



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

November 26, 1996

Mr. John Wagoner, Manager  
U.S. Department of Energy  
P.O. Box 550  
Richland, WA 99352

Mr. H. J. Hatch, President and CEO  
Fluor Daniel Hanford, Inc.  
P.O. Box 1000  
Richland, WA 99352

Mr. R. M. Little, President  
Bechtel Hanford, Inc.  
3350 George Washington Way  
Richland, WA 99352

Dr. William J. Madia, Director  
Pacific Northwest National Laboratory  
P.O. Box 999  
Richland, WA 99352



Dear Messrs. Wagoner, Hatch, Little, and Madia:

This letter transmits the Dangerous Waste portion of the Hanford Facility Wide *Resource Conservation and Recovery Act* (RCRA) Permit, Revision 3, for the Treatment, Storage, and Disposal of Dangerous Waste (Permit), as modified in accordance with the Washington State Department of Ecology's (Ecology) letter dated August 16, 1996.

The following modifications are approved and have been incorporated in the Permit:

**1. Inclusion of Approved Part B Permit Application:**

The Part B Permit Application documentation for the PUREX Storage Tunnels, Revision 3, is approved and has been added to the Permit under Part III, Chapter 3. This treatment, storage, and/or disposal (TSD) unit will be operated in accordance with the applicable Permit requirements, the approved Part B Permit Application documentation, and the unit specific conditions in Chapter 3. Subsequent modifications to this documentation will be made in accordance with WAC 173-303-830. The PUREX Storage Tunnels documentation will be certified by the appropriate permittees to the permit and re-submitted to Ecology by March 1, 1997.

**2. Inclusion of Approved Closure Plans:**

The following Closure Plans have been approved by Ecology and have been added to the Permit under the chapters in Part V listed below. Closure of these TSD units will be implemented in accordance with the applicable Permit requirements, the approved Closure Plans, and the unit specific conditions in the respective chapters.

Chapter 12: 4843 Alkali Metal Storage Facility Closure Plan  
Chapter 13: 3718-F Alkali Metal Treatment and Storage Facility Closure Plan  
Chapter 14: 303-K Storage Facility Closure Plan

**3. Inclusion of Approved Modified Closure Plan:**

The modified closure of the 300 Area Process Trenches, Revision 1, has been added to the Permit in the new Part VI, under Chapter 1. This modified closure will be conducted in accordance with the applicable requirements of the Permit, the approved modified closure plan, and the unit specific conditions in this chapter.

**4. Approval of a Class 3 Modification to 616 Nonradioactive Dangerous Waste Storage Facility:**

The modification to the frequency of inspections at this TSD unit, as delineated in Ecology's letter dated August 16, 1996, is approved. This modification will be reflected in the re-certified revision of the Part B Permit Application documentation for this TSD unit to be submitted to Ecology by March 1, 1997.

**5. Inclusion of Approved General Information Document:**

The General Information Document (GID) is approved and has been included in the Permit as Attachment 33. Subsequent modifications to the GID will be made in accordance with WAC 173-303-830. The GID will be certified by all the permittees to the Permit, and re-submitted to Ecology by March 1, 1997.

**6. Editorial Modifications to Permit:**

A number of editorial modifications have been made to the Permit to reflect the addition of the new Part VI for units undergoing modified closures or have Post-Closure Permits. A list of these modifications will be added to the Hanford Facility RCRA Permit Handbook for reference. Also, enclosed is Ecology's Responsiveness Summary to the Public Comments Ecology received during the Public Comment Period on the proposed modifications to the Permit.

Messrs. Wagoner, Hatch, Little, and Madia  
November 26, 1996  
Page 3

**7. Modified Applicability Matrix :**

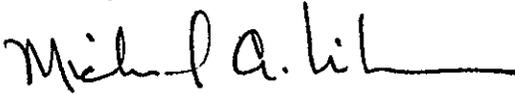
Enclosed is an updated Applicability Matrix (Attachment 3) which reflects the addition of the new Part VI and other chapters to the Permit.

**8. Modified Permittee List:**

The permittee list has been modified to replace Westinghouse Hanford Company with Fluor Daniel Hanford, Inc.

If you have any questions regarding the above modifications, please contact Moses Jaraysi at (509) 736-3016.

Sincerely,

A handwritten signature in cursive script that reads "Michael Wilson". The signature is written in black ink and is positioned above the typed name.

Michael Wilson, Manager  
Nuclear Waste Program

MW:MJ:sb  
Enclosures

cc: Doug Sherwood, EPA  
Cliff Clark, USDOE  
William Adair, FDH  
Sue Price, FDH  
Linda Mehalik, BHI  
Harold Tilden, PNL  
Administrative Record

## Public Comment Responsiveness Summary

The following are the comments submitted by the U.S. Department of Energy, on the Draft Modification Package, submitted for public review on August 16, 1996, of the RCRA permit for the Treatment, Storage, and Disposal of Dangerous Waste for the Hanford Facility (Permit). These were the only comments the Washington State Department of Ecology (Department) received. The following includes the responses to these comments and the resulting changes in the proposed modification, if any are warranted.

---

### Comment #1 (3718-F Alkali Metal)

**Condition:** V.13.A.

**Requested Action:**

Delete the second paragraph.

**Commenter's Justification:**

The statement indicating the treatment, storage, and/or disposal (TSD) unit released dangerous waste or constituents to the soil and concrete pad is unfounded. There was evidence brought up in the closure plan or in the data quality objective (DQO) process to state unequivocally that material was spilled. The paragraph should not state anything that was not previously identified in the Hanford Facility RCRA Permit, closure plan, or regulations.

**Department Response:**

This must remain as a permit condition for the following reason:  
The owner/operator did not keep the records or other documentation necessary for Ecology to verify releases did not occur. In this case, Ecology will not be able to verify the certification of closure and, therefore, be unable to accept the closure certification without supporting information. Ecology is requiring sampling to verify releases did not occur. If necessary, Ecology will extend the closure period to cover the time period of the required sampling. Consequently, the closure certification will be based on the data generated from this sampling activity. (For further information see Publication 94-111, Guidance for Clean Closure of Dangerous Waste Facilities, August, 1994.)

**Permit Change:**

No change needed.

**Comment #2 (3718-F Alkali Metal)**

**Condition:** V.13.B.b.

**Requested Action:**

Rewrite the conditions as follows: "A supplemental DQO process will be conducted to address soil sampling. The results of the supplemental DQO process will be used to determine the extent of any supplemental sampling at the 3718-F. During the DQO process, it also will be determined what type of documentation will be required for any sampling efforts. Items to be addressed during the DQO include, but are not limited to, number of samples, location of samples, analytes of concern, appropriate level of QA/QC, and laboratory methods."

**Commenter's Justification:**

Using the DQO process will allow Ecology and the Permittees the flexibility to determine the appropriate level of sampling and analytical needs. The permit conditions, as written, allow for no flexibility; if the Permittees needed to deviate from any of the conditions, as written, they could have to do a permit modification. The DQO process has always been used in the past to indicate what types of sampling and analytical needs will be used to complete closure.

**Department Response:**

The design and operation of this unit does not preclude waste from being released to the soil surrounding the concrete pad; hence, a sampling and analysis plan is required to determine the degree to which previously conducted activities comply with closure requirements. Furthermore, Ecology permit writer does not believe that any flexibility is lost by keeping the condition as proposed. (For further information see Publication 94-111, Guidance for Clean Closure of Dangerous Waste Facilities, August, 1994.)

**Permit Change:**

No change needed.

**Comment #3 (3718-F Alkali Metal)**

**Condition:** V.13.B.d.

**Requested Action:**

Delete this condition.

**Commenter's Justification:**

This condition is already addressed in V.13.B.b.

**Department Response:**

These conditions will remain. They do not impose additional requirements, but provide consistency.

**Permit Change:**

Requested change will not be made.

**Comment #4 (3718-F Alkali Metal)**

**Condition:** V.13.B.1

**Requested Action:**

Delete this condition.

**Commenter's Justification:**

This information is already included in WAC 173-303 and in the Tri-Party Agreement Action Plan.

**Department Response:**

Ecology agrees with the comment that this information is already included in WAC 173-303 and in the Tri-Party Agreement Action Plan. It should be emphasized that these conditions are not imposing any additional or new requirements, but are used for clarity and consistency.

**Permit Change:**

No change needed.

**Comment #5 (3718-F Alkali Metal)**

**Condition:** V.13.C.a.

**Requested Action:**

Delete this condition.

**Commenter's Justification:**

The documents cited in this condition are in error, not the closure plan.

**Department Response:**

The commenter's justification may be correct, but the regulation has written evidence to the contrary which the owner/operator is responsible for providing the opposite. The burden of proof is on the owner/operator.

**Permit Change:**

No change needed.

**Comment #1 (303-K Storage Facility)**

**Condition:** V.14.A

**Requested Action:**

For Appendix F, reword title as follows: "Quality Assurance Project Plan for Sampling and Analysis for ~~304-Generation~~ 303-K Storage Facility Closure Activities."

**Commenter's Justification:**

Correct unit name.

**Department Response:**

Requested change accepted.

**Permit Change:**

Requested text change will be made.

**Comment #2 (303-K Storage Facility)**

**Condition:** V.14.B.b

**Requested Action:**

Rewrite as follows: "The results of all sampling required by the Plan shall be provided to Ecology. This submittal shall include ~~raw analytical data~~, a summary of analytical results, a data validation package, and a narrative summary of conclusions. Raw analytical data will be provided to Ecology upon request."

**Commenter's Justification:**

This rewrite conforms with Ecology's request in previous closure plans not to provide raw analytical data.

**Department Response:**

Requested change is accepted.

**Permit Change:**

Requested text change will be made.

**Comment #3 (303-K Storage Facility)**

**Condition:** V.14.B.c

**Requested Action:**

Rewrite as follows: "Ecology shall be provided, for review and approval, a sampling and analysis plan and date of sampling for any sampling event not addressed in the Plan, which provides data used to support the 303-K cleanup activities at least 30 days prior to initiating actual sampling activities. The results of this sampling shall be submitted to Ecology. These submittals shall include ~~the raw analytical data~~ a summary of analytical results, a data validation package, and a narrative summary of conclusions. Raw analytical data will be provided to Ecology upon request."

**Commenter's Justification:**

This rewrite conforms with Ecology's request in previous closure plans not to provide raw analytical data.

**Department Response:**

Requested change accepted.

**Permit Change:**

Requested text change will be made.

End of comments.

**THIS PAGE INTENTIONALLY  
LEFT BLANK**

DANGEROUS WASTE PORTION OF THE RESOURCE  
CONSERVATION AND RECOVERY ACT PERMIT  
FOR THE TREATMENT, STORAGE, AND DISPOSAL  
OF DANGEROUS WASTE

Department of Ecology  
Nuclear Waste Program  
P.O. Box 47600  
Olympia, Washington 98504-7600  
Telephone: (360) 407-7132

Issued in accordance with the applicable provisions of the Hazardous Waste Management Act, Chapter 70.105 RCW, and the regulations promulgated thereunder in Chapter 173-303 WAC.

---

ISSUED TO:

U.S. Department of Energy  
Richland Operations Office  
(Owner/Operator)  
P.O. Box 550  
Richland, Washington 99352  
Telephone: (509) 376-7395

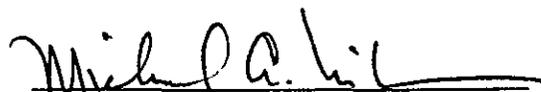
Bechtel Hanford, Inc.  
(Co-operator)  
P.O. Box 969  
Richland, Washington 99352  
Telephone: (509) 376-4645

Fluor Daniel Hanford, Inc.  
(Co-Operator)  
P.O. Box 1000  
Richland, Washington 99352  
Telephone: (509) 372-2886

Pacific Northwest National Laboratory  
(Co-Operator)  
P.O. Box 999  
Richland, Washington 99352  
Telephone: (509) 375-6600

This Permit, as modified on November 26, 1996, is effective as of December 26, 1996, and shall remain in effect through September 27, 2004, unless revoked and reissued under WAC 173-303-830(3), terminated under WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7).

ISSUED BY: WASHINGTON STATE DEPARTMENT OF ECOLOGY

  
Michael Wilson, Manager  
Nuclear Waste Program  
Department of Ecology

Date: 11/26/96

TABLE OF CONTENTS

1		
2	TABLE OF CONTENTS .....	2
3	LIST OF ATTACHMENTS.....	4
4	INTRODUCTION.....	6
5	DEFINITIONS .....	8
6	ACRONYMS .....	10
7	PART I - STANDARD CONDITIONS .....	12
8	I.A.    EFFECT OF PERMIT.....	12
9	I.B.    PERSONAL AND PROPERTY RIGHTS .....	12
10	I.C.    PERMIT ACTIONS.....	12
11	I.D.    SEVERABILITY .....	13
12	I.E.    DUTIES AND REQUIREMENTS .....	13
13	I.F.    SIGNATORY REQUIREMENT .....	19
14	I.G.    CONFIDENTIAL INFORMATION.....	19
15	I.H.    DOCUMENTS TO BE MAINTAINED AT FACILITY SITE .....	19
16	PART II - GENERAL FACILITY CONDITIONS .....	20
17	II.A.   FACILITY CONTINGENCY PLAN.....	20
18	II.B.   PREPAREDNESS AND PREVENTION .....	20
19	II.C.   PERSONNEL TRAINING.....	20
20	II.D.   WASTE ANALYSIS .....	21
21	II.E.   QUALITY ASSURANCE/QUALITY CONTROL .....	22
22	II.F.   GROUNDWATER AND VADOSE ZONE MONITORING.....	26
23	II.G.   SITING CRITERIA.....	27
24	II.H.   RECORDKEEPING AND REPORTING.....	27
25	II.I.   FACILITY OPERATING RECORD .....	27
26	II.J.   FACILITY CLOSURE.....	29
27	II.K.   SOIL/GROUNDWATER CLOSURE PERFORMANCE STANDARDS .....	29
28	II.L.   DESIGN AND OPERATION OF THE FACILITY .....	31
29	II.M.   SECURITY .....	32
30	II.N.   RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE .....	32
31	II.O.   GENERAL INSPECTION REQUIREMENTS .....	32
32	II.P.   MANIFEST SYSTEM .....	33
33	II.Q.   ON-SITE TRANSPORTATION.....	33
34	II.R.   EQUIVALENT MATERIALS.....	33
35	II.S.   LAND DISPOSAL RESTRICTIONS.....	34
36	II.T.   ACCESS AND INFORMATION .....	34
37	II.U.   MAPPING OF UNDERGROUND PIPING.....	34
38	II.V.   MARKING OF UNDERGROUND PIPING .....	35
39	II.W.   OTHER PERMITS AND/OR APPROVALS .....	35
40	II.X.   SCHEDULE EXTENSIONS.....	36
41	PART III - UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS.....	37
42	CHAPTER 1.....	37
43	616 Nonradioactive Dangerous Waste Storage Facility .....	37
44	CHAPTER 2.....	43
45	305-B Storage Facility .....	43

1	CHAPTER 3.....	48
2	PUREX Storage Tunnels.....	48
3	PART IV - CORRECTION ACTIONS FOR PAST PRACTICES.....	49
4	PART V - UNIT-SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE.....	50
5	CHAPTER 1.....	50
6	183-H Solar Evaporation Basin.....	50
7	CHAPTER 2.....	53
8	300 Area Solvent Evaporator (Clean Closed).....	53
9	CHAPTER 3.....	55
10	2727-S Nonradioactive Dangerous Waste Storage Facility (Clean Closed).....	55
11	CHAPTER 4.....	57
12	Simulated High Level Waste Slurry Treatment and Storage Unit (Clean Closed).....	57
13	CHAPTER 5.....	58
14	2118-E-8 Borrow Pit Demolition Site (Clean Closed).....	58
15	CHAPTER 6.....	60
16	200 West Area Ash Pit Demolition Site (Clean Closed).....	60
17	CHAPTER 7.....	62
18	2101-M Pond (Clean Closed).....	62
19	CHAPTER 8.....	63
20	216-B-3 Expansion Ponds (Clean Closed).....	63
21	CHAPTER 9.....	64
22	Hanford Patrol Academy Demolition Site (Clean Closed).....	64
23	CHAPTER 10.....	66
24	105-DR Large Sodium Fire Facility (Clean Closed).....	66
25	CHAPTER 11.....	68
26	304 Concretion Facility (Clean Closed).....	68
27	CHAPTER 12.....	70
28	4843 Alkali Metal Storage Facility.....	70
29	CHAPTER 13.....	71
30	3718-F Alkali Metal Treatment and Storage Facility Closure Plan.....	71
31	CHAPTER 14.....	73
32	303-K Storage Facility.....	73
33	PART VI - UNIT-SPECIFIC CONDITIONS FOR UNITS IN POST-CLOSURE.....	75
34	CHAPTER 1.....	75
35	300 Area Process Trenches.....	75

LIST OF ATTACHMENTS

The following listed documents are attached in their entirety. However, only those portions of the Attachments specified in Parts I through VI are enforceable Conditions of this Permit and subject to the Permit modification requirements of Condition I.C.3. Changes to portions of the Attachments which are not subject to the Permit modification process shall be addressed in accordance with Conditions I.E.8., I.E.11., I.E.13., I.E.15. through I.E.20., and I.E.22. The Department has, as deemed necessary, modified specific language in these Attachments. These modifications are described in the Conditions (Parts I through VI), and thereby supersede the language of the Attachment.

- Attachment 1 Hanford Federal Facility Agreement and Consent Order. (As Amended)
- Attachment 2 Hanford Facility Legal Description
- Attachment 3 Permit Applicability Matrix (As Revised on November 26, 1996)
- Attachment 4 Hanford Facility Contingency Plan, Revision 1, June 1993
- Attachment 5 Purgewater Management Plan, July 1990
- Attachment 6 Hanford Well Remediation and Decommissioning Plan, Revision 0
- Attachment 7 Policy on Remediation of Existing Wells and Acceptance Criteria for RCRA and CERCLA, June 1990
- Attachment 8 616 Nonradioactive Dangerous Waste Storage Facility Part A & Part B Permit Applications, Revision 2, September 1991
- Attachment 9 616 Nonradioactive Dangerous Waste Shipping Lists
- Attachment 10 616 Nonradioactive Dangerous Waste Facility Description of Procedures
- Attachment 11 183-H Solar Evaporation Basins Closure/Post-Closure Plan, Revision 3, June 1991
- Attachment 12 Decommissioning Work Plan "Concrete Sampling - 183-H Solar Evaporation Basins" (DWP-H-080-00001) 8-26-91, Revision A-3
- Attachment 13 Decommissioning Work Plan "Core Drill Sampling - 183-H Solar Evaporation Basins (Phase I)" (DWP-H-080-00005) 2-8-91, Revision A-1
- Attachment 14 "183-H Solar Evaporation Basins Vadose Zone Sampling Plan" (WHC-SD-EN-AP-056) 6-25-91, Revision 0
- Attachment 15 Decommissioning Work Plan "Berm Removal for 183-H Solar Evaporation Basins" (DWP-H-026-00008) 1-16-91, Revision A-0
- Attachment 16 300 Area Solvent Evaporator Closure Plan, Revision 3b, September 1992
- Attachment 17 2727-S Nonradioactive Dangerous Waste Storage Facility Closure Plan, Revision 3, January 1992
- Attachment 18 305-B Storage Facility Part A and Part B Permit Applications, Revision 2, October 1992
- Attachment 19 Simulated High Level Waste Slurry TSD Closure Plan
- Attachment 20 218-E-8 Borrow Pit Demolition Site Closure Plan
- Attachment 21 200 West Ash Pit Demolition Site Closure Plan
- Attachment 22 2101-M Pond Closure Plan

1	Attachment 23	216-B-3 Expansion Ponds Closure Plans
2	Attachment 24	Hanford Patrol Academy Demolition Site Closure Plan
3	Attachment 25	105-DR Large Sodium Fire Facility Closure Plan
4	Attachment 26	304 Concretion Facility Closure Plan
5	Attachment 27	Permit Modification Schedule
6	Attachment 28	PUREX Storage Tunnels Part A & B, Revision 3
7	Attachment 29	4843 Closure Plan
8	Attachment 30	3718-F Closure Plan
9	Attachment 31	300 Area Process Trenches Part A & B, Revision 1
10	Attachment 32	303-K Storage Facility Closure Plan
11	Attachment 33	General Information Document

INTRODUCTION

Pursuant to Chapter 70.105 Revised Code of Washington (RCW), the Hazardous Waste Management Act (HWMA) of 1976, as amended, Chapter 70.105D RCW, the Model Toxics Control Act, and regulations promulgated thereunder by the Washington State Department of Ecology (hereafter called the Department), codified in Chapter 173-303 Washington Administrative Code (WAC), Dangerous Waste Regulations, a Dangerous Waste Permit is issued to the U.S. Department of Energy - Richland Operations Office (DOE-RL), (owner/operator), and its contractors (Westinghouse Hanford Company (Westinghouse Hanford) (co-operator), Pacific Northwest National Laboratory (PNNL) (co-operator), and Bechtel Hanford, Incorporated (BHI) (co-operator)) (hereafter called the Permittees), for the treatment, storage, and disposal of dangerous waste at the Hanford Facility.

This Dangerous Waste Permit, issued in conjunction with the U.S. Environmental Protection Agency's (hereafter call the Agency) Hazardous and Solid Waste Amendments Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Hazardous Waste (HSWA Permit), constitutes the Resource Conservation and Recovery Act Permit (RCRA Permit) for the Hanford Facility. Use of the term "Permit" within the Dangerous Waste Permit shall refer to the Dangerous Waste Permit while use of the term "Permit" within the HSWA Permit shall refer to the HSWA Permit. Use of the same term in both the Dangerous Waste Permit and the HSWA Permit, shall have the standard meaning associated with the activities addressed by the Permit in which the term is used. Such meanings shall prevail except where specifically stated otherwise.

The Permittees shall comply with all terms and Conditions set forth in this Permit and those portions of the Attachments that have been specifically incorporated into this Permit. When the Permit and the Attachments (except Attachment 1) conflict, the wording of the Permit will prevail. The Permit is intended to be consistent with the terms and conditions of the Hanford Federal Facility Agreement and Consent Order (FFACO, Attachment 1). The Permittees shall also comply with all applicable state regulations, including Chapter 173-303 WAC.

Applicable state regulations are those which are in effect on the date of issuance, or as specified in subsequent modifications of this Permit. In addition, applicable state regulations include any self-implementing statutory provisions and related regulations which, according to the requirements of the HWMA, as amended, or other law(s), are automatically applicable to the Permittees' dangerous waste management activities, notwithstanding the Conditions of this Permit.

This Permit is based upon the administrative record, as required by WAC 173-303-840. The Permittees' failure in the application or during the Permit issuance process to fully disclose all relevant facts, or the Permittees' misrepresentation of any relevant facts at any time, shall be grounds for the termination or modification of this Permit and/or initiation of an enforcement action, including criminal proceedings. The Permittees shall inform the Department of any deviation from Permit Conditions or changes in the information on which the application is based which would affect either the Permittees' ability to comply or actual compliance with the applicable regulations or Permit Conditions or which alters any Condition of this Permit in any way.

