

**ENVIRONMENTAL PORTAL DISTRIBUTION COVERSHEET**

*REGULATORY INFORMATION*

Author  
 J. B. Hebdon/RL  
 R. H. Gurske/FH

Addressee  
 L. Ruud/DOEC

Correspondence No.  
 0200279  
 DOE-RL: 02-RCA-103  
 CC Recd: 01/14/2002  
 Ref: FH-0106796AR2

Subject: **QUARTERLY NOTIFICATION OF CLASS 1 MODIFICATIONS TO THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT (RCRA), DANGEROUS WASTE (DW) PORTION (QUARTER ENDING DECEMBER 31, 2001, PERMIT CONDITION I.C.3)**

**DISTRIBUTION**

Approval	Date	Name	Location	w/att
		<b>Environmental Portal</b>	<b>A3-01</b>	<b>X</b>
		<u>Fluor Hanford</u>		
		L. E. Borneman	T6-16	X
		R. C. Bowman	A1-14	X
		R. C. Brunke	N1-26	X
		S. B. Cherry	B3-15	X
		S. B. Clifford	N1-25	X
		K. F. Clouse (RCRA File)	N1-25	X
		L. M. Culley	B3-70	X
		N. R. Dahl	N2-57	X
		T. T. Daniels	B3-70	X
		L. P. Diediker	N1-24	X
		R. H. Engelmann	N1-25	X
		R. H. Gurske	H8-73	X
		K. A. Hadley	T5-57	X
		J. W. Hales	A1-14	X
		J. S. Hertzell	A1-14	X
		L. G. Juguilon	H8-73	X
		C. A. Kooiker	N2-57	X
		A. G. Miskho	N1-26	X
		T. W. Noland	H8-67	X
		J. K. Perry	L1-04	X
		S. M. Price	H8-67	X
		F. A. Ruck III	N1-26	X
		A. R. Sherwood	N1-26	X
		S. A. Szendre	N1-26	X
		S. A. Thompson	N1-25	X
		D. J. Watson	X3-79	X
		J. F. Williams, Jr.	N1-25	X
		L. F. Willis	H8-73	X

<b>ENVIRONMENTAL PORTAL</b>
For Questions or Distribution/MSIN Corrections
<b>OUTLOOK ADDRESS: ^CORRESPONDENCE CONTROL-PHMC</b>
Contact: 376-8111 or 372-3931

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**REGULATORY INFORMATION**

Author  
J. B. Hebdon/RL  
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Page 2 of 2  
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**DISTRIBUTION**

Approval	Date	Name	Location	w/att
		<u>Bechtel Hanford Inc.</u>		
		^BHI Document & Info Services		X
		R. H. Wyer (BHI)	H0-09	X
		R. J. Landon (BHI)	H0-02	X
		<u>Pacific Northwest National Laboratory</u>		
		S. D. Cooke (PNNL)	K1-67	X
		A. K. Ikenberry (PNNL)	P7-79	X
		K. A. Poston (PNNL)	P7-79	X
		<u>U. S. Department of Energy, Richland Operations Office</u>		
		J. J. Bevelacqua	H6-60	X
		J. B. Hall	A2-15	X
		A. P. Larsen	A5-15	X
		E. M. Mattlin	A5-15	X
		A. C. McKarns	A5-15	X
		H. M. Rodriguez	A5-15	X
		S. D. Stubblebine	H6-60	X
		B. D. Williamson	A4-52	X



02-RCA-103

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

JAN 08 2002

Ms. Laura Ruud, Permit Specialist  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
1315 West Fourth Avenue  
Kennewick, Washington 99336

Dear Ms. Ruud:

QUARTERLY NOTIFICATION OF CLASS 1 MODIFICATIONS TO THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT (RCRA), DANGEROUS WASTE (DW) PORTION (QUARTER ENDING DECEMBER 31, 2001, PERMIT CONDITION I.C.3)

In accordance with Condition I.C.3. of the Hanford Facility RCRA Permit, enclosed Modifications this quarter included updating information in the List of Attachments and Part III of the RCRA Permit, DW Portion. The List of Attachments Class 1 modifications pertain to Attachment 27 and Attachment 47. The Part III Class 1 modifications pertain to the 305-B Storage Facility. The Class 1 modifications are being made to ensure that all activities conducted are in compliance with the RCRA Permit, DW Portion.

