

Second Draft
February 2, 1994

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

Department of Ecology
Nuclear and Mixed Waste Management Program
P.O. Box 47600
Olympia, Washington 98504-7600
Telephone: (206) 407-7150

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)
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Richland, Washington 99352
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This Permit is effective as of _____, and shall remain in effect until _____, unless revoked and reissued under WAC 173-303-830(3), or terminated under WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7).

ISSUED BY: WASHINGTON STATE DEPARTMENT OF ECOLOGY

Dru Butler, Program Manager
Nuclear and Mixed Waste Management
Department of Ecology

Date: _____



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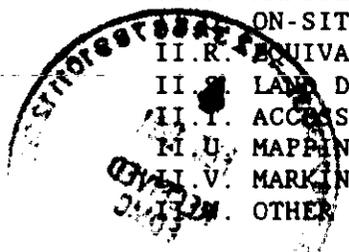
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1
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3 INTRODUCTION
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5

6 Pursuant to Chapter 70.105 Revised Code of Washington (RCW), the Hazardous
7 Waste Management Act (HWMA) of 1976, as amended, Chapter 70.105D RCW, the
8 Model Toxics Control Act, and regulations promulgated thereunder by the
9 Washington State Department of Ecology (hereafter called the Department),
10 codified in Chapter 173-303 Washington Administrative Code (WAC), Dangerous
11 Waste Regulations, a Dangerous Waste Permit is issued to the U.S. Department
12 of Energy - Richland Operations Office (DOE-RL), (owner/operator), and its
13 contractors; Westinghouse Hanford Company (Westinghouse Hanford) (co-
14 operator), and Pacific Northwest Laboratory (PNL) (co-operator) (hereafter
15 called the Permittees), for the treatment, storage, and disposal of dangerous
16 waste at the Hanford Facility.
17

18 This Dangerous Waste Permit, issued in conjunction with the U.S. Environmental
19 Protection Agency's, (hereafter call the Agency) Hazardous and Solid Waste
20 Amendments Portion of the Resource Conservation and Recovery Act Permit for
21 the Treatment, Storage, and Disposal of Hazardous Waste (HSWA Permit),
22 constitutes the Resource Conservation and Recovery Act Permit (RCRA Permit)
23 for the Hanford Facility. Use of the term "Permit" within the Dangerous Waste
24 Permit shall refer to the Dangerous Waste Permit while use of the term
25 "Permit" within the HSWA Permit shall refer to the HSWA Permit.
26

27 The Permittees shall comply with all terms and Conditions set forth in this
28 Permit and those portions of the Attachments that have been specifically
29 incorporated into this Permit. When the Permit and the Attachments (except
30 Attachment 1) conflict, the wording of the Permit will prevail. The Permit is
31 intended to be consistent with the terms and conditions of the Hanford Federal
32 Facility Agreement and Consent Order (FFACO, Attachment 1). The Permittees
33 shall also comply with all applicable State regulations, including Chapter
34 173-303 WAC. Additionally, the Permittees shall comply with all applicable
35 Federal regulations, including 40 CFR Parts 260 through 266, Part 268, and
36 Part 270.
37

38 Applicable State and Federal regulations are those which are in effect on the
39 date of issuance, or subsequent modifications of this Permit. In addition,
40 applicable State regulations include any self-implementing statutory
41 provisions and related regulations which, according to the requirements of the
42 HWMA, as amended, or other law(s), are automatically applicable to the
43 Permittees' dangerous waste management activities, notwithstanding the
44 Conditions of this Permit.
45

46 This Permit is based upon the administrative record, as required by WAC 173-
47 303-840. The Permittees' failure in the application or during the Permit
48 issuance process to fully disclose all relevant facts, or the Permittees'
49 misrepresentation of any relevant facts at any time, shall be grounds for the
50 termination or modification of this Permit and/or initiation of an enforcement

1 action, including criminal proceedings. The Permittees shall inform the
2 Department of any deviation from Permit Conditions or changes in the
3 information on which the application is based which would affect either the
4 Permittees' ability to comply or actual compliance with the applicable
5 regulations or Permit Conditions or which alters any Condition of this Permit
6 in any way.
7

8 The Department shall enforce all Conditions of this Permit for which the State
9 of Washington is authorized, or which are "state-only" provisions (i.e.,
10 conditions broader in scope or more stringent than the Federal RCRA program).
11 Any challenges of any such Permit Condition may be appealed in accordance with
12 WAC 173-303-845, except that USDOE may invoke any applicable dispute
13 resolution procedure of Part Two of the FFACO (Attachment 1). In the event a
14 decision of the Department is challenged by USDOE under an applicable dispute
15 resolution procedure of the FFACO and by any Permittee under WAC 173-303-845,
16 the Department shall stay the decision as it pertains to the Permittees in
17 accordance with the same terms of any stay it grants to USDOE. Such a stay
18 constitutes a "stay by the issuing agency" within the meaning of RCW
19 43.21B.320(1).
20

21 This Permit has been developed to allow a step-wise permitting process of the
22 Hanford Facility to ensure the proper implementation of the FFACO. In order
23 to accomplish this, this Permit consists of five (5) Parts.
24

25 Part I, Standard Conditions, are those Conditions which appear in all
26 dangerous waste permits.
27

28 Part II, General Facility Conditions, combines typical dangerous waste Permit
29 Conditions with those Conditions intended to address issues specific to the
30 Hanford Facility. Where appropriate, the General Facility Conditions apply to
31 all final status dangerous waste management activities at the Facility. Where
32 appropriate, the General Facility Conditions also address dangerous waste
33 management activities which may not be directly associated with distinct
34 Treatment, storage, and disposal (TSD) units or which may be associated with
35 many TSD units (i.e., spill reporting, training, contingency planning, etc.).
36

37 Part III, Unit-Specific Conditions for Operating Units, contains those Permit
38 requirements which apply to each individual TSD unit operating under final
39 status. Conditions for each TSD unit are found in a Chapter dedicated to that
40 TSD unit. These unit-specific Chapters contain references to Standard and
41 General Conditions (Parts I and II), as well as additional requirements which
42 are intended to ensure that each TSD unit is operated in an efficient and
43 environmentally protective manner.
44

45 Part IV, Corrective Actions for Past Practice, includes, by reference, the EPA
46 HSWA Permit which is considered part of this Permit. These Conditions contain
47 those Permit requirements that apply to the identification of Solid Waste
48 Management Units (SWMUs) at the Facility and conduct of investigations and
49 remediations at such SWMUs. This Part addresses both SWMUs that are located

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1 on the USDOE managed portions of the Facility as well as SWMUs which are not
2 located on USDOE managed property (i.e., leased lands). Any SWMUs located on
3 USDOE managed property are, or will be, included in the FFACO and assigned to
4 operable units. The processes and procedures to be followed, and the
5 schedules of compliance for investigation and subsequent remediation, will be
6 contained in the FFACO. SWMUs not located on USDOE managed property will
7 undergo investigations and remediations, as necessary, in accordance with the
8 requirements and schedules identified in the HSWA Permit.
9

10 It is intended that, once the Department receives authorization from EPA to
11 implement the Corrective Action provisions, these requirements will be
12 incorporated into this Part through a Permit modification. Until Ecology
13 receives authorization for the Corrective Action provisions of RCRA, EPA shall
14 maintain regulatory lead for these requirements.
15

16 Part V, Unit-Specific Conditions for Units Undergoing Closure, contains those
17 requirements which apply to those specific TSD units included in this Part
18 that are undergoing closure. In accordance with Section 5.3. of the Action
19 Plan of the FFACO, all TSD units that undergo closure, irrespective of permit
20 status, shall be closed pursuant to the authorized State Dangerous Waste
21 Program in accordance with WAC 173-303-610. Requirements for each TSD unit
22 undergoing closure are found in a Chapter dedicated to that TSD unit. These
23 unit-specific Chapters contain references to Standard Conditions (Part I) and
24 General Conditions (Part II), as well as additional requirements which are
25 intended to ensure that each TSD unit is closed in an efficient and
26 environmentally protective manner. Standard Conditions and General Conditions
27 which only address requirements for operating units will not be enforced at
28 units undergoing closure.
29
30

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LIST OF ATTACHMENTS

The following listed documents are attached in their entirety. However, only those portions of the Attachments specified in Parts I through V 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 V), and thereby supersede the language of the Attachment.

- Attachment 1 Hanford Federal Facility Agreement and Consent Order, May 1989 (As Amended)
- Attachment 2 Facility Description
- Attachment 3 FFAO Milestones Incorporated into the Permit
- 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 Part A Application and the Closure/Postclosure 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

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1 Attachment 13 Decommissioning Work Plan "Core Drill Sampling - 183-H
2 Solar Evaporation Basins (Phase I)" (DWP-H-080-00005)
3 2-8-91, Revision A-1
4
5 Attachment 14 "183-H Solar Evaporation Basins Vadose Zone Sampling
6 Plan" (WHC-SD-EN-AP-056) 6-25-91, Revision 0
7
8 Attachment 15 Decommissioning Work Plan "Berm Removal for 183-H
9 Solar Evaporation Basins" (DWP-H-026-00008) 1-16-91,
10 Revision A-0
11
12 Attachment 16 300 Area Solvent Evaporator Closure Plan, Revision 3b,
13 September 1992
14
15 Attachment 17 2727-S Nonradioactive Dangerous Waste Storage Facility
16 Closure Plan, Revision 3, January 1992
17
18 Attachment 18 305-B Storage Facility Part A and Part B Permit
19 Applications, Revision 2, October 1992

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DEFINITIONS

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

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

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

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

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

The following definitions apply throughout this Permit:

- a. The term "Critical Systems" as applied to determining whether a permit modification is required means those specific portions of a TSD unit's structure or equipment whose failure could lead to the release of dangerous waste into the environment and/or systems which include processes which treat, transfer, store or dispose of regulated wastes. A list identifying the critical systems of a specific TSD unit may be developed and included in Part III or Part V of this Permit. In developing a critical system list, or in the absence of a critical system list, WAC 173-303-830 modifications shall be considered.
- b. The term "Contractor(s)" means, unless specifically identified otherwise in this Permit or attachments, Westinghouse Hanford Company (Westinghouse Hanford) and/or Pacific Northwest Laboratory (PNL).
- c. The term "Dangerous Waste" means those solid wastes designated under Chapter 173-303 WAC as dangerous or extremely hazardous waste. As used in the Permit, the word "dangerous waste" shall refer to the full universe of wastes regulated by Chapter 70.105 RCW and Chapter 173-303 WAC (including dangerous waste, hazardous

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1 waste, extremely hazardous waste, mixed waste and acutely
2 hazardous waste).

3
4 d. The term "Days" means calendar days unless specifically identified
5 otherwise.

6
7 e. The term "Department" means the Washington State Department of
8 Ecology, (with the address as specified on page one (1) of this
9 Permit).

10
11 f. The term "Director" means the Director of the Washington State
12 Department of Ecology or a designated representative. The Program
13 Manager of the Nuclear and Mixed Waste Management Program (with
14 the address as specified on page one of this Permit) is a duly
15 authorized and designated representative of the Director for
16 purposes of this Permit.

17
18 g. The term "Facility" means all contiguous land, and structures,
19 other appurtenances, and improvements on the land used for
20 recycling, reusing, reclaiming, transferring, storing, treating,
21 or disposing of dangerous waste. The legal and physical
22 description of the Facility is set forth in Attachment 2 of this
23 Permit.

24
25 h. The term "FFACO" means the Hanford Federal Facility Agreement and
26 Consent Order, as amended.

27
28 i. The term "Independent" as used in such titles as 'independent
29 engineer', 'independent expert', and 'independent inspector';
30 means an individual who is not employed by the Permittees, or who
31 is not employed by a firm that has primary responsibility for the
32 specific project phase that requires the certification, such as
33 design, installation, construction or closure of the project or
34 equipment. For example, a firm that has primary responsibility
35 for the design of a project or equipment, but not for its
36 installation or construction, can provide the independent
37 installation and tank system integrity assessment certifications.
38 Multiple certifications by the same individual will not nullify
39 the individual's independent status.