The Department shall enforce all Conditions of this Permit for which the State of Washington is authorized, or which are "state-only" provisions (i.e., Conditions broader in scope or more stringent than the Federal RCRA program). Any challenges of any Permit Condition may be appealed in accordance with WAC 173-303-845. In the event that any Permit Condition is challenged by any Permittee under WAC 173-303-845, the Department may stay any such Permit Condition as it pertains to all Permittees in accordance with the same terms of any stay it grants to the challenging Permittee. If such a stay is granted, it will constitute a "stay by the issuing agency" within the meaning of RCW 43.21B.320(1).

This Permit has been developed to allow a step-wise permitting process of the Hanford Facility to ensure the proper implementation of the FFACO. In order to accomplish this, this Permit consists of six (6) Parts.

1 Part I, **Standard Conditions**, contains Conditions which are similar to those appearing in all dangerous  
2 waste permits.

3 Part II, **General Facility Conditions**, combines typical dangerous waste Permit Conditions with those  
4 Conditions intended to address issues specific to the Hanford Facility. Where appropriate, the General  
5 Facility Conditions apply to all final status dangerous waste management activities at the Facility. Where  
6 appropriate, the General Facility Conditions also address dangerous waste management activities which  
7 may not be directly associated with distinct treatment, storage, and disposal (TSD) units or which may be  
8 associated with many TSD units (i.e., spill reporting, training, contingency planning, etc.).

9 Part III, **Unit-Specific Conditions for Operating Units**, contains those Permit requirements which apply  
10 to each individual TSD unit operating under final status. Conditions for each TSD unit are found in a  
11 Chapter dedicated to that TSD unit. These unit-specific Chapters contain references to Standard and  
12 General Conditions (Parts I and II), as well as additional requirements which are intended to ensure that  
13 each TSD unit is operated in an efficient and environmentally protective manner.

14 Part IV, **Corrective Actions for Past Practice**, references the Agency's HSWA Permit. The HSWA  
15 Permit contains those requirements that apply to the identification of Solid Waste Management Units  
16 (SWMUs) at the Facility and conduct of investigations and remediations at such SWMUs. The HSWA  
17 Permit addresses both SWMUs that are located on the USDOE managed portions of the Facility as well as  
18 SWMUs which are not located on USDOE managed property (i.e., leased lands). Any SWMUs located on  
19 USDOE managed property are, or will be, included in the FFACO and assigned to operable units. The  
20 processes and procedures to be followed, and the schedules of compliance for investigation and subsequent  
21 remediation, will be contained in the FFACO. SWMUs not located on USDOE managed property will  
22 undergo investigations and remediations, as necessary, in accordance with the requirements and schedules  
23 identified in the HSWA Permit.

24 It is intended that, once the Department receives authorization from the Agency to implement the  
25 Corrective Action provisions, these requirements will be incorporated into this Part through a Permit  
26 modification. Until the Department receives authorization for the Corrective Action provisions of RCRA,  
27 the Agency shall maintain regulatory lead for these requirements.

28 Part V, **Unit-Specific Conditions for Units Undergoing Closure**, contains those requirements which  
29 apply to those specific TSD units included in this Part that are undergoing closure. In accordance with  
30 Section 5.3. of the Action Plan of the FFACO, all TSD units that undergo closure, irrespective of permit  
31 status, shall be closed pursuant to the authorized State Dangerous Waste Program in accordance with  
32 WAC 173-303-610. Requirements for each TSD unit undergoing closure are found in a Chapter dedicated  
33 to that TSD unit. These unit-specific Chapters contain references to Standard Conditions (Part I) and  
34 General Conditions (Part II), as well as additional requirements which are intended to ensure that each  
35 TSD unit is closed in an efficient and environmentally protective manner.

36 Part VI, **Unit-Specific Conditions for Units in Post-Closure**, contains requirements which apply to those  
37 specific units in this Part that have completed modified or landfill closure requirements and now only need  
38 to meet post-closure standards. As set out in Section 5.3 of the Action Plan of the FFACO, certain TSD  
39 units shall be permitted for post-closure care pursuant to the authorized State Dangerous Waste Program  
40 (173-303 WAC) and the Hazardous and Solid Waste Amendments. Requirements for each unit  
41 undergoing post-closure care are found in a Chapter, within this Part, dedicated to that unit. These unit  
42 specific Chapters may contain references to Standard Conditions (Part I) and General Conditions (Part II),  
43 as well as, the unit specific conditions, all of which are intended to ensure the unit is managed in an  
44 efficient, environmentally protective manner.

1 DEFINITIONS

2 All definitions contained in the FFACO, May 1989, as amended, are hereby incorporated, in their entirety,  
3 by reference into this Permit, except that any of the definitions used below, (a) through (n) shall supersede  
4 any definition of the same term given in the FFACO. However, the Permit is intended to be consistent  
5 with the FFACO.

6 All definitions contained in WAC 173-303-040 are hereby incorporated, in their entirety, by reference into  
7 this Permit, except that any of the definitions used below, (a) through (n), shall supersede any definition of  
8 the same term given in WAC 173-303-040.

9 Where terms are defined in both Chapter 173-303 WAC and the FFACO, the definitions contained in  
10 Chapter 173-303 WAC shall supersede any definition of the same term given in the FFACO.

11 Where terms are not defined in the regulations, the Permit or the FFACO, the meaning associated with  
12 such terms shall be defined by a standard dictionary reference or the generally accepted scientific or  
13 industrial meaning of the term.

14 As used in this Permit, words in the masculine gender also include the feminine and neuter genders, words  
15 in the singular include the plural, and words in the plural include the singular.

16 The following definitions apply throughout this Permit:

- 17 a. The term "**Critical Systems**," as applied to determining whether a permit modification is  
18 required, means those specific portions of a TSD unit's structure or equipment whose failure  
19 could lead to the release of dangerous waste into the environment and/or systems which  
20 include processes which treat, transfer, store, or dispose of regulated wastes. A list  
21 identifying the critical systems of a specific TSD unit may be developed and included in Part  
22 III, V, and/or VI of this Permit. In developing a critical system list, or in the absence of a  
23 critical system list, WAC 173-303-830 modifications shall be considered.
- 24 b. The term "**Contractor(s)**" means, unless specifically identified otherwise in this Permit or  
25 attachments, Westinghouse Hanford Company (Westinghouse Hanford), Pacific Northwest  
26 National Laboratory (PNNL), and Bechtel Hanford, Inc. (BHI).
- 27 c. The term "**Dangerous Waste**" means those solid wastes designated under Chapter 173-303  
28 WAC as dangerous or extremely hazardous waste. As used in the Permit, the word  
29 "dangerous waste" shall refer to the full universe of wastes regulated by Chapter 70.105 RCW  
30 and Chapter 173-303 WAC (including dangerous waste, hazardous waste, extremely  
31 hazardous waste, mixed waste, and acutely hazardous waste).
- 32 d. The term "**Days**" means calendar days, unless specifically identified otherwise. Any  
33 submittal, notification, or recordkeeping requirement that would be due under the Conditions  
34 of this Permit on a Saturday, Sunday, or federal or state holiday shall be due on the following  
35 business day, unless specifically specified otherwise in the Permit.
- 36 e. The term "**Department**" means the Washington State Department of Ecology (with the  
37 address as specified on page one (1) of this Permit).
- 38 f. The term "**Director**" means the Director of the Washington State Department of Ecology or a  
39 designated representative. The Program Manager of the Nuclear Waste Program (with the  
40 address as specified on page one of this Permit) is a duly authorized and designated  
41 representative of the Director for purposes of this Permit.
- 42 g. The term "**Facility**" means all contiguous land, structures, other appurtenances, and  
43 improvements on the land used for recycling, reusing, reclaiming, transferring, storing,

1 treating, or disposing of dangerous waste. The legal and physical description of the Facility is  
2 set forth in Attachment 2 of this Permit.

- 3 h. The term "FFACO" means the Hanford Federal Facility Agreement and Consent Order, as  
4 amended.
- 5 i. The term "RCRA Permit" means the Dangerous Waste Portion of the RCRA Permit for the  
6 Treatment, Storage, and Disposal of Dangerous Waste (Dangerous Waste Permit) issued by  
7 the Washington State Department of Ecology, pursuant to Chapter 70.105 RCW and Chapter  
8 173-303 WAC coupled with the HSWA Portion of the RCRA Permit for the Treatment,  
9 Storage, and Disposal of Hazardous Waste (HSWA Permit) issued by the EPA, Region 10,  
10 pursuant to 42 U.S.C. 6901 et seq. and 40 CFR Parts 124 and 270.
- 11 j. The term "Permittees" means the United States Department of Energy (owner/operator),  
12 Westinghouse Hanford Company (co-operator), Bechtel Hanford, Inc. (co-operator), and  
13 Pacific Northwest National Laboratory (co-operator).
- 14 k. The term "Raw Data" means the initial value of analog or digital instrument outputs and/or  
15 manually recorded values obtained from measurement tools or personal observation. These  
16 values are converted into reportable data (e.g., concentration, percent moisture) via automated  
17 procedures and/or manual calculations.
- 18 l. The term "Reasonable Times" means normal business hours, hours during which production,  
19 treatment, storage, construction, disposal, or discharge occurs or times when the Department  
20 suspects a violation requiring immediate inspection.
- 21 m. The term "Significant Discrepancy" in regard to a manifest or shipping paper means a  
22 discrepancy between the quantity or type of dangerous waste designated on the manifest or  
23 shipping paper and the quantity or type of dangerous waste a TSD unit actually receives. A  
24 significant discrepancy in quantity is a variation greater than ten (10) percent in weight for  
25 bulk quantities (e.g., tanker trucks, railroad tank cars, etc.) or any variation in piece count for  
26 nonbulk quantities (i.e., any missing container or package would be a significant  
27 discrepancy). A significant discrepancy in type is an obvious physical or chemical difference  
28 which can be discovered by inspection or waste analysis (e.g., waste solvent substituted for  
29 waste acid).
- 30 n. The term "Unit" (or "TSD unit"), as used in Parts I through VI of this Permit, means the  
31 contiguous area of land on or in which dangerous waste is placed, or the largest area in which  
32 there is a significant likelihood of mixing dangerous waste constituents in the same area. A  
33 TSD unit, for purposes of this Permit, is a subgroup of the Facility which has been identified  
34 in a Hanford Facility Dangerous Waste Part A Permit Application Form 3.

ACRONYMS

1		
2	AGENCY	U.S. Environmental Protection Agency, Region X
3	APP	Used to Denote Appendix Page Numbers
4	BHI	Bechtel Hanford, Inc.
5	CERCLA	Comprehensive Environmental Response Compensation and Liability Act of
6		1980 (as Amended by the Superfund Reauthorization Act of 1986)
7	CFR	Code of Federal Regulations
8	CIP	Construction Inspection Plan
9	CLP	Contract Laboratory Program
10	Department	Washington State Department of Ecology
11	DOE-RL	U.S. Department of Energy, Richland Operations Office
12	EC	Emergency Coordinator
13	Ecology	Washington State Department of Ecology
14	ECN	Engineering Change Notice
15	EPA	U.S. Environmental Protection Agency
16	FFACO	Hanford Federal Facility Agreement and Consent Order
17	HSWA	Hazardous and Solid Waste Amendments of 1984
18	HWMA	Hazardous Waste Management Act
19	MTCA	Model Toxics Control Act
20	NCR	Nonconformance Report
21	616 NRDWSF	616 Nonradioactive Dangerous Waste Storage Facility
22	OSWER	Office of Solid Waste and Emergency Response
23	PNNL	Pacific Northwest National Laboratory
24	QA	Quality Assurance
25	QAPP	Quality Assurance Project Plan
26	QC	Quality Control
27	RCRA	Resource Conservation and Recovery Act of 1976
28	RCW	Revised Code of Washington
29	SAP	Sampling and Analysis Plan
30	SARA	Superfund Amendments and Reauthorization Act of 1986
31	SOP	Standard Operating Procedure
32	SWMU	Solid Waste Management Unit
33	TCLP	Toxicity Characteristic Leaching Procedure
34	TSD	Treatment, Storage, and/or Disposal
35	USDOE	U.S. Department of Energy

- 1 WAC Washington Administrative Code
- 2 WAP Waste Analysis Plan
- 3 Westinghouse Westinghouse Hanford Company

**PART I - STANDARD CONDITIONS**

**I.A. EFFECT OF PERMIT**

I.A.1.a. The Permittees are authorized to treat, store, and dispose of dangerous waste in accordance with the Conditions of this Permit and in accordance with the applicable provisions of Chapter 173-303 WAC (including provisions of the Chapter as they have been applied in the FFACO). Any treatment, storage, or disposal of dangerous waste by the Permittees at the Facility that is not authorized by this Permit, or by WAC 173-303-400 (including provisions of this regulation as they have been applied in the FFACO) for those TSD units not subject to this Permit, and for which a permit is required by Chapter 173-303 WAC, is prohibited.

TSD units operating or closing under interim status shall maintain interim status until that TSD unit is incorporated into Part III, V, and/or VI of this Permit or until interim status is terminated under WAC 173-303-805(8). Interim status units shall be incorporated into this Permit through the Permit modification process.

I.A.1.b. The Conditions of this Permit shall be applied to the Facility as defined by the Permit Applicability Matrix (Attachment 3).

I.A.2. USDOE is responsible for activities which include, but are not limited to, the overall management and operation of the Facility.

Westinghouse Hanford is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

PNNL is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

BHI is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

**I.A.3. Coordination With The FFACO**

Each TSD unit shall have an application for a final status permit or closure/post-closure plan submitted to the Department in accordance with the schedules identified in the FFACO (Milestone M-20-00). After completion of the permit application or closure plan review, a final permit decision will be made pursuant to WAC 173-303-840. Specific conditions for each TSD unit shall be incorporated into this Permit in accordance with the Class 3 permit modification procedure identified in Condition I.C.3., at the time identified in the five year Permit Modification Schedule in Attachment 27.

**I.B. PERSONAL AND PROPERTY RIGHTS**

This Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or any invasion of other private rights, or any violation of federal, state, or local laws or regulations.

**I.C. PERMIT ACTIONS**

**I.C.1. Modification, Revocation, Reissuance, or Termination**

This Permit may be modified, revoked and reissued, or terminated by the Department for cause as specified in WAC 173-303-830(3),(4), and (5).

1 I.C.2. **Filing of a Request**

2 The filing of a request for a permit modification, or revocation and reissuance, or termination,  
3 or a notification of planned changes or anticipated noncompliance on the part of the  
4 Permittees shall not stay the applicability or enforceability of any Condition except as  
5 provided in WAC 173-303-830(3),(4), and (5).

6 I.C.3. **Modifications**

7 Except as provided otherwise by specific language in this Permit, the Permit modification  
8 procedures of WAC 173-303-830 shall apply to modifications or changes in design or  
9 operation of the Facility or any modification or change in dangerous waste management  
10 practices covered by this Permit. As an exception, the Permittees shall provide notifications  
11 to the Department required by WAC 173-303-830(4)(a)(i)(A) on a quarterly basis. Each  
12 quarterly notification shall be submitted within ten (10) days of the end of the quarter and  
13 provide the required information for all such modifications put into effect during that  
14 reporting period. Quarterly reporting periods shall be based upon the state Fiscal Year.

15 I.D. **SEVERABILITY**

16 I.D.1. **Effect of Invalidation**

17 The provisions of this Permit are severable, and if any provision of this Permit, or the  
18 application of any provision of this Permit to any circumstance is contested and/or held  
19 invalid, the application of such provision to other circumstances and the remainder of this  
20 Permit shall not be affected thereby. Invalidation of any state statutory or regulatory  
21 provision which forms the basis for any Condition of this Permit does not affect the validity  
22 of any other state statutory or regulatory basis for said Condition.

23 I.D.2. **Final Resolution**

24 In the event that a Condition of this Permit is stayed for any reason, the Permittees shall  
25 continue to comply with the related applicable and relevant interim status standards in WAC  
26 173-303-400 until final resolution of the stayed Condition, unless the Department determines  
27 compliance with the related applicable and relevant interim status standards would be  
28 technologically incompatible with compliance with other Conditions of this Permit which  
29 have not been stayed, or unless the FFACO authorizes an alternative action, in which case the  
30 Permittees shall comply with the FFACO.

31 I.E. **DUTIES AND REQUIREMENTS**

32 I.E.1. **Duty to Comply**

33 The Permittees shall comply with all Conditions of this Permit, except to the extent and for  
34 the duration such noncompliance is authorized by an emergency permit issued under WAC  
35 173-303-804. Any Permit noncompliance other than noncompliance authorized by an  
36 emergency permit constitutes a violation of Chapter 70.105 RCW, as amended, and is  
37 grounds for enforcement action, Permit termination, modification or revocation and  
38 reissuance of the Permit, and/or denial of a Permit renewal application.

39 I.E.2. **Compliance Not Constituting Defense**

40 Compliance with the terms of this Permit does not constitute a defense to any order issued or  
41 any action brought under Section 3007, 3008, 3013, or 7003 of RCRA (42 U.S.C. Sections  
42 6927, 6928, 6934, and 6973), Section 104, 106(a) or 107 of the Comprehensive  
43 Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C.  
44 Sections 9604, 9606(a), and 9607], as amended by the Superfund Amendments and

1 Reauthorization Act of 1986 (42 U.S.C. 9601 et seq.), or any other federal, state, or local law  
2 governing protection of public health or the environment; provided, however, that compliance  
3 with this Permit during its term constitutes compliance at those areas subject to this Permit for  
4 the purpose of enforcement with WAC 173-303-140, WAC 173-303-180, WAC 173-303-280  
5 through -395, WAC 173-303-600 through -680, WAC 173-303-810, and WAC 173-303-830,  
6 except for Permit modifications and those requirements not included in the Permit that  
7 become effective by statute, or that are promulgated under 40 CFR Part 268 restricting the  
8 placement of dangerous waste in or on the land.

9 I.E.3. **Duty to Reapply**

10 If the Permittees wish to continue an activity regulated by this Permit after the expiration date  
11 of this Permit, the Permittees must apply for and obtain a new Permit, in accordance with  
12 WAC 173-303-806(6).

13 I.E.4. **Permit Expiration and Continuation**

14 This Permit, and all Conditions herein, will remain in effect beyond the Permit's expiration  
15 date until the effective date of the new permit if the Permittees have submitted a timely,  
16 complete application for renewal per WAC 173-303-806 and, through no fault of the  
17 Permittees, the Department has not made a final Permit determination as set forth in WAC  
18 173-303-840.

19 I.E.5. **Need to Halt or Reduce Activity Not a Defense**

20 It shall not be a defense in the case of an enforcement action that it would have been  
21 necessary to halt or reduce the permitted activity in order to maintain compliance with the  
22 Conditions of this Permit.

23 I.E.6. **Duty to Mitigate**

24 In the event of noncompliance with the Permit, the Permittees shall take all reasonable steps  
25 to minimize releases to the environment, and shall carry out such measures as are reasonable  
26 to minimize or correct adverse impacts on human health and the environment.

27 I.E.7. **Proper Operation and Maintenance**

28 The Permittees shall at all times properly operate and maintain all facilities and systems of  
29 treatment and control which are installed or used by the Permittees to achieve compliance  
30 with the Conditions of this Permit. Proper operation and maintenance includes effective  
31 performance, adequate funding, adequate operator staffing and training, and adequate  
32 laboratory and process controls including appropriate quality assurance/quality control  
33 procedures. This provision requires the operation of backup or auxiliary facilities or similar  
34 systems only when necessary to achieve compliance with the Conditions of the Permit.

35 I.E.8. **Duty to Provide Information**

36 The Permittees shall furnish to the Department, within a reasonable time, any relevant  
37 information which the Department may request to determine whether cause exists for  
38 modifying, revoking and reissuing, or terminating this Permit, or to determine compliance  
39 with this Permit. The Permittees shall also furnish to the Department, upon request, copies of  
40 records required to be kept by this Permit.

1 I.E.9. **Inspection and Entry**

2 The Permittees shall allow the Department, or authorized representatives, upon the  
3 presentation of Department credentials, to:

4 I.E.9.a. During operating hours, and at all other reasonable times, enter and inspect the Facility or any  
5 unit or area within the Facility where regulated activities are located or conducted, or where  
6 records must be kept under the Conditions of this Permit;

7 I.E.9.b. Have access to, and copy, at reasonable times, any records that must be kept under the  
8 Conditions of this Permit;

9 I.E.9.c. Inspect at reasonable times any portion of the Facility, equipment (including monitoring and  
10 control equipment), practices, or operations regulated or required under this Permit; and,

11 I.E.9.d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as  
12 otherwise authorized by state law, as amended, for substances or parameters at any location.

13 I.E.10. **Monitoring and Records**

14 I.E.10.a. Samples and measurements taken by the Permittees for the purpose of monitoring required by  
15 this Permit shall be representative of the monitored activity. Sampling methods shall be in  
16 accordance with WAC 173-303-110 or 40 CFR 261, unless otherwise specified in this Permit  
17 or agreed to in writing by the Department. Analytical methods shall be as specified in the  
18 most recently published test procedure of the documents cited in WAC 173-303-110(3)(a)  
19 through (d), unless otherwise specified in this Permit or agreed to in writing by the  
20 Department.

21 I.E.10.b. The Permittees shall retain at the TSD unit(s), or other location approved by the Department,  
22 as specified in Parts III, V, and/or VI of this Permit, records of monitoring information  
23 required for compliance with this Permit, including calibration and maintenance records and  
24 all original strip chart recordings for continuous monitoring instrumentation, copies of reports  
25 and records required by this Permit, and records of data used to complete the application for  
26 this Permit for a period of at least ten (10) years from the date of the sample, measurement,  
27 report, or application, unless otherwise required for certain information by other Conditions  
28 of this Permit. This information may be retained on electronic media.

29 I.E.10.c. The Permittees shall retain at the Facility, or other approved location, records of all  
30 monitoring and maintenance records, copies of all reports and records required by this Permit,  
31 and records of all data used to complete the application for this Permit which are not  
32 associated with a particular TSD unit for a period of at least ten (10) years from the date of  
33 certification of completion of post-closure care or corrective action for the Facility, whichever  
34 is later. This information may be retained on electronic media.

35 I.E.10.d. The record retention period may be extended by request of the Department at any time by  
36 notification, in writing, to the Permittees and is automatically extended during the course of  
37 any unresolved enforcement action regarding this Facility to ten (10) years beyond the  
38 conclusion of the enforcement action.

39 I.E.10.e. Records of monitoring information shall include:

40 i. The date, exact place and time of sampling or measurements;

41 ii. The individual who performed the sampling or measurements and their affiliation;

42 iii. The dates the analyses were performed;

43 iv. The individual(s) who performed the analyses and their affiliation;

- v. The analytical techniques or methods used; and,
- vi. The results of such analyses.