Should you have any questions regarding this information, please contact Astrid P. Larsen, U.S. Department of Energy, Richland Operations Office, on (509) 372-0477.

Handwritten signature of Joel Hebdon in cursive.

Joel Hebdon, Director  
Regulatory Compliance and Analysis Division

Handwritten signature of Richard H. Gurske in cursive.

Richard H. Gurske, Director  
Environmental and Regulation  
Fluor Hanford

Handwritten signature of Roby D. Enge in cursive.

Roby D. Enge, Director  
Environment, Safety, and Health  
Pacific Northwest National Laboratory

RCA:APL

Enclosure

cc: See page 2

Ms. Laura Ruud  
02-RCA-103

-2-

JAN 08 2002

Administrative Record H6-08  
HF Operating Record G1-27  
Ecology NWP Kennewick Library  
Environmental Portal, LMSI  
R. D. Enge, PNNL  
R. H. Gurske, FHI  
A. K. Ikenberry, PNNL  
R. Jim, YN  
R. J. Landon, BHI  
J. H. Richards, CTUIR  
P. Sobotta, NPT  
S. A. Thompson, FHI  
M. A. Wilson, Ecology

M. Anderson-Moore, Ecology  
F. W. Bond, Ecology  
L. J. Cusack, Ecology  
F. Jamison, Ecology  
D. R. Sherwood, EPA

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**Hanford Facility RCRA Permit Modification Notification Forms**  
**Hanford Facility RCRA Permit**

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- Page 3 of 4: Hanford Facility RCRA Permit, List of Attachments
- Page 4 of 4: Hanford Facility RCRA Permit, Attachment 27

## Hanford Facility RCRA Permit Modification Notification Form

Unit: <b>Hanford Facility RCRA Permit</b>	Permit Part & Chapter: <b>RCRA Permit</b>
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## Description of Modification:

Hanford Facility RCRA Permit, page 1:

This Permit, as modified on February 28, 2001, is effective as of March 30, 2001, and shall remain in effect through September 27, 2004, unless revoked and reissued under WAC 173-303-830(3), terminated under WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7). The Internet address for this Permit is <http://www.rl.gov/docs/wa7890008967/rcra.pdf> <http://www.hanford.gov/docs/wa7890008967/index.htm>.

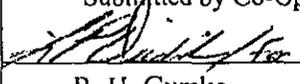
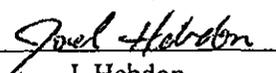
Modification Class: 12 3	Class 1	Class <sup>1</sup> 1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation:

A. General Permit Provisions

I. Administrative and informational changes

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:
 R. H. Gurske	 J. Hebdon	L.E. Ruud
12-11-01 Date	1/08/02 Date	Date

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup>1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

<sup>3</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to <sup>1</sup>1, if appropriate

### Hanford Facility RCRA Permit Modification Notification Form

Unit: <b>Hanford Facility RCRA Permit</b>	Permit Part & Chapter: <b>List of Attachments, Attachment 47</b>
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Description of Modification:  
Hanford Facility RCRA Permit, List of Attachments:

Attachment 47      Corrective Measures Study for the 100-NR-1 and 100-NR-2 Operable Units, DOE/RL-95-1111, Revision 0, July 1997

Modification Class: 12 3	Class 1	Class <sup>1</sup> 1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification:      A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation:

- A. General Permit Provisions
  - 1. Administrative and informational changes

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:
 R. H. Gurske	 J. Hebdon	L.E. Ruud
12-14-01 Date	1/08/02 Date	Date

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup>1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

<sup>3</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to <sup>1</sup>1, if appropriate