40
41 j. The term "RCRA Permit" means the Dangerous Waste Portion of the
42 RCRA Permit for the Treatment, Storage, and Disposal of Dangerous
43 Waste (Dangerous Waste Permit) issued by the Washington State
44 Department of Ecology, pursuant to Chapter 70.105 RCW and Chapter
45 173-303 WAC coupled with the HSWA Portion of the RCRA Permit for
46 the Treatment, Storage, and Disposal of Hazardous Waste (HSWA
47 Permit) issued by the EPA, Region 10, pursuant to 42 U.S.C. 6901
48 et seq. and 40 CFR Parts 124 and 270.
49

- 1 k. The term "Permittees" means the United States Department of Energy
2 (owner/operator), Westinghouse Hanford Company (co-operator) and
3 Pacific Northwest Laboratory (co-operator).
4
- 5 l. The term "Registered Professional Engineer" means an individual
6 who has received a certificate of registration from the State of
7 Washington to practice engineering. This term is equivalent to
8 the term "licensed professional engineer."
9
- 10 m. The term "Reasonable Times" means normal business hours, hours
11 during which production, treatment, storage, construction,
12 disposal or discharge occurs or times when the Department suspects
13 a violation requiring immediate inspection.
14
- 15 n. The term "Significant Discrepancy" in regard to a manifest or
16 shipping paper means a discrepancy between the quantity or type of
17 dangerous waste designated on the manifest or shipping paper and
18 the quantity or type of dangerous waste a TSD unit actually
19 receives. A significant discrepancy in quantity is a variation
20 greater than ten (10) percent for bulk quantities (e.g., tanker
21 trucks, railroad tank cars, etc.), or any variation in piece count
22 for nonbulk quantities (i.e., any missing container or package
23 would be a significant discrepancy). A significant discrepancy in
24 type is an obvious physical or chemical difference which can be
25 discovered by inspection or waste analysis (e.g., waste solvent
26 substituted for waste acid).
27
- 28 o. The term "Unit" (or "TSD unit"), as used in Parts I through V of
29 this Permit, means the contiguous area of land on or in which
30 dangerous waste is placed, or the largest area in which there is a
31 significant likelihood of mixing dangerous waste constituents in
32 the same area. A TSD unit, for purposes of this Permit, is a
33 subgroup of the Facility which has been identified in a Hanford
34 Facility Dangerous Waste Part A Permit Application Form 3.
35
36

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ACRONYMS

1		
2		
3		
4		
5	AGENCY	U. S. Environmental Protection Agency
6		
7	APP	Used to Denote Appendix Page Numbers
8		
9	CERCLA	Comprehensive Environmental Response Compensation and
10		Liability Act of 1980 (as Amended by the Superfund
11		Reauthorization Act of 1986)
12	CFR	Code of Federal Regulations
13	CIP	Construction Inspection Plan
14	CLP	Contract Laboratory Program
15		
16	Department	Washington State Department of Ecology
17	DOE-RL	U. S. Department of Energy Field Office, Richland,
18		Washington
19		
20	EC	Emergency Coordinator
21	Ecology	Washington State Department of Ecology
22	ECN	Engineering Change Notice
23	EPA	U.S. Environmental Protection Agency
24		
25	FFACO	Hanford Federal Facility Agreement and Consent Order
26		
27	HSWA	Hazardous and Solid Waste Amendments of 1984
28	HWMA	Hazardous Waste Management Act
29		
30	MTCA	Model Toxics Control Act
31		
32	NCR	Nonconformance Report
33	616 NRDWSF	616 Nonradioactive Dangerous Waste Storage Facility
34		
35	OSWER	Office of Solid Waste and Emergency Response
36		
37	PNL	Pacific Northwest Laboratory
38		
39	QA	Quality Assurance
40	QAPP	Quality Assurance Project Plan
41	QC	Quality Control
42		
43	RCRA	Resource Conservation and Recovery Act of 1976
44	RCW	Revised Code of Washington
45		
46	SARA	Superfund Amendments and Reauthorization Act of 1986
47		
48	SOP	Standard Operating Procedure
49	SWMU	Solid Waste Management Unit
50		

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1	TCLP	Toxicity Characteristic Leaching Procedure
2	TSD	Treatment, Storage, and/or Disposal
3		
4	USDOE	U.S. Department of Energy
5		
6	WAC	Washington Administrative Code
7	WAP	Waste Analysis Plan
8	Westinghouse	Westinghouse Hanford Company
9	Hanford	

10
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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, is prohibited.

The Conditions of this Permit do not apply to TSD units operating or closing under interim status. Such units shall maintain interim status until that TSD unit is incorporated into Part III or V 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 modification process. Standard Conditions and General Conditions which only address requirements for operating units will not be enforced at units undergoing closure.

I.A.1.b. Lands leased by the State of Washington are subject only to the HSWA Permit (including references to Conditions in Parts I through V).

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.

PNL 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/postclosure plan submitted to the Department in accordance with the schedules identified in

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1 the FFACO (Milestone M-20-00). After completion of the
2 permit application or closure plan review, a final permit
3 decision will be made pursuant to WAC 173-303-840. Specific
4 conditions for each TSD unit shall be incorporated into this
5 Permit in accordance with the Class 3 permit modification
6 procedure identified in Condition I.C.3.
7

8 I.A.4. Incorporation of the FFACO

9
10 The USDOE shall comply with all milestone schedules, not to
11 include target dates, contained within the FFACO as amended
12 and as specified in Attachment 3, which are hereby
13 incorporated by reference into this Permit in their
14 entirety. This Permit is intended to be consistent with the
15 conditions of the FFACO, as amended.
16

17 I.B. PERSONAL AND PROPERTY RIGHTS

18
19 This Permit does not convey property rights of any sort or
20 any exclusive privilege; nor does it authorize any injury to
21 persons or property, or any invasion of other private
22 rights, or any violation of Federal, State, or local laws or
23 regulations.
24

25 I.C. PERMIT ACTIONS

26
27 I.C.1. Modification, Revocation, Reissuance, or Termination

28
29 This Permit may be modified, revoked and reissued, or
30 terminated by the Department for cause as specified in WAC
31 173-303-830(3), (4), and (5).
32

33 I.C.2. Filing of a Request

34
35 The filing of a request for a permit modification, or
36 revocation and reissuance, or termination, or a notification
37 of planned changes or anticipated noncompliance on the part
38 of the Permittees shall not stay the applicability or
39 enforceability of any Condition except as provided in WAC
40 173-303-830(3), (4), and (5).
41

42 I.C.3. Modifications

43
44 I.C.3.a. Except as provided otherwise by specific language in this
45 Permit, and except for the Department's approval of a Class
46 2 permit modification, or a Class 1 modification, in
47 accordance with WAC 173-303-830(4), any modification or
48 change in design or operation of this Facility or any
49 modification or change in a dangerous waste management

CONFIDENTIAL

1 practice covered by this Permit shall be administered as a
2 Class 3 permit modification prior to such modification or
3 change taking place.
4

5 I.C.3.b. For corrective actions taken pursuant to provisions of the
6 FFACO, as amended, compliance with the public participation
7 provisions of the FFACO shall be deemed compliant with the
8 Class 3 permit modification procedures of WAC 173-303-
9 830(4). At the completion of the public involvement
10 requirements and when Department and/or Agency approval is
11 provided where applicable, documents will be incorporated
12 into Part IV of this Permit.
13

14 I.C.3.c. For any corrective actions required by this Permit that are
15 not addressed by the FFACO, the Permit modification
16 procedures identified in Condition I.C.3.a. shall be
17 followed.
18

19 I.D. SEVERABILITY

20
21 I.D.1. Effect of Invalidation

22
23 The provisions of this Permit are severable, and if any
24 provision of this Permit, or the application of any
25 provision of this Permit to any circumstance is contested
26 and/or held invalid, the application of such provision to
27 other circumstances and the remainder of this Permit shall
28 not be affected thereby. Invalidation of any State
29 statutory or regulatory provision which forms the basis for
30 any Condition of this Permit does not affect the validity of
31 any other State statutory or regulatory basis for said
32 Condition.
33

34 I.D.2. Final Resolution

35
36 In the event that a Condition of this Permit is stayed for
37 any reason, the Permittees shall continue to comply with the
38 related applicable and relevant interim status standards in
39 WAC 173-303-400 until final resolution of the stayed
40 Condition, unless the Department determines compliance with
41 the related applicable and relevant interim status standards
42 would be technologically incompatible with compliance with
43 other Conditions of this Permit which have not been stayed.
44

45 I.E. DUTIES AND REQUIREMENTS

46
47 I.E.1. Duty to Comply
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1 The Permittees shall comply with all Conditions of this
2 Permit, except to the extent and for the duration such
3 noncompliance is authorized by an emergency permit issued
4 under WAC 173-303-804. Any Permit noncompliance other than
5 noncompliance authorized by an emergency permit constitutes
6 a violation of Chapter 70.105 RCW, as amended, and is
7 grounds for enforcement action, Permit termination,
8 modification or revocation and reissuance of the Permit,
9 and/or denial of a Permit renewal application.

10
11 I.E.2. Compliance Not Constituting Defense

12
13 Compliance with the terms of this Permit does not constitute
14 a defense to any order issued or any action brought under
15 Section 3007, 3008, 3013, or 7003 of RCRA (42 U.S.C.
16 Sections 6927, 6928, 6934, and 6973), Section 104, 106(a) or
17 107 of the Comprehensive Environmental Response,
18 Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C.
19 Sections 9604, 9606(a), and 9607], as amended by the
20 Superfund Amendments and Reauthorization Act of 1986 (42
21 U.S.C. 9601 et seq.), or any other Federal, State or local
22 law governing protection of public health or the
23 environment.

24
25 I.E.3. Duty to Reapply

26
27 If the Permittees wish to continue an activity regulated by
28 this Permit after the expiration date of this Permit, the
29 Permittees must apply for and obtain a new Permit, in
30 accordance with WAC 173-303-806(6).

31
32 I.E.4. Permit Expiration and Continuation

33
34 This Permit, and all Conditions herein, will remain in
35 effect beyond the Permit's expiration date until the
36 effective date of the new permit if the Permittees have
37 submitted a timely, complete application for renewal per WAC
38 173-303-806 and, through no fault of the Permittees, the
39 Department has not made a final Permit determination as set
40 forth in WAC 173-303-840.

41
42 I.E.5. Need to Halt or Reduce Activity Not a Defense

43
44 It shall not be a defense in the case of an enforcement
45 action that it would have been necessary to halt or reduce
46 the permitted activity in order to maintain compliance with
47 the Conditions of this Permit.

48
49 I.E.6. Duty to Mitigate

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1 In the event of noncompliance with the Permit, the
2 Permittees shall take all reasonable steps to minimize
3 releases to the environment, and shall carry out such
4 measures as are reasonable to minimize or correct adverse
5 impacts on human health and the environment. Such
6 mitigation shall not be a defense to any enforcement action.
7

8 I.E.7. Proper Operation and Maintenance
9

10 The Permittees shall at all times properly operate and
11 maintain all facilities and systems of treatment and control
12 which are installed or used by the Permittees to achieve
13 compliance with the Conditions of this Permit. Proper
14 operation and maintenance includes effective performance,
15 adequate funding, adequate operator staffing and training,
16 and adequate laboratory and process controls including
17 appropriate quality assurance/quality control procedures.
18 This provision requires the operation of backup or auxiliary
19 facilities or similar systems only when necessary to achieve
20 compliance with the Conditions of the Permit.
21

22 I.E.8. Duty to Provide Information
23

24 The Permittees shall furnish to the Department, within a
25 reasonable time, any relevant information which the
26 Department may request to determine whether cause exists for
27 modifying, revoking and reissuing or terminating this
28 Permit, or to determine compliance with this Permit. The
29 Permittees shall also furnish to the Department, upon
30 request, copies of records required to be kept by this
31 Permit.
32

33 I.E.9. Inspection and Entry
34

35 The Permittees shall allow the Department, or authorized
36 representatives, upon the presentation of Department
37 credentials, to:
38

39 I.E.9.a. During operating hours and at all other reasonable times,
40 enter and inspect the Facility or any unit or area within
41 the Facility where regulated activities are located or
42 conducted, or where records must be kept under the
43 Conditions of this Permit;
44

45 I.E.9.b. Have access to, and copy, at reasonable times, any records
46 that must be kept under the Conditions of this Permit;
47

48 I.E.9.c. Inspect at reasonable times any portion of the Facility,
49 equipment (including monitoring and control equipment),

POST PERMITS

- 1 practices, or operations regulated or required under this
2 Permit; and,
3
- 4 I.E.9.d. Sample or monitor, at reasonable times, for the purposes of
5 assuring Permit compliance or as otherwise authorized by
6 State law, as amended, for substances or parameters at any
7 location.
8
- 9 I.E.10. Monitoring and Records
- 10
- 11 I.E.10.a. Samples and measurements taken by the Permittees for the
12 purpose of complying with this Permit shall be
13 representative of the monitored activity. Sampling methods
14 shall be in accordance with WAC 173-303-110 or 40 CFR 261,
15 unless otherwise specified in this Permit. Analytical
16 methods shall be as specified in the most recently published
17 test procedure of the documents cited in WAC 173-303-
18 110(3)(a) through (d), unless otherwise specified in this
19 Permit.
20
- 21 I.E.10.b. The Permittees shall retain at the TSD unit(s), or other
22 location approved by the Department, as specified in Parts
23 III or V of this Permit, records of monitoring information
24 required for compliance with this Permit, including
25 ~~calibration and maintenance records and all original strip~~
26 ~~chart recordings for continuous monitoring instrumentation,~~
27 copies of reports and records required by this Permit, and
28 ~~records of data used to complete the application for this~~
29 Permit for a period of at least ten (10) years from the date
30 of the sample, measurement, report, or application, unless
31 otherwise required for certain information by other
32 Conditions of this Permit.
33
- 34 I.E.10.c. The Permittees shall retain at the Facility, or other
35 approved location, records of all monitoring and maintenance
36 records, copies of all reports and records required by this
37 Permit, and records of all data used to complete the
38 application for this Permit which are not associated with a
39 particular TSD unit for a period of at least ten (10) years
40 from the date of certification of completion of postclosure
41 care or corrective action for the Facility, whichever is
42 later.
43
- 44 I.E.10.d. The record retention period may be extended by request of
45 the Department at any time by notification, in writing, to
46 the Permittees and is automatically extended during the
47 course of any unresolved enforcement action regarding this
48 Facility to ten (10) years beyond the conclusion of the
49 enforcement action.