3 **I.E.11. Reporting Planned Changes**

4 The Permittees shall give notice to the Department as soon as possible of any planned  
5 physical alterations or additions to the Facility subject to this Permit. Such notice does not  
6 authorize any noncompliance with or modification of this Permit.

7 **I.E.12. Certification of Construction or Modification**

8 The Permittees may not commence treatment, storage, or disposal of dangerous wastes in a  
9 new or modified portion of TSD units subject to this Permit until:

- 10 i. The Permittees have submitted to the Department, by certified mail, overnight express  
11 mail, or hand delivery, a letter signed by the Permittees and a registered professional  
12 engineer stating that the TSD unit has been constructed or modified in compliance with  
13 the Conditions of this Permit; and,
- 14 ii. The Department has inspected the modified or newly constructed TSD unit, and finds  
15 that it is in compliance with the Conditions of this Permit; or
- 16 iii. Within 15 days of the date of receipt of the Permittees' letter, the Permittees have not  
17 received notice from the Department of its intent to inspect, prior inspection is waived,  
18 and the Permittees may commence treatment, storage, and disposal of dangerous waste.

19 **I.E.13. Anticipated Noncompliance**

20 The Permittees shall give at least 30 days advance notice to the Department of any planned  
21 changes in the Facility subject to this Permit or planned activity which might result in  
22 noncompliance with Permit requirements.

23 If 30 days advance notice is not possible, then the Permittees shall give notice immediately  
24 after the Permittees become aware of the anticipated noncompliance. Such notice does not  
25 authorize any noncompliance with or modification of this Permit.

26 **I.E.14. Transfer of Permits**

27 This Permit may be transferred to a new owner only if it is modified or revoked and reissued  
28 pursuant to WAC 173-303-830(3)(b). The Permit may be transferred to a new co-operator in  
29 accordance with the provisions of WAC 173-303-830(2). Before transferring ownership or  
30 operation of the Facility during its operating life, the Permittees shall notify the new owner or  
31 operator in writing of the requirements of WAC 173-303-600 and -806 and this Permit.

32 **I.E.15. Immediate Reporting**

33 **I.E.15.a.** The Permittees shall verbally report to the Department any release of dangerous waste or  
34 hazardous substances, or any noncompliance with the Permit which may endanger human  
35 health or the environment. Any such information shall be reported immediately after the  
36 Permittees become aware of the circumstances.

37 **I.E.15.b.** The immediate verbal report shall contain all the information needed to determine the nature  
38 and extent of any threat to human health and the environment, including the following:

- 39 i. Name, address, and telephone number of the Permittee responsible for the release or  
40 noncompliant activity;
- 41 ii. Name, location, and telephone number of the unit at which the release occurred;

- 1           iii.    Date, time, and type of incident;
- 2           iv.    Name and quantity of material(s) involved;
- 3           v.    The extent of injuries, if any;
- 4           vi.    An assessment of actual or potential hazard to the environment and human health,
- 5                 where this is applicable;
- 6           vii.   Estimated quantity of released material that resulted from the incident; and,
- 7           viii.   Actions which have been undertaken to mitigate the occurrence.

8    I.E.15.c.   The Permittees shall report, in accordance with Conditions I.E.15.a. and I.E.15.b., any  
9                 information concerning the release or unpermitted discharge of any dangerous waste or  
10                hazardous substances that may cause an endangerment to drinking water supplies or ground or  
11                surface waters, or of a release or discharge of dangerous waste or hazardous substances or of  
12                a fire or explosion at the Facility, which may threaten human health or the environment. The  
13                description of the occurrence and its cause shall include all information necessary to fully  
14                evaluate the situation and to develop an appropriate course of action.

15   I.E.15.d.   For any release or noncompliance not required to be reported to the Department immediately,  
16                 a brief account must be entered within two (2) working days, into the TSD operating record,  
17                 for a TSD unit, or into the Facility operating record, inspection log or separate spill log, for  
18                 non-TSD units. This account must include: the time and date of the release, the location and  
19                 cause of the release, the type and quantity of material released, and a brief description of any  
20                 response actions taken or planned.

21   I.E.15.e.   All releases, regardless of location of release or quantity of release, shall be controlled and  
22                 mitigated, if necessary, as required by WAC 173-303-145(3).

23   **I.E.16.    Written Reporting**

24                 Within 15 days after the time the Permittees become aware of the circumstances of any  
25                 noncompliance with this Permit which may endanger human health or the environment, the  
26                 Permittees shall provide to the Department a written report. The written report shall contain a  
27                 description of the noncompliance and its cause (including the information provided in the  
28                 verbal notification); the period of noncompliance including exact dates and times; the  
29                 anticipated time noncompliance is expected to continue if the noncompliance has not been  
30                 corrected; corrective measures being undertaken to mitigate the situation, and steps taken or  
31                 planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

32   **I.E.17.    Manifest Discrepancy Report**

33   I.E.17.a.   For dangerous waste received from outside the Facility, whenever a significant discrepancy in  
34                 a manifest is discovered, the Permittees shall attempt to reconcile the discrepancy. If not  
35                 reconciled within 15 days of discovery, the Permittees shall submit a letter report in  
36                 accordance with WAC 173-303-370(4), including a copy of the applicable manifest or  
37                 shipping paper, to the Department.

38   I.E.17.b.   For dangerous waste which is being transported within the Facility (i.e., shipment of on-site  
39                 generated dangerous waste), whenever a significant discrepancy in the shipping papers (see  
40                 Condition II.Q.1.) is discovered, the Permittees shall attempt to reconcile the discrepancy. If  
41                 not reconciled within 15 days of discovery, the Permittees shall note the discrepancy in the  
42                 receiving unit's operating record.

1 I.E.18. **Unmanifested Waste Report**

2 The Permittees shall follow the provisions of WAC 173-303-370 for the receipt of any  
3 dangerous waste shipment from off-site. The Permittees shall also submit a report in  
4 accordance with WAC 173-303-390(1) to the Department within 15 days of receipt of any  
5 unmanifested dangerous waste shipment received from off-site sources.

6 I.E.19. **Other Noncompliance**

7 The Permittees shall report to the Department all instances of noncompliance not otherwise  
8 required to be reported elsewhere in this Permit at the time the Annual Dangerous Waste  
9 Report is submitted.

10 I.E.20. **Other Information**

11 Whenever the Permittees become aware that they have failed to submit any relevant facts in a  
12 permit application, closure plan, or post-closure plan, or submitted incorrect information in a  
13 permit application, closure plan, or post-closure plan, or in any report to the Department, the  
14 Permittees shall promptly submit such facts or corrected information.

15 I.E.21. **Reports, Notifications and Submissions**

16 All written reports, notifications or other submissions which are required by this Permit to be  
17 sent or given to the Director or Department should be sent certified mail, overnight express  
18 mail, or hand delivered to:

19 Nuclear Waste Program  
20 Regulatory and Technical Support Unit  
21 Department of Ecology  
22 300 Desmond Drive  
23 Lacey, Washington 98503  
24 Telephone: (206) 407-7132

25 and

26 Department of Ecology  
27 200 Area Section  
28 1315 West Fourth Avenue  
29 Kennewick, Washington 99336  
30 Telephone: (509) 735-7581

31 Telephonic and oral reports/notifications need only be provided to the Department's  
32 Kennewick Office.

33 These are the current phone numbers and addresses and may be subject to change. The  
34 Department shall give the Permittees written notice of a change in address or telephone  
35 number. It is the responsibility of the Permittees to ensure any required reports, notifications,  
36 or other submissions are transmitted to the addressee listed in this Condition. However, the  
37 Permittees shall not be responsible for ensuring verbal and written correspondence reaches a  
38 new address or telephone number until after their receipt of the Department's written  
39 notification.

40 I.E.22. **Annual Report**

41 The Permittees shall comply with the annual reporting requirements of WAC 173-303-  
42 390(2)(a) through (e) and (g).

1 I.F. SIGNATORY REQUIREMENT

2 All applications, reports, or information submitted to the Department which require  
3 certification shall be signed and certified in accordance with WAC 173-303-810(12) and (13).  
4 All other reports required by this Permit and other information requested by the Department  
5 shall be signed in accordance with WAC 173-303-810(12).

6 I.G. CONFIDENTIAL INFORMATION

7 The Permittees may claim confidential any information required to be submitted by this  
8 Permit, at the time of submission, in accordance with WAC 173-303-810(15).

9 I.H. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE

10 The Permittees shall maintain at the Facility, or some other location approved by the  
11 Department, the following documents and amendments, revisions, and modifications to these  
12 documents:

- 13 1. This Permit and all attachments;
- 14 2. All dangerous waste Part B permit applications, post-closure permit applications,  
15 and closure plans; and,
- 16 3. The Facility Operating Record.

17 These documents shall be maintained for ten (10) years after post-closure care or corrective  
18 action for the Facility, whichever is later, has been completed and certified as complete.

1 **PART II - GENERAL FACILITY CONDITIONS**

2 II.A. **FACILITY CONTINGENCY PLAN**

3 II.A.1. The Permittees shall immediately carry out the provisions of the Contingency Plan as  
4 provided in Attachment 4, pursuant to WAC 173-303-360(2), whenever there is a release of  
5 dangerous waste or dangerous waste constituents, or other emergency circumstance, either of  
6 which threatens human health or the environment.

7 II.A.2. The Permittees shall comply with the requirements of WAC 173-303-350(4), as provided in  
8 the Hanford Facility Contingency Plan (Attachment 4). The Hanford Facility Contingency  
9 Plan contains reference to unit-specific contingency plans included in Part III of this Permit.

10 II.A.3. The Permittees shall review and amend, if necessary, the Hanford Facility Contingency Plan,  
11 as provided in Permit Attachment 4, pursuant to WAC 173-303-350(5) and in accordance  
12 with the provisions of WAC 173-303-830(4). The plan shall be amended within a period of  
13 time agreed upon by the Department.

14 II.A.4. The Permittees shall comply with the requirements of WAC 173-303-350(3) and -360(1)  
15 concerning the emergency coordinator, except the names and home telephone numbers will be  
16 on file with the Occurrence Notification Center, phone number (509) 376-2900.

17 II.A.5. The Facility Contingency Plan, as provided in Attachment 4, shall be modified as follows:

18 Page APP 7A-2, lines 2 and 49. The emergency telephone number "811" shall be replaced  
19 with "911."

20 Page APP 7A-3, lines 45 through 48. The emergency telephone number "811" shall be  
21 replaced with "911."

22 Page 7A-T1, lines 11 through 12. The term "Emergency Management Center Location: 1170  
23 Building" shall be replaced with "Site Operation Team Location: Federal Building,  
24 Richland."

25 II.B. **PREPAREDNESS AND PREVENTION**

26 II.B.1. The Permittees shall equip the Facility with the equipment specified in the Hanford Facility  
27 Contingency Plan (Attachment 4) pursuant to WAC 173-303-340(1). Unit-specific  
28 preparedness and prevention provisions are included in Parts III, V, and/or VI of this Permit.

29 II.B.2. The Permittees shall test and maintain the equipment specified in the previous condition as  
30 necessary to assure proper operation in the event of emergency.

31 II.B.3. The Permittees shall maintain access to communications or alarms pursuant to WAC 173-  
32 303-340(2), as provided in the Hanford Facility Contingency Plan (Attachment 4) and unit-  
33 specific contingency plans.

34 II.B.4. The Permittees shall comply with WAC 173-303-340(4) and WAC 173-303-355(1) pertaining  
35 to arrangements with local authorities.

36 II.C. **PERSONNEL TRAINING**

37 II.C.1. The Permittees shall conduct personnel training as required by WAC 173-303-330. The  
38 Permittees shall maintain documents in accordance with WAC 173-303-330(2) and (3).  
39 Training records may be maintained in the Hanford Facility operating record or on electronic  
40 data storage.

- 1 II.C.2. All Hanford Facility personnel shall receive general Facility training within six (6) months of  
2 hire. This training shall provide personnel with orientation of dangerous waste management  
3 activities being conducted on the Hanford Facility. This training shall include:
- 4 II.C.2.a. Description of emergency signals and appropriate personnel response,  
5 II.C.2.b. Identification of contacts for information regarding dangerous waste management activities.  
6 II.C.2.c. Introduction to waste minimization concepts,  
7 II.C.2.d. Identification of contact(s) for emergencies involving dangerous waste, and  
8 II.C.2.e. Familiarization with the Hanford Facility Contingency Plan.
- 9 II.C.3. Description of training plans for personnel assigned to TSD units subject to this Permit are  
10 delineated in the unit-specific chapters in Parts III, V, and/or VI of this Permit.
- 11 II.C.4. The Permittees shall provide the necessary training to non-Facility personnel (i.e., visitors,  
12 sub-contractors) as appropriate for the locations such personnel will be at and the activities  
13 that will be undertaken. At a minimum, this training shall describe dangerous waste  
14 management hazards at the Facility.
- 15 II.D. WASTE ANALYSIS
- 16 II.D.1. All waste analyses required by this Permit shall be conducted in accordance with a written  
17 waste analysis plan (WAP) or sampling and analysis plan (SAP). Operating TSD units shall  
18 have a WAP, which shall be approved through incorporation of the TSD unit into Part III of  
19 this Permit. Closing TSD units and units in post-closure should have a SAP and, if necessary,  
20 a WAP which shall be approved through incorporation of the TSD unit into Part V and/or VI  
21 of this Permit.
- 22 II.D.2. Until a WAP is implemented in accordance with Condition II.D.1., any unit(s) identified in  
23 Parts III, V, and/or VI of this Permit without a unit-specific waste analysis plan approved by  
24 the Department shall not treat, store, or dispose of dangerous waste, unless specified  
25 otherwise by the Department in writing.
- 26 II.D.3. Each TSD unit WAP shall include:
- 27 i. The parameters for which each dangerous waste will be analyzed, and the rationale for  
28 selecting these parameters;
- 29 ii. The methods of obtaining or testing for these parameters;
- 30 iii. The methods for obtaining representative samples of wastes for analysis (representative  
31 sampling methods are discussed in WAC 173-303-110(2));
- 32 iv. The frequency with which analysis of a waste will be reviewed or repeated to ensure  
33 that the analysis is accurate and current;
- 34 v. The waste analyses which generators have agreed to supply;
- 35 vi. Where applicable, the methods for meeting the additional waste analysis requirements  
36 for specific waste management methods as specified in WAC 173-303-630 through  
37 173-303-670; and,
- 38 vii. For off-site facilities, the procedures for confirming that each dangerous waste received  
39 matches the identity of the waste specified on the accompanying manifest or shipping  
40 paper. This includes at least:
- 41 (1) The procedure for identifying each waste movement at the Facility; and,

1 (2) The method for obtaining a representative sample of the waste to be identified, if  
2 the identification method includes sampling.

3 II.D.4. Should waste analysis be required by this Permit at a location on the Facility other than at a  
4 TSD unit, a SAP shall be maintained by the Permittees and made available upon request from  
5 the Department. Any SAP required by this Permit not associated with a particular TSD unit  
6 shall include the elements of Conditions II.D.3.(i) through II.D.3.(iv).

7 II.E. QUALITY ASSURANCE/QUALITY CONTROL

8 II.E.1. All WAPs and SAPs required by this Permit shall include a quality assurance/quality control  
9 (QA/QC) plan, or equivalent, to document all monitoring procedures so as to ensure that all  
10 information, data, and resulting decisions are technically sound, statistically valid, and  
11 properly documented. Each QA/QC plan shall include, or contain a reference to another  
12 document which will be used and includes, the elements defined in Conditions II.E.2. and  
13 II.E.3. The QA/QC plan may be part of a SAP, WAP, or equivalent.

14 II.E.2. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:

15 II.E.2.a. A Data Collection Strategy section including, but not limited to, the following:

- 16 i. A description of the intended uses for the data, and the necessary level of precision and  
17 accuracy for these intended uses; and,  
18 ii. A description of methods and procedures to be used to assess the precision, accuracy,  
19 and completeness of the measurement data;

20 II.E.2.b. A Sampling section which shall include or describe and reference or cite:

- 21 i. Sampling methods including the identification of sampling equipment, a description of  
22 purging procedures, and a description of decontamination procedures to be used;  
23 ii. Criteria for selecting appropriate sampling locations, depths, etc., or identification and  
24 justification of sample collection points and frequencies;  
25 iii. Criteria for providing a statistically sufficient number of samples as defined in EPA  
26 guidance or criteria for determining a technically sufficient number of measurements to  
27 meet the needs of the project as determined through the DQO planning process;  
28 iv. Methods for, or specification of, measuring all necessary ancillary data;  
29 v. Criteria for, or specification of, determining conditions under which sampling should  
30 be conducted;  
31 vi. Criteria for establishing, or specification of, which parameters are to be measured at  
32 each sample collection point and the frequency that each parameter is to be measured;  
33 vii. Criteria for, or specification of, identifying the type of sampling (e.g., composites vs.  
34 grabs) and number of samples to be collected;  
35 viii. Criteria for, or specification of, measures to be taken to prevent contamination of the  
36 sampling equipment and cross contamination between sampling points;  
37 ix. Methods and documentation of field sampling operations and procedure descriptions,  
38 as appropriate, including:

39 (1) Documentation of procedures for preparation of reagents or supplies which  
40 become an integral part of the sample (e.g., filters and absorbing reagents);

- 1 (2) Procedure descriptions and forms for recording the exact location, sampling  
2 conditions, sampling equipment, and visual condition of samples;
- 3 (3) Documentation of specific sample preservation method;
- 4 (4) Calibration of field devices;
- 5 (5) Collection of replicate samples;
- 6 (6) Submission of field-biased blanks, where appropriate;
- 7 (7) Potential interferences present at the facility;
- 8 (8) Field equipment listing and sample containers;
- 9 (9) Sampling order; and,
- 10 (10) Descriptions of decontamination procedures.
- 11 x. Selection of appropriate sample containers, as applicable;
- 12 xi. Sample preservation methods, as applicable; and,
- 13 xii. Chain-of-custody procedure descriptions as applicable, including:
  - 14 (1) Standardized field tracking reporting forms to establish sample custody in the  
15 field prior to and during shipment; and,
  - 16 (2) Pre-prepared sample labels containing all information necessary for effective  
17 sample tracking, except where such information is generated in the field, in  
18 which case, blank spaces shall be provided on the pre-prepared sampling label.
- 19 II.E.2.c. Where applicable, a Field Measurements section which shall address:
  - 20 i. Selecting appropriate field measurement locations, depths, etc.;
  - 21 ii. Providing a statistically sufficient number of field measurements as defined in EPA  
22 guidance or criteria for determining a technically sufficient number of measurements to  
23 meet the needs of the project as determined through the DQO process;
  - 24 iii. Measuring all necessary ancillary data;
  - 25 iv. Determining conditions under which field measurements should be conducted;
  - 26 v. Determining which media are to be addressed by appropriate field measurements (e.g.,  
27 ground water, air, soil, sediment, etc.);
  - 28 vi. Determining which parameters are to be measured and where;
  - 29 vii. Selecting the frequency of field measurement and length of field measurements period;  
30 and,
  - 31 viii. Documenting field measurement operations and procedures, including:
    - 32 (1) Descriptions of procedures and forms for recording raw data and the specific  
33 location, time, and sampling conditions;
    - 34 (2) Calibration of field devices;
    - 35 (3) Collection of replicate measurements;
    - 36 (4) Submission of field-biased blanks, where appropriate;
    - 37 (5) Potential interferences present at the facility;

- (6) Field equipment listing; and,
- (7) Descriptions of decontamination procedures.

11.E.2.d. Where applicable, a Sample Analysis section which shall specify the following:

- i. Chain-of-custody procedures, including:
  - (1) Certification that all samples obtained for analysis will be delivered to a responsible person at the recipient laboratory who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
  - (2) Provision for a laboratory sample custody log; and,
  - (3) Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
- ii. Sample storage procedure descriptions and storage times;
- iii. Sample preparation methods;
- iv. Descriptions of analytical procedures, including:
  - (1) Scope and application of the procedure;
  - (2) Sample matrix;
  - (3) Potential interferences;
  - (4) Precision and accuracy of the methodology; and,
  - (5) Method detection limits.
- v. Descriptions of calibration procedures and frequency;
- vi. Data reduction, validation, and reporting;
- vii. Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, including:
  - (1) Method blank(s);
  - (2) Laboratory control sample(s);
  - (3) Calibration check sample(s);
  - (4) Replicate sample(s);
  - (5) Matrix-spiked sample(s);
  - (6) "Blind" quality control;
  - (7) Control charts;
  - (8) Surrogate samples;
  - (9) Zero and span gases; and,
  - (10) Reagent quality control checks.

11.E.3. Each QA/QC plan shall include a Data Management Plan, or equivalent, to document and track data and results. This plan shall identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data shall be identified. The

1 plan shall also provide the format to be used to record and, for projects, present the validated  
2 and invalidated data and conclusions. The Data Management Plan shall include the following  
3 as applicable:

4 II.E.3.a. A data record including the following:

- 5 i. Unique sample or field measurement code;
- 6 ii. Sampling or field measurement location including surveyed horizontal coordinates and  
7 elevation of the sample location, and sample or measurement type;
- 8 iii. Sampling or field measurement raw data;
- 9 iv. Laboratory analysis ID number;
- 10 v. Result of analysis (e.g., concentration);
- 11 vi. Elevations of reference points for all ground water level measurements, including water  
12 level elevation, top of casing elevation, and ground surface elevation; and,
- 13 vii. Magnetic computer records of all ground water, soil, surface water, and sediment  
14 analytical data.

15 II.E.3.b. Tabular displays, as appropriate, illustrating:

- 16 i. Unsorted validated and invalidated data;
- 17 ii. Results for each medium and each constituent monitored;
- 18 iii. Data reduction for statistical analysis;
- 19 iv. Sorting of data by potential stratification factors (e.g., location, soil layer, topography);  
20 and,
- 21 v. Summary data.

22 II.E.3.c. Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-  
23 sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the  
24 following:

- 25 i. Displays of sampling location and sampling grid;
- 26 ii. Identification of boundaries of sampling area and areas where more data are required;
- 27 iii. Displays of concentrations of contamination at each sampling location;
- 28 iv. Displays of geographical extent of contamination;
- 29 v. Aerial and vertical displays of contamination concentrations, concentration averages,  
30 and concentration maxima, including isoconcentration maps for contaminants found in  
31 environmental media at the Facility;
- 32 vi. Illustrations of changes in concentration in relation to distance from the source, time,  
33 depth, or other parameters;
- 34 vii. Identification of features affecting intramedia transport and identification of potential  
35 receptors;
- 36 viii. For each round of ground water level measurements, maps showing the distribution of  
37 head measurements in each aquifer; and,
- 38 ix. For each well, provide a hydrograph that shows the distribution of water level  
39 measurements taken during the time interval of the investigation.