## Hanford Facility RCRA Permit Modification Notification Form

Unit:  
Hanford Facility RCRA Permit

Permit Part & Chapter:  
List of Attachments, Attachment 27

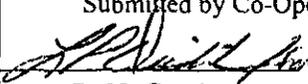
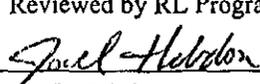
Description of Modification:  
Hanford Facility RCRA Permit, Attachment 27:

### PERMIT MODIFICATION SCHEDULE

Updated: 05-18-99

Attachment 27

Internet address <http://www.ri.gov/docs/wa7890008967/attach27/modsch.htm>  
<http://www.hanford.gov/docs/wa7890008967/modsch.htm>

Modification Class: 12 3	Class 1	Class <sup>1</sup> 1	Class 2	Class 3
Please check one of the Classes:	X			
Relevant WAC 173-303-830, Appendix I Modification: A.1.				
Enter wording of the modification from WAC 173-303-830, Appendix I citation:				
A. General Permit Provisions				
1. Administrative and informational changes				
Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:		
 12-11-01	 1/08/02			
R. H. Gurske	J. Hebdon	L.E. Ruud	Date	

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup>1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

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**Hanford Facility RCRA Permit Modification Notification Forms  
Part III, Chapter 2 and Attachment 18  
305-B Storage Facility**

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Page 5 of 6: Chapter 1.0, Part A, Form 3, Section IV  
Page 6 of 6: Chapter 3.0

## Hanford Facility RCRA Permit Modification Notification Form

Unit: 305-B Storage Facility		Permit Part & Chapter: Part III, Chapter 2 and Attachment 18			
<u>Description of Modification:</u>					
Hanford Facility RCRA Permit, Condition III.2.A:					
III.2.A. <u>COMPLIANCE WITH APPROVED PERMIT APPLICATION</u>					
The Permittees shall comply with all the requirements set forth in Attachment 18, including all Class 1 Modifications specified below, and 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:					
Section 1.0	Part A, Form 3, Permit Application, <del>Revision 1</del> and from Class 1 Modification for quarter ending <del>December 31, 2001</del> <del>June 30, 1998</del>				
Section 2.1.2	The 305-B Storage Unit, from Class 1 Modification for quarter ending March 31, 2001				
Section 2.2.1	General Requirement from Class 1 Modification for quarter ending March 31, 2001				
Section 2.5	Performance Standard, from Class 1 Modification for quarter ending March 31, 2001				
Section 2.6	Buffer Monitoring Zones, from Class 1 Modification for quarter ending March 31, 2001				
Section 2.8	Manifest System, from Class 1 Modification for quarter ending March 31, 2001				
Chapter 3.0	Waste Characteristics, from Class 1 Modification for quarter ending <del>December 31, 2001</del> <del>September 30, 2000</del>				
Chapter 4.0	Process Information, from Class 1 Modification for quarter ending December 31, 2000.				
Chapter 6.0	Procedures to Prevent Hazards, from Class 1 Modification for quarter ending March 31, 2001				
Chapter 7.0	Building Emergency Procedure, from Class 1 Modification for quarter ending June 30, 2001				
Chapter 8.0	Personnel Training, from Class 1 Modification for quarter ending September 30, 2001				
Chapter 11.0	Closure and Post-Closure Requirements, from Class 1 Modification for quarter ending September 30, 2000				
Chapter 12.0	Reporting and Recordkeeping, from Class 1 Modification for quarter ending June 30, 1999				
Section 13.8	Toxic Substances Control Act, from Class 1 Modification for quarter ending September 30, 2000				
Section 13.9	Other Requirements, from Class 1 Modification for quarter ending September 30, 2000				
Appendix 2A	Hanford Site and 300-Area Topographic Maps, Plates 2-2 Through 2-9, from Class 1 Modification for quarter ending June 30, 2001				
Modification Class: <sup>123</sup>		Class 1	Class <sup>1</sup>	Class 2	Class 3
Please check one of the Classes:		X			
Relevant WAC 173-303-830, Appendix I Modification:		A.1.			
<u>Enter wording of the modification from WAC 173-303-830, Appendix I citation</u>					
A. General Permit Provisions					
1. Administrative and Informational changes					
Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:		
<i>A.K. Ikenberry</i> 12/13/01	<i>R.F. Christensen</i> 1/3/02				
A.K. Ikenberry	R.F. Christensen	F. Jamison	L.E. Ruud	Date	
Date	Date	Date	Date	Date	

<sup>1</sup> Class 1 modifications requiring prior Agency approval.<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup>, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.<sup>3</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to <sup>1</sup>, if appropriate.