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1 I.E.13. Anticipated Noncompliance
2

3 The Permittees shall give at least 30 days advance notice to
4 the Department of any planned changes in the Facility
5 subject to this Permit or planned activity which might
6 result in noncompliance with Permit requirements.
7

8 If 30 days advance notice is not possible, then the
-9 Permittees shall give notice immediately after the
10 Permittees become aware of the anticipated noncompliance.
11 Such notice does not authorize any noncompliance with or
12 modification of this Permit.
13

14 I.E.14. Transfer of Permits
15

16 This Permit may be transferred to a new owner or operator
17 only if it is modified or revoked and reissued pursuant to
18 WAC 173-303-830(3)(b). Before transferring ownership or
19 operation of the Facility during its operating life, the
20 Permittees shall notify the new owner or operator in writing
21 of the requirements of WAC 173-303-600 and -806 and this
22 Permit.
23

24 I.E.15. Immediate Reporting
25

26 I.E.15.a The Permittees shall verbally report to the Department any
27 release of dangerous waste or hazardous substances, or any
28 noncompliance with the Permit which may endanger human
29 health or the environment. Any such information shall be
30 reported within two (2) hours after the Permittees become
31 aware of the release and/or noncompliance.
32

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

- 38 i. Name, address, and telephone number of the Permittee
39 responsible for the release or noncompliant activity;
- 40
- 41 ii. Name, location, and telephone number of the unit at
42 which the release occurred;
- 43
- 44 iii. Date, time, and type of incident;
- 45
- 46 iv. Name and quantity of material(s) involved;
- 47
- 48 v. The extent of injuries, if any;
- 49

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- vi. An assessment of actual or potential hazard to the environment and human health, where this is applicable;
- vii. Estimated quantity of released material that resulted from the incident; and,
- viii. Actions which have been undertaken to mitigate the occurrence.

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

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

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

I.E.16. **Written Reporting**

Within 15 days after the Permittees become aware of any noncompliance with this Permit which may endanger human health or the environment, the Permittees shall provide to the Department a written report. The written report shall contain a description of the noncompliance and its cause (including the information provided in the verbal notification); the period of noncompliance including exact dates and times; the anticipated time noncompliance is expected to continue if the noncompliance has not been corrected; corrective measures being undertaken to mitigate

1 postclosure plan, or in any report to the Department, the
2 ----- Permittees shall promptly submit such facts or corrected
3 information.
4

5 I.E.21. Reports, Notifications and Submissions
6

7 I.E.21.a. Except as specified in Condition I.E.21.b., all reports,
8 notifications or other submissions which are required by
9 ----- this Permit to be sent or given to the Director or
10 Department should be sent certified mail, overnight express
11 mail or hand delivered to:
12

13 Hanford Project Manager
14 Nuclear and Mixed Waste Management Program
15 Department of Ecology
16 300 Desmond Drive
17 Lacey, Washington 98503
18 Telephone: (206) 407-7108
19

20 ----- This is the current phone number and address and may be
21 subject to change. The Department shall give the Permittees
22 notice of a change in address or telephone number. It is
23 the responsibility of the Permittees to ensure any required
24 reports, notifications or other submissions are transmitted
25 to the addressee listed in this Condition.
26

27 I.E.21.b. All immediate reports and subsequent written reports
28 ----- required by Condition I.E.15.a., I.E.15.b., I.E.15.c., or
29 I.E.15.d., shall be reported to the Department's Kennewick
30 office at:
31

32 Hanford Project
33 Department of Ecology
34 ----- 7601 W. Clearwater, Suite 102
35 Kennewick, Washington 99336
36 Telephone: (509) 736-3000
37

38 This is the current phone number and address and may be
39 subject to change. The Department shall give the Permittees
40 notice of a change in address or telephone number. It is
41 the responsibility of the Permittees to ensure any required
42 reports, notifications or other submissions are transmitted
43 to the addressee listed in this Condition.
44

45 I.E.22. Annual Report
46

47 ----- The Permittees shall comply with the annual reporting
48 requirements of WAC 173-303-390(2).
49

1 I.F. SIGNATORY REQUIREMENT

2
3 All applications, reports, or information submitted to the
4 Department shall be signed and certified in accordance with
5 WAC 173-303-810(12) and (13).
6

7 I.G. CONFIDENTIAL INFORMATION

8
9 The Permittees may claim confidential any information
10 required to be submitted by this Permit, at the time of
11 submission, in accordance with WAC 173-303-810(15).
12

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

14
15 The Permittees shall maintain at the Facility, or some other
16 location approved by the Department, the following documents
17 and amendments, revisions, and modifications to these
18 documents:
19

- 20 1. This Permit and all attachments;
21
22 2. All dangerous waste Part B permit applications,
23 postclosure permit applications and closure plans;
24 and,
25
26 3. The Facility Operating Record.
27

28 These documents shall be maintained for ten (10) years after
29 postclosure care or corrective action for the Facility,
30 whichever is later, has been completed and certified as
31 complete.
32

1
2
3 PART II - GENERAL FACILITY CONDITIONS

4 II.A. FACILITY CONTINGENCY PLAN

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

11
12 II.A.2. The Permittees shall comply with the requirements of WAC
13 173-303-350(4), as provided in the Hanford Facility
14 Contingency Plan (Attachment 4). The Hanford Facility
15 Contingency Plan contains reference to unit-specific
16 contingency plans included in Part III of this Permit.

17
18 II.A.3. The Permittees shall review and amend, if necessary, the
19 Hanford Facility Contingency Plan, as provided in Permit
20 Attachment 4, pursuant to WAC 273-303-350(5) and in
21 accordance with the provisions of WAC 273-303-830(4). The
22 plan shall be amended within a period of time agreed upon by
23 the Department.

24
25 II.A.4. The Permittees shall comply with the requirements of WAC
26 173-303-350(3) and -360(1) concerning the emergency
27 coordinator, except the names will be on file with the
28 Occurrence Notification Center, phone number (509) 376-2900.

29
30 II.B. PREPAREDNESS AND PREVENTION

31
32 II.B.1. At a minimum, the Permittees shall equip the Facility with
33 the equipment specified in the Hanford Facility Contingency
34 Plan (Attachment 4) pursuant to WAC 173-303-340(1). Unit-
35 specific preparedness and prevention provisions are included
36 in Parts III and V of this Permit.

37
38 II.B.2. The Permittees shall test and maintain the equipment
39 specified in the previous condition as necessary to assure
40 proper operation in the event of emergency.

41
42 II.B.3. The Permittees shall maintain access to communications or
43 alarms pursuant to WAC 173-303-340(2), as provided in the
44 Hanford Facility Contingency Plan (Attachment 4) and unit-
45 specific contingency plans.

46
47 II.B.4. The Permittees shall comply with WAC 173-303-340(4) and WAC
48 173-303-355(1) pertaining to arrangements with local
49 authorities.

1
2 II.C. PERSONNEL TRAINING
3

4 II.C.1. The Permittees shall conduct personnel training as required
5 by WAC 173-303-330. The Permittees shall maintain documents
6 and records in accordance with WAC 173-303-330(2) and (3).
7

8 II.C.2. All Hanford Facility personnel shall receive general
9 Facility training within 30 days of hire. This training
10 shall provide personnel with orientation of dangerous waste
11 management activities being conducted on the Hanford
12 Facility. This training shall include:

13
14 II.C.2.a. Description of emergency signals and appropriate personnel
15 response,
16

17 II.C.2.b. Identification of contacts for information regarding
18 dangerous waste management activities,
19

20 II.C.2.c. Introduction to waste minimization concepts,
21

22 II.C.2.d. Identification of contact(s) for emergencies involving
23 dangerous waste, and
24

25 II.C.2.e. Familiarization with the Hanford Facility Contingency Plan.
26

27 II.C.3. Description of training plans for personnel assigned to TSD
28 units subject to this Permit are delineated in the unit-
29 specific chapters in Parts III or V of this Permit.
30

31 II.C.4. The Permittees shall provide the necessary training to non-
32 Facility personnel (i.e., visitors, sub-contractors) as
33 appropriate for the locations such personnel will be at and
34 the activities that will be undertaken. At a minimum, this
35 training shall describe dangerous waste management hazards
36 and the appropriate responses to emergencies involving
37 dangerous waste.
38

39 II.D. WASTE ANALYSIS
40

41 II.D.1. All waste analyses required by this Permit shall be
42 conducted in accordance with a written waste analysis plan
43 (WAP). WAPs for TSD units shall be approved through
44 incorporation of the TSD unit into Part III or V of this
45 Permit. Should waste analysis be required by this Permit at
46 a location on the Facility other than at a TSD unit, a WAP
47 shall be maintained by the Permittees and made available
48 upon request from the Department.
49

1 II.D.2. Until a WAP is implemented in accordance with Condition
2 II.D.1., any unit(s) identified in Parts III or V of this
3 Permit without a unit-specific waste analysis plan approved
4 by the Department shall not treat, store, or dispose of
5 dangerous waste, unless specified otherwise by the
6 Department in writing.
7

8 II.D.3. Each TSD unit WAP shall include:
9

- 10 i. The parameters for which each dangerous waste will be
11 analyzed, and the rationale for selecting these
12 parameters;
13
14 ii. The methods of obtaining or testing for these
15 parameters;
16
17 iii. The methods for obtaining representative samples of
18 wastes for analysis (representative sampling methods
19 are discussed in WAC 173-303-110(2));
20
21 iv. The frequency with which analysis of a waste will be
22 reviewed or repeated to ensure that the analysis is
23 accurate and current;
24
25 v. The waste analyses which generators have agreed to
26 supply;
27
28 vi. Where applicable, the methods for meeting the
29 additional waste analysis requirements for specific
30 waste management methods as specified in WAC 173-303-
31 630 through 173-303-670; and,
32
33 vii. For off-site facilities, the procedures for confirming
34 that each dangerous waste received matches the
35 identity of the waste specified on the accompanying
36 manifest or shipping paper. This includes at least:
37
38 (1) The procedure for identifying each waste
39 movement at the Facility; and,
40
41 (2) The method for obtaining a representative sample
42 of the waste to be identified, if the
43 identification method includes sampling.
44

45 II.D.4 Any WAP required by this Permit not associated with a
46 particular TSD unit shall include the elements of Conditions
47 II.D.3.(i) through II.D.3.(iv).
48

49 II.E. QUALITY ASSURANCE/QUALITY CONTROL
50

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- 1 II.E.1. All sampling and analysis plans (including WAPs) required by
2 this Permit shall include a quality assurance/quality
3 control (QA/QC) plan to document all monitoring procedures
4 so as to ensure that all information, data, and resulting
5 decisions are technically sound, statistically valid, and
6 properly documented. Each QA/QC plan shall include, or
7 contain a reference to another document which will be used
8 and includes, the elements defined in Conditions II.E.2. and
9 II.E.3. The QA/QC plan may be part of a sampling and
10 analysis plan or WAP.
- 11
- 12 II.E.2. Each QA/QC plan shall contain a Data Quality Assurance Plan
13 which includes the following:
- 14
- 15 II.E.2.a. A Data Collection Strategy section including, but not be
16 limited to, the following:
- 17
- 18 i. A description of the intended uses for the data, and
19 the necessary level of precision and accuracy for
20 these intended uses; and,
- 21
- 22 ii. A description of methods and procedures to be used to
23 assess the precision, accuracy, and completeness of
24 the measurement data;
- 25
- 26 II.E.2.b. A Sampling section which shall include:
- 27
- 28 i. Sampling methods including the identification of
29 sampling equipment, a description of purging
30 procedures, and a description of decontamination
31 procedures to be used;
- 32
- 33 ii. Criteria for selecting appropriate sampling locations,
34 depths, etc.;
- 35
- 36 iii. Criteria for providing a technically sufficient number
37 of sampling sites;
- 38
- 39 iv. Methods for measuring all necessary ancillary data;
- 40
- 41 v. Criteria for determining conditions under which
42 sampling should be conducted;
- 43
- 44 vi. Criteria for identifying which parameters are to be
45 measured, and criteria for determining when specific
46 parameters will be measured;
- 47
- 48 vii. Criteria for identifying the type of sampling (e.g.,
49 composites vs. grabs) and number of samples to be
50 collected;

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- 1 viii. Measures to be taken to prevent contamination of the
- 2 sampling equipment and cross contamination between
- 3 sampling points;
- 4
- 5 ix. Methods and documentation of field sampling operations
- 6 and procedure descriptions, including:
- 7
- 8 (1) Documentation of procedures for preparation of
- 9 ~~reagents or supplies which become an integral~~
- 10 ~~part of the sample (e.g., filters and absorbing~~
- 11 ~~reagents);~~
- 12
- 13 (2) Procedure descriptions and forms for recording
- 14 the exact location, sampling conditions,
- 15 sampling equipment, and visual condition of
- 16 samples;
- 17
- 18 (3) Documentation of specific sample preservation
- 19 method;
- 20
- 21 (4) Calibration of field devices;
- 22
- 23 (5) Collection of replicate samples;
- 24
- 25 (6) Submission of field-biased blanks, where
- 26 appropriate;
- 27
- 28 (7) Potential interferences present at the facility;
- 29
- 30 (8) Field equipment listing and sample containers;
- 31
- 32 (9) Sampling order; and,
- 33
- 34 (10) Descriptions of decontamination procedures.
- 35
- 36 x. Selection of appropriate sample containers;
- 37
- 38 xi. Sample preservation methods; and,
- 39
- 40 ~~xii. Chain-of-custody procedure descriptions, including:~~
- 41
- 42 ~~(1) Standardized field tracking reporting forms to~~
- 43 ~~establish sample custody in the field prior to~~
- 44 ~~and during shipment; and,~~
- 45
- 46 ~~(2) Pre-prepared sample labels containing all~~
- 47 ~~information necessary for effective sample~~
- 48 ~~tracking.~~
- 49

II.E.2.c.