1 II.E.4. Unless otherwise agreed upon in writing by the Department, the Permittees shall provide  
2 notification of availability to the Department of all data obtained pursuant to this Permit  
3 within 30 days of receipt by the Permittees, or after completion of QA/QC activities, if  
4 applicable. If the Department agrees that data will be obtained on a routine basis for a  
5 particular unit, the Permittees shall only be required to provide notification of data  
6 availability within 30 days of first availability along with a statement as to expected  
7 frequency of future data. If routine data is not acquired at the stated expected frequency, the  
8 Permittees shall notify the department within 30 days with an explanation and revision, if  
9 applicable. This notification requirement shall also apply to any other information obtained  
10 from activities conducted, or data obtained, that may influence activities pursuant to this  
11 Permit.

12 II.E.5. The level of QA/QC for the collection, preservation, transportation, and analysis of each  
13 sample which is required for implementation of this Permit may be based upon Department  
14 approved data quality objectives for the sample. These data quality objectives shall be  
15 approved by the Department, in writing, or through incorporation of unit plans and permits  
16 into Parts III, V, and/or VI of this Permit.

17 II.F. GROUNDWATER AND VADOSE ZONE MONITORING

18 The Permittees shall comply with the groundwater monitoring requirements of WAC 173-  
19 303-645. This Condition shall apply only to those wells the Permittees use for the  
20 groundwater monitoring programs applicable to the TSD units incorporated into Parts III, V,  
21 and/or VI of this Permit. Where releases from TSD units subject to this Permit have been  
22 documented or confirmed by investigation, or where vadose zone monitoring is proposed for  
23 integration with groundwater monitoring, the Permittees shall evaluate the applicability of  
24 vadose zone monitoring. The Permittees shall consult with the Department regarding the  
25 implementation of these requirements. If agreed to by the Department, integration of  
26 groundwater and vadose zone monitoring for reasons other than this Permit may be  
27 accommodated by this Permit. Results from other investigation activities shall be used  
28 whenever possible to supplement and/or replace sampling required by this Permit.

29 II.F.1. **Purgewater Management**

30 Purgewater shall be handled in accordance with the requirements set forth in Attachment 5,  
31 *Purgewater Management Plan*.

32 II.F.2. **Well Remediation and Abandonment**

33 II.F.2.a. The Permittees shall inspect the integrity of active resource protection wells as defined by  
34 WAC 173-160-030 subject to this Permit at least once every five (5) years. These inspections  
35 shall be recorded in the Operating Record. The Permittees shall prepare a plan and schedule  
36 within 120 days after the effective date of this Permit, specifying the schedule and technical  
37 standards for this program. The Permittees shall provide a copy of this plan upon the request  
38 of the Department.

39 II.F.2.b. The permittees shall evaluate resource protection wells subject to this Permit according to  
40 Sections 4.1. through 4.8.3. of the *Hanford Well Remediation and Decommissioning Plan*  
41 (Attachment 6) and the Policy on Remediation of Existing Wells and Acceptance Criteria for  
42 RCRA and CERCLA, June 1990 (Attachment 7) to determine if a well has a potential use as a  
43 qualified well. The Permittees shall abandon or remediate unusable wells according to the  
44 requirements of Chapter 18.104 RCW, Chapter 173-160 WAC, and Chapter 173-162 WAC to  
45 ensure that the integrity of wells subject to this Permit is maintained. The timeframe for this  
46 remediation will be specified in Parts III, V, and/or VI of this Permit.

- 1 II.F.2.c. The Department shall receive notice in writing at least 72 hours before the Permittees  
2 remediate (excluding maintenance activities) or abandon any well subject to this Permit.
- 3 II.F.2.d. For wells subject to this Permit, the Permittees shall achieve full compliance with Chapter  
4 173-160 WAC and Chapter 18.104 RCW consistent with a rolling five (5) year schedule  
5 agreed to by the Department and the Permittees. This process shall be completed by the year  
6 2012.
- 7 II.F.3. **Well Construction**
- 8 All wells constructed pursuant to this Permit shall be constructed in compliance with Chapter  
9 173-160 WAC.
- 10 II.G. **SITING CRITERIA**
- 11 The Permittees shall comply with the applicable notice of intent and siting criteria of WAC  
12 173-303-281 and WAC 173-303-282, respectively.
- 13 II.H. **RECORDKEEPING AND REPORTING**
- 14 In addition to the recordkeeping and reporting requirements specified elsewhere in this  
15 Permit, the Permittees shall comply with the following:
- 16 II.H.1. **Cost Estimate for Facility Closure**
- 17 The Permittees shall submit an annual report updating projections of anticipated costs for  
18 closure and post-closure of TSD units incorporated into Parts III, V, and/or VI of this Permit.  
19 This report will be submitted annually, by October 31, to the Department and reflect cost  
20 updates as of September 30, of the past Fiscal Year.
- 21 II.H.2. **Cost Estimate for Post-Closure Monitoring and Maintenance**
- 22 The Permittees shall submit an annual report updating projections of anticipated costs for  
23 post-closure monitoring and maintenance for TSD units incorporated into Parts III, V, and/or  
24 VI of this Permit. This report will be submitted annually, by October 31, to the Department  
25 and reflect cost updates as of September 30, of the past Fiscal Year.
- 26 II.H.3. The Permittees are exempt from the requirements of WAC 173-303-620
- 27 II.I. **FACILITY OPERATING RECORD**
- 28 II.I.1. The Permittees shall maintain a written Facility Operating Record until ten (10) years after  
29 post-closure or corrective action is complete and certified for the Facility, whichever is later.  
30 Except as specifically provided otherwise in this Permit, the Permittees shall also record all  
31 information referenced in this Permit in the Facility Operating Record within seven (7)  
32 working days after the information becomes available. A TSD unit-specific operating record  
33 shall be maintained for each TSD unit at a location identified in Parts III, V, and VI of this  
34 Permit. Each TSD unit-specific operating record shall be included by reference in the Facility  
35 Operating Record. Information required in each TSD unit-specific operating record is  
36 identified on a unit-by-unit basis in Part III or V of this Permit. The Facility Operating  
37 Record shall include, but not limited to, the following information:
- 38 II.I.1.a. A description of the system(s) currently utilized to identify and map solid waste management  
39 units and their locations. The description of the system(s) is required to include an  
40 identification of on-site access to the system's data, and an on-site contact name and telephone  
41 number. In addition to, or as part of, this system(s), the Permittees shall also maintain a list  
42 identifying active 90-day waste storage areas and dangerous waste satellite accumulation  
43 areas and their locations. The list shall identify the location, the predominant waste types

- 1 managed at the area, and a date identifying when the list was compiled. Maps shall be  
2 provided by the Permittees upon request by the Department;
- 3 II.I.1.b. Records and results of waste analyses required by WAC 173-303-300;
- 4 II.I.1.c. An identification of the system(s) currently utilized to generate Occurrence Reports. The  
5 identification of the system(s) is required to include a description, an identification of an on-  
6 site location of hard-copy Occurrence Reports, an identification of on-site access to the  
7 system's data, and an on-site contact name and telephone number;
- 8 II.I.1.d. Copies of all unmanifested waste reports;
- 9 II.I.1.e. Hanford Facility Contingency Plan as well as summary reports and details of all incidents that  
10 require implementing the Contingency Plan, as specified in WAC 173-303-360(2)(k);
- 11 II.I.1.f. An identification of the system(s) currently utilized and being developed to record personnel  
12 training records and to develop training plans. The identification of the system(s) is required  
13 to include a description, an identification of on-site access to the system's data, and an on-site  
14 contact name and telephone number;
- 15 II.I.1.g. Preparedness and prevention arrangements made pursuant to WAC 173-303-340(4) and  
16 documentation of refusal by state or local authorities that have declined to enter into  
17 agreements in accordance with WAC 173-303-340(5);
- 18 II.I.1.h. [Reserved]
- 19 II.I.1.i. An identification and description of the report containing closure and post-closure cost  
20 estimates required by Conditions II.H.1. and II.H.2. The identification shall provide the on-  
21 site location and document number of the report;
- 22 II.I.1.j. Documentation (e.g., waste profile sheets) of all dangerous waste transported to or from any  
23 TSD unit subject to this Permit. This documentation shall be maintained in the receiving  
24 unit's operating record from the time the waste is received;
- 25 II.I.1.k. An identification of the system(s) currently utilized to cross-reference waste locations to  
26 specific manifest document numbers. The identification of the system(s) is required to  
27 include a thorough description, an identification of an on-site location of a hard-copy data  
28 report, an identification of on-site access to the system's data, and an on-site contact name and  
29 telephone number;
- 30 II.I.1.l. [Reserved]
- 31 II.I.1.m. Annual Reports required by this Permit;
- 32 II.I.1.n. An identification of all systems currently utilized to record monitoring information, including  
33 all calibration and maintenance records, and all original strip chart recordings for continuous  
34 monitoring instrumentation. The identification of systems shall include a description of the  
35 systems. The descriptions shall include a confirmation that the criteria of Condition I.E.10.e.  
36 is provided by the utilization of the system. The identification of the systems shall also  
37 include an identification of on-site access to the system's data, an on-site contact name and  
38 telephone number;
- 39 II.I.1.o. [Reserved]
- 40 II.I.1.p. Summaries of all records of groundwater corrective action required by WAC 173-303-645;
- 41 II.I.1.q. An identification of the system(s) currently being utilized and being developed to evaluate  
42 compliance with the Conditions of this Permit and with Chapter 173-303 WAC. The  
43 identification of the system(s) shall include a description of the system(s), an identification of

1 on-site access to the system's data, and an on-site contact name and telephone number. The  
2 description of the system(s) shall also include a definition of which portion(s) of the  
3 system(s) are accessible to the Department;

4 II.I.1.r. All deed notifications required by this Permit (to be included by reference);

5 II.I.1.s. All inspection reports required by this Permit; and,

6 II.I.1.t. All other reports as required by this Permit, including ECNs and NCRs.

7 II.I.2. The descriptions of systems and/or reports required in Conditions II.I.1.a., II.I.1.c., II.I.1.f.,  
8 II.I.1.i., II.I.1.k., II.I.1.n., and II.I.1.q., shall be placed in the Facility Operating Record within  
9 twelve months of the effective date of this Permit.

10 II.J. FACILITY CLOSURE

11 II.J.1. Final closure of the Hanford Facility will be achieved when closure activities for all TSD  
12 units have been completed, as specified in Parts III, IV, V, or VI of this Permit. Completion  
13 of these activities shall be documented using either certifications of closure, in accordance  
14 with WAC 173-303-610(6), or certifications of completion of post-closure care, in accordance  
15 with WAC 173-303-610(11).

16 II.J.2. The Permittees shall close all TSD units as specified in Parts III, V, and/or VI of this Permit.

17 II.J.3. The Permittees shall submit a written notification of or request for a permit modification in  
18 accordance with the provisions of WAC 173-303-610(3)(b) whenever there is a change in  
19 operating plans, facility design, or the approved closure plan. The written notification or  
20 request must include a copy of the amended closure plan for review or approval by the  
21 Department.

22 II.J.4. The Permittees shall close the Facility in a manner that:

23 II.J.4.a. Minimizes the need for further maintenance;

24 II.J.4.b. Controls, minimizes or eliminates to the extent necessary to protect human health and the  
25 environment, post-closure escape of dangerous waste, dangerous constituents, leachate,  
26 contaminated run-off, or dangerous waste decomposition products to the ground, surface  
27 water, ground water, or the atmosphere; and,

28 II.J.4.c. Returns the land to the appearance and use of surrounding land areas to the degree possible  
29 given the nature of the previous dangerous waste activity.

30 II.J.4.d. Meets the requirements of WAC 173-303-610(2)(b).

31 II.K. SOIL/GROUNDWATER CLOSURE PERFORMANCE STANDARDS

32 II.K.1. For purposes of Condition II.K., the term "clean closure" shall mean the status of a TSD unit  
33 at the Facility which has been closed to the cleanup levels prescribed by WAC 173-303-  
34 610(2)(b) provided certification of such closure has been accepted by the Department.

35 II.K.2. The Permittees may close a TSD unit to background levels as defined in Department  
36 approved Hanford Site Background Documents if background concentrations exceed the  
37 levels prescribed by Condition II.K.1. Closure to these levels, provided the Permittees  
38 comply with all other closure requirements for a TSD unit as identified in Parts III, V, and/or  
39 VI of this Permit, shall be deemed as "clean closure."

40 II.K.3. Except for those TSD units identified in Conditions II.K.1., II.K.2., or II.K.4., the Permittees  
41 may close a TSD unit to a cleanup level specified under Method C of Chapter 173-340 WAC.  
42 Closure of a TSD unit to these levels, provided the Permittees comply with all other closure

- 1 requirements for the TSD unit as specified in Parts III, V, and/or VI of the Permit, and  
2 provided the Permittees comply with Conditions II.K.3.a. through II.K.3.c., shall be deemed  
3 as a "modified closure."
- 4 II.K.3.a. For "modified closures," the Permittees shall provide institutional controls in accordance with  
5 WAC 173-340-440 which restricts access to the TSD unit for a minimum of five (5) years  
6 following completion of closure. The specific details and duration of institutional controls  
7 shall be specified in Parts III, V, and/or VI of this Permit for a particular TSD unit.
- 8 II.K.3.b. For "modified closures," the Permittees shall provide periodic assessments of the TSD unit to  
9 determine the effectiveness of the closure. The specific details of the periodic assessments  
10 shall be specified in Parts III, V, and/or VI of this Permit. The periodic assessments shall  
11 include, as a minimum, a compliance monitoring plan in accordance with WAC 173-340-410  
12 that will address the assessment requirements on a unit by unit basis. At least one (1)  
13 assessment activity shall take place after a period of five (5) years from the completion of  
14 closure, which will demonstrate whether the soils and groundwater have been maintained at  
15 or below the allowed concentrations as specified in Parts III, V, or VI of this Permit. Should  
16 the required assessment activities identify contamination above the allowable limits as  
17 specified in Parts III, V, and/or VI, the TSD unit must be further remediated or the  
18 requirements of II.K.4. must be followed. Should the required assessment activities  
19 demonstrate that contamination has diminished or remained the same, the Permittees may  
20 request that the Department reduce or eliminate the assessment activities and/or institutional  
21 controls.
- 22 II.K.3.c. For "modified closures," the Permittees shall specify the specific activities required by this  
23 Condition in a post-closure permit application.
- 24 II.K.4. For any TSD unit which Conditions II.K.1., II.K.2., or II.K.3., are not chosen as the closure  
25 option, closing the TSD unit as a landfill may be selected. Closure and post-closure of the  
26 TSD unit as a landfill must follow the procedures and requirements specified in WAC 173-  
27 303-610.
- 28 II.K.5. The cleanup option selected shall be specified in Parts III, V, and/or VI of this Permit and  
29 shall be chosen with consideration of the potential future site use for that TSD unit/area.  
30 Definitions contained within Chapter 173-340 WAC shall apply to Condition II.K. where  
31 definitions are not otherwise provided by this Permit, the FFAO, or Chapter 173-303 WAC.
- 32 II.K.6. Deviations from a TSD unit closure plan required by unforeseen circumstances encountered  
33 during closure activities which do not impact the overall closure strategy but provide  
34 equivalent results shall be documented in the TSD unit-specific operating record and made  
35 available to the Department upon request or during the course of an inspection.
- 36 II.K.7. Where agreed to by the Department, integration of other statutorily or regulatory mandated  
37 cleanups may be accommodated by this Permit. Results from other cleanup investigation  
38 activities shall be used whenever possible to supplement and/or replace TSD unit closure  
39 investigation activities. All, or appropriate parts of, multipurpose cleanup and closure  
40 documents can be incorporated into this Permit through the Permit modification process.  
41 Cleanup and closures conducted under any statutory authority with oversight by either the  
42 Department or the Agency which meets the equivalent of the technical requirements of  
43 Conditions II.K.1. through II.K.4. may be considered as satisfying the requirements of this  
44 Permit.

1 II.L. DESIGN AND OPERATION OF THE FACILITY

2 II.L.1. **Proper Design and Construction**

3 The Permittees shall design, construct, maintain, and operate the Facility to minimize the  
4 possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous  
5 substances to air, soil, ground water, or surface water which could threaten human health or  
6 the environment.

7 II.L.2. **Design Changes, Nonconformance, and As-Built Drawings**

8 II.L.2.a. The Permittees shall conduct all construction subject to this Permit in accordance with the  
9 approved designs, plans and specifications that are required by this Permit unless authorized  
10 otherwise in Conditions II.L.2.b. or II.L.2.c. For purposes of Conditions II.L.2.b. and  
11 II.L.2.c., a Department construction inspector or TSD unit manager are designated  
12 representatives of the Department.

13 II.L.2.b. During construction of a project subject to this Permit, changes to the approved designs, plans  
14 and specifications shall be formally documented with an Engineering Change Notice (ECN).  
15 All ECNs shall be maintained in the TSD unit-specific operating record and shall be made  
16 available to the Department upon request or during the course of an inspection. The  
17 Permittees shall provide copies of ECNs affecting any critical system to the Department  
18 within five (5) working days of initiating the ECN. Identification of critical systems shall be  
19 included by the Permittees in each TSD unit-specific dangerous waste permit application,  
20 closure plan or Permit modification, as appropriate. The Department will review an ECN  
21 modifying a critical system and inform the Permittees within two (2) working days in writing  
22 whether the proposed ECN, when issued, will require a Class 1, 2, or 3 permit modification.  
23 If after two (2) working days the Department has not responded, it will be deemed as  
24 acceptance of the ECN by the Department.

25 II.L.2.c. During construction of a project subject to this Permit, any work completed which does not  
26 meet or exceed the standards of the approved design, plans and specifications shall be  
27 formally documented with a nonconformance report (NCR). All NCRs shall be maintained in  
28 the TSD unit-specific operating record and shall be made available to the Department upon  
29 request or during the course of an inspection. The Permittees shall provide copies of NCRs  
30 affecting any critical system to the Department within five (5) working days after  
31 identification of the nonconformance. The Department will review an NCR affecting a  
32 critical system and inform the Permittees within two (2) working days in writing whether a  
33 permit modification is required of any nonconformance and whether prior approval is  
34 required from the Department before work proceeds which affects the nonconforming item.  
35 If the Department does not respond within two (2) working days, it will be deemed as  
36 acceptance and no permit modification is required.

37 II.L.2.d. Upon completion of a construction project subject to this Permit, the Permittees shall produce  
38 as-built drawings of the project which incorporate the design and construction modifications  
39 resulting from all project ECNs and NCRs as well as modifications made pursuant to WAC  
40 173-303-830. The Permittees shall place the drawings into the operating record within 12  
41 months of completing construction, or within an alternate period of time specified in a unit-  
42 specific Condition in Part III or V of this Permit.

43 II.L.3. **Facility Compliance**

44 The Permittees in receiving, storing, transferring, handling, treating, processing, and  
45 disposing of dangerous waste shall design, operate, and/or maintain the Facility in compliance  
46 with all applicable federal, state, and local laws and regulations.

1 II.M. SECURITY

2 The Permittees shall comply with the security provisions of WAC 173-303-310. The  
3 Permittees may comply with the requirements of WAC 173-303-310(2) on a unit-by-unit  
4 basis.

5 II.N. RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE

6 II.N.1. **Receipt of Off-Site Waste**

7 The Permittees shall comply with Conditions II.N.2. and II.N.3. for any dangerous wastes  
8 which are received from either sources outside the United States or from off-site generators.

9 II.N.2. **Waste From Sources Outside the United States**

10 The Permittees shall meet the requirements of WAC 173-303-290(1) for waste received from  
11 outside the United States.

12 II.N.3. **Notice to Generator**

13 For waste received from off-site sources (except where the owner/operator is also the  
14 generator), the Permittees shall inform the generator in writing that they have the appropriate  
15 permits for, and will accept, the waste the generator is shipping, as required by WAC 173-  
16 303-290(3). The Permittees shall keep a copy of this written notice as part of the TSD unit-  
17 specific operating record.

18 II.O. GENERAL INSPECTION REQUIREMENTS

19 II.O.1. The Permittees shall inspect the Facility to prevent malfunctions and deterioration, operator  
20 errors, and discharges which may cause or lead to the release of dangerous waste constituents  
21 to the environment, or a threat to human health. Inspections must be conducted in accordance  
22 with the provisions of WAC 173-303-320(2). In addition to the TSD unit inspections  
23 specified in Parts III, V, and/or VI, the following inspections will also be conducted:

24 II.O.1.a. The 100, 200 East, 200 West, 300, 400, and 1100 areas shall be inspected annually.

25 II.O.1.b. The Permittees shall inspect the banks of the Columbia River, contained within the Facility  
26 boundary, two (2) times yearly. One (1) inspection shall occur at the low water mark of the  
27 year and one (1) inspection shall occur at a time chosen by the Permittees. These inspections  
28 shall be performed from the river, by boat, and the inspectors shall follow the criteria in  
29 Condition II.O.1.c.

30 II.O.1.c. The Permittees shall visually inspect the areas identified in Conditions II.O.1.a. and II.O.1.b.  
31 for malfunctions, deterioration, operator errors, and discharges which may cause or lead to the  
32 release of dangerous waste constituents to the environment, or that threaten human health.  
33 Specific items to be noted are as follows:

- 34 i. Remains of waste containers, labels, or other waste management equipment;
- 35 ii. Solid waste disposal sites not previously identified for remedial action;
- 36 iii. Uncontrolled waste containers (e.g., orphan drums);
- 37 iv. Temporary or permanent activities that could generate an uncontrolled waste form; and,
- 38 v. Unpermitted waste discharges.

39 II.O.1.d. The Permittees shall notify the Department at least seven (7) days prior to conducting these  
40 inspections in order to allow representatives of the Department to be present during the  
41 inspections.