### Hanford Facility RCRA Permit Modification Notification Form

Unit:  
305-B Storage Facility

Permit Part & Chapter:  
Part III, Chapter 2 and Attachment 18

Description of Modification:

Chapter 1.0, Part A, Form 3

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes	
				1. Process Codes (enter)	2. Process Description (if a code is not entered in D(1))
3	D003	1000500	K	S01	
4	D004	1000200	K	S01	
5	D005	1000200	K	S01	
6	D006	1000200	K	S01	
9	D009	1000400	K	S01	
10	D010	1000500	K	S01	
11	D011	1000200	K	S01	

Modification Class: <sup>1 2 3</sup>	Class 1	Class <sup>1</sup> 1	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions  
1. Administrative and Informational changes

Submitted by Co-Operator: <i>A.K. Ikenberry</i> 2/13/02 A.K. Ikenberry Date	Reviewed by RL Program Office: <i>R.F. Christensen</i> 2/10/02 R.F. Christensen Date	Reviewed by Ecology: F. Jamison Date	Reviewed by Ecology: L.E. Ruud Date
---	--	---	--

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class 1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

<sup>3</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to <sup>1</sup>, if appropriate.

## Hanford Facility RCRA Permit Modification Notification Form

Unit:  
**305-B Storage Facility**

Permit Part & Chapter:  
**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Chapter 1.0, Part A, Form 3

**IV. DESCRIPTION OF DANGEROUS WASTES (continued)**

Line No.	A. Dangerous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes	
				1. Process Codes (enter)	2. Process Description (if a code is not entered in D(1))
68	P019	200	K	S01	
74	P025	200	K	S01	
81	P032	200	K	S01	
84	P035	200	K	S01	
102	P052	200	K	S01	
103	P053	200	K	S01	
105	P055	200	K	S01	
111	P061	200	K	S01	
129	P079	200	K	S01	
130	P080	200	K	S01	
133	P083	200	K	S01	
136	P086	200	K	S01	
140	P090	200	K	S01	
141	P091	200	K	S01	
150	P100	200	K	S01	
157	P107	200	K	S01	
167	P117	200	K	S01	
186	U013	200	K	S01	
222	U040	200	K	S01	
236	U054	200	K	S01	
247	U065	200	K	S01	
281	U100	200	K	S01	
285	U104	200	K	S01	
320	U139	200	K	S01	
356	U175	200	K	S01	
376	U195	200	K	S01	
379	U198	200	K	S01	
380	U199	200	K	S01	
393	U212	200	K	S01	
405	U224	200	K	S01	
410	U229	200	K	S01	
411	U230	200	K	S01	
412	U231	200	K	S01	
413	U232	200	K	S01	
414	U233	200	K	S01	
422	U241	200	K	S01	
423	U242	200	K	S01	
426	U245	200	K	S01	

Modification Class: <sup>123</sup>	Class 1	Class <sup>1</sup>	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: **A.1.**

Enter wording of the modification from WAC 173-303-830, Appendix I citation

A. General Permit Provisions  
1. Administrative and Informational changes

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
<i>A.K. Ikenberry</i> 12/17/01	<i>R.F. Christensen</i> 1/3/02		
A.K. Ikenberry Date	R.F. Christensen Date	F. Jamison Date	L.E. Ruud Date

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup>1, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

<sup>3</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to <sup>1</sup>1, if appropriate.