A Field Measurements section which shall address:

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- i. Selecting appropriate field measurement locations, depths, etc.;
- ii. Providing a technically sufficient number of field measurements;
- iii. Measuring all necessary ancillary data;
- iv. Determining conditions under which field measurements should be conducted;
- v. Determining which media are to be addressed by appropriate field measurements (e.g., ground water, air, soil, sediment, etc.);
- vi. Determining which parameters are to be measured and where;
- vii. Selecting the frequency of field measurement and length of field measurements period; and,
- viii. Documenting field measurement operations and procedures, including:
 - (1) Descriptions of procedures and forms for recording raw data and the specific location, time, and sampling conditions;
 - (2) Calibration of field devices;
 - (3) Collection of replicate measurements;
 - (4) Submission of field-biased blanks, where appropriate;
 - (5) Potential interferences present at the facility;
 - (6) Field equipment listing; and,
 - (7) Descriptions of decontamination procedures.

II.E.2.d. 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,

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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 dispersment 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;

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1 II.E.3.c.

2 Graphical displays (e.g., bar graphs, line graphs, area or
3 plan maps, isopleth plots, cross-sectional plots or
4 transects, three dimensional graphs, etc.), as appropriate,
5 presenting the following:

- 6 i. Displays of sampling location and sampling grid;
7
8 ii. Identification of boundaries of sampling area and
9 areas where more data are required;
10
11 iii. Displays of concentrations of contamination at each
12 sampling location;
13
14 iv. Displays of geographical extent of contamination;
15
16 v. Areal and vertical displays of contamination
17 concentrations, concentration averages, and
18 concentration maxima, including isoconcentration maps
19 for contaminants found in environmental media at the
20 Facility;
21
22 vi. Illustrations of changes in concentration in relation
23 to distance from the source, time, depth, or other
24 parameters;
25
26 vii. Identification of features affecting intramedia
27 transport and identification of potential receptors;
28
29 viii. For each round of ground water level measurements,
30 maps showing the distribution of head measurements in
31 each aquifer at a scale of one inch equals 50 feet and
32 a contour interval of one-half foot; and,
33
34 ix. For each well, provide a hydrograph that shows the
35 distribution of water level measurements taken during
36 the time interval of the investigation.
37

38 II.E.4.

39 The Permittees shall provide notification of availability to
40 the Department of all data obtained within thirty (30) days
41 of receipt by Permittee, or after completion of quality
42 assurance/quality control activities, if applicable. This
43 notification requirement shall also apply to any other
44 information obtained from activities conducted, or data
45 obtained, that may influence activities pursuant to this
46 Permit.

47 II.E.5.

48 The level of QA/QC for the collection, preservation,
49 transportation, and analysis of each sample which is
50 required for implementation of this Permit may be based upon
Department approved data quality objectives for the sample.

1 These data quality objectives shall be approved by the
2 Department, in writing, or through incorporation of unit
3 plans and permits into Parts III or V of this Permit.
4

5 II.F. FACILITY WIDE GROUND WATER MONITORING
6

7 The Permittees shall comply with the ground water monitoring
8 requirements of WAC 173-303-645 and FFACO Milestone M-24.

9 ~~The Permittees shall consult with the Department regarding~~
10 ~~implementation of these requirements. Where agreed to by~~
11 ~~the Department, integration of ground water and vadose zone~~
12 ~~monitoring conducted for reasons other than this Permit may~~
13 ~~be accommodated by this Permit. Results from other~~
14 ~~investigation activities shall be used whenever possible to~~
15 ~~supplement and/or replace sampling required by this Permit.~~

16
17 II.F.1. Purgewater Management

18
19 Purgewater shall be handled in accordance with the
20 requirements set forth in Attachment 5, *Purgewater*
21 *Management Plan*.
22

23 II.F.2. Ground Water and Vadose Zone Well Remediation and
24 Abandonment
25

26 II.F.2.a. The Permittees shall evaluate wells according to Sections
27 4.1 through 4.8.3 of the *Hanford Well Remediation and*
28 *Decommissioning Plan* (Attachment 6) to determine if a well
29 has a potential use. The Permittees shall abandon or
30 remediate unusable wells according to the requirements of
31 Chapter 18.104 RCW, Chapter 173-160 WAC, and Chapter 173-162
32 WAC to ensure the integrity of ground water and vadose zone
33 monitoring wells subject to this Permit is maintained.
34

35 II.F.2.b. The Permittees shall inspect the integrity of all ground
36 water monitoring wells or vadose zone monitoring wells
37 identified in this Permit at least once every five (5)
38 years. These inspections must be recorded in the operating
39 record. The Permittees shall prepare a plan and schedule
40 within 120 days after the effective date of this Permit
41 specifying the schedule and technical standards for this
42 program. The Permittees shall provide a copy of this plan
43 upon the request of the Department.
44

45 II.F.2.c. The Department shall receive notice in writing at least 72
46 hours before the Permittees remediate or abandon any well
47 subject to this Permit.
48

1 ~~II.F.2.d.~~ ~~The Permittees shall achieve full compliance with Chapter~~
2 173-160 WAC and Chapter 18.104 RCW within eight (8) years

3 from the initial issuance of this Permit for any well
4 required by this Permit.
5

6 II.F.3. Ground Water and Vadose Zone Well Construction
7

8 II.F.3.a. All ground water and vadose zone wells constructed pursuant
9 to this Permit shall be constructed in compliance with
10 Chapter 173-160 WAC.
11

12 II.F.3.b. All existing ground water and vadose zone wells which the
13 Permittees wish to utilize for the ground water monitoring
14 program required by this Permit, but were constructed prior
15 to the effective date of this Permit, shall be evaluated
16 pursuant to the *Policy on Remediation of Existing Wells and*
17 *Acceptance Criteria for RCRA and CERCLA, June 1990*
18 (Attachment 7). Upon completion of this evaluation, only
19 those wells meeting the requirements set forth in this
20 policy shall be included in the ground water monitoring
21 program(s) required by this Permit.
22

23 II.G. SITING CRITERIA
24

25 The Permittees shall comply with the applicable notice of
26 intent and siting criteria of WAC 173-303-281 and WAC 173-
27 303-282, respectively.
28

29 II.H. RECORDKEEPING AND REPORTING
30

31 ~~In addition to the recordkeeping and reporting requirements~~
32 ~~specified elsewhere in this Permit, the Permittees shall~~
33 ~~comply with the following:~~
34

35 II.H.1. Cost Estimate for Facility Closure
36

37 The Permittees shall submit an annual report updating
38 projections of anticipated costs for closure and postclosure
39 of TSD units incorporated into Parts III or V of this
40 Permit. This report will be submitted annually, by October
41 31, to the Department and reflect cost updates as of
42 September 30, of the past Fiscal Year.
43

44 II.H.2. Cost Estimate for Postclosure Monitoring and Maintenance
45

46 The Permittees shall submit an annual report updating
47 projects of anticipated costs for postclosure monitoring and
48 maintenance for TSD units incorporated into Parts III or V
49 of this Permit. This report will be submitted annually, by

1 October 31, to the Department and reflect cost updates as of
2 September 30, of the past Fiscal Year.
3

4 II.I. FACILITY OPERATING RECORD

5
6 II.I.1. The Permittees shall maintain a written Facility Operating
7 Record until ten (10) years after postclosure or corrective
8 action is complete and certified for the Facility, whichever
9 is later. Except as specifically provided otherwise in this
10 Permit, the Permittees shall also record all information
11 referenced in this Permit in the Facility Operating Record
12 within seven (7) working days after the information becomes
13 available. A unit-specific operating record shall be
14 maintained for each TSD unit at a location identified in
15 Parts III and V of this Permit. Each unit-specific
16 operating record shall be included by reference in the
17 Facility Operating Record. Information required in each
18 unit-specific operating record is identified on a unit-by-
19 unit basis in Part III or V of this Permit. The Facility
20 Operating Record shall include, but not be limited to, the
21 following information:
22

23 II.I.1.a. A current map showing the location of all dangerous waste
24 points of generation and TSD units within the Facility;
25

26 II.I.1.b. Records and results of each waste analysis performed in
27 accordance with this Permit;
28

29 II.I.1.c. Assessment reports and details of all incidents that require
30 the preparation of an Unusual Occurrence Report, Off Normal
31 Occurrence Report at a TSD unit, or the implementation of
32 the contingency plan;
33

34 II.I.1.d. Off-site waste manifests and any required unmanifested
35 shipment reports or exception reports not specifically
36 identified in a unit-specific operating record;
37

38 II.I.1.e. Hanford Facility Contingency Plan;
39

40 II.I.1.f. Personnel training records;
41

42 II.I.1.g. Preparedness and prevention arrangements made pursuant to
43 WAC 173-303-340;
44

45 II.I.1.h. Record of all spills and releases not specifically reported
46 in a unit-specific operating record;
47

48 II.I.1.i. All closure and postclosure cost estimate documents prepared
49 pursuant to this Permit;
50

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1 II.I.2. The Permittees shall, by March 31 of each year, submit to
2 the Department a certification signed in accordance with WAC
3 173-303-810(12) and (13), that the Permittees have a program
4 in place to reduce the volume and toxicity of dangerous
5 waste that is generated to the degree determined by the
6 Permittees to be economically practicable; and have
7 determined that the proposed method of treatment, storage,
8 or disposal is the most practicable method currently
9 available to the Permittees which minimizes the present and
10 future threat to human health and the environment. The
11 Permittees shall describe, in a report attached to the
12 certification, the efforts undertaken during the past year
13 to reduce the volume and toxicity of waste generated. The
14 report shall also describe the changes in volume and
15 toxicity of waste actually achieved during the past year in
16 comparison to previous years under this Permit.
17

18 II.J. FACILITY CLOSURE PLAN

19
20 II.J.1. Final closure of the Hanford Facility will be achieved when
21 closure activities for all TSD units have been completed, as
22 specified in Parts III, IV, or V of this Permit. Completion
23 of these activities shall be documented using either
24 certifications of closure, in accordance with WAC 173-303-
25 610(6), or certifications of completion of postclosure care,
26 in accordance with WAC 173-303-610(11).
27

28 II.J.2. The Permittees shall close all TSD units as specified in
29 Parts III or V of this Permit.
30

31 II.J.3. The Permittees shall submit a written notification of or
32 request for a permit modification in accordance with the
33 provisions of WAC 173-303-610(3)(b) whenever there is a
34 change in operating plans, facility design, or the approved
35 closure plan, including changes to incorporate the addition
36 of TSD units to the Permit. The written notification or
37 request must include a copy of the amended closure plan for
38 review or approval by the Department.
39

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

41
42 II.J.4.a Minimizes the need for further maintenance;
43

44 II.J.4.b. Controls, minimizes or eliminates to the extent necessary to
45 protect human health and the environment, postclosure escape
46 of dangerous waste, dangerous constituents, leachate,
47 contaminated run-off, or dangerous waste decomposition
48 products to the ground, surface water, ground water, or the
49 atmosphere; and,
50

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

5 II.J.4.d. Meets the requirements of WAC 173-303-610(2)(b).
6

7 II.K. SOIL/GROUNDWATER CLOSURE PERFORMANCE STANDARDS
8

9 II.K.1. For purposes of Condition II.K., the term "clean closure"
10 shall mean the status of a TSD unit at the Facility which
11 has been closed to the cleanup levels prescribed by WAC 173-
12 303-610(2)(b) provided certification of such closure has
13 been accepted by Ecology. A TSD unit which achieves clean
14 closure shall be available to unrestricted use consistent
15 with the future site use of that TSD unit/area.
16

17 II.K.2. The Permittees may close a TSD unit to background levels as
18 defined in Department approved Hanford Site Background
19 Documents if background concentrations exceed the levels
20 prescribed by Condition II.K.1. Closure to these levels,
21 provided the Permittees comply with all other closure
22 requirements for a TSD unit as identified in Parts III or V
23 of this Permit, shall be deemed as "clean closure."
24

25 II.K.3. Except for those TSD units identified in Conditions II.K.1.,
26 II.K.2., or II.K.4., the Permittees may close a TSD unit to
27 a cleanup level specified under Method C of Chapter 173-340
28 WAC. Closure of a TSD unit to these levels, provided the
29 Permittees comply with all other closure requirements for
30 the TSD unit as specified in Parts III or V of the Permit,
31 and provided the Permittees comply with Conditions II.K.3.a.
32 and II.K.3.b., shall be deemed as a "modified closure."
33