- 1 II.O.2. If the inspection by the Permittees conducted pursuant to Condition II.O.1. reveals any  
2 problems, the Permittees shall take remedial action on a schedule agreed to by the  
3 Department.
- 4 II.O.3. The inspection of high radiation areas will be addressed on a case-by-case basis in either Part  
5 III of this Permit or prior to the inspections required in Condition II.O.1.
- 6 II.P. MANIFEST SYSTEM
- 7 II.P.1. The Permittees shall comply with the manifest requirements of WAC 173-303-370 for waste  
8 received from off-site and WAC 173-303-180 for waste shipped off-site.
- 9 II.P.2. Transportation of dangerous wastes along State Highways 240, 24, and 243, and Route 4  
10 South (Stevens Drive) south of the Wye Barricade, if such routes are not closed to general  
11 public access at the time of shipment, shall be manifested pursuant to Condition II.P.1.
- 12 II.Q. ON-SITE TRANSPORTATION
- 13 II.Q.1. Documentation must accompany any on-site dangerous waste which is transported to or from  
14 any TSD unit subject to this Permit through or within the 600 Area, unless the roadway is  
15 closed to general public access at the time of shipment. Waste transported by rail or by  
16 pipeline is exempt from this Condition. This documentation shall include the following  
17 information, unless other unit-specified provisions are designated in Part III or V:
- 18 II.Q.1.a. Generator's name, location, and telephone number;
- 19 II.Q.1.b. Receiving TSD unit's name, location, and telephone number;
- 20 II.Q.1.c. Description of waste;
- 21 II.Q.1.d. Number and type of containers;
- 22 II.Q.1.e. Total quantity of waste;
- 23 II.Q.1.f. Unit volume/weight;
- 24 II.Q.1.g. Dangerous waste number(s); and,
- 25 II.Q.1.h. Any special handling instructions.
- 26 II.Q.2. All non-containerized solid, dangerous waste transported to or from TSD units subject to this  
27 Permit shall be covered to minimize the potential for material to escape during transport.
- 28 II.R. EQUIVALENT MATERIALS
- 29 II.R.1. The Permittees may substitute an equivalent or superior product for any equipment or  
30 materials specified in this Permit. Use of equivalent or superior products shall not be  
31 considered a modification of this Permit. A substitution will not be considered equivalent  
32 unless it is at least as effective as the original equipment or materials in protecting human  
33 health and the environment.
- 34 II.R.2. The Permittees shall place in the operating record (within seven (7) days after the change is  
35 put into effect) the substitution documentation, accompanied by a narrative explanation, and  
36 the date the substitution became effective. The Department may judge the soundness of the  
37 substitution.
- 38 II.R.3. If the Department determines that a substitution was not equivalent to the original, it will  
39 notify the Permittees that the Permittees' claim of equivalency has been denied, of the reasons  
40 for the denial, and that the original material or equipment must be used. If the product

1 substitution is denied, the Permittees shall comply with the original approved product  
2 specification or find an acceptable substitution.

3 II.S. LAND DISPOSAL RESTRICTIONS

4 Unless specifically identified otherwise in the FFACO, the Permittees shall comply with all  
5 Land Disposal Restriction requirements as set forth in WAC 173-303-140.

6 II.T. ACCESS AND INFORMATION

7 To the extent that work required by this Permit must be done on property not owned or  
8 controlled by the Permittees, the Permittees must utilize their best efforts to obtain access and  
9 information at these locations.

10 II.U. MAPPING OF UNDERGROUND PIPING

11 II.U.1. Within 24 months of the effective date of the Permit, the Permittees shall submit a report to  
12 the Department which describes the procedures proposed to be used to compile the  
13 information required by Conditions II.U.2., II.U.3., and II.U.4. The report shall describe the  
14 methods which will be used to retrieve the piping information, the estimated accuracy of the  
15 data to be provided, quality assurance and/or quality control techniques to be employed  
16 including field verification activities (i.e., surveying, ground penetrating radar, etc.) to  
17 support information gathered from existing drawings, and conceptual examples of the product  
18 which will be submitted.

19 II.U.2. Within 36 months of the effective date of this Permit, the Permittees shall make an initial  
20 submittal to the Department of maps showing the location of dangerous waste underground  
21 pipelines (including active, inactive, and abandoned pipelines which contain or contained  
22 dangerous waste subject to the provisions of Chapter 173-303 WAC) on the Facility which  
23 are located outside of the fences enclosing the 200 East, 200 West, 300, 400, 100N, and 100K  
24 Areas. These maps shall identify the origin, destination, size, depth, and type (i.e., reinforced  
25 concrete, stainless steel, cast iron, etc.) of each pipe and the location of their diversion boxes,  
26 valve pits, seal pots, catch tanks, receiver tanks, and pumps, utilizing Washington State Plane  
27 Coordinates, NAD 83(91), meters. If the type of pipe material is not documented on existing  
28 drawings, the most probable material type shall be provided. These maps shall be  
29 accompanied by a description of the quality assurance and quality control measures used to  
30 compile the maps.

31 The age of all pipes required to be identified pursuant to this Condition shall be documented  
32 in an attachment to the submittal. If the age cannot be documented, an estimate of the age of  
33 the pipe shall be provided based upon best engineering judgment.

34 These maps, and any attachments, shall be maintained in the Facility Operating Record and  
35 updated annually after the initial submittal with new or revised information. Each map  
36 submittal required by this Condition shall incorporate information available six (6) months  
37 before the scheduled submittal date.

38 II.U.3. Within 48 months of the effective date of this Permit, the Permittees shall make an initial  
39 submittal to the Department of piping schematics for dangerous waste underground pipelines  
40 (including active, inactive, and abandoned pipelines which contain or contained dangerous  
41 waste subject to the provisions of Chapter 173-303 WAC) within the 200 East, 200 West,  
42 300, 400, 100N, and 100K Areas. The piping schematics shall identify the origin, destination,  
43 and direction of flow for each pipe, as well as whether the pipe is active, inactive, or  
44 abandoned. These schematics need not include the pipes within a fenced tank farm or within  
45 a building/structure. These schematics shall be accompanied by a description of the quality  
46 assurance and quality control measures used to compile the maps.

1 These schematics and any attachments, shall be maintained in the Facility Operating Record  
2 and updated annually after the initial submittal with new or revised information. Each map  
3 submittal required by this Condition shall incorporate information available six months before  
4 the scheduled submittal date.

5 II.U.4. Within 48 months of the effective date of this Permit, the Permittees shall make an initial  
6 submittal to the Department of maps showing the location of dangerous waste underground  
7 pipelines (including active, inactive, and abandoned pipelines which contain or contained  
8 dangerous waste subject to the provisions of Chapter 173-303 WAC) within the 200 East, 200  
9 West, 300, 400, 100N, and 100K Areas. These maps will incorporate information available  
10 six months prior to the scheduled submittal date. Thereafter, the maps will be updated on an  
11 annual basis to incorporate additional information, as such information becomes available in  
12 accordance with the FFAO milestone schedule. A schedule for the provision of map input  
13 shall be included in the report specified in Condition II.U.1.

14 The maps shall identify the origin, destination, size, depth and type (i.e., reinforced concrete,  
15 stainless steel, cast iron, etc.) of each pipe and the location of their diversion boxes, valve  
16 pits, seal pots, catch tanks, receiver tanks, and pumps, and utilize Washington State Plan  
17 Coordinates, NAD 83(91), meters. If the type of pipe material is not documented on existing  
18 drawings, the most probable material type shall be provided. These maps need not include the  
19 pipes within a fenced tank farm or within a building/structure. These maps shall be  
20 accompanied by a description of the quality assurance/quality control used to compile the  
21 maps.

22 The age of all pipes required to be identified pursuant to this Condition shall be documented  
23 in an attachment to the submittal. If the age cannot be documented, an estimate of the age of  
24 the pipe shall be provided based upon best engineering judgment.

25 These maps, and any attachments, shall be maintained in the Facility Wide Operating Record  
26 and updated annually after the initial submittal with new or revised information.

27 II.V. MARKING OF UNDERGROUND PIPING

28 Within 36 months of the effective date of this Permit, the Permittees shall mark the  
29 underground pipelines identified in Condition II.U.2. These pipelines shall be marked at the  
30 point they pass beneath a fence enclosing the 200 East, 200 West, 300, 400, 100N, or 100K  
31 Areas, at their origin and destination, at any point they cross an improved road and every 100  
32 meters along the pipeline corridor where practicable. The markers shall be labeled with a  
33 sign that reads "Buried Dangerous Waste Pipe" and shall be visible from a distance of 15  
34 meters.

35 II.W. OTHER PERMITS AND/OR APPROVALS

36 II.W.1. The Permittees shall be responsible for obtaining all other applicable federal, state, and local  
37 permits authorizing the development and operation of the Facility. To the extent that work  
38 required by this Permit must be done under a permit and/or approval pursuant to other  
39 regulatory authority, the Permittees shall use their best efforts to obtain such permits. Copies  
40 of all documents relating to actions taken, pursuant to this Condition, shall be kept in the  
41 operating record.

42 II.W.2. All other permits related to dangerous waste management activities are severable and  
43 enforceable through the permitting authority under which they are issued.

44 II.W.3. All air emissions from TSD units subject to this Permit shall comply with all applicable state  
45 and federal regulations pertaining to air emission controls, including but not limited to,  
46 Chapter 173-400 WAC, General Regulations for Air Pollution Sources; Chapter 173-460

1 WAC, Controls for New Sources of Toxic Air Pollutants; and Chapter 173-480 WAC,  
2 Ambient Air Quality Standards and Emission Limits for Radionuclides.

3 II.X. SCHEDULE EXTENSIONS

4 II.X.1. The Permittees shall notify the Department in writing as soon as possible of any deviations or  
5 expected deviations from the schedules of this Permit. The Permittees shall include with the  
6 notification all information supporting their claim that they have used best efforts to meet the  
7 required schedules. If the Department determines that the Permittees have made best efforts  
8 to meet the schedules of this Permit, the Department shall notify the Permittees in writing by  
9 certified mail that the Permittees have been granted an extension. Such an extension shall not  
10 require a permit modification under Condition I.C.3. Should the Department determine that  
11 the Permittees have not made best efforts to meet the schedules of this Permit, the Department  
12 may take such action as deemed necessary.

13 Copies of all correspondence regarding schedule extensions shall be kept in the operating  
14 record.

15 II.X.2. Any schedule extension granted through the approved change control process identified in the  
16 FFACO shall be incorporated into this Permit. Such a revision shall not require a Permit  
17 modification under Condition I.C.3.

1                   **PART III - UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS**

2   **CHAPTER 1**

3   **616 Nonradioactive Dangerous Waste Storage Facility**

4     The 616 Nonradioactive Dangerous Waste Storage Facility (NRDWSF) is an active storage unit for  
5     dangerous wastes that are shipped to off-site commercial treatment or disposal facilities. This Chapter sets  
6     forth the operating Conditions for this TSD unit.

7     III.1.A.       **COMPLIANCE WITH APPROVED PERMIT APPLICATION**

8             The Permittees shall comply with all the requirements set forth in the *616 Nonradioactive*  
9             *Dangerous Waste Storage Facility Permit Application, Rev. 2*, as found in Attachment 8,  
10            including the amendments specified in Condition III.1.B. Enforceable portions of the  
11            application are listed below; all subsections, figures, and tables included in these portions are  
12            also enforceable unless stated otherwise:

13            Part A Application

- 14            Section 2.1.3       The 616 Nonradioactive Dangerous Waste Storage Facility Description
- 15            Section 2.2         Topographic Maps
- 16            Section 2.5         Performance Standards
- 17            Section 2.7.1       Spills and Discharges Into the Environment
- 18            Section 2.8         Manifest System
- 19            Chapter 3.0         Waste Characteristics
- 20            Chapter 4.0         Process Information
- 21            Chapter 6.0         Procedures to Prevent Hazards
- 22            Chapter 7.0         Contingency Plan
- 23            Chapter 8.0         Personnel Training
- 24            Chapter 11.0        Closure and Post-Closure Requirements
- 25            Chapter 12.0        Reporting and Recordkeeping
- 26            Section 13.7        Toxic Substance Control Act of 1976
- 27            Section 13.8        Other Requirements
- 28            Appendix 2A         Drawing H-13-000014, 616 NRDWSF Topographic Map
- 29            Appendix 4B         Drawing H-6-1553, Architectural Plan, Elevations and Sections, Rev. 3
- 30            Appendix 4B         Drawing H-6-1556, Structural Plan and Sections, Rev. 2
- 31            Appendix 7A         Building Emergency Plan - 616 Building
- 32            Appendix 11B        Description of Procedures

33     III.1.B.       **AMENDMENTS TO THE APPROVED PERMIT APPLICATION**

- 34     III.1.B.a.     Page 2-7, line 25. The words "can be" are changed to "shall be."
- 35     III.1.B.b.     Page 2-16, line 45. An additional bullet is added to the text which reads as follows: "In  
36                    addition, all reporting requirements identified in Conditions I.E.15. through I.E.22. of this  
37                    Permit shall be complied with."

- 1 III.1.B.c. Page 2-17, line 24. The word "voluntarily" is deleted from the text.
- 2 III.1.B.d. Page 2-17, line 26. The words "information on" is changed to "requirements for."
- 3 III.1.B.e. Page 3-6, line 44. The term "Table 3-3" is deleted and replaced with "Sections 3.2.2 through  
4 3.2.4 and 3.2.6."
- 5 III.1.B.f. Page 3-7, lines 8-11. These lines are deleted and replaced with the following:
- 6 "Prior to acceptance of wastes at 616 NRDWSF, confirmation of designation may be required  
7 by Solid Waste Engineering (Section 3.2.4). The wastes which shall undergo confirmation of  
8 designation are identified in Condition III.1.B.n. of this Permit and may be divided into two  
9 groups; those that easily yield a representative sample (Category I), and those that do not  
10 (Category II). The steps for each type are outlined below along with a description of which  
11 wastes fall into each category:
- 12 Category I. If a waste which easily yields a representative sample is received, a representative  
13 sample will be taken of the waste. If more than one phase is present, each phase must be  
14 tested individually. The following field tests will be performed:
- 15 \* Reactivity - HAZCAT™ oxidizer, cyanide, and sulfide tests. These tests will not  
16 be performed on materials known to be organic peroxides, ethers, and/or water reactive  
17 compounds.
- 18 \* Flashpoint/explosivity - by HAZCAT™ flammability procedure, explosive  
19 atmosphere meter<sup>1</sup>, or a closed cup flashpoint measurement instrument<sup>1</sup>.
- 20 \* pH - by pH meter<sup>1</sup> or pH paper (SW-846-9041)<sup>2</sup>. This test will not be performed  
21 on non-aqueous materials.
- 22 \* Halogenated organic compounds - by Chlor-D-Tect™ kits.
- 23 \* Volatile organic compounds - by photo or flame ionization tester<sup>1</sup>, by gas chromatography  
24 with or without mass spectrometry, or by melting point and/or boiling point determination.
- 25 <sup>1</sup>These instruments are field calibrated or checked for accuracy daily when in use.
- 26 <sup>2</sup>The pH paper must have a distinct color change every 0.5 pH unit and each batch  
27 of paper must be calibrated against certified pH buffers or by comparison with a  
28 pH meter calibrated with certified pH buffers.
- 29 If the waste meets the parameters specified in its documentation, within a 10% tolerance,  
30 confirmation of designation is complete. If it does not meet these parameters, sample and  
31 analyze the materials in accordance with WAC 173-303-110. See Table 3-4 for a list of  
32 analytical methodologies and Table 3-5 for sampling methodologies. This is considered a  
33 significant error under Section 3.2.4. Re-assess and re-designate the waste. Repackage and  
34 label as necessary or return to the generating unit.
- 35 When mathematically possible, the Permittees shall perform confirmation on an equal number  
36 of Category I and Category II containers.
- 37 Category II. If a representative sample is not easily obtained (for example, discarded  
38 machinery or shop rags) or if the waste is a labpack or discarded laboratory reagent container,  
39 the following steps will be performed:
- 40 a. Visually verify the waste. Labpacks and combination packages must be removed from the  
41 outer container. If the waste meets the parameters specified in its documentation,  
42 confirmation of designation is complete. If it does not meet these parameters, proceed to  
43 the next step. This is considered a significant error under Section 3.2.4.

- 1 b. If possible and necessary, segregate/repackage the waste for shipment in a compliant  
2 manner. If the waste is not packaged in compliance with shipping requirements, proceed  
3 to the next step.
- 4 c. The waste must be re-designated using designation methods identified in WAC 173-303-  
5 070 through 173-303-100."
- 6 III.1.B.g. Page 3-7, line 17. The following line is added: "Petitions to use an alternate test method  
7 shall be submitted in accordance with WAC 173-303-910."
- 8 III.1.B.h. Page 3-7, line 18. The following paragraph is added: "All analytical tests performed to fulfill  
9 the requirements of Sections 3.2.4 and 4.1.1.8 (Frequency of Analysis and Removal of  
10 Liquids from Containment System, respectively) shall be performed in accordance with WAC  
11 173-303-110. New test methods shall be used within 90 days of the effective date of the state  
12 regulations or laws that mandate the use of the test method. To ensure analytical quality  
13 control, all analyses must fulfill, at a minimum, the quality procedures specified in SW-846  
14 Volume II."
- 15 III.1.B.i. Page 3-7, line 33. The words "is adequate" are deleted and replaced with "must be adequate."
- 16 III.1.B.j. Page 3-7, line 35. The words "is performed" are deleted and replaced with "must be  
17 performed."
- 18 III.1.B.k. Page 3-7, line 40. The word "representative" is inserted between the words "obtaining" and  
19 "samples."
- 20 III.1.B.l. Page 3-8, line 1. The following sentence is inserted before the word "Appropriate:" "To  
21 ensure sample quality control, all sampling efforts must, at a minimum, be in accordance with  
22 the procedures specified in WAC 173-303-110."
- 23 III.1.B.m. Page 3-8, line 1. "Appropriate preservation" is deleted and replaced with "Appropriate  
24 packaging and preservation."
- 25 III.1.B.n. Page 3-8, line 8. The following paragraph is added:  
26 "At least five percent (5%) of the waste containers stored at 616 NRDWSF during a federal  
27 fiscal year (October 1 through September 30) will undergo confirmation of designation  
28 pursuant to Sections 3.2.2 and 3.2.3 (Test Methods and Sampling Methods, respectively).  
29 The number of containers to meet the five percent (5%) requirement is the average of  
30 containers for the previous three months. For example, if 200 containers are received in  
31 January, 180 in February, and 220 in March then 10 containers of inbound waste must  
32 undergo confirmation of designation in April. All generating units which ship more than  
33 twenty (20) containers through 616 NRDWSF in a fiscal year will have at least one (1)  
34 container sampled and analyzed. Containers for which there is insufficient process  
35 knowledge or analytical information to designate without sampling and analysis may not be  
36 counted as part of the five percent (5%) requirement unless there is additional confirmation of  
37 designation independent of the generator designation. The generating unit's staff shall not  
38 select the waste containers to be sampled and analyzed other than identifying containers for  
39 which insufficient information is available to designate."
- 40 III.1.B.o. Page 3-8, line 20. Delete the first sentence of the paragraph and replace it with the following:  
41 "To be acceptable at 616 NRDWSF, samples of non-radioactive waste streams must be  
42 documented to have been sent to a laboratory for waste profiling when newly identified or  
43 whenever the process used or raw materials usage changes, and at least annually thereafter, to  
44 ensure that the waste designation assigned by the Solid Waste Engineering staff (Section 3.2)  
45 is accurate and in compliance with land ban restrictions."

- 1 III.1.B.p. Page 3-8, line 29. The words "For two months" are deleted and replaced with "For the next  
2 six shipments or two months, whichever is longer, to 616 NRDWSF."
- 3 III.1.B.q. Page 3-8, line 32. The following line is added to the end of the paragraph: "The laboratory  
4 verification results shall be obtained in accordance with WAC 173-303-110."
- 5 III.1.B.r. [Reserved]
- 6 III.1.B.s. Page 4-5, line 4. Add the following after the word "performed:" "after determination by the  
7 Building Emergency Director (BED) that implementation of the Contingency Plan pursuant to  
8 Appendix 7A is not necessary or all necessary actions in accordance with the Contingency  
9 Plan have been implemented. Either case must be recorded and signed in the TSD unit-  
10 specific operating record by the BED."
- 11 III.1.B.t. [Reserved]
- 12 III.1.B.u. Page 4-5, line 32. The following sentence is added: "The 616 NRDWSF staff will ensure  
13 that waste is properly packaged, labeled, marked, and stored."
- 14 III.1.B.v. Page 4-5, line 46. The sentence "Wherever possible, organic free water will be used as the  
15 collection medium to minimize the generation of additional dangerous waste." is deleted.
- 16 III.1.B.w. Page 4-5, line 46. The following sentence is added after "spilled material:" "All samples  
17 taken to verify that the site of a release is clean will be obtained in accordance with the  
18 applicable standards of Section 11.1.5. et seq."
- 19 III.1.B.x. Figure 6-2, Section 2.0, Hallway. Revise the checklist to read "Protective equipment supply  
20 present per the emergency equipment list." This equipment shall be individually inspected  
21 and documented by type, and be in adequate condition, and in the quantities listed. The  
22 revised checklist shall be submitted for approval to the Department within 30 days of the  
23 effective date of this Permit.
- 24 III.1.B.y. Page 8-28, lines 5 through 8. These lines are deleted.
- 25 III.1.B.z. Chapter 11. All sampling and analyses necessary for soils underneath a contaminated  
26 concrete layer must be performed prior to removal of the overlying concrete. All soils which  
27 exceed the clean closure standards of WAC 173-303-610(2)(b) shall be managed in a manner  
28 analogous to that for contaminated surrounding soil as described in Chapter 11 of Attachment  
29 8.
- 30 III.1.B.aa. Page 11-2, line 1. The words "In general," are deleted from the text. The "t" on "these" is  
31 capitalized to read "These."
- 32 III.1.B.bb. Table 11-1, page T11-1. In addition to the analyses in Table 11-1, the concrete samples shall  
33 also be analyzed for all dangerous waste constituents documented to have been spilled at the  
34 616 NRDWSF during its operating life. These analyses shall be performed in accordance  
35 with WAC 173-303-110 including the quality assurance and quality control requirements  
36 delineated in SW-846. Action levels shall be based on the level of quantitation for each  
37 analyte. Final decisions based on health based standards shall be subject to approval or  
38 rejection by the Department.
- 39 III.1.B.cc. Page 12-5, line 28. Replace the words "via line management, that the" with "via line  
40 management, when the."
- 41 III.1.B.dd. Page 12-5, line 41. The words, "outside the Hanford Facility" are deleted.
- 42 III.1.B.ee. Page 12-12, line 16. The last two sentences of this paragraph are deleted.

- 1 III.1.B.ff. Table 12-1 "Reports and Records." A definition of the footnote "a" is added to the bottom of  
2 the table as follows:  
3 "a Hanford Facility means the reports and records are available through the Facility  
4 Regulatory File index pursuant to Section 12.0. Until the index is implemented, reports and  
5 records will be available at the Facility, but not necessarily at the 616 NRDWSF.  
6 616 NRDWSF means the reports and records are available at the 616 NRDWSF office."  
7 III.1.B.gg. Chemical, biological, and physical analyses of the dangerous waste to be handled at 616  
8 NRDWSF pursuant to WAC 173-303-806(4)(a), entitled "616 Nonradioactive Dangerous  
9 Waste Facility Off-Site Shipping Lists," is found in Attachment 9 of this Permit.  
10 III.1.B.hh. The description of procedures as referenced in Appendix 11B are provided in various sections  
11 of *Procedure Description*, January 13, 1991 (Attachment 10). The specific sections of  
12 Attachment 10 which are incorporated into the Permit are listed in Table III-1, below, by  
13 procedure. No part of Attachment 10 shall supersede any part of Attachment 8.