**Hanford Facility RCRA Permit Modification Notification Form**

Unit:  
**305-B Storage Facility**

Permit Part & Chapter:  
**Part III, Chapter 2 and Attachment 18**

Description of Modification:

Chapter 1.0, Part A, Form 3

**IV. DESCRIPTION OF DANGEROUS WASTES (continued)**

Line No.	A. Dangerous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes	
				1. Process Codes (enter)	2. Process Description (if a code is not entered in D(1))
	P127	200	K	S01	
	P128	200	K	S01	
	P185	200	K	S01	
	P188	200	K	S01	
	P189	200	K	S01	
	P190	200	K	S01	
	P191	200	K	S01	
	P192	200	K	S01	
	P194	200	K	S01	
	P196	200	K	S01	
	P197	200	K	S01	
	P198	200	K	S01	
	P199	200	K	S01	
	P201	200	K	S01	
	P202	200	K	S01	
	P203	200	K	S01	
	P204	200	K	S01	
	P205	200	K	S01	
	U271	200	K	S01	
	U278	200	K	S01	
	U279	200	K	S01	
	U280	200	K	S01	
	U364	200	K	S01	
	U367	200	K	S01	
	U372	200	K	S01	
	U373	200	K	S01	
	U387	200	K	S01	
	U389	200	K	S01	
	U394	200	K	S01	
	U395	200	K	S01	
	U404	200	K	S01	
	U409	200	K	S01	
	U410	200	K	S01	
	U411	200	K	S01	
	K013	200	K	S01	
	K044	200	K	S01	

Modification Class: <sup>123</sup>	Class 1	Class <sup>1</sup>	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

**A. General Permit Provisions**

**1. Administrative and Informational changes**

Submitted by Co-Operator: <i>A.K. Ikenberry</i> A.K. Ikenberry	Reviewed by RL Program Office: <i>R.F. Christensen</i> R.F. Christensen	Reviewed by Ecology:  F. Jamison	Reviewed by Ecology:  L.E. Ruud
<i>12/13/0</i> Date	<i>1/3/02</i> Date	Date	Date

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

<sup>2</sup> This is only an advanced notification of an intended Class <sup>1</sup>, 2, or 3 modification, this should be followed with a formal modification request, and consequently implement the required Public Involvement processes when required.

<sup>3</sup> If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to <sup>1</sup>, if appropriate.

**Hanford Facility RCRA Permit Modification Notification Form**

Unit:  
305-B Storage Facility

Permit Part & Chapter:  
Part III, Chapter 2 and Attachment 18

Description of Modification:

Chapter 3.0

Remove Chapter 3.0 and replace with the attached Chapter 3.0.

Modification Class: <sup>123</sup>	Class 1	Class <sup>1</sup>	Class 2	Class 3
Please check one of the Classes:	X			

Relevant WAC 173-303-830, Appendix I Modification: A.1.

Enter wording of the modification from WAC 173-303-830, Appendix I citation

- A. General Permit Provisions
  - I. Administrative and Informational changes

Submitted by Co-Operator:	Reviewed by RL Program Office:	Reviewed by Ecology:	Reviewed by Ecology:
<i>A.K. Ikenberry</i> 12/13/01	<i>R.F. Christensen</i> 1/3/02		
A.K. Ikenberry Date	R.F. Christensen Date	F. Jamison Date	L.E. Ruud Date

<sup>1</sup> Class 1 modifications requiring prior Agency approval.

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**Hanford Facility RCRA Permit Modification  
Part III, Chapter 2 and Attachment 18  
305-B Storage Facility**

Replacement Sections

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Chapter 1.0

Chapter 3.0

<b>FORM 3</b>	<b>DANGEROUS WASTE PERMIT APPLICATION</b>	<b>I. EPA/State I.D. No.</b>
		W A 7 8 9 0 0 0 8 9 6 7

**FOR OFFICIAL USE ONLY**

Application Approved	Date Received (month/ day / year)	Comments

**II. FIRST OR REVISED APPLICATION**

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or If this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.

