QC samples (i.e., trip blanks,
9 equipment blanks, splits, and duplicates), sampling methodology, analytical methods,
10 laboratory protocols, laboratory QC samples (e.g., spikes, duplicates, reagent blanks, method
11 check, and column check), sample validation, data error tolerances, acceptance of sitewide
12 background values (DOE-RL 1994b), and data evaluation methods. Sample handling,
13 packaging, and shipping, chain of custody, and QC samples will be as required by internal,
14 approved procedures (WHC 1989).
15

16 **7.3.2 Remedy-Specific Sampling**

17
18 Sampling will be appropriate to the applicable remedial alternatives under consideration for
19 CERCLA remediation of radionuclides. RCRA constituent concentrations are already below
20 MTCA Method C industrial cleanup levels that will qualify the TSD unit for modified closure
21 (Section 6.1). These alternatives are selective excavation and disposal; consolidation and soil
22 cover; and excavation, soil washing, and fines disposal. Sampling for each alternative could
23 reasonably proceed as follows. Sampling for consolidation and soil cover would be similar to
24 sampling for selective excavation and disposal because of the common elements of excavation
25 and offsite removal of potentially RCRA contaminated soil.
26

27 **7.3.2.1 Sampling for Excavation and Disposal.** In-process field screening, postremediation
28 verification sampling, and laboratory analysis will be performed. Field screening will be used to
29 support excavation of the TSD. Laboratory verification samples would be required at TSD unit
30 excavations before backfilling to verify the absence of contamination above MTCA Method B
31 cleanup levels for clean closure and MTCA Method C cleanup levels for modified closure). TSD
32 unit structure demolition debris could require sampling for purposes of waste designation before
33 disposal (Section 7.4.3). In any event, the debris rule listed under 40 CFR 268.45 will be
34 followed.
35

36 **7.3.2.2 Sampling for Excavation, Soil Washing, and Fines Disposal.** Sampling for this
37 alternative could include the in-process excavation monitoring and field screening,
38 postremediation excavation verification monitoring, structure debris sampling, and laboratory
39 sampling of excavations before backfilling, as described in Section 7.3.2.1.
40

41 During soil washing, in-process field screening and monitoring should be performed to verify
42 process efficiency for the remediated fraction as potential backfill material. Laboratory samples
43 could be taken periodically to provide a higher QC confirmation of the field results. The process
44 specifications for soil washing should be specified in the SAP as a decision rule for determining
45 when remedial action objectives have been achieved and treatment may cease. Where
46 in-process field screening and monitoring indicate that process specifications have not been
47 met, the deficient fraction could be rerun or disposed of appropriately.

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