Number	Procedure	Pages	Sections
11B-1	Preparing Health and Safety Plan	1-4	1.0, 2.0, 3.0, 4.2, 5.0, 5.1, 5.2, 6.0, 6.1, 6.2
11B-2	Decontaminating Sampling Equipment	23-24	1.0, 2.0, 3.0, 5.2, 5.3, 6.1, 6.2, 6.3
11B-3	Evaluating Data	25-26, 28-29	1.0, 2.0, 3.0, 4.7, 5.0
11B-4	Packaging Samples	32-35	1.0, 4.0, 4.1, 5.0, 5.1, 5.2
11B-5	Soil and Sediment Sample Containers	6-11	1.0, 3.0, 4.2, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8
11B-6	Ensuring Quality Control of Records and Documentation	70-77	1.0, 3.0, 4.0, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 6.0, 6.2, 6.3, 6.4, 6.5, 6.6
11B-7	Maintaining a Field Logbook	44-48	1.0, 3.0, 5.0, 5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 6.0, 6.1, 6.2, 7.0
11B-8	Chain-of-Custody	39-43	1.0, 3.0, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 5.0, 6.0, 6.1, 6.2, 6.3, 6.4, 6.5, 6.7
11B-9	Controlling Unknown Suspected Waste	49-59	1.0, 3.0, 4.1, 4.2, 4.3, 4.4, 4.5, 5.0, 5.1, 5.2, 6.0, 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11
11B-10	Deviating from Procedures Used During Closure	60-64	1.0, 2.0, 4.0, 4.2, 5.0, 5.1, 5.2, 5.2.1, 5.2.2, 5.3

14 Table III-1: Procedures from Attachment 10.

- 15 III.1.B.ii. All instances where the emergency response number is cited as "811" shall be changed to  
16 "911."  
17 III.1.B.jj. Part A Application, page 4 of 24, lines 18 and 19. Waste Code WC01 shall be deleted and the  
18 estimated annual volume of Waste Code WC02 shall be changed to 55,000 kilograms.  
19 III.1.B.kk. Page 2-8, line 3. The following sentence shall be added: "A mechanical fork truck lift and  
20 associated safety equipment (guards, handrails, etc.) are mounted on the containment pad.  
21 Design drawings of the mechanical fork truck lift are provided in Appendix 4B."

- 1 III.1.B.ii. Page 2-16, lines 30 and 32. The address "7601 West Clearwater, Suite 102" shall be changed  
2 to "1315 West Fourth Avenue" and the telephone number "509-546-2990" shall be changed to  
3 "509-735-7581."
- 4 III.1.B.mm. Page 2-18, line 38. The following bullet shall be added: "• Evidence tape from field verified  
5 waste is untampered."
- 6 III.1.B.nn. Page 3-1, lines 12 through 14. The sentence beginning with "Nonradioactive dangerous waste  
7 . . ." shall be deleted and replaced with the following: "The 616 NRDWSF stores  
8 nonradioactive dangerous waste that is received from generating units located on the  
9 contiguous Hanford Facility and from DOE-RL owned and operated generators located on  
10 noncontiguous areas near the Hanford Facility (e.g., Federal Building and 712 Building in  
11 downtown Richland and the 3000 Area). This waste is stored at the 616 NRDWSF until it is  
12 transported to an offsite TSD facility."
- 13 III.1.B.oo. Page 3-1, line 20. The term "onsite" shall be deleted and replaced with "DOE-RL owned and  
14 operated."
- 15 III.1.B.pp. Page 3-1, lines 21 and 22. The sentence "Shipments are made from onsite generating units to  
16 the 616 NRDWSF" shall be deleted.
- 17 III.1.B.qq. Page 3-1, line 22. The term "onsite" shall be deleted and replaced with "Hanford Site." On  
18 line 26, the term "generated onsite" shall be deleted.
- 19 III.1.B.rr. Page 3-2, lines 14 and 19. The term "Onsite" shall be deleted.
- 20 III.1.B.ss. Page 3-3, lines 31 through 39. The paragraph on these lines shall be deleted.
- 21 III.1.B.tt. Page 3-4, lines 3 and 16. The term "onsite" shall be deleted.
- 22 III.1.B.uu. Page 3-5, lines 19, 36, 38, and 44. The term "onsite" shall be deleted.
- 23 III.1.B.vv. Page 3-6, lines 13, 15, 19, 23, and 24. The term "onsite" shall be deleted.
- 24 III.1.B.ww. Page 3-7, line 32. The term "suction pump" shall be added after the word "device."
- 25 III.1.B.xx. Page 3-8, line 8. The term "onsite" shall be deleted.
- 26 III.1.B.yy. Page 3-8, lines 37 through 40. The paragraph on these lines shall be deleted and replaced  
27 with the following: "All waste received at the 616 NRDWSF, as described in Section 3.1, is  
28 subject to the confirmation of designation sampling requirements described in Section 3.2.  
29 Each shipment of waste received at the 616 NRDWSF must be accompanied by accurate and  
30 complete waste tracking forms for waste received from onsite sources and uniform hazardous  
31 waste manifests for waste received from offsite sources."
- 32 III.1.B.zz. Page T4-2, line 31. The word "cabinet" shall be replaced with "cabinet(s)."
- 33 III.1.B.aaa. Page T4-2, line 34. The following option shall be added: "or 34 (55 gal) 34 (30 gal) (208.2  
34 liters) (113.6 liters) 2 Flammable liquid storage cabinets (170 gal) (1,024 liters)."
- 35 III.1.B.bbb. Page APP 4B-ii. On line 12, the term "Rev. 2" shall be replaced with "Rev. 4." At line 13,  
36 the following shall be added:
- 37 "ECN 191786 (10/28/93)  
38 ECN 176589 (11/16/93)  
39 ECN 605639 (01/17/94)  
40 ECN 605649 (08/01/94)"



1 annually, or when generating unit and/or 305-B personnel have reason to believe the waste  
2 stream has changed, to determine compliance with LDR requirements in 40 CFR 268."

3 III.2.B.c. Page 3-9, line 16. The following is added to the end of this section: "Storage limits for all  
4 chemicals are listed in Table 4-1, page 4-18, and 4-19 (Uniform Building Code, Table  
5 numbers 9-A and 9-B). This table is incorporated into this section by reference."

6 III.2.B.d. Page 3-10, line 27. The following paragraphs are inserted into this section:

7 "Prior to acceptance of wastes at 305-B, confirmation of designation may be required (Section  
8 3.2.4). The wastes which shall undergo confirmation of designation are identified in  
9 Condition III.2.B.f. of this Permit and may be divided into two groups; those that easily yield  
10 a representative sample (Category I), and those that do not (Category II). The steps for each  
11 type are outlined below along with a description of which wastes fall into each category:

12 Category I. If a waste which easily yields a representative sample is received, a representative  
13 sample will be taken from the waste containers selected. If more than one phase is present,  
14 each phase must be tested individually. The following field tests will be performed:

15 \* Reactivity - HAZCAT™ oxidizer, cyanide, and sulfide tests. These tests will not be  
16 performed on materials known to be organic peroxides, ethers, and/or water reactive  
17 compounds.

18 \* Flashpoint/explosivity - by HAZCAT™ flammability procedure, explosive  
19 atmosphere meter<sup>1</sup>, or a closed cup flashpoint measurement instrument<sup>1</sup>.

20 \* pH - by pH meter<sup>1</sup> or pH paper (SW-846-9041)<sup>2</sup>. This test will not be performed on non-  
21 aqueous materials.

22 \* Halogenated organic compounds - by Chlor-D-Tect™ kits.

23 \* Volatile organic compounds - by photo or flame ionization tester<sup>1</sup>, by gas chromatography  
24 with or without mass spectrometry, or by melting point and/or boiling point determination.

25 <sup>1</sup>These instruments are field calibrated or checked for accuracy daily when in use.

26 <sup>2</sup>The pH paper must have a distinct color change every 0.5 pH unit and each batch  
27 of paper must be calibrated against certified pH buffers or by comparison with a pH meter  
28 calibrated with certified pH buffers.

29 If the sample data observed meets the parameters specified in its documentation, within a  
30 10% tolerance, confirmation of designation is complete and the waste may be accepted. If  
31 not, the waste is rejected and returned to the generating unit, and sampling and analysis of the  
32 waste is required to be included with a resubmitted CD/RR.

33 When mathematically possible, the Permittees shall perform confirmation on an equal number  
34 of Category I and Category II containers.

35 Category II. If a representative sample is not easily obtained (for example, discarded  
36 machinery or shop rags) or if the waste is a labpack or discarded laboratory reagent container,  
37 the following steps will be performed:

38 a. Visually verify the waste. Examine each selected container to assure that it matches the  
39 data provided on the CD/RR form(s) provided to document the waste. Labpacks and  
40 combination packages must be removed from the outer container. If the waste matches the  
41 description specified in its documentation, confirmation of designation is complete and the  
42 waste may be accepted. If not, the waste is rejected and returned to the generating unit,  
43 and the generating unit revises and resubmits the documentation to reflect the actual

- 1 contents. If necessary, the waste shall be re-designated utilizing the designation methods  
2 identified in WAC 173-303-070 through 173-303-100."
- 3 III.2.B.e. Page 3-10, line 32. The following is added to the end of this section: "Wastes must be  
4 analyzed using the TCLP in accordance with Appendix II of 40 CFR 261, as amended, in  
5 order to provide sufficient information for proper management and for decisions regarding  
6 Land Disposal Restrictions pursuant to 40 CFR 268."
- 7 III.2.B.f. Page 3-16, lines 24-28. Replace the existing language with: "At least five percent (5%) of  
8 the waste containers received at 305-B during a federal fiscal year (October 1 through  
9 September 30) will undergo confirmation of designation pursuant to Sections 3.2.2 and 3.2.3  
10 (Test Methods and Sampling Methods, respectively). The number of containers needed to  
11 meet the 5% requirement is 5% of the average of containers for the previous three months.  
12 For example if 200 containers are received in January, 180 in February, and 220 in March,  
13 then 10 containers of received waste must undergo confirmation of designation in April. All  
14 generating units which ship more than twenty (20) containers through 305-B in a fiscal year  
15 will have at least one (1) container sampled and analyzed. Containers for which there is  
16 insufficient process knowledge or analytical information to designate without sampling and  
17 analysis may not be counted as part of the five percent requirement unless there is additional  
18 confirmation of designation independent of the generator designation. The generating unit's  
19 staff shall not select the waste containers to be sampled and analyzed other than identifying  
20 containers for which insufficient information is available to designate.
- 21 Containers of the following are exempt from the confirmation calculation above: Laboratory  
22 reagents or other unused products such as paint, lubricants, solvent, or cleaning products,  
23 whether received for redistribution, recycling, or as waste. To qualify for this exemption,  
24 such materials must be received at 305-B in their original containers."
- 25 III.2.B.g. Page 4-1, line 30. "and -630" is added after "WAC 173-303-190" in this sentence.
- 26 III.2.B.h. Page 4-1, line 45. Added to the end of this section is the following sentence: "Containers  
27 utilized for off-site shipment shall also comply with WAC 173-303-190(2) and (3). 305-B  
28 personnel shall comply with WAC 173-303-190(4)."
- 29 III.2.B.i. Page 4-24, line 21. The following paragraph is added to the end of Section 4.1.1.8.:  
30 "Verification sampling shall be carried out in accordance with Section 11.1.4.4. (Methods for  
31 sampling and testing to demonstrate success of decontamination)."
- 32 III.2.B.j. Page 7-3, line 1. This line is deleted.
- 33 III.2.B.k. Page 7-3, line 28. The following is added to the end of this Section: "The names and work  
34 phone numbers of the 305-B Emergency Coordinator(s) shall be submitted to the Department  
35 and the Agency and kept at the Single Point contact and with the contingency plan at the 305-  
36 B Unit."
- 37 III.2.B.l. Page 7-6, line 2. The following is added to this Section: "Samples of spilled or released  
38 material(s) shall be taken in accordance with the WAP found in Section 3.2."
- 39 III.2.B.m. Page 7-13, line 46. Added to the end of the second to last sentence is the following: "pursuant  
40 to WAC 173-303-360(2)(j)."
- 41 III.2.B.n. Page 7-23, line 35. The following bullet is added to this Section: "All local police and fire  
42 departments, hospitals, and state and local response teams that may be called upon to provide  
43 emergency services."
- 44 III.2.B.o. Page 8-2, line 28. The "I"s are replaced by "B"s on this line, changing the training frequency  
45 for Hazardous Waste Shipment Certification from initially to biennially.

- 1 III.2.B.p. Page 8-2, line 30. A "B<sup>4</sup>" is inserted replacing the "N" under the vertical column for TS  
2 (Waste Management Technicians and Technical Specialists), requiring that they receive  
3 Radioactive Material Shipping Representative training biennially. Footnote 4 shall be  
4 changed to read: "Required for staff directly responsible for radioactive material shipments."
- 5 III.2.B.q. Page 11-1, line 44. Added to the end of this Section is the following: "Spill reports and logs  
6 shall be consulted to determine potential areas of contamination."
- 7 III.2.B.r. Page 11-3, line 51. Prior to the words "will also be performed," the following is added: "or  
8 areas of documented spills or releases."
- 9 III.2.B.s. Page 11-8, lines 4 and 7. The following language is inserted after the words Low-Level  
10 Radioactive on line 4 and Nonregulated on line 7, respectively, replacing the current  
11 language: "Shall be handled in accordance with the Liquid Effluent Consent Order (No. DE  
12 91NM-177) and Milestone M-17 of the Hanford Federal Facility Agreement and Consent  
13 Order."
- 14 III.2.B.t. Page 11-8, line 25. Prior to the words "...will also be performed," the following is added: "or  
15 areas of documented spills or releases."
- 16 III.2.B.u. Page 11-13, line 39. The words "annually during closure activities" are deleted from the end  
17 of this sentence and replaced with: "in accordance with Condition II.H.1." of this Permit.
- 18 III.2.B.v. Page 12-1, lines 7-9. The sentence beginning "Many of the records..." is deleted.
- 19 III.2.B.w. [Reserved]
- 20 III.2.B.x. Page 12-10, line 37. Added to the end of this sentence is the following: "and Condition  
21 I.E.15. of the Facility Wide Permit."
- 22 III.2.B.y. [Reserved]
- 23 III.2.B.z. [Reserved]
- 24 III.2.B.aa. Page 13-2, line 42. This sentence is deleted and replaced with the following: "Wastes  
25 containing polychlorinated biphenyls (PCB), which are subject to regulation under the Toxic  
26 Substances Control Act (TSCA), are stored in the 305-B Storage Unit. These wastes are  
27 stored for periods less than one (1) year before shipment to a disposal facility permitted under  
28 TSCA. Storage of PCB wastes in 305-B for periods less than one (1) year will continue to be  
29 done in compliance with applicable TSCA regulations in 40 CFR Part 761."
- 30 III.2.B.bb. Part A Application, Page 3Q of 5, lines 10 and 11. Waste Code WC01 shall be deleted and  
31 the estimated annual volume of Waste Code WC02 shall be changed to 2,000 kilograms.
- 32 III.2.B.cc. Page 2-15, lines 30 and 31. The term "1988" shall be changed to "1991."
- 33 III.2.B.dd. Page 4-17, lines 23-36. The text on these lines shall be deleted and replaced with the  
34 following: "4.1.1.6.11 RMW Storage Area. Radioactive mixed waste that is not flammable  
35 per UFC (i.e., flash point above 100 degrees F) is stored in a special area in the basement of  
36 305-B. For additional segregation capability, there are six small chemical storage cabinets  
37 and four 5 ft. X 5 ft. stainless steel "container pans" with 12 in. sides. The containment pans  
38 are mounted to the floor or wall of the cell to provide segregated storage for potentially  
39 incompatible mixed waste streams. Drums stored in this area are stored on pallets to prevent  
40 potential contact with spilled waste in containment during an emergency. A diagram of this  
41 area is provided in Figure 4-9."
- 42 In normal use, the storage capacity of this area is limited by the radionuclide limits imposed  
43 by the DOE for "low inventory facilities." These limitations are defined in DOE-STD-1027-

1           92. Hazard Characterization and Accident Analysis Techniques for Compliance with DOE  
2           Order 5480.23, Nuclear Safety Analysis Reports, and are included in the radiation work  
3           permit for the mixed waste storage area."

4   III.2.B. ee.   Page 6-1, lines 46-52. The paragraph beginning with the word "Access" shall be deleted.

5   III.2.B. ff.   Page 6-3, lines 15-18. The first two sentences of this paragraph shall be deleted.

6   III.2.B. gg.   Page 6-16, lines 15-19. The first five bullets shall be deleted and replaced with the following:  
7           "• 6 sets of chemically resistant suits, aprons, boots, and gloves."

8   III.2.B. hh.   Page 7-17, lines 5-9. The first five bullets shall be deleted and replaced with the following:  
9           "• 6 sets of chemically resistant suits, aprons, boots, and gloves."

10   III.2.B. ii.   Page 8-3, line 24. The following shall be added to the text: "Equivalent training may be  
11           taken in place of the training identified in Figure 8-1 with approval from the 305-B Unit  
12           Operating Supervisor or the Waste Management Section Manager. Documentation of the  
13           training substitution will be placed in the operating record (within seven (7) days after the  
14           training was received) accompanied by a narrative explanation, and the date of the training.  
15           The documentation shall be made available to the Department or EPA during inspections for  
16           assessment. If the Department or EPA determines that the training substitution was not  
17           equivalent to the original, the original training will be taken or an acceptable substitution will  
18           be found."



**PART IV - CORRECTIVE ACTIONS FOR PAST PRACTICES**

1  
2  
3  
4  
5  
6  
7

The HSWA Permit is issued by the Agency in conjunction with this Permit. Upon delegation of the Corrective Action requirements of the HSWA by the Agency to the Department, the Permit shall be modified to incorporate the specific requirements of the HSWA Permit into this Permit. This modification shall be considered a Class 3 modification in accordance with Condition I.C.3. Until this modification is complete, compliance with the terms of the referenced provisions, shall be deemed as compliance with WAC 173-303-646.



- 1 all applicable environmental regulations and laws as well as the FFAO. New or modified  
2 regulations and laws may require closure activities and/or the closure plan to be modified."
- 3 V.1.B.b. Page I-108, line 46. The reference to WAC 173-303-700 is deleted.
- 4 V.1.B.c. Page I-150, line 53. The date of "October 1991" is deleted and replaced with "the first  
5 October after the effective date of this Permit."
- 6 V.1.B.d. Page III-77, line 5. The phone number (509) 376-5411 is changed to (509) 375-4647.
- 7 V.1.B.e. A copy of any Unusual Occurrence Report or Off Normal Occurrence Report issued after  
8 approval of the Plan which is directly related to Basin closure shall be provided to the  
9 Department's Basin unit manager within seven (7) days after issuance. This does not relieve  
10 the Permittees from any other reporting requirements specified in Part I or II of this Permit.
- 11 V.1.B.f. Annual closure cost estimates shall be provided to the Department as described in Section  
12 I.C.4. of this closure plan and Condition II.H.1. of this Permit.
- 13 V.1.B.g. A written notification that closure has begun and will be conducted in accordance with the  
14 Plan, including these conditions to the Plan, shall be submitted to the Department within 30  
15 days after the Plan is approved through issuance of this Permit.
- 16 V.1.B.h. Concrete sampling and analysis activities (basin and background sampling) shall be  
17 conducted as described within the Plan and as augmented by the Decommissioning Work Plan  
18 (DWP) entitled "Concrete Sampling - 183-H Solar Evaporation Basins" (DWP-H-080-00001)  
19 as found in Attachment 12 of this Permit.
- 20 V.1.B.i. Soil sampling and analyses activities (including Phases I and II, berm and background  
21 sampling) shall be conducted as described within the Plan and as augmented by DWP-H-080-  
22 00005 entitled "Core Drill Sampling - 183-H Solar Evaporation Basins (Phase I);" WHC-SD-  
23 EN-AP-056 entitled "183-H Solar Evaporation Basins Vadose Zone Sampling Plan;" and  
24 DWP-H-026-00008 entitled "Berm Removal For 183-H Solar Evaporation Basins" as found  
25 in Attachments 13, 14, and 15, respectively, of this Permit.
- 26 V.1.B.j. The results of Basin concrete sampling (including background sampling) shall be received by  
27 the Department within 180 days of the effective date of this Permit. This submittal shall  
28 include the raw analytical data, a summary of analytical results, a data validation package,  
29 and a narrative summary with conclusions.
- 30 V.1.B.k. The results of Basin soil sampling (including Phases I and II, berm and background sampling)  
31 shall be received by the Department within 180 days of the effective date of this Permit. This  
32 submittal shall include the raw analytical data, a summary of analytical results, a data  
33 validation package, and a narrative summary with conclusions.
- 34 V.1.B.l. The Department shall be provided, for review and approval, a sampling plan and the date of  
35 sampling for any sampling event not addressed above which provides data used to support  
36 Basin closure activities at least 30 days prior to initiating actual sampling activities. This  
37 condition applies to, but is not limited to, equipment and non-concrete structural sampling and  
38 verification sampling. The results of this sampling shall be submitted to the Department.  
39 These submittals shall include the raw analytical data, a summary of analytical results, a data  
40 validation package, and a narrative summary with conclusions.
- 41 V.1.B.m. The Permittees shall submit to the Department, for approval, a notification indicating which  
42 closure option identified in Condition II.K. of this Permit will be utilized for the Basins. This  
43 notification shall be submitted at least 60 days prior to implementation of the option and shall  
44 be accompanied by the technical and regulatory justification for choosing the closure option  
45 along with any supporting documentation including, if necessary, the result of sampling per

- 1 Conditions V.1.B.h. through V.1.B.l. This notification shall also be accompanied by a revised  
2 Figure I.B-20 of the Plan indicating a new closure schedule; however, the date of final closure  
3 shall not exceed eighteen months after the effective date of this Permit. Implementation of  
4 the option cannot commence until receipt of the Department's written approval for the closure  
5 option.
- 6 V.1.B.n. Regardless of the option chosen from Condition II.K., the Permittees and the independent,  
7 registered, professional engineer certifications of closure shall be prepared and submitted to  
8 the Department within 60 days of closure as described in Section I.C-1. of the closure plan.
- 9 V.1.B.o. If a landfill closure is chosen, the definitive design documents, construction specifications,  
10 construction drawings, and construction quality assurance plans for any engineered system  
11 (including a final cover system) shall be submitted to the Department pursuant to Condition  
12 I.C.3.
- 13 V.1.B.p. After review of the documents identified in Condition V.1.B.o., the Department may issue a  
14 unit-specific Construction Inspection Plan (CIP). If the Department chooses to issue a CIP,  
15 the Department shall be provided with all submittals and notifications required by the CIP and  
16 within the time period identified in the CIP.
- 17 V.1.B.q. If a landfill closure is chosen, notification of any of the following occurrences shall be  
18 provided to the Department within 30 days of observance until a post-closure permit is issued:  
19 settlement/sedimentation in the final cover greater than one (1) foot; actual vegetative cover  
20 canopy on the final cover less than 50 percent (50%) of a typical Hanford cover canopy six  
21 (6) months after closure; erosion of the final cover greater than six (6) inches; tampering or  
22 damage to wells or well heads. The notification must include the extent and cause of the  
23 occurrence as well as actions taken (or to be taken) to mitigate the occurrence.
- 24 V.1.B.r. If a modified closure is chosen, the Permittees shall request any reduction of landfill  
25 requirements identified in the Plan pursuant to Condition I.C.3. This request shall be based  
26 upon the quantity and concentration of contamination which will remain in place, and shall  
27 meet the requirements of Condition II.K.3.
- 28 V.1.B.s. If a modified closure or landfill closure is chosen, a survey plat shall be prepared and  
29 submitted to the Department and the Benton County Planning Department no later than 60  
30 days after certification of closure as described in Section I.C-2. of the Plan.
- 31 V.1.B.t. If a modified closure or a landfill closure is chosen, a notice on the deed to the property shall  
32 be prepared and submitted to the Auditor of Benton County no later than 60 days after  
33 certification of closure as described in Section I.C-3. of the Plan. No later than 30 days after  
34 submitting this notice, a certification signed by the Permittees must be submitted to the  
35 Department that the notification has been recorded along with a copy of the notice itself.
- 36 V.1.B.u. If a modified closure or landfill closure is chosen, a revision to the "Final Status Post-Closure  
37 Permit Application, 183-H Solar Evaporation Basins" (June 1988) shall be submitted pursuant  
38 to Condition I.C.3. within 12 months of the Department's approval of the closure option.
- 39 V.1.B.v. Quarterly and annual ground water monitoring reports for the wells specified in the Plan shall  
40 continue to be submitted to the Department until clean closure is acknowledged by the  
41 Department in writing or as specified otherwise in a Basin post-closure permit.