**A. First Application (place an "X" below and provide the appropriate date)**

1. Existing Facility (See instructions for definition of "existing" facility. Complete item below.)

2. New Facility (Complete item below.)

MO	DAY	YEAR
03	22	1943

\*For existing facilities, provide the date (mo/day/yr) operation began or the date construction commenced. (use the boxes to the left)

MO	DAY	YEAR

For new facilities, provide the date (mo/day/yr) operation began or is expected to begin

\*The date construction of the Hanford Facility commenced

**B. Revised Application (Place an "X" below and complete Section I above)**

1. Facility has an Interim Status Permit

2. Facility has a Final Permit

**III. PROCESSES - CODES AND DESIGN CAPACITIES**

**A. Process Code** - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the codes(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the (Section III-C).

**B. Process Design Capacity** - For each code entered in column A enter the capacity of the process.

1. Amount - Enter the amount.

2. Unit of Measure - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<b>STORAGE:</b>		
Container (barrel, drum, etc.)	S01	Gallons or liters
Tank	S02	Gallons or liters
Waste pile	S03	Cubic yards or cubic meters
Surface impoundment	S04	Gallons or liters
	S06	Cubic yards or cubic meters*
<b>DISPOSAL:</b>		
Injection well	D80	Gallons or liters
Landfill	D81	Acre-feet (the volume that would cover one acre to a Depth of one foot) or hectare-meter
Land application	D82	Acres or hectares
Ocean disposal	D83	Gallons per day or liters per day
Surface impoundment	D84	Gallons or liters
<b>TREATMENT:</b>		
Tank	T01	Gallons per day or liters per day
Surface impoundment	T02	Gallons per day or liters per day
Incinerator	T03	Tons per hour or metric tons per hour; gallons per hour or liters per hour
Other (use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	Gallons per day or liters per day

Unit of Measure	Unit of Measure Code	Unit of Measure	Unit of Measure Code
Gallons .....	G	Liters Per Day .....	V
Liters .....	L	Tons Per Hour .....	D
Cubic Yards .....	Y	Metric Tons Per Hour .....	W
Cubic Meters .....	C	Gallons Per Hour .....	E
Gallons Per Day .....	U	Liters Per Hour .....	H

Unit of Measure	Unit of Measure Code
Acre-Foot .....	A
Hectare-Meter .....	F
Acres .....	B
Hectares .....	Q

**III. PROCESS - CODES AND DESIGN CAPACITIES (continued)**

Example for Completing Section III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks; one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line No.	A. Process Code (from list above)			B. process Design Capacity			For Official Use Only			
				1. Amount (Specify)	2. Unit of Measure (enter code)					
X-1	S	0	2	600		G				
X-2	T	0	3	20		E				
1	S	0	1	30,000		G				
2										
3										
4										
5										
6										
7										
8										
9										
10										

**C. Space for additional process codes or for describing other process (code "T04"). For each process entered here include design capacity.**

The 305-B Storage Facility is a waste assembly area that services Research and Development operations as a 300 Area satellite storage area. Waste are brought in the facility for storage, repackaging, and/or waste consolidation in mostly 55 gallon drums. The storage design capacity is 30,000 gallons.

RMW is stored as received in storage cells in the basement of the facility. Other waste are stored in segregated cells in the high bay area..

**IV. DESCRIPTION OF DANGEROUS WASTES**

**A. Dangerous Waste Number** - Enter the digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four-digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.

**B. Estimated Annual Quantity** - For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

**C. Unit of Measure** - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
Pounds	P	Kilograms	K
Tons	T	Metric Tons	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

**D. Processes**

**1. Process Codes:**

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

**2. Process Description:** If a code is not listed for a process that will be used, describe the process in the space provided on the form.

**NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER** - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

- Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.
- Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

Example for completing Section IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste.

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes				
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))		
X-1	K	0	5	4	900		P		T03	D80			
X-2	D	0	0	2	400		P		T03	D80			
X-3	D	0	0	1	100		P		T03	D80			
X-4	D	0	0	2					T03	D80			Included with above