34 II.K.3.a. For "modified closures," the Permittees shall provide
35 institutional controls in accordance with WAC 173-340-440
36 which restricts access to the TSD unit for a minimum of five
37 (5) years following completion of closure. The specific
38 details and duration of institutional controls shall be
39 specified in Parts III or V of this Permit for a particular
40 TSD unit.
41

42 II.K.3.b. For "modified closures", the Permittees shall provide
43 periodic assessments of the TSD unit to determine the
44 effectiveness of the closure. The specific details of the
45 periodic assessments shall be specified in Parts III or V of
46 this Permit. The periodic assessments shall include, as a
47 minimum, a compliance monitoring plan in accordance with WAC
48 173-340-410 that will address the assessment requirements on
49 a unit by unit basis. At least one (1) assessment activity
50 shall take place after a period of five (5) years from the

1 completion of closure, which will demonstrate whether the
2 soils and groundwater have been maintained at or below the
3 allowed concentrations as specified in Parts III of V of
4 this Permit. Should the required assessment activities
5 identify contamination above the allowable limits as
6 specified in Parts III or V, the TSD unit must be further
7 remediated or the requirements of II.K.4. must be followed.
8 Should the required assessment activities demonstrate that
9 contamination has diminished or remained the same, the
10 Permittees may request that the Department reduce or
11 eliminate the assessment activities and/or institutional
12 controls.
13

14 II.K.4. For any TSD unit which Conditions II.K.1., II.K.2., or
15 II.K.3., are not chosen as the closure option, closing the
16 TSD unit as a landfill may be selected, provided this option
17 is consistent with the future site use of the TSD unit/area.
18 Closure and postclosure of the TSD unit as a landfill must
19 follow the procedures and requirements specified in WAC 173-
20 303-610.
21

22 II.K.5. The cleanup levels selected shall be specified in Parts III
23 or V of this Permit and shall be based upon the future site
24 use for that TSD unit/area. Definitions contained within
25 Chapter 173-340 WAC shall apply to Condition II.K. where
26 definitions are not otherwise provided by this Permit, the
27 FFACO, or Chapter 173-303 WAC.
28

29 II.K.6. Deviations from a TSD unit closure plan required by
30 unforeseen circumstances encountered during closure
31 activities which do not impact the overall closure strategy
32 but provide equivalent results shall be documented in the
33 TSD unit operating record and made available to the
34 Department upon request or during the course of an
35 inspection.
36

37 II.K.7. Where agreed to by the Department, integration of other
38 statutorily or regulatory mandated cleanups may be
39 accommodated by this Permit. Results from other cleanup
40 investigation activities shall be used whenever possible to
41 supplement and/or replace TSD unit closure investigation
42 activities. All, or appropriate parts of, multipurpose
43 cleanup and closure documents can be incorporated into this
44 Permit through the Permit modification process. Cleanup and
45 closures conducted under any statutory authority with
46 oversight by either the Department or the Agency which meets
47 the equivalent of the technical requirements of Conditions
48 II.K.1. through II.K.4. may be considered as satisfying the
49 requirements of this Permit.
50

1 II.L. DESIGN AND OPERATION OF THE FACILITY

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

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

10
11 II.L.2. Design Changes, Nonconformance, and As-Built Drawings

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

20
21 II.L.2.b. During construction of a project subject to this Permit,
22 changes to the approved designs, plans and specifications
23 shall be formally documented with an Engineer Change Notice
24 (ECN). All ECNs shall be maintained in the TSD unit
25 operating record and shall be made available to the
26 Department upon request or during the course of an
27 inspection. The Permittees shall provide copies of ECNs
28 affecting any critical system to the Department within five
29 (5) working days of initiating the ECN. Identification of
30 critical systems shall be included by the Permittees in each
31 unit-specific dangerous waste permit application, closure
32 plan or Permit modification, as appropriate. The Department
33 will review an ECN modifying a critical system and inform
34 the Permittees within two (2) working days in writing
35 whether the proposed ECN, when issued, will require a Class
36 1,2 or 3 permit modification. If after two (2) working days
37 the Department has not responded, it will be deemed as
38 acceptance of the ECN by the Department.

39
40 II.L.2.c. During construction of a project subject to this Permit, any
41 work completed which does not meet the standards of the
42 approved design, plans and specifications shall be formally
43 documented with a nonconformance report (NCR). All NCRs
44 shall be maintained in the TSD unit operating record and
45 shall be made available to the Department upon request or
46 during the course of an inspection. The Permittees shall
47 provide copies of NCRs affecting any critical system to the
48 Department within five (5) working days after identification
49 of the nonconformance. The Department will review an NCR

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1 affecting a critical system and inform the Permittees within
2 two (2) working days in writing whether a permit
3 modification is required of any nonconformance and whether
4 prior approval is required from the Department before work
5 proceeds which affects the nonconforming item. If the
6 Department does not respond within two (2) working days, it
7 will be deemed as acceptance and no permit modification is
8 required.

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

20 II.L.3. Facility Compliance
21
22 The Permittees in receiving, storing, transferring,
23 handling, treating, processing, and disposing of dangerous
24 waste shall design, operate and/or maintain the Facility in
25 compliance with all applicable Federal, State and local laws
26 and regulations, including but not limited to the Washington
27 State Dangerous Waste Regulations, Chapter 173-303 WAC.

29 II.M. SECURITY
30
31 The Permittees shall comply with the security provisions of
32 WAC 173-303-310. The Permittees may comply with the
33 requirements of WAC 173-303-310(2) on a unit-by-unit basis.

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

37 II.N.1. Receipt of Off-Site Waste
38
39 Unless specified in Part III of this Permit, dangerous waste
40 from a foreign source and dangerous waste from off-site
41 generators shall not be allowed to be received at units
42 subject to this Permit. The Permittees shall comply with
43 Conditions II.N.2. and II.N.3. for any dangerous wastes
44 which are received from either a foreign source or from off-
45 site generators.

47 II.N.2. Waste From a Foreign Source

48

1 The Permittees shall notify the Department in writing at
2 least four (4) weeks in advance of the date the Permittees
3 expect to receive dangerous waste from a foreign source, as
4 required by WAC 173-303-290. Notice of subsequent shipments
5 of the same dangerous waste from the same foreign source in
6 the same calendar year is not required.

7
8 II.N.3. Notice to Generator

9
10 For waste received from off-site sources (except where the
11 owner/operator is also the generator), the Permittees shall
12 inform the generator in writing that they have the
13 appropriate permits for, and will accept, the waste the
14 generator is shipping, as required by WAC 173-303-290(3).
15 The Permittees shall keep a copy of this written notice as
16 part of the unit-specific operating record.

17
18 II.O. GENERAL INSPECTION REQUIREMENTS

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

28
29 II.O.1.a. The 100, 200 East, 200 West, 300, 400, and 1100 areas shall
30 be inspected annually.

31
32 II.O.1.b. The Permittees shall inspect the banks of the Columbia
33 River, contained within the Facility boundary, two (2) times
34 yearly. One (1) inspection shall take place at the low
35 water mark of the year and one (1) inspection shall take
36 place at the high water mark of the year. These inspections
37 shall be performed from the river by boat, and the
38 inspectors shall follow the criteria in Condition II.O.1.c.

39
40 II.O.1.c. The Permittees shall visually inspect the areas identified
41 in Conditions II.O.1.a. and II.O.1.b. for malfunctions,
42 deterioration, operator errors, and discharges which may
43 cause or lead to the release of dangerous waste constituents
44 to the environment, or that threaten human health. Specific
45 items to be noted are as follows:

- 46
47 i. Remains of waste containers, labels or other waste
48 management equipment;
49

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- 1 ii. Solid waste disposal sites not previously identified
2 for remedial action;
3
4 iii. Uncontrolled waste containers (e.g., orphan drums);
5
6 iv. Temporary or permanent activities that could generate
7 an uncontrolled waste form; and,
8
9 v. Unpermitted waste discharges.
- 10
11 II.O.1.d. The Permittees shall notify the Department at least seven
12 (7) days prior to conducting these inspections in order to
13 allow representatives of the Department to be present during
14 the inspections.
15
16 II.O.2. The Permittees shall comply with WAC 173-303-320(3)
17 regarding remedial actions.
18
19 II.O.3. The inspection of high radiation areas will be addressed on
20 a case-by-case basis in either Part III of this Permit or
21 prior to the inspections required in Condition II.O.1.
22
- 23 II.P. MANIFEST SYSTEM
24
25 II.P.1. The Permittees shall comply with the manifest requirements
26 of WAC 173-303-370 for waste received from off-site and WAC
27 173-303-180 for waste shipped off-site.
28
29 II.P.2. Transportation of dangerous wastes along State Highways 240,
30 24, and 243, and Route 4 South (Stevens Drive) south of the
31 Wye Barricade, if such routes are not closed to general
32 public access at the time of shipment, shall be manifested
33 pursuant to Condition II.P.1.
34
- 35 II.Q. ON-SITE TRANSPORTATION
36
37 II.Q.1. Unless authorized otherwise by unit-specific Conditions in
38 Parts III or V, the Permittees shall maintain documentation
39 of all dangerous waste transported to or from any TSD unit
40 subject to this Permit. This documentation shall be
41 maintained in the receiving TSD unit's operating record from
42 the time the waste is received. This documentation must
43 accompany any on-site dangerous waste which is transported
44 through or within the 600 Area, unless the roadway is closed
45 to general public access at the time of shipment. Waste
46 transported by rail or by pipeline is exempt from this
47 Condition. This documentation shall include the following
48 information, unless other unit-specified provisions are
49 designated in Part III or V.
50

SECRET

- 1 II.Q.1.a. Generator's name, location and telephone number;
2
3 II.Q.1.b. Receiving TSD unit's name, location, and telephone number;
4
5 II.Q.1.c. Description of waste;
6
7 II.Q.1.d. Number and type of containers;
8
9 II.Q.1.e. Total quantity of waste;
10
11 II.Q.1.f. Unit volume/weight;
12
13 II.Q.1.g. Dangerous waste number(s); and,
14
15 II.Q.1.h. Any special handling instructions.
16
17 II.Q.2. All non-containerized solid, dangerous waste transported to
18 or from TSD units subject to this Permit shall be covered
19 such that no material can escape during transport.
20

21 II.R. EQUIVALENT MATERIALS

22
23 II.R.1. The Permittees may substitute an equivalent or superior
24 product for any equipment or materials specified in this
25 Permit. Use of equivalent or superior products shall not be
26 considered a modification of this Permit. A substitution
27 will not be considered equivalent unless it is at least as
28 effective as the original equipment or materials in
29 protecting human health and the environment.
30

31 II.R.2. The Permittees must place in the operating record (prior to
32 institution of such substitution) the substitution,
33 accompanied by a narrative explanation, and the date the
34 substitution became effective. The Department may judge the
35 soundness of the substitution and take appropriate action.
36

37 II.R.3. If the Department determines that a substitution was not
38 equivalent to the original, it may take enforcement action
39 against the Permittees. Such action may include, at a
40 minimum, requiring the Permittees to cease the use of the
41 substitute equipment or material.
42

43 II.S. LAND DISPOSAL RESTRICTIONS

44
45 Unless specifically identified otherwise in the FFACO, the
46 Permittees shall comply with all Land Disposal Restriction
47 requirements as set forth in WAC 173-303-140.
48

49 II.T. ACCESS AND INFORMATION
50

99-0000000000

1 To the extent that work required by this Permit must be done
2 on property not owned or controlled by the Permittees, the
3 Permittees must utilize their best efforts to obtain access
4 and information at these locations.
5

6 II.U. MAPPING OF UNDERGROUND PIPING

7
8 II.U.1. Within 12 months of the effective date of the Permit, the
9 Permittee shall submit a report to the Department which
10 describes the procedures to be used to compile the
11 information required by Conditions II.U.2., II.U.3., and
12 II.U.4. The report shall describe the methods which will be
13 used to retrieve the piping information, the estimated
14 accuracy of the data to be provided, quality
15 assurance/quality control techniques to be employed
16 including field verification activities (i.e., surveying,
17 ground penetrating radar, etc.) to support information
18 gathered from existing drawings, and conceptual examples of
19 the product which will be submitted.
20

21 II.U.2. Within 24 months of the effective date of this Permit, the
22 Permittees shall make an initial submittal to the Department
23 of maps showing the location of dangerous waste underground
24 pipelines (including active, inactive, and abandoned
25 pipelines which contain or contained dangerous waste subject
26 to the provisions of Chapter 173-303 WAC) on the Facility
27 which are located outside of the fences enclosing the 200
28 East, 200 West, 300, 400, 100N, and 100K Areas. These maps
29 shall identify the origin, destination, size, depth and type
30 (i.e., reinforced concrete, stainless steel, cast iron,
31 etc.) of each pipe and the location of their diversion
32 boxes, valve pits, seal pots, catch tanks, receiver tanks,
33 and pumps, utilizing Washington State Plane Coordinates, NAD
34 83(91), meters. If the type of pipe material is not
35 documented on existing drawings, the most probable material
36 type shall be provided. These maps shall be accompanied by
37 a description of the quality assurance and quality control
38 measures used to compile the maps.
39

40 The age of all pipes required to be identified pursuant to
41 this Condition shall be documented in an attachment to the
42 submittal. If the age cannot be documented, an estimate of
43 the age of the pipe shall be provided based upon best
44 engineering judgement.
45

46 These maps, and any attachments, shall be maintained in the
47 Facility Operating Record and updated annually after the
48 initial submittal with new or revised information.
49

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1 II.U.3. Within 36 months of the effective date of this Permit, the
2 Permittees shall make an initial submittal to the Department
3 of piping schematics for dangerous waste underground
4 pipelines (including active, inactive, and abandoned
5 pipelines which contain or contained dangerous waste subject
6 to the provisions of Chapter 173-303 WAC) within the 200
7 East, 200 West, 300, 400, 100N, and 100K Areas. The piping
8 schematics shall identify the origin, destination, and
9 direction of flow for each pipe, as well as whether the pipe
10 is active, inactive, or abandoned. These diagrams need not
11 include the pipes within a fenced tank farm or within a
12 building/structure. These maps shall be accompanied by a
13 description of the quality assurance and quality control
14 measures used to compile the maps.