- 1 V.2.B.d. Annual cost estimates shall be provided to the Department as described in Section 5.2. of this  
2 closure plan and Condition II.H.1. of this Permit. At Page 5-2, line 6, delete "October 1993,"  
3 and replace it with "the first October after the effective date of this Permit."
- 4 V.2.B.e. The Permittees shall notify the Department, in writing, if the initial action levels in Table 3-2  
5 of the Plan are exceeded. The notification shall either include a request for the Department's  
6 approval of alternative action levels or identify the interim measures to be taken at the 300  
7 ASE until closure activities are performed in conjunction with the 300-FF-2 Operable Unit.
- 8 V.2.B.f. The Permittees and the independent, registered, professional engineer certifications of closure  
9 shall be prepared and submitted to the Department by registered mail within 60 days of  
10 closure as described in Section 4.0. of the Plan. The Permittees shall continue to address the  
11 300 ASE as a dangerous waste management unit until receipt of the Department's written  
12 notification that the 300 ASE is accepted as clean closed.
- 13 V.2.B.g. The Permittees shall complete 300 ASE closure activities within 180 days after the effective  
14 date of this Permit.



- 1 V.3.B.e. The Permittees shall notify the Department, in writing, if clean closure concentrations cannot  
2 be achieved. The notification shall include a justification for not completing clean closure  
3 requirements and a plan to address dangerous waste post-closure requirements at 2727-S.
- 4 V.3.B.f. The Permittees and the independent, registered, professional engineer certifications of closure  
5 shall be prepared and submitted to the Department by registered mail within 60 days of  
6 closure as described in Section 4.7 of the Plan. The Permittees shall continue to address  
7 2727-S as a dangerous waste management unit until receipt of the Department's written  
8 notification that 2727-S is accepted as clean closed.
- 9 V.3.B.g. The Permittees shall complete 2727-S closure activities within 180 days after the effective  
10 date of this Permit.





- 1 V.5.B.d. The Permittees shall notify the Department, in writing, if the action levels as defined in  
2 Section 6.1 of the Plan are exceeded. The notification shall either include a request to  
3 develop a phase two investigation to determine further sampling activities or remedial actions,  
4 or identify the interim measures to be taken at the 218 BPDS until closure activities are  
5 performed in conjunction with the 200-PO-6 Operable Unit.
- 6 V.5.B.e. The Permittees and the independent, registered, professional engineer certification of closure  
7 shall be prepared and submitted to the Department by registered mail within 60 days of  
8 closure, as described in Section 6.3.2 of the Plan. The Permittees shall continue to address  
9 the 218 BPDS as a dangerous waste management unit until receipt of the Department's written  
10 notification stating the 218 BPDS is accepted as clean closed.
- 11 V.5.B.f. The Permittees shall complete 218 BPDS closure activities within 180 days after the effective  
12 date of Revision 1 to this Permit.

1 CHAPTER 6

2 **200 West Area Ash Pit Demolition Site**

3 The 200 West Area Ash Pit Demolition Site (200 APDS) is an inactive treatment unit which is currently  
4 undergoing permanent closure activities. This TSD unit was operated as an open burning/open detonation  
5 unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

6 V.6.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

7 The permittees shall comply with all the requirements set forth in the *200 West Area Ash Pit*  
8 *Demolition Site Closure Plan* (Plan), as found in Attachment 21, including the amendments  
9 specified in condition V.6.B. Enforceable portions of the Plan are listed below; all  
10 subsections, figures, and tables included in these portions are also enforceable unless stated  
11 otherwise:

12 Part A Application

13 Section 2.2.2 Facility Description and General Provisions

14 Section 2.2.3 Description of 200 West Area Ash Pit Demolition Site

15 Section 2.4 Security Information

16 Chapter 3.0 Process Information

17 Chapter 4.0 Waste Characteristics

18 Chapter 5.0 Groundwater Monitoring

19 Chapter 6.0 Closure Strategy and Performance Standards

20 Chapter 7.0 Closure Activities

21 Chapter 8.0 Post-Closure Plan

22 Appendix 4A Toxicity Data

23 Appendix 7A Quality Assurance Project Plan for Soil Sampling and Analysis for the  
24 200 West Area Ash Pit Demolition Site

25 Appendix 7B Training Course Descriptions

26 Appendix 7C Sampling and Analysis Plan

27 V.6.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

28 V.6.B.a. A written notification stating closure has begun and will be conducted in accordance with the  
29 Plan, including these additional conditions to the Plan, shall be submitted to the Department  
30 within 30 days after the effective date of Revision 1 to this Permit.

31 V.6.B.b. The results of all sampling required by this Plan shall be provided to the Department. This  
32 submittal shall include the raw analytical data, a summary of analytical results, a data  
33 validation package, and a narrative summary with conclusions.

34 V.6.B.c. The Department shall be provided, for review and approval, a sampling plan and the date of  
35 sampling for any sampling event not addressed in the Plan which provides data used to  
36 support 200 APDS closure activities at least 30 days prior to initiating actual sampling  
37 activities. The results of this sampling shall be submitted to the Department. These  
38 submittals shall include the raw analytical data, a summary of analytical results, a data  
39 validation package, and a narrative summary with conclusions.

- 1 V.6.B.d. The Permittees shall notify the Department, in writing, if the action levels as defined in  
2 Section 6.1 of the Plan are exceeded. The notification shall either include a request to  
3 develop a phase two investigation to determine further sampling activities, or remedial actions  
4 or identify the interim measures to be taken at the 200 APDS until closure activities are  
5 performed in conjunction with the 200-SS-2 Operable Unit.
- 6 V.6.B.e. The Permittees and the independent, registered, professional engineer certification of closure  
7 shall be prepared and submitted to the Department by registered mail within 60 days of  
8 closure, as described in Section 6.3.2 of the Plan. The Permittees shall continue to address  
9 the 200 APDS as a dangerous waste management unit until receipt of the Department's  
10 written notification stating the 200 APDS is accepted as clean closed.
- 11 V.6.B.f. The Permittees shall complete 200 APDS closure activities within 180 days after the effective  
12 date of Revision 1 to this Permit.

CHAPTER 7

2101-M Pond

The 2101-M Pond is undergoing permanent closure activities. This unit was operated as a disposal unit for potentially dangerous waste. This chapter sets for the closure requirements for this TSD unit.

V.7.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

The Permittees shall comply with all requirements set forth in the *2101-M Pond Closure Plan* (Plan), found in Attachment 22, including the amendments specified in Condition V.7.B. Enforceable portions of the Plan are listed below; all subsections, figures, and tables included in these portions are also enforceable:

Appendix A-1	Part A Permit Application, Form 3
Section I-3	2101-M Pond Location and General Description
Section I-5	Security
Chapter A	Closure Performance Standards
Chapter B	Content of Closure Plan
Chapter C	Certification of Closure

V.7.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

V.7.B.a. A written notification stating closure has been and will continue to be conducted in accordance with the Plan, including these conditions of the Plan, shall be submitted to the Department within 30 days after the effective date of Revision 1 to this Permit.

V.7.B.b. The Permittees shall notify the Department, in writing, if at any time it is determined the clean closure levels specified in this plan are exceeded.

V.7.B.c. The Permittees and the independent, registered, professional engineer certification of closure shall be prepared and submitted to the Department by registered mail within 60 days of closure, as described in the Plan. The Permittees shall continue to address the unit as a dangerous waste management unit until receipt of the Departments written notification stating the unit is accepted as clean closed.



1 CHAPTER 9

2 **Hanford Patrol Academy Demolition Site**

3 The Hanford Patrol Academy Demolition Site (HPADS) is an inactive treatment unit which is currently  
4 undergoing permanent closure activities. This TSD unit was operated as an open burning/open detonation  
5 unit for dangerous waste. This Chapter sets forth the closure requirements for this TSD unit.

6 V.9.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN

7 The Permittees shall comply with all the requirements set forth in the *Hanford Patrol*  
8 *Academy Demolition Sites Closure Plan* (Plan), as found in Attachment 24, including the  
9 amendments specified in condition V.9.B. Enforceable portions of the Plan are listed below;  
10 all subsections, figures, and tables included in these portions are also enforceable unless  
11 stated otherwise:

12 Part A Application

13 Section 2.2.2 Facility Description and General Provisions

14 Section 2.2.3 Description of Hanford Patrol Academy Demolition Sites

15 Section 2.24 Security Information

16 Chapter 3.0 Process Information

17 Chapter 4.0 Waste Characteristics

18 Chapter 5.0 Groundwater Monitoring

19 Chapter 6.0 Closure Strategy and Performance Standards

20 Chapter 7.0 Closure Activities

21 Chapter 8.0 Post-Closure Plan

22 Appendix 4A Waste Inventories

23 Appendix 7A Quality Assurance Project Plan for Soil Sampling and Analysis for the  
24 Hanford Patrol academy Demolition Sites

25 Appendix 7B Training Course Descriptions

26 Appendix 7C Sampling and Analysis Plan

27 V.9.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

28 V.9.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan,  
29 including these unit specific Conditions to the Plan, a written notification shall be submitted  
30 to the Department within 30 days after the Plan is approved.

31 V.9.B.b. The results of all sampling required by this Plan shall be provided to the Department. This  
32 submittal shall include the raw analytical data, a summary of analytical results, a data  
33 validation package, and a narrative summary with conclusions.

34 V.9.B.c. The Department shall be provided, for review and approval, a sampling plan and the date of  
35 sampling for any sampling event not addressed in the Plan which provides data used to  
36 support HPADS closure activities at least 30 days prior to initiating actual sampling activities.  
37 The results of this sampling shall be submitted to the Department. These submittals shall  
38 include the raw analytical data, a summary of analytical results, a data validation package,  
39 and a narrative summary with conclusions.

- 1 V.9.B.d. The Permittees shall notify the Department, in writing, if the action levels as defined in  
2 Section 6.1 of the Plan are exceeded. The notification shall include a request to develop a  
3 phase two investigation to determine further sampling activities or remedial actions.
- 4 V.9.B.e. The Permittees and the independent, registered, professional engineer certifications of closure  
5 shall be prepared and submitted to the Department by registered mail within 60 days of  
6 closure, as described in Section 6.3.2 of the Plan. The Permittees shall continue to address  
7 HPADS as a dangerous waste management unit until receipt of the Department's written  
8 notification that HPADS is accepted as clean closed.
- 9 V.9.B.f. The Permittees shall complete HPADS closure activities within 180 days after the effective  
10 date of Revision 2 to this Permit.
- 11

1 **CHAPTER 10**

2 **105-DR Large Sodium Fire Facility**

3 The Large Sodium Fire Facility (LSFF) was a research laboratory used to conduct experiments for  
4 studying the behavior of alkali metals. This facility was also used for the treatment of alkali metal  
5 dangerous wastes. This chapter sets forth the closure requirements for this TSD unit.

6 **V.10.A. COMPLIANCE WITH THE APPROVED CLOSURE PLAN**

7 The Permittees shall comply with all the requirements set forth in the *Large Sodium Fire*  
8 *Facility Closure Plan* (Plan), as found in Attachment 25, including the amendments specified  
9 in Condition V.10.B. Enforceable portions of the Plan are listed below; all subsections,  
10 figures, and tables included in these portions are also enforceable unless stated otherwise:

11 **Part A Application**

12	Section 2.2	Unit Description and Operations
13	Section 2.3	Security Information
14	Chapter 4	Waste Characteristics
15	Chapter 6	Closure Strategy and Performance Standards
16	Chapter 7	Closure Activities
17	Chapter 8	Post-Closure
18	Appendix B	Sampling Locations
19	Appendix E	Quality Assurance Project Plan for Characterization and Verification
20		Sampling at the Large Sodium Fire Facility

21 **V.10.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN**

22 V.10.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan,  
23 including these unit specific Conditions to the Plan, a written notification shall be submitted  
24 to the Department within 30 days after the Plan is approved.

25 V.10.B.b. The results of all sampling required by this Plan shall be provided to the Department. This  
26 submittal shall include the raw analytical data, a summary of analytical results, a data  
27 validation package, and a narrative summary of conclusions.

28 V.10.B.c. The Department shall be provided, for review and approval, a sampling plan and the date of  
29 sampling for any sampling event not addressed in the Plan which provides data used to  
30 support LSFF cleanup activities at least 30 days prior to initiating actual sampling activities.  
31 The results of this sampling shall be submitted to the Department. These submittals shall  
32 include the raw analytical data, a summary of analytical results, a data validation package,  
33 and a narrative summary of conclusions.

34 V.10.B.d. The Permittees shall notify the Department, in writing, if the action levels cited in Section  
35 6.1.1 of the Plan cannot be achieved. The notification shall include either a request for the  
36 Department's approval of alternative action levels or identify the interim measures to be taken  
37 in the LSFF until closure activities are performed in conjunction with the 100-DR-2 Operable  
38 Unit.

39 V.10.B.e. The Permittees and the independent, registered, professional engineer certifications of closure  
40 shall be prepared and submitted to the Department by registered mail within 60 days of  
41 closure, as described in Section 7.9 of the Plan. The Permittees shall continue to address

- 1 LSFF as a dangerous waste management unit until receipt of the Department's written
- 2 notification that LSFF is accepted as closed.
- 3 V.10.B.f. The Permittees shall complete LSFF closure activities within 240 days after the effective date
- 4 of Revision 2 of this Permit.



- 1 alternative action levels or identify the interim measures to be taken in the 304 Facility until  
2 closure activities are performed in conjunction with the 300-FF-2 Operable Unit.
- 3 V.11.B.e. The Permittees and the independent, registered, professional engineer certifications of closure  
4 shall be prepared and submitted to the Department by registered mail within 60 days of  
5 closure, as described in Section 7.8 of the Plan. The Permittees shall continue to address the  
6 304 Facility as a dangerous waste management unit until receipt of the Department's written  
7 notification that the 304 Facility is accepted as clean closed.
- 8 V.11.B.f. The Permittees shall complete 304 Facility closure activities within 180 days after the  
9 effective date of Revision 2 of this Permit.

1 CHAPTER 12

2 **4843 Alkali Metal Storage Facility Closure Plan**

3 The 4843 Alkali Metal Storage Facility (4843 AMSF) is an inactive storage facility which is currently  
4 undergoing permanent closure activities. This TSD unit was operated as a storage unit for dangerous  
5 waste and alkali metals. This chapter sets forth the closure requirements for this TSD unit.

6 V.12.A. COMPLIANCE WITH APPROVED CLOSURE PLAN

7 The Permittees shall comply with all requirements set forth in the *4843 Alkali Metal Storage*  
8 *Facility Closure Plan* (Plan), as found in Attachment 29, including the amendments specified  
9 in Condition V.12.B. Enforceable portions of the Plan are listed below; all subsections,  
10 figures, and tables included in these portions are also enforceable unless stated otherwise:

11 Part A Application

12	Section 1.1	Executive Summary
13	Section 2.2	Unit Description and Operations
14	Section 2.3	Security
15	Section 3.0	Process Information
16	Section 4.0	Waste Characteristics
17	Section 6.0	Closure Strategy and Performance Standards
18	Section 7.0	Closure Activities
19	Section 8.0	Post-Closure
20	Section 9.0	References
21	Appendix G	Quality Assurance Project Plan

22 V.12.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

23 V.12.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan,  
24 including these unit-specific Conditions to the Plan, a written notification shall be submitted  
25 to the Department within 30 days after the Plan is approved.

26 V.12.B.b. The Permittees shall notify the Department, in writing, if at any time it is determined the  
27 clean closure levels specified in this plan are exceeded.

28 V.12.B.c. The Permittees and the independent, registered, professional engineer certification of closure  
29 shall be prepared and submitted to the Department by registered mail within 60 days of  
30 closure, as described in the Plan. The Permittees shall continue to address the unit as a  
31 dangerous waste management unit until receipt of the Department's written notification  
32 stating the unit is accepted as clean closed.

33 V.12.B.d. The Permittees shall complete 4843 AMSF closure activities 180 days after the effective date  
34 of Revision 3 to this Permit.

1 CHAPTER 13

2 **3718-F Alkali Metal Treatment and Storage Facility Closure Plan**

3 The 3718-F Alkali Metal Treatment and Storage Facility was operated to treat and store alkali metal waste  
4 from the Fast Flux Test Facility and from various laboratories that used alkali metals for experiments.  
5 Contaminated equipment was treated using water, methanol, isopropyl alcohol, or 2-butoxy ethanol. Bulk  
6 waste was treated by burning to eliminate the ignitability and reactive characteristics. After the burn  
7 treatment, the waste was neutralized with acid to a pH between 2 and 12.5.

8 V.13.A COMPLIANCE WITH THE APPROVED CLOSURE PLAN

9 The Permittees shall comply with all requirements set forth in the *3718-F Alkali Metal*  
10 *Treatment and Storage Facility Closure Plan* (Plan), found in Attachment 30, including the  
11 amendments specified in Condition V.13.B. Enforceable portions of the Plan are listed  
12 below; all subsections, figures, and tables included in these portions are also enforceable  
13 unless stated otherwise:

14 The operation of this facility resulted in the release of material, which may classify as  
15 dangerous waste and/or dangerous constituents, to the soil surrounding the building and  
16 concrete pad. A closure plan must address the full extent of operation and releases to the  
17 environment. Therefore, the Department requires the owner/operator to conduct soil  
18 sampling to determine the extent of the releases. The 3718-F Alkali Metal Treatment and  
19 Storage Facility can not be released from interim status until it can be demonstrated that the  
20 unit has been closed in accordance with closure requirements of WAC 173-303, or corrective  
21 action has been completed.

22 If pre-existing contamination remains at the unit in concentrations above appropriate MTCA  
23 cleanup levels, the unit is subject to additional remediation under RCRA corrective action,  
24 MTCA, or CERCLA, as appropriate.

25 **Part A Permit Application**

26	Section 1.2	Closure Strategy
27	Chapter 2.0	Facility Description and Location Information
28	Chapter 5.0	Groundwater Monitoring
29	Chapter 6.0	Closure Performance Standards
30	Chapter 7.0	Closure Activities
31	Chapter 8.0	Post-Closure Plan

32 V.13.B. AMENDMENTS TO THE APPROVED CLOSURE PLAN

33 V.13.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan,  
34 including these unit-specific Conditions to the Plan, a written notification shall be submitted  
35 to the Department within 30 days after the Plan is approved.

36 V.13.B.b. The Department shall be provided, for review and approval, a soil sampling and analysis plan  
37 at least 30 days prior to initiating actual sampling. Such a plan shall include a schedule for  
38 conducting sampling events. The analytical results of the sampling event will be used to  
39 determine if corrective action will be required to close the 3718-F Alkali Metal Treatment  
40 and Storage Facility.

41 V.13.B.c. The Department shall be provided a diagram of the 3718-F Alkali Metal Treatment and  
42 Storage Facility unit boundary to be closed, addressing the maximum extent of operation.

- 1 The diagram should incorporate the fenced area surrounding the building indicating which  
2 areas intentionally, or unintentionally, received waste. This diagram is to be submitted with  
3 the sampling and analysis plan required by Condition V.13.B.b.
- 4 V.13.B.d. The soil samples shall be analyzed for all dangerous constituents documented to have been  
5 potentially spilled or released at the 3718-F Alkali Metal Treatment and Storage Facility  
6 during its operating life. These analyses shall be performed in accordance with WAC 173-  
7 303-110 including the quality assurance and quality control requirements delineated in SW-  
8 846.
- 9 V.13.B.e. The results of all sampling shall be submitted to the Department. These submittals shall  
10 include the raw analytical data, a summary of analytical results, a data validation package,  
11 and a narrative summary with conclusions.
- 12 V.13.B.f. The Permittees and the independent, registered, professional engineer shall prepare and  
13 submit the certification of closure to the Department by registered mail within 60 days of  
14 closure.
- 15 V.13.B.g. The Permittees shall continue to address the 3718-F Alkali Metal Treatment and Storage  
16 Facility as a dangerous waste management unit until receipt of the Department's written  
17 notification that the closure certification is accepted as clean closed.
- 18 V.13.B.h. The Permittees shall complete the 3718-F Alkali Metal Treatment and Storage Facility  
19 closure activities within 180 days after the effective date of this Permit. This schedule may  
20 be extended at Ecology's discretion based on the results of sampling conducted at the unit.
- 21 V.13.B.i. Any solid waste remaining at the unit or generated during sampling and/or decontamination  
22 activities shall be designated and managed accordingly. The Department shall be informed in  
23 writing of the final disposition of the waste.
- 24 V.13.B.j. A written notification shall be submitted to the Department regarding the final disposition of  
25 equipment associated with or subject to decontamination, designation, removal, disposal,  
26 recycling or reuse at the 3718-F Alkali Metal Treatment and Storage Facility.
- 27 V.13.B.k. The Permittees shall notify the Department, in writing, if at any time it is determined the  
28 clean closure levels specified in this Plan are exceeded.
- 29 V.13.B.l. The Department will consider removal and decontamination complete when the  
30 concentrations of dangerous waste, dangerous waste constituents, and dangerous waste  
31 residues, which originated from the 3718-F Alkali Metal Treatment and Storage Facility,  
32 throughout the areas affected by releases from this unit do not exceed numeric cleanup levels  
33 for soils, groundwater, surface water, and air, determined using residential exposure  
34 assumptions according to the MTCA 173-340, method A or B.
- 35 V.13.B.m. A Post-Closure permit will be required if dangerous wastes constituents, residues, or  
36 decomposition products are left in place at concentrations above the numeric cleanup levels  
37 determined using residential exposure assumptions under MTCA method A or B.
- 38 V.13.C CHANGES TO TEXT OF REVISION 2 OF THE CLOSURE PLAN (CHAPTER 13)
- 39 V.13.C.a. Page 6-2, line 8. Disregard first bullet. The bullet inaccurately states radioactive waste was  
40 not managed at the unit. The 3718-F Alkali Metal Treatment and Storage Facility did manage  
41 radioactive sodium according to *DOE-RL 1992a, 3718-F Alkali Metal Treatment and Storage  
42 Facility Closure Plan, DOE-RL-91-35, Rev. 1*, U.S. Department of Energy, Richland Field  
43 Office, Richland, Washington and the *300-FF-2 Operable Unit Technical Baseline Report,  
44 BHI-00012, Rev. 00, Bechtel Hanford, Inc., Richland, Washington*.



1 of closure as described in Section 7.8 of the Plan. The Permittees shall continue to address  
2 the 303-K as a dangerous waste management unit until receipt of the department's written  
3 notification that the 303-K is accepted as clean closed.

4 V.14.B.f. The allowed time for closure is hereby extended in accordance with WAC 173-303-  
5 610(4)(b)(i). The Permittees shall submit a certification of closure for 303-K prior to July 31,  
6 1998.

1                   **PART VI - UNIT-SPECIFIC CONDITIONS FOR UNITS IN POST-CLOSURE**

2                                   CHAPTER 1

3   **300 Area Process Trenches**

4   The 300 Area Process Trenches were operated to receive effluent discharges of dangerous mixed waste  
5   from fuel fabrication laboratories in the 300 Area. This chapter sets forth the modified closure  
6   requirements.

7   VI.1.A.       COMPLIANCE WITH APPROVED MODIFIED CLOSURE PLAN

8       The Permittees shall comply with all requirements set forth in the *300 Area Modified Closure*  
9       *Plan (Plan)*, as found in Attachment 31, including amendments specified in Condition VI.1.B.  
10      Enforceable portions of the plan are listed below. All subsections, figures, and tables  
11      included in these portions are also enforceable unless otherwise stated. The Permittees shall  
12      also comply with all the requirements in the 300-FF-1 and 300-FF-5 Record of Decision and  
13      Addendum and the groundwater monitoring plan (WHC-SD-EN-AP-185, Rev. 0A).

14      Part A Application

15      Section ADD-1    Addendum, Introduction

16      Section 1.3.     Content of the Modified Closure/Post-Closure Plan

17      Chapter 4.0      Waste Characteristics. Summary of non-radionuclide data. Data is  
18      located in the *Expedited Response Action Assessment for the 316-5*  
19      *Process Trenches (DOE/RL-92-32, Rev. 0)*

20      Section 6.2.1.   Minimize Need for Post-Closure Maintenance and Controls

21      Section 6.2.2.   Minimize Post-Closure Escape of Dangerous Waste

22      Section 7.9.      Amendment to Closure Plan

23      Section 7.10.     Certification of Closure, Survey Plat, Notice in Deed, and Financial  
24      Requirements

25      Section 8.2.      Inspection Plan

26      Section 8.4.      Maintenance Plan

27      Section 8.5.      Personnel Training

28      Appendix 2A       Photographs

29      Appendix 5A       Groundwater References

30      Appendix 5B       RCRA, Final Status Compliance Monitoring (WHC-SD-EN-AP-185, Rev.  
31      0A)

32      Appendix 7A       Sampling and Analysis Plan

33      Appendix 7B       Sampling Data and Evaluation Package for the 300 Area Process Trenches

34      Appendix 7C       Training Course Descriptions

35      Appendix 7D       Summary of Pre- and Post- Expedited Response Action (ERA) Sampling  
36      Data. Radionuclide data.

37   VI.1.B.       AMENDMENTS TO THE APPROVED MODIFIED CLOSURE PLAN

38   VI.1.B.a.    Page I-1, line 34 will reference section II.K.3. of the Hanford Facility Wide Permit, which  
39   covers modified closures.

- 1 VI.1.B.b. Pursuant to condition II.K.7. of the Hanford Facility Wide Permit, the 300 Area Process  
2 Trenches (APT) closure shall be a Modified Closure in coordination with the Record of  
3 Decision (ROD) for 300-FF-1 and 300-FF-5. Sections of CERCLA documents (examples  
4 include, but are not limited to, Remedial Design/Remedial Action CERCLA work plan, the  
5 Operation and Monitoring Work Plan, etc.) which satisfy requirements and conditions of this  
6 Modified Closure Plan will be reviewed and approved by the Department.
- 7 VI.1.B.c. The Sampling and Analysis Plan, Appendix 7A (Verification Sampling), will be submitted to  
8 the Department for approval. This will occur prior to all remedial actions within the 300  
9 APT.
- 10 VI.1.B.d. Page 1-7, lines 9-13. This portion of the paragraph will be replaced by the following:  
11 "Disposal of TSD unit soil into the Environmental Restoration Disposal Facility (ERDF) (or a  
12 comparable RCRA Subtitle C Landfill) within the boundaries of the Hanford Facility is  
13 allowed through an approved, contained in demonstration, based on MTCA B cleanup levels  
14 (WAC-173-340) for the contamination carrying the F and U codes, and with TCLP data for  
15 the characteristic waste."
- 16 VI.1.B.e. Page 6-1, lines 8-10. This portion of the paragraph will be replaced by the following: "Based  
17 on data in addition to ERA data (DOE/RL-92-32), remediation will occur to meet all  
18 Applicable Relevant and Appropriate Requirements (ARARs) within the trenches. This will  
19 include removal of the spoils pile for chemical contamination above MTCA C Industrial  
20 cleanup values. It has been concluded that when uranium is removed to the CERCLA  
21 cleanup standard of 350 pCi/g, the Chemical Contaminants of Concern (COCs) will likely be  
22 removed to below the cleanup standard, as well. Verification samples will be collected for  
23 both chemicals and radioisotopes, as directed in the remedial action sampling and analysis  
24 plan, to determine whether performance standards for the modified closure have been met."
- 25 VI.1.B.f. Page 6-1, line 11. The sentence here is deleted and replaced with the following: "When SD  
26 soils are remediated, the cleanup levels achieved for RCRA constituents could qualify the  
27 unit for clean closure of the soil."
- 28 VI.1.B.g. Page 6-1, lines 22-27. This portion of the paragraph will be removed.
- 29 VI.1.B.h. Page 6-2, line 23-27. These sentences will be deleted and replaced with the following:  
30 "Final closure specifications are known and will be coordinated with the CERCLA cleanup  
31 activities."
- 32 VI.1.B.i. As stipulated through the RCRA Final Status Compliance Monitoring Plan (i.e., WHC-SD-  
33 EN-AP-185) Appendix IX, sampling shall not be required unless Post-Closure monitoring  
34 results indicate a need to do so.
- 35 VI.1.B.j. Page 6-3, line 12-24. Presenting the option for Modified Closure is redundant. This  
36 paragraph will be deleted.
- 37 VI.1.B.k. Page 6-4, lines 26-33. Presenting the Landfill Closure Option is not supported by sufficient  
38 technical data. This paragraph will be deleted.
- 39 VI.1.B.l. Page 6-6, lines 14-15. This paragraph will be replaced with the following: "RCRA closure  
40 verification will occur as part of the spoils pile removal, and will be in coordination with  
41 CERCLA remedial activities."
- 42 VI.1.B.m. Page 6-6, lines 17-19. This paragraph will be replaced with the following: "The analytical  
43 results of TSD screening/verification sampling will be reviewed by the Department. This  
44 review will be allowed at any point during the process (i.e., raw data, as well as, completed  
45 data summaries)."

- 1 VI.1.B.n. Page 7-1, lines 5-10. This portion of the paragraph will be replaced by the following: "These  
2 closure activities will reflect the closure specifications stipulated in the Modified  
3 Closure/Post-Closure Plan, Hanford Facility Wide Permit (#WA7890008967), and the  
4 CERCLA ROD for 300-FF-1. Groundwater remediation will be addressed as part of the  
5 remedial actions for 3-FF-5."
- 6 VI.1.B.o. Page 7-6, lines 20-22. These sentences will be replaced by the following: "Sampling will be  
7 appropriate to the applicable remedial alternatives under consideration for remediation of  
8 both CERCLA and RCRA Constituents."
- 9 VI.1.B.p. Page 8-3, line 6. Security Control Devices (SCD) will be developed pursuant to Condition  
10 II.K.3.a. of the Permit. Design will occur during the CERCLA RD/RA process.  
11 Implementation of SCD will occur through the Department approval of pertinent sections of  
12 the CERCLA Operations and Maintenance Plan.
- 13 VI.1.B.q. Page 8-3, line 20. Well condition will be assessed pursuant to Condition II.F. of the Permit.
- 14 VI.1.B.r. Page 8-5, Section 8.5. This section will reference Section II.C. of the Permit for additional  
15 training requirements.
- 16 VI.1.B.s. Pursuant to CERCLA, removal of the spoils pile within the trenches will begin 15 months  
17 after the signature of the 300-FF-1/300-FF-5 ROD.

THIS PAGE INTENTIONALLY  
LEFT BLANK

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

PART I									
CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B <sup>1</sup>	C <sup>2</sup>	D <sup>3</sup>	E	F	G	
I.A.	EFFECT OF PERMIT								
I.A.1.a		*	*	*	*	*	*	*	
I.A.1.b		*	*	*	*	*	*	*	
I.A.2		*	*		*	*	*	*	
I.A.3	Coord. w/FFACO		*		*	*	*	*	
I.B.	PERSONAL & PROPERTY RIGHTS		*		*	*	*	*	
I.C.	PERMIT ACTIONS								
I.C.1.	Modification, Revocation, Reissuance, or Termination		*		*	*	*	*	
I.C.2.	Filing of a Request		*		*	*	*	*	
I.C.3.	Modifications		*		*	*	*	*	
I.D.	SEVERABILITY								
I.D.1.	Effect of Invalidation		*		*	*	*	*	
I.D.2.	Final Resolution		*		*	*	*	*	
I.E.	DUTIES & REQUIREMENTS								
I.E.1.	Duty to Comply		*		*	*	*	*	
I.E.2.	Compliance Not Constituting Defense		*		*	*	*	*	
I.E.3.	Duty to Reapply		*		*	*	*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

- 1 - For Category B, Part I Conditions only apply if future TSD activities are begun on the North Slope or ALE
- 2 - For Category C, all Part I Conditions apply to activities subject to Conditions II.U. and II.V.
- 3 - For Category D, Part I Conditions only apply to activities subject to Conditions II.A., II.C. II.D.4., II.G., II.I., II.L.3., II.O., II.Q., II.S., II.T., and II.X.

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
I.E.4.	Permit Expiration & Continuation		*		*	*	*	*	
I.E.5.	Need to Halt or Reduce Activity Not a Defense		*		*	*	*	*	
I.E.6.	Duty to Mitigate		*		*	*	*	*	
I.E.7.	Proper Operation & Maintenance		*			*	*	*	
I.E.8.	Duty to Provide Information		*		*	*	*	*	
I.E.9.	Inspection & Entry		*		*	*	*	*	
I.E.10.	Monitoring & Records								
I.E.10.a			*		*	*	*	*	
I.E.10.b			*		*	*	*	*	
I.E.10.c			*		*	*	*	*	
I.E.10.d			*		*	*	*	*	
I.E.10.e			*		*	*	*	*	
I.E.11.	Reporting Planned Changes		*			*	*	*	
I.E.12.	Certification of Construction or Modification		*				*		
I.E.13.	Anticipated Noncompliance		*		*	*	*	*	
I.E.14.	Transfer of Permits		*			*	*	*	
I.E.15.	Immediate Reporting								
I.E.15.a			*		*	*	*	*	
I.E.15.b			*		*	*	*	*	
I.E.15.c			*		*	*	*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (in Part V)
- F. TSD Operating Units (in Part III)
- G. TSD Units in Post-Closure/Modified Closure (in Part VI)

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
I.E.15.d			*		*	*	*	*	
I.E.15.e			*		*	*	*	*	
I.E.16	Written Reporting		*		*	*	*	*	
I.E.17	Manifest Discrepancy Report		*		*	*	*	*	
I.E.17.a			*		*	*	*	*	
I.E.17.b			*		*	*	*	*	
I.E.18.	Unmanifested Waste Report		*		*	*	*	*	
I.E.19.	Other Noncompliance		*		*	*	*	*	
I.E.20.	Other Information		*		*	*	*	*	
I.E.21.	Reports, Notifications & Submissions		*		*	*	*	*	
I.E.22.	Annual Report		*		*	*	*	*	
I.F.	SIGNATORY REQUIREMENT		*		*	*	*	*	
I.G.	CONFIDENTIAL INFORMATION		*		*	*	*	*	
I.H.	DOCUMENTS TO BE MAINTAINED AT FACILITY SITE		*		*	*	*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

PART II									
CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.A.	FACILITY CONTINGENCY PLAN								
II.A.1.					*	*	*	*	For Category D, II.A. Conditions only apply to releases of hazardous substances which threaten human health or the environment.
II.A.2.					*	*	*	*	
II.A.3.					*	*	*	*	
II.A.4.					*	*	*	*	
II.A.5.					*	*	*	*	
II.B.	PREPAREDNESS & PREVENTION								
II.B.1.						*	*		
II.B.2.						*	*		
II.B.3.						*	*		
II.B.4.						*	*		
II.C.	PERSONNEL TRAINING								
II.C.1.						*	*	*	
II.C.2.					*	*	*	*	
II.C.3.						*	*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.C.4.					*	*	*	*	For Category D, Condition II.C.4. will not apply to unrestricted (publicly accessible) areas
II.D.	WASTE ANALYSIS								
II.D.1.						*	*	*	
II.D.2.						*	*	*	
II.D.3.						*	*	*	
II.D.4.					*				
II.E.	QA/QC								
II.E.1.						*	*	*	
II.E.2.						*	*	*	
II.E.3.						*	*	*	
II.E.4.						*	*	*	
II.E.5.						*	*	*	
II.F.	GW AND VADOSE ZONE MONITORING					*	*	*	
II.F.1.	Purgewater Management					*	*	*	
II.F.2.	Well Remed. & Abandonment								
II.F.2.a						*	*	*	
II.F.2.b						*	*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

**HANFORD FACILITY WIDE PERMIT (REV. 3)**  
**ATTACHMENT 3**  
**PERMIT APPLICABILITY MATRIX**  
 Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.F.2.c						*	*	*	
II.F.2.d						*	*	*	
II.F.3	Well Construction					*	*	*	
II.G.	SITING CRITERIA				*		*		For Category D, Condition II.G. only applies if a new TSD unit is to be sited.
II.H.	RECORDKEEPING & REPORTING								
II.H.1.	Cost Estimate for Facility Closure					*	*	*	
II.H.2.	Cost Est. for Postclosure Monitoring & Maintenance					*	*	*	
II.H.3.						*	*	*	
II.I.	FACILITY OPERATING RECORD								
II.I.1.		*	*		*	*	*	*	For Category D, II.I. Conditions only apply to activities subject to this Permit as defined by this matrix.  For Category E, Condition applicability to be specified in Part V.  Condition II.J. only applies to existing records and records prepared after the date of Permit issuance.
II.I.1.a		*	*		*	*	*	*	
II.I.1.b							*	*	
II.I.1.c					*	*	*	*	

**CATEGORIES ARE DEFINED AS FOLLOWS:**

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)  
ATTACHMENT 3  
PERMIT APPLICABILITY MATRIX  
Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.1.1.d						*	*	*	
II.1.1.e			*		*				
II.1.1.f					*	*	*	*	
II.1.1.g						*	*	*	
II.1.1.h	Condition Reserved								
II.1.1.i						*	*	*	
II.1.1.j						*	*	*	
II.1.1.k					*	*	*	*	
II.1.1.l	Condition Reserved								
II.1.1.m						*	*	*	
II.1.1.n					*	*	*	*	
II.1.1.o	Condition Reserved								
II.1.1.p			*		*	*	*	*	
II.1.1.q			*		*	*	*	*	
II.1.1.r					*	*	*	*	
II.1.1.s					*	*	*	*	
II.1.1.t					*	*	*	*	
II.1.2.		*	*		*	*	*	*	

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.J.	FACILITY CLOSURE								
II.J.1.						*	*	*	
II.J.2.						*	*	*	
II.J.3.						*	*	*	
II.J.4.						*	*	*	
II.K.	SOIL/GW CLOSURE PERFORMANCE STANDARDS								
II.K.1.						*	*	*	
II.K.2.						*	*	*	
II.K.3.						*	*	*	
II.K.4.						*	*	*	
II.K.5.						*	*	*	
II.K.6.						*	*	*	
II.K.7.						*	*	*	
II.L.	DESIGN & OPERATION OF FACILITY								
II.L.1.	Proper Design & Construction					*	*	*	Condition II.L.2. only applies to Category E if it is a landfill closure.
II.L.2.	Design Changes, Nonconformance, & As-Built Drawings					*	*	*	Condition II.L.2 applies to Categories E & G only if it is a landfill closure.

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)

ATTACHMENT 3

PERMIT APPLICABILITY MATRIX

Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.L.3.	Facility Compliance				*	*	*	*	
II.M.	SECURITY					*	*	*	
II.N.	RECEIPT OF DANG. WASTES GENERATED OFF-SITE								
II.N.1.	Receipt of Off-Site Waste						*		
II.N.2.	Waste From Sources Outside the U.S.						*		
II.N.3.	Notice to Generator						*		
II.O.	GENERAL INSPECTION REQUIREMENTS								
II.O.1.					*				
II.O.2.					*				
II.O.3.					*				
II.P.	MANIFEST SYSTEM								
II.P.1.						*	*	*	
II.P.2.						*	*	*	
II.Q.	ON-SITE TRANSPORTATION								
II.Q.1.					*	*	*	*	
II.Q.2.					*	*	*	*	
II.R.	EQUIVALENT MATERIALS								

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)  
 ATTACHMENT 3  
 PERMIT APPLICABILITY MATRIX  
 Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.R.1.						*	*	*	
II.R.2.						*	*	*	
II.R.3.						*	*	*	
II.S.	LAND DISPOSAL RESTRICTIONS				*	*	*	*	
II.T.	ACCESS & INFORMATION				*	*	*	*	
II.U.	MAPPING OF UNDERGROUND PIPING								
II.U.1.				*		*	*	*	
II.U.2.				*		*	*	*	
II.U.3.				*		*	*	*	
II.U.4.				*		*	*	*	
II.V.	MARKING OF UNDERGROUND PIPING			*		*	*	*	
II.W.	OTHER PERMITS AND/OR APPROVALS								
II.W.1.						*	*	*	
II.W.2.						*	*	*	
II.W.3.						*	*	*	
II.X.	SCHEDULE EXTENSIONS								
II.X.1.				*	*	*	*	*	Condition II.X. only applies to Category C if activities are subject to Conditions II.U. and II.V.

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)

ATTACHMENT 3

PERMIT APPLICABILITY MATRIX

Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
II.X.2.				*	*	*	*	*	Condition II.X. only applies to Category D if activities are subject to this Permit as defined by this matrix.
<b>PARTS III, IV, and V</b>									
III.	UNIT SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS								
III.1.A.	616 NRDWSF COMPLIANCE WITH APPROVED PERMIT APPLICATION						*		
III.1.B.	AMENDMENTS TO THE APPROVED PERMIT APPLICATION						*		
III.2.A.	305-B COMPLIANCE WITH APPROVED PERMIT APPLICATION						*		
III.2.B.	AMENDMENTS TO THE APPROVED PERMIT APPLICATION						*		
IV.	CORRECTIVE ACTIONS FOR PAST PRACTICE	*	*		*				
V.	UNIT SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE								
V.1.A.	183-H BASINS COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.1.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			

CATEGORIES ARE DEFINED AS FOLLOWS:

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (in Part V)
- F. TSD Operating Units (in Part III)
- G. TSD Units in Post-Closure/Modified Closure (in Part VI)

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

HANFORD FACILITY WIDE PERMIT (REV. 3)

ATTACHMENT 3

PERMIT APPLICABILITY MATRIX

Updated November 26, 1996

CONDITION		CATEGORY							QUALIFIERS
PART	TITLE	A	B	C	D	E	F	G	
V.2.A.	300 ASE COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.2.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.3.A.	2727-S COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.3.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.4.A.	SHLWS COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.4.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.5.A.	218 BPDS COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.5.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.6.A.	200 APDS COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.6.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.7.A.	2101-M POND COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.7.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.8.A.	B PONDS COMPLIANCE WITH APPROVED CLOSURE PLAN					*			
V.8.B.	AMENDMENTS TO THE APPROVED CLOSURE PLAN					*			
V.12.A	4843 ALKALI METAL STORAGE FACILITY COMPLIANCE WITH					*			

CATEGORIES ARE DEFINED AS FOLLOWS:

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

**HANFORD FACILITY WIDE PERMIT (REV. 3)**  
**ATTACHMENT 3**  
**PERMIT APPLICABILITY MATRIX**  
 Updated November 26, 1996

APPROVED CLOSURE PLAN										
CONDITION		CATEGORY							QUALIFIERS	
PART	TITLE	A	B	C	D	E	F	G		
V.12.B	AMMENDMENTS TO THE APPROVED CLOSURE PLAN					*				
V.13.A	3718-F ALKALI METAL TREATMENT AND STORAGE FACILITY COMPLIANCE WITH APPROVED CLOSURE PLAN					*				
V.13.B	AMMENDMENTS TO THE APPROVED CLOSURE PLAN					*				
V.14.A	303-K STORAGE FACILITY COMPLIANCE WITH APPROVED CLOSURE PLAN					*				
V.14.B	AMMENDMENTS TO THE APPROVED CLOSURE PLAN					*				
VI	UNIT SPECIFIC CONDITIONS FOR UNITS UNDERGOING POST-CLOSURE/MODIFIED CLOSURE									
VI.1.A	300 AREA PROCESS TRENCHES COMPLIANCE WITH APPROVED CLOSURE PLAN							*		
VI.1.B	AMMENDMENTS TO THE APPROVED CLOSURE PLAN							*		

**CATEGORIES ARE DEFINED AS FOLLOWS:**

- |                             |   |  |
|-----------------------------|---|--|
| A. Leased Land              | D. Areas Between TSDs (excluding A and B) | G. TSD Units in Post-Closure/Modified Closure (in Part VI) |
| B. North Slope and ALE      | E. TSD Unit Closures (in Part V)          |  |
| C. Interim Status TSD Units | F. TSD Operating Units (in Part III)      |  |

\* Condition applies to this category, as modified by applicable footnotes and qualifiers

**THIS PAGE INTENTIONALLY  
LEFT BLANK**