15
16 These diagrams, and any attachments, shall be maintained in
17 the Facility Operating Record and updated annually after the
18 initial submittal with new or revised information.

19
20 II.U.4. Within 36 months of the effective date of this Permit, the
21 Permittees shall make an initial submittal to the Department
22 of maps showing the location of dangerous waste underground
23 pipelines (including active, inactive, and abandoned
24 pipelines which contain or contained dangerous waste subject
25 to the provisions of Chapter 173-303 WAC) within the 200
26 East, 200 West, 300, 400, 100N, and 100K Areas. These maps
27 will incorporate information available six months prior to
28 the scheduled submittal date. Thereafter, the maps will be
29 updated on an annual basis to incorporate additional
30 information, as such information becomes available in
31 accordance with the FFACO milestone schedule. A schedule
32 for the provision of map input shall be included in the
33 report specified in Condition II.U.1.

34
35 The maps shall identify the origin, destination, size, depth
36 and type (i.e., reinforced concrete, stainless steel, cast
37 iron, etc.) of each pipe and the location of their diversion
38 boxes, valve pits, seal pots, catch tanks, receiver tanks,
39 and pumps, and utilize Washington State Plan Coordinates,
40 NAD 83(91), meters. If the type of pipe material is not
41 documented on existing drawings, the most probable material
42 type shall be provided. These maps need not include the
43 pipes within a fenced tank farm or within a
44 building/structure. These maps shall be accompanied by a
45 description of the quality assurance/quality control used to
46 compile the maps.

47
48 The age of all pipes required to be identified pursuant to
49 this Condition shall be documented in an attachment to the
50 submittal. If the age cannot be documented, an estimate of

1 the age of the pipe shall be provided based upon best
2 engineering judgement.

3
4 These diagrams, and any attachments, shall be maintained in
5 the Facility Wide Operating Record and updated annually
6 after the initial submittal with new or revised information.

7
8 II.V. MARKING OF UNDERGROUND PIPING

9
10 Within 24 months of the effective date of this Permit, the
11 Permittees shall mark the underground pipelines identified
12 in Condition II.U.2. These pipelines shall be marked at the
13 point they pass beneath a fence enclosing the 200 East, 200
14 West, 300, 400, 100N or 100K Areas, at their origin and
15 destination, at any point they cross an improved road and
16 every 100 meters along the pipeline corridor where
17 practicable. The markers shall be labeled with a sign that
18 reads "Buried Dangerous Waste Pipe" and shall be visible
19 from a distance of 15 meters.

20
21 II.W. OTHER PERMITS AND/OR APPROVALS

22
23 II.W.1. To the extent that work required by this Permit must be done
24 under a permit and/or approval pursuant to other regulatory
25 authority, the Permittees shall use their best efforts to
26 obtain such permits. For the purposes of this Condition,
27 "best efforts" means submittal of a complete application for
28 the permit and/or approval in accordance with a schedule
29 approved by the Department. "Best efforts" also means
30 submittal of the complete application for the Permit and/or
31 approval with lead time for issuance of such permit and/or
32 approval as is typical for that action. Copies of all
33 documents relating to actions taken, pursuant to this
34 Condition, shall be kept in the unit-specific operating
35 record.

36
37 II.W.2. All other permits incorporated into this Permit are
38 severable and enforceable through the permitting authority
39 under which they are issued.

40
41 II.W.3. All air emissions from TSD units subject to this Permit
42 shall comply with all applicable State and Federal
43 regulations pertaining to air emission controls, including
44 but not limited to, Chapter 173-400 WAC, General Regulations
45 for Air Pollution Sources; Chapter 173-460 WAC, Controls for
46 New Sources of Toxic Air Pollutants; and Chapter 173-480
47 WAC, Ambient Air Quality Standards and Emission Limits for
48 Radionuclides.

49
50 II.X. SCHEDULE EXTENSIONS

1 II.X.1

2 To the extent that activities required by this Permit are
3 not completed in accordance with the schedules of this
4 Permit, and the Permittees can demonstrate to the
5 Department's satisfaction that the Permittees used best
6 efforts to accomplish the activity within the required
7 schedule, the Department may grant the Permittees an
8 extension to the schedule.

9 For purposes of this Condition "best efforts" means
10 performance of all activities necessary to award contracts
11 to outside contractors at the earliest opportunity after the
12 information necessary to award the contract is available to
13 the Permittees. "Best efforts" also means adequate
14 planning, adequate funding, adequate operator staffing, and
15 adequate laboratory and process controls when necessary to
16 meet the schedules of this Permit.

17
18 The Permittees shall notify the Department in writing as
19 soon as possible of any deviations or expected deviations
20 from the schedules of this Permit. The Permittees shall
21 include with the notification all information supporting
22 their claim that they have used best efforts to meet the
23 required schedules. If the Department determines that the
24 Permittees have made best efforts to meet the schedules of
25 this Permit, the Department shall notify the Permittees in
26 writing by certified mail that the Permittees have been
27 granted an extension. Such an extension shall not require a
28 permit modification under Condition I.C.3. Should the
29 Department determine that the Permittees have not made best
30 efforts to meet the schedules of this Permit, the Department
31 may take such action as deemed necessary.

32
33 Copies of all correspondence regarding schedule extensions
34 shall be kept in the Facility Operating Record.

35
36 II.X.2

37 Any schedule extension granted through the approved change
38 control process identified in the FFACO shall be
39 incorporated into this Permit. Such a revision shall not
40 require a permit modification under Condition I.C.3.
41

2025 RELEASE UNDER E.O. 14176

PART III - UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS

CHAPTER 1

616 Nonradioactive Dangerous Waste Storage Facility

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

III.1.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION

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

Part A Application

- Section 2.1.3 The 616 Non-radioactive Dangerous Waste Storage Facility Description
- Section 2.2 Topographic Maps
- Section 2.5 Performance Standards
- Section 2.7 Spills and Discharges Into the Environment
- Section 2.8 Manifest System
- Chapter 3.0 Waste Characteristics
- Chapter 4.0 Process Information
- Chapter 6.0 Procedures to Prevent Hazards
- Chapter 7.0 Contingency Plan
- Chapter 8.0 Personnel Training
- Chapter 10.0 Waste Minimization Plan
- Chapter 11.0 Closure and Post-Closure Requirements
- Chapter 12.0 Reporting and Recordkeeping

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- 1 Section 13.7 Toxic Substance Control Act of 1976
2
3 Section 13.8 Other Requirements
4
5 Appendix 2A Drawing H-13-000014, 616 NRWSF
6 Topographic Map
7
8 Appendix 4A Construction Specification
9
10 Appendix 4B Drawing H-6-1553, Architectural Plan,
11 Elevations and Sections, Rev. 3
12
13 Appendix 4B Drawing H-6-1556, Structural Plan and
14 Sections, Rev. 2
15
16 Appendix 7A Building Emergency Plan - 616 Building
17
18 Appendix 11B Description of Procedures
19
20 III.1.B. AMENDMENTS TO THE APPROVED PERMIT APPLICATION
21
22 III.1.B.a. Page 2-7, line 25. The words "can be" are changed to "shall
23 be."
24
25 III.1.B.b. Page 2-16, line 45. An additional bullet is added to the
26 text which reads as follows: "In addition, all reporting
27 requirements identified in Conditions I.E.15. through
28 I.E.22. of this Permit shall be complied with."
29
30 III.1.B.c. Page 2-17, line 24. The word "voluntarily" is deleted from
31 the text.
32
33 III.1.B.d. Page 2-17, line 26. The words "information on" is changed
34 to "requirements for."
35
36 III.1.B.e. Page 3-6, line 44. The term "Table 3-3" is deleted and
37 replaced with "Sections 3.2.2 through 3.2.4 and 3.2.6".
38
39 III.1.B.f. Page 3-7, lines 8-11. These lines are deleted and replaced
40 with the following:
41
42 "Prior to acceptance of wastes at 616 NRWSF, confirmation
43 of designation may be required by Solid Waste Engineering
44 (Section 3.2.4). The wastes which shall undergo
45 confirmation of designation are identified in Condition
46 ~~III.1.B.n. of the Facility Wide Permit~~ and may be divided
47 into two general groups; those that easily yield a
48 representative sample (Category I), and those that do not
49 (Category II). The steps for each type are outlined below

1 along with a description of which waste fall into each
2 category:
3

4 I. If a representative sample cannot be obtained (for
5 example, discarded machinery or shop rags) or if the
6 waste is a labpack or discarded chemical product, the
7 following steps will be performed:
8

9 a. Visually verify the waste. Labpacks and
10 combination packages must be removed from the
11 outer container. If the waste meets the
12 parameters specified in its documentation,
13 confirmation of designation is complete. If it
14 does not meet these parameters, proceed to the
15 next step. This is considered a significant
16 error under Section 3.2.4.
17

18 b. If possible and necessary, segregate/repackage
19 the waste for shipment in a compliant manner.
20 If the waste is not packaged in compliance with
21 shipping requirements, proceed to the next step.
22

23 c. The waste must be re-designated using methods
24 identified in WAC 173-303-110.
25

26 II. All wastes that do not fit in Category I will undergo
27 the following steps:
28

29 a. A representative sample will be taken of the
30 waste (if more than one phase is present, each
31 phase must be tested individually) and the
32 following field tests will be performed:
33

34 • Reactivity - HAZCAT™ oxidizer, cyanide,
35 and sulfide tests. These tests will not
36 be performed on materials known to be
37 organic peroxides, ethers, and/or water
38 reactive compounds.
39

40 • Flashpoint/explosivity - by HAZCAT™
41 flammability procedure B, explosive
42 atmosphere meter,¹ or a closed cup
43 flashpoint measurement instrument.¹
44

45 • pH - by pH meter¹ or pH paper (SW-846
46 9041).² This test will not be performed
47 on non-aqueous materials.
48

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- Halogenated organic compounds - by Chlor-D-Tect™ kits, or the HAZCAT™ fluoride, chlorine, bromine, and iodine tests.
- Volatile organic compounds - by photo or flame ionization tester.¹

¹These instruments are field calibrated daily.

²The pH paper must have a distinct color change every 0.5 pH unit and each batch must be calibrated versus certified pH buffers or by comparison with a pH meter calibrated with certified pH buffers.

If the waste meets the parameters specified in its documentation, confirmation of designation is complete. If it does not meet these parameters proceed to the next step. This is considered a significant error under Section 3.2.4.

- b. Sample and analyze the materials in accordance with WAC 173-303-110. See Table 3-4 for a list of analytical methodologies and Table 3-5 for sampling methodologies.
- c. Re-assess and redesignate the waste. Repackage and label as necessary or return to the generating unit.

At least half of the containers to undergo confirmation of designation must fall into Category II.

III.1.B.g. Page 3-7, line 17. The following line is added: "Petitions to use an alternate test method shall be submitted in accordance with WAC 173-303-910."

III.1.B.h. Page 3-7, line 18. The following paragraph is added: "All analytical tests performed to fulfill the requirements of Sections 3.2.4 and 4.1.1.8 (Frequency of Analysis and Removal of Liquids from Containment System, respectively) shall be performed in accordance with WAC 173-303-110. New test methods shall be used within 90 days of the effective date of the State regulations or laws that mandate the use of the test method. To ensure analytical quality control, all analyses must fulfill, at a minimum, the quality procedures specified in SW-846 Volume II."

III.1.B.i. Page 3-7, line 33. The words "is adequate" are deleted and replaced with "must be adequate."

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- 1 III.1.B.j. Page 3-7, line 35. The words "is performed" are deleted and
2 replaced with "must be performed."
3
- 4 III.1.B.k. Page 3-7, line 40. The word "representative" is inserted
5 between the words "obtaining" and "samples."
6
- 7 III.1.B.l. Page 3-8, line 1. The following sentence is inserted before
8 the word "Appropriate": "To ensure sample quality control,
9 all sampling efforts must, at a minimum, be in accordance
10 with the procedures specified in SW-846."
11
- 12 III.1.B.m. Page 3-8, line 1. "Appropriate preservation" is deleted and
13 replaced with "Appropriate packaging and preservation."
14
- 15 III.1.B.n. Page 3-8, line 8. The following paragraph is added:
16
17 "At least five percent (5%) of the waste containers stored
18 at 616 NRDWSF during a Federal fiscal year (October 1
19 through September 30) will undergo confirmation of
20 designation pursuant to Sections 3.2.2 and 3.2.3 (Test
21 Methods and Sampling Methods, respectively). The number of
22 containers to meet the five-percent (5%) requirement is the
23 average of containers for the previous three months. For
24 example, if 200 containers are received in January, 180 in
25 February, and 220 in March then 10 containers of inbound
26 waste must undergo confirmation of designation in April.
27 All generating units which ship more than twenty (20)
28 containers through 616 NRDWSF in a fiscal year will have at
29 least one (1) container sampled and analyzed. Containers
30 for which there is insufficient process knowledge or
31 analytical information to designate without sampling and
32 analysis may not be counted as part of the five percent (5%)
33 requirement unless there is additional confirmation of
34 designation independent of the generator designation. The
35 generating unit's staff shall not select the waste
36 containers to be sampled and analyzed other than identifying
37 containers for which insufficient information is available
38 to designate."
39
- 40 III.1.B.o. Page 3-8, line 20. Delete the first sentence of the
41 paragraph and replace it with the following: "To be
42 acceptable at 616 NRDWSF, samples of non-radioactive waste
43 streams must be documented to have been sent to a laboratory
44 for waste profiling when newly identified or whenever the
45 process used or raw materials usage changes, and at least
46 annually thereafter, to ensure that the waste designation
47 assigned by the Solid Waste Engineering staff (Section 3.2)
48 is accurate and in compliance with land ban restrictions."
49

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- 1 III.1.B.p. Page 3-8, line 29. The words "For two months" are deleted
2 and replaced with "For the next six shipments or two months,
3 whichever is longer, to 616 NRDWSF."
4
- 5 III.1.B.q. Page 3-8, line 32. The following line is added to the end
6 of the paragraph: "The laboratory verification results
7 shall be obtained in accordance with WAC 173-303-110."
8
- 9 III.1.B.r. Page 3-8, line 40. The following sentence is added after
10 "activities": "There shall be no waste accepted at the 616
11 NRDWSF generated under a different Agency ID number."
12
- 13 III.1.B.s. Page 4-5, line 4. Add the following after the word
14 "performed": "after determination by the Building Emergency
15 Director (BED) that implementation of the Emergency Plan
16 pursuant to Appendix 7A is not necessary or all necessary
17 actions in accordance with the Emergency Plan have been
18 implemented. Either case must be recorded and signed in the
19 Operating Record by the BED."
20
- 21 III.1.B.t. Page 4-5, line 12. The following sentence is added: "Any
22 waste releases for which remedial actions have not been
23 completed shall be reported in writing to the Department on
24 a monthly basis by the 21st of the subsequent month unless
25 specified otherwise in writing by the Department."
26
- 27 III.1.B.u. Page 4-5, line 32. The following sentence is added: "The
28 616 NRDWSF staff will ensure that waste is properly
29 packaged, labeled, marked, and stored."
30
- 31 III.1.B.v. Page 4-5, line 46. The sentence "Wherever possible, organic
32 free water will be used as the collection medium to minimize
33 the generation of additional dangerous waste." is deleted.
34
- 35 III.1.B.w. Page 4-5, line 46. The following sentence is added after
36 "spilled material": "All samples taken to verify that the
37 site of a release is clean will be obtained in accordance
38 with the applicable standards of Section 11.1.5. et seq."
39
- 40 III.1.B.x. Figure 6-2, Section 2.0, Hallway. Revise the checklist to
41 read "Protective equipment supply present per the emergency
42 equipment list." This equipment shall be individually
43 inspected and documented by type, and be in adequate
44 condition, and in the quantities listed. The revised
45 checklist shall be submitted for approval to the Department
46 within 30 days of the effective date of this Permit.
47
- 48 III.1.B.y. Page 8-28, lines 5 through 8. These lines are deleted.
49

- 1 III.1.B.z. Chapter 11. All sampling and analyses necessary for soils
2 underneath a contaminated concrete layer must be performed
3 prior to removal of the overlying concrete. All soils which
4 exceed the clean closure standards of WAC 173-303-610(2)(b)
5 shall be managed in a manner analogous to that for
6 contaminated surrounding soil as described in Chapter 11 of
7 Attachment 8.
8
- 9 III.1.B.aa. Page 11-2, line 1. The words "In general," are deleted from
10 the text. The "t" on "these" is capitalized to read
11 "These".
12
- 13 III.1.B.bb. Table 11-1, page T11-1. In addition to the analyses in
14 Table 11-1, the concrete samples shall also be analyzed for
15 all dangerous waste constituents documented to have been
16 spilled at the 616 NRDWSF during its operating life. These
17 analyses shall be performed in accordance with WAC 173-303-
18 110 including the quality assurance and quality control
19 requirements delineated in SW-846. Action levels shall be
20 based on the level of quantitation for each analyte. Final
21 decisions based on health based standards shall be subject
22 to approval or rejection by the Department.
23
- 24 III.1.B.cc. Page 12-5, line 28. Replace the words "via line management,
25 that the" with "via line management, when the".
26
- 27 III.1.B.dd. Page 12-5, line 41. The words, "outside the Hanford
28 Facility" are deleted.
29
- 30 III.1.B.ee. Page 12-12, line 16. The last two sentences of this
31 paragraph are deleted.
32
- 33 III.1.B.ff. Table 12-1 "Reports and Records." A definition of the
34 footnote "a" is added to the bottom of the table as follows:
35
36 "a Hanford Facility means the reports and records are
37 available through the Facility Regulatory File index
38 pursuant to Section 12.0. Until the index is implemented,
39 reports and records will be available at the Facility, but
40 not necessarily at the 616 NRDWSF.
41
42 616 NRDWSF means the reports and records are available at
43 the 616 NRDWSF office."
44
- 45 III.1.B.gg. Chemical, biological, and physical analyses of the dangerous
46 waste to be handled at 616 NRDWSF pursuant to WAC 173-303-
47 806(4)(a), entitled "616 Nonradioactive Dangerous Waste
48 Facility Off-Site Shipping Lists," is found in Attachment 9
49 of this Permit.
50

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1 III.1.B.hh. The description of procedures as referenced in Appendix 11B
2 are provided in various sections of *Procedure Description*,
3 January 13, 1991 (Attachment 10). The specific sections of
4 Attachment 10 which are incorporated into the Permit are
5 listed in Table III-1, below, by procedure. No part of
6 Attachment 10 shall supersede any part of Attachment 8.
7
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

Table III-1: Procedures from Attachment 10.

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CHAPTER 2

305-B Storage Facility

The 305-B Storage Facility (305-B) is an active storage unit for dangerous wastes and mixed wastes. These wastes are derived primarily from research and development activities and laboratory activities in the 300 Area. This Chapter sets forth the operating Conditions for this TSD unit.

III.2.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION

The Permittees shall comply with all the requirements set forth in the 305-B Storage Facility Dangerous Waste Permit Application, as found in Attachment 18 including the amendments specified in Condition III.2.B. Enforceable portions of the application are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 2.1.2 The 305-B Storage Unit

Section 2.2.1 General Requirement

Section 2.5 Performance Standard

Section 2.6 Buffer Monitoring Zones

Section 2.7 Spills and Discharges Into the Environment

Section 2.8 Manifest System

Chapter 3.0 Waste Characteristics

Chapter 4.0 Process Information

Chapter 6.0 Procedures to Prevent Hazards

Chapter 7.0 Contingency Plan

Chapter 8.0 Personnel Training

Chapter 10.0 Waste Minimization Plans

Chapter 11.0 Closure and Postclosure Requirements

Chapter 12.0 Reporting and Recordkeeping

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1 Section 13.8 Toxic Substances Control Act

2
3 Section 13.9 Other Requirements

4
5 Appendix 2A Hanford Site and 300-Area Topographic Maps,
6 Plates 2-2 Through 2-9

7
8 ~~III.2.B.~~ AMENDMENTS TO THE APPROVED PERMIT APPLICATION

9
10 III.2.B.a. For all shipments of waste to or from this TSD unit, 305-B
11 personnel shall comply with Conditions II.P. and II.Q. of
12 this Permit regarding waste shipment manifesting and
13 transportation.

14
15 III.2.B.b. Page 3-5, line 41. The following text is added: "The 305-B
16 personnel shall collect from the generating unit(s) the
17 information pursuant to 40 CFR 268.7(a) regarding Land
18 Disposal Restricted (LDR) wastes, the appropriate treatment
19 standards, whether the waste meets the treatment standards,
20 and the certification that the waste meets the treatment
21 standards, if necessary, as well as any waste analysis data
22 that supports the generator's determinations. If this
23 information is not supplied by the generating unit, then the
24 305-B personnel shall be responsible for completion and
25 transmittal of all subsequent information regarding LDR
26 wastes, pursuant to 40 CFR 268.7(b). All waste streams must
27 be re-characterized at least annually, or when generating
28 unit and/or 305-B personnel have reason to believe the waste
29 stream has changed, to determine compliance with LDR
30 requirements in 40 CFR 268."

31
32 III.2.B.c. Page 3-9, line 16. The following is added to the end of
33 this section: "Storage limits for all chemicals are listed
34 in Table 4-1, page 4-18, and 4-19 (Uniform Building Code,
35 Table numbers 9-A and 9-B). This table is incorporated into
36 this section by reference."

37
38 III.2.B.d. Page 3-10, line 27. The following paragraphs are inserted
39 into this section:

40
41 "Prior to acceptance of wastes at 305-B, confirmation of
42 designation may be required (Section 3.2.4). The wastes
43 which shall undergo confirmation of designation are
44 identified in Condition III.2.B.n. of the Facility Wide
45 Permit and may be divided into two general groups; those
46 that easily yield a representative sample (Category I), and
47 those that do not (Category II). The steps for each type
48 are outlined below along with a description of which waste
49 fall into each category:

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I. If a representative sample cannot be obtained (for example, discarded machinery or shop rags) or if the waste is a labpack or discarded chemical product, the following steps will be performed:

- a. Visually verify the waste. Labpacks and combination packages must be removed from the outer container. If the waste meets the parameters specified in its documentation, confirmation of designation is complete. If it does not meet these parameters, proceed to the next step.
- b. If possible and necessary, segregate/repackage the waste for shipment in a compliant manner. If the waste is not packaged in compliance with shipping requirements, proceed to the next step.
- c. The waste must be re-designated using methods identified in WAC 173-303-110.

II. All wastes that do not fit in Category I will undergo the following steps:

- a. A representative sample will be taken of the waste (if more than one phase is present, each phase must be tested individually) and the following field tests will be performed:
 - Reactivity - HAZCAT™ oxidizer, cyanide, and sulfide tests. These tests will not be performed on materials known to be organic peroxides, ethers, and/or water reactive compounds.
 - Flashpoint/explosivity - by HAZCAT™ flammability procedure B, explosive atmosphere meter,¹ or a closed cup flashpoint measurement instrument.¹
 - pH - by pH meter¹ or pH paper (SW-846 9041).² This test will not be performed on non-aqueous materials.
 - Halogenated organic compounds - by Chlor-D-Tect™ kits, or the HAZCAT™ fluoride, chlorine, bromine, and iodine tests.
 - Volatile organic compounds - by photo or flame ionization tester.¹

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¹These instruments are field calibrated daily.

²The pH paper must have a distinct color change every 0.5 pH unit and each batch must be calibrated versus certified pH buffers or by comparison with a pH meter calibrated with certified pH buffers.

If the waste meets the parameters specified in its documentation, confirmation of designation is complete. If it does not meet these parameters proceed to the next step.

b. Sample and analyze the materials in accordance with WAC 173-303-110. See Table 3-2 for a list of analytical methodologies.

c. Re-assess and redesignate the waste. Repackage and label as necessary or return to the generating unit.

At least half of the containers to undergo confirmation of designation must fall into category II.

III.2.B.e.

Page 3-10, line 32. The following is added to the end of this section: "Wastes must be analyzed using the TCLP in accordance with Appendix II of 40 CFR 261, as amended, in order to provide sufficient information for proper management and for decisions regarding Land Disposal Restrictions pursuant to 40 CFR 268."

III.2.B.f.

Page 3-16, lines 24-28. Replace the existing language with:

"At least five percent (5%) of the waste containers stored at 305-B during a Federal fiscal year (October 1 through September 30) will undergo confirmation of designation pursuant to Sections 3.2.2 and 3.2.3 (Test Methods and Sampling Methods, respectively). The number of containers to meet the five percent (5%) requirement is the average of containers for the previous three months. For example, if 200 containers are received in January, 180 in February, and 220 in March then 10 containers of inbound waste must undergo confirmation of designation in April. All generating units which ship more than twenty (20) containers through 305-B in a fiscal year will have at least one (1) container sampled and analyzed. Containers for which there is insufficient process knowledge or analytical information to designate without sampling and analysis may not be counted as part of the five percent (5%) requirement unless

- 1 III.2.B.o. Page 8-2, line 28. The "I"s are replaced by "A"s on this
2 line, changing the training frequency for Hazardous Waste
3 Shipment Certification from initially to annually.
4
5 III.2.B.p. Page 8-2, line 30. A "B⁴" is inserted replacing the "N"
6 under the vertical column for TS (Waste Management
7 Technicians and Technical Specialists), requiring that they
8 receive Radioactive Material Shipping Representative
9 training biennially. The footnote "4" is removed from the
10 "E" vertical column. In addition, Footnote 4 shall be
11 changed to read: "Training is required for RMW Engineers,
12 RMW Technical Specialists, and RMW Technicians."
13
14 III.2.B.q. Page 11-1, line 44. Added to the end of this Section is the
15 following: "Spill reports and logs shall be consulted to
16 determine potential areas of contamination."
17
18 III.2.B.r. Page 11-3, line 51. Prior to the words "will also be
19 performed.", the following is added: "or areas of documented
20 spills or releases."
21
22 III.2.B.s. Page 11-8, lines 4 and 7. The following language is
23 inserted after the words Low-Level Radioactive on line 4 and
24 Nonregulated on line 7, respectively, replacing the current
25 language: "Shall be handled in accordance with the Liquid
26 Effluent Consent Order (No. DE 91NM-177) and Milestone M-17
27 of the Hanford Federal Facility Agreement and Consent
28 Order."
29
30 III.2.B.t. Page 11-8, line 25. Prior to the words "...will also be
31 performed", the following is added: "or areas of documented
32 spills or releases".
33
34 III.2.B.u. Page 11-14, line 39. The words "annually during closure
35 activities" are deleted from the end of this sentence and
36 replaced with: "in accordance with Condition II.H.1." of
37 this Permit.
38
39 III.2.B.v. Page 12-1, lines 7-9. The sentence beginning "Many of the
40 records..." is deleted.
41
42 III.2.B.w. Page 12-4, line 52. The following is inserted into this
43 section: "Entries into the operating record pursuant to WAC
44 173-303-145(2)(d)...Life of Facility...Hanford Site."
45
46 III.2.B.x. Page 12-10, line 37. Added to the end of this sentence is
47 the following: "and Condition I.E.15. of the Facility Wide
48 Permit."
49

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- 1 III.2.B.y. Page 12-12, line 48. A bullet is added to this Section
2 stating: "An account of spills or discharges in accordance
3 with WAC 173-303-145."
4
5 III.2.B.z. Page 13-1, line 3. The first sentence is deleted.
6
7 III.2.B.aa. Page 13-2, line 42. This sentence is deleted and replaced
8 with the following: "Wastes containing polychlorinated
9 biphenyls (PCB), which are subject to regulation under the
10 Toxic Substances Control Act (TSCA), are stored in the 305-B
11 Storage Unit. These wastes are stored for periods less than
12 one (1) year before shipment to a disposal facility
13 permitted under TSCA. Storage of PCB wastes in 305-B for
14 periods less than one (1) year will continue to be done in
15 compliance with applicable TSCA regulations in 40 CFR Part
16 761."
17

PART V - UNIT-SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE

CHAPTER 1

183-H Solar Evaporation Basin

The 183-H Solar Evaporation Basins (Basins) comprise an inactive TSD unit that is currently undergoing permanent closure activities. This TSD unit was operated as an evaporation treatment unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.1.A.

COMPLIANCE WITH APPROVED CLOSURE PLAN

The Permittees shall comply with all requirements set forth in the *183-H Solar Evaporation Basins Closure Plan/Postclosure Plan* (Plan), found in Attachment 11, including the amendments specified in Condition V.1.B. Enforceable portions of the Plan are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

- Section I. General Closure Requirements, Introduction (Pages I-1 through I-6)
- Section I.A-1. Minimize Need for Post-Closure Maintenance and Controls
- Section I.A-2. Minimize Post-Closure Escape of Dangerous Waste
- Section I.B. Content of Closure Plan
- Section II.B-1. Preliminary Cover Design
- Section III.A-1. Inspection Plan
- Section III.A-2g. Monitoring Plan Proposed to be Conducted Until Issuance of Final Status Post-Closure Permit
- Section III.A-3. Maintenance Plan
- Section III.B. Personnel Training
- Section III.C. Procedures to Prevent Hazards
- Section III.D. Post-Closure Contact

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1	Section III.E.	Amendment of Post-Closure Plan
2		
3	Section III.F.	Certification of Completion of Post-
4	-----	Closure Care
5		
6	Appendix A	Topographical Maps
7		
8	Appendix L	Procedures for Sample Collection, Chain of
9	-----	Custody, and Field Measurements
10		
11	Appendix M	Analytical Methods and Quality Control
12		Procedures
13		
14	Appendix N	Personnel Training for Closure Activities
15		
16	V.1.B.	<u>AMENDMENTS TO THE APPROVED CLOSURE PLAN</u>
17		
18	V.1.B.a.	Page I-1, lines 9-12. The sentence found here is deleted
19		and replaced with the following: "Additionally, the 183-H
20		Basins will be closed in accordance with the most current
21		version of all applicable environmental regulations and laws
22	-----	as well as the FFACO. New or modified regulations and laws
23		may require closure activities and/or the closure plan to be
24		modified."
25		
26	V.1.B.b.	Page I-108, line 46. The reference to WAC 173-303-700 is
27		deleted.
28		
29	V.1.B.c.	Page I-150, line 53. The date of "October 1991" is deleted
30		and replaced with "the first October after the effective
31		date of this Permit".
32		
33	V.1.B.d.	Page III-77, line 5. The phone number (509) 376-5411 is
34		changed to (509) 376-7277.
35		
36	V.1.B.e.	A copy of any Unusual Occurrence Report or Off Normal
37		Occurrence Report issued after approval of the Plan which is
38		directly related to Basin closure shall be provided to the
39		Department's Basin unit manager within seven (7) days after
40		issuance. This does not relieve the Permittees from any
41		other reporting requirements specified in Part I or II of
42		this Permit.
43		
44	V.1.B.f.	Annual closure cost estimates shall be provided to the
45		Department as described in Section I.C.4. of this closure
46		plan and Condition II.H.1. of this Permit.
47		
48	V.1.B.g.	A written notification that closure has begun and will be
49		conducted in accordance with the Plan, including these
50		conditions to the Plan, shall be submitted to the Department

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1 within 30 days after the Plan is approved through issuance
2 of this Permit.

3
4 V.1.B.h. Concrete sampling and analysis activities (basin and
5 background sampling) shall be conducted as described within
6 the Plan and as augmented by the Decommissioning Work Plan
7 (DWP) entitled "Concrete Sampling - 183-H Solar Evaporation
8 Basins" (DWP-H-080-00001) as found in Attachment 12 of this
9 Permit.

10
11 V.1.B.i. Soil sampling and analyses activities (including Phases I
12 and II, berm and background sampling) shall be conducted as
13 described within the Plan and as augmented by DWP-H-080-
14 00005 entitled "Core Drill Sampling - 183-H Solar
15 Evaporation Basins (Phase I)"; the Westinghouse Hanford
16 Company document WHC-SD-EN-AP-056 entitled "183-H Solar
17 Evaporation Basins Vadose Zone Sampling Plan"; and DWP-H-
18 026-00008 entitled "Berm Removal For 183-H Solar Evaporation
19 Basins" as found in Attachments 13, 14, and 15,
20 respectively, of this Permit.

21
22 V.1.B.j. The results of Basin concrete sampling (including background
23 sampling) shall be received by the Department within 30 days
24 of the effective date of this Permit. This submittal shall
25 include the raw analytical data, a summary of analytical
26 results, a data validation package, and a narrative summary
27 with conclusions.

28
29 V.1.B.k. The results of Basin soil sampling (including Phases I and
30 II, berm and background sampling) shall be received by the
31 Department within 30 days of the effective date of this
32 Permit. This submittal shall include the raw analytical
33 data, a summary of analytical results, a data validation
34 package, and a narrative summary with conclusions.

35
36 V.1.B.l. The Department shall be provided, for review and approval, a
37 sampling plan and the date of sampling for any sampling
38 event not addressed above which provides data used to
39 support Basin closure activities at least 30 days prior to
40 initiating actual sampling activities. This condition
41 applies to, but is not limited to, equipment and non-
42 concrete structural sampling and verification sampling. The
43 results of this sampling shall be submitted to the
44 Department. These submittals shall include the raw
45 analytical data, a summary of analytical results, a data
46 validation package, and a narrative summary with
47 conclusions.

48
49 V.1.B.m. The Permittees shall submit to the Department, for approval,
50 a notification indicating which closure option identified in

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Condition II.K. of this Permit will be utilized for the Basins. This notification shall be submitted at least 60 days prior to implementation of the option and shall be accompanied by the technical and regulatory justification for choosing the closure option along with any supporting documentation including, if necessary, the result of sampling per Conditions V.1.B.h. through V.1.B.l. This notification shall also be accompanied by a revised Figure I.B-20 of the Plan indicating a new closure schedule; however, the date of final closure shall not exceed six months after the effective date of this Permit. Implementation of the option cannot commence until receipt of the Department's written approval for the closure option.

V.1.B.n.

Regardless of the option chosen from Condition II.K., the Permittees and the independent, registered, professional engineer certifications of closure shall be prepared and submitted to the Department within 60 days of closure as described in Section I.C-1. of the closure plan.

V.1.B.o.

If a landfill closure is chosen, the definitive design documents, construction specifications, construction drawings, and construction quality assurance plans for any engineered system (including a final cover system) shall be submitted to the Department pursuant to Condition I.C.3.

V.1.B.p.

After review of the documents identified in Condition V.1.B.o., the Department may issue a unit-specific Construction Inspection Plan (CIP). If the Department chooses to issue a CIP, the Department shall be provided with all submittals and notifications required by the CIP and within the time period identified in the CIP.

V.1.B.q.

If a landfill closure is chosen, notification of any of the following occurrences shall be provided to the Department within 30 days of observance until a postclosure permit is issued: settlement/sedimentation in the final cover greater than one (1) foot; actual vegetative cover canopy on the final cover less than 50 percent (50%) of a typical Hanford cover canopy six (6) months after closure; erosion of the final cover greater than six (6) inches; tampering or damage to wells or well heads. The notification must include the extent and cause of the occurrence as well as actions taken (or to be taken) to mitigate the occurrence.

V.1.B.r.

If a modified closure is chosen, the Permittees shall request any reduction of landfill requirements identified in the Plan pursuant to Condition I.C.3. This request shall be based upon the quantity and concentration of contamination which will remain in place.

300-FF-2
OPERABLE UNIT

- 1 V.2.B.a. A written notification that closure has begun and will be
2 conducted in accordance with the Plan, including these
3 Conditions to the Plan, shall be submitted to the Department
4 within 30 days after the Plan is approved through issuance
5 of this Permit.
6
- 7 V.2.B.b. The results of all sampling required by this Plan shall be
8 provided to the Department. This submittal shall include
9 the raw analytical data, a summary of analytical results, a
10 data validation package, and a narrative summary with
11 conclusions.
12
- 13 V.2.B.c. The Department shall be provided, for review and approval, a
14 sampling plan and the date of sampling for any sampling
15 event not addressed in the Plan which provides data used to
16 support 300 ASE closure activities at least 30 days prior to
17 initiating actual sampling activities. The results of this
18 sampling shall be submitted to the Department. These
19 submittals shall include the raw analytical data, a summary
20 of analytical results, a data validation package, and a
21 narrative summary with conclusions.
22
- 23 V.2.B.d. Annual cost estimates shall be provided to the Department as
24 described in Section 5.2. of this closure plan and Condition
25 II.H.1. of this Permit.
26
- 27 V.2.B.e. The Permittees shall notify the Department, in writing, if
28 the initial action levels in Table 3-2 of the Plan are
29 exceeded. The notification shall either include a request
30 for the Department's approval of alternative action levels
31 or identify the interim measures to be taken at the 300 ASE
32 until closure activities are performed in conjunction with
33 the 300-FF-2 Operable Unit.
34
- 35 V.2.B.f. The Permittees and the independent, registered, professional
36 engineer certifications of closure shall be prepared and
37 submitted to the Department by registered mail within 60
38 days of closure as described in Section 4.0. of the Plan.
39 The Permittees shall continue to address the 300 ASE as a
40 dangerous waste management unit until receipt of the
41 Department's written notification that the 300 ASE is
42 accepted as clean closed.
43
- 44 V.2.B.g. The Permittees shall complete 300 ASE closure activities
45 within 180 days after the effective date of this Permit.

CHAPTER 3

2727-S Nonradioactive Dangerous Waste Storage Facility

The 2727-S Nonradioactive Dangerous Waste Storage Facility (2727-S) is an inactive storage unit which is currently undergoing permanent closure activities. This TSD unit was operated as a storage unit for dangerous wastes. This Chapter sets forth the closure requirements for this TSD unit.

V.3.A.

COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the 2727-S Nonradioactive Dangerous Waste Storage Facility Closure Plan (Plan), as found in Attachment 17, including the amendments specified in Condition V.3.B. Enforceable portions of the Plan are listed below (All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise):

Part A Application

Section 1.1 Location Information

Section 1.2 Security

Section 1.3 Facility Description and Operations

Chapter 2.0 Closure Performance Standard

Chapter 4.0 Closure Activities

Chapter 5.0 Contingency Plan

Chapter 6.0 Training Requirements

Chapter 7.0 Closure Plan Schedule

Appendix F Sampling and Handling Procedures

Appendix G Quality Assurance Project Plan

Appendix H Personnel Training

Appendix I Certification Statements

V.3.B.

AMENDMENTS TO THE APPROVED CLOSURE PLAN

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