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	8	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes			
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
1	D	0	0	1	20,000		K		S01			
2	D	0	0	2	5,000		K		S01			
3	D	0	0	3	500		K		S01			
4	D	0	0	4	200		K		S01			
5	D	0	0	5	200		K		S01			
6	D	0	0	6	200		K		S01			
7	D	0	0	7	10,000		K		S01			
8	D	0	0	8	50,000		K		S01			
9	D	0	0	9	400		K		S01			
10	D	0	1	0	50		K		S01			
11	D	0	1	1	200		K		S01			
12	D	0	1	2	220		K		S01			
13	D	0	1	3	220		K		S01			
14	D	0	1	4	220		K		S01			
15	D	0	1	5	220		K		S01			
16	D	0	1	6	220		K		S01			
17	D	0	1	7	220		K		S01			
18	D	0	1	8	2,000		K		S01			
19	D	0	1	9	2,000		K		S01			
20	D	0	2	0	220		K		S01			
21	D	0	2	1	220		K		S01			
22	D	0	2	2	2,000		K		S01			
23	D	0	2	3	2,000		K		S01			
24	D	0	2	4	2,000		K		S01			
25	D	0	2	5	2,000		K		S01			
26	D	0	2	6	2,000		K		S01			
27	D	0	2	7	220		K		S01			
28	D	0	2	8	220		K		S01			
29	D	0	2	9	220		K		S01			
30	D	0	3	0	220		K		S01			
31	D	0	3	1	220		K		S01			
32	D	0	3	2	220		K		S01			
33	D	0	3	3	220		K		S01			
34	D	0	3	4	220		K		S01			
35	D	0	3	5	5,000		K		S01			
36	D	0	3	6	220		K		S01			
37	D	0	3	7	2,000		K		S01			
38	D	0	3	8	2,000		K		S01			
39	D	0	3	9	2,000		K		S01			
40	D	0	4	0	2,000		K		S01			
41	D	0	4	1	220		K		S01			
42	D	0	4	2	220		K		S01			
43	D	0	4	3	2,000		K		S01			
44	F	0	0	1	2,000		K		S01			
45	F	0	0	2	2,000		K		S01			
46	F	0	0	3	5,000		K		S01			

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I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	8	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes			
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
47	F	0	0	4	1,000		K		S01			
48	F	0	0	5	5,000		K		S01			
49	F	0	2	7	200		K		S01			
50	P	0	0	1	200		K		S01			
51	P	0	0	2	200		K		S01			
52	P	0	0	3	200		K		S01			
53	P	0	0	4	200		K		S01			
54	P	0	0	5	200		K		S01			
55	P	0	0	6	200		K		S01			
56	P	0	0	7	200		K		S01			
57	P	0	0	8	200		K		S01			
58	P	0	0	9	200		K		S01			
59	P	0	1	0	200		K		S01			
60	P	0	1	1	200		K		S01			
61	P	0	1	2	200		K		S01			
62	P	0	1	3	200		K		S01			
63	P	0	1	4	200		K		S01			
64	P	0	1	5	200		K		S01			
65	P	0	1	6	200		K		S01			
66	P	0	1	7	200		K		S01			
67	P	0	1	8	200		K		S01			
68	P	0	2	0	200		K		S01			
69	P	0	2	1	200		K		S01			
70	P	0	2	2	200		K		S01			
71	P	0	2	3	200		K		S01			
72	P	0	2	4	200		K		S01			
73	P	0	2	6	200		K		S01			
74	P	0	2	7	200		K		S01			
75	P	0	2	8	200		K		S01			
76	P	0	2	9	200		K		S01			
77	P	0	3	0	200		K		S01			
78	P	0	3	1	200		K		S01			
79	P	0	3	3	200		K		S01			
80	P	0	3	4	200		K		S01			
81	P	0	3	6	200		K		S01			
82	P	0	3	7	200		K		S01			
83	P	0	3	8	200		K		S01			
84	P	0	3	9	200		K		S01			
85	P	0	4	0	200		K		S01			
86	P	0	4	0	200		K		S01			
87	P	0	4	1	200		K		S01			
88	P	0	4	2	200		K		S01			
89	P	0	4	3	200		K		S01			
90	P	0	4	4	200		K		S01			
91	P	0	4	5	200		K		S01			
92	P	0	4	6	200		K		S01			

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I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)		D. Processes			
								1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
93	P	0	4	7	200		K	S01			
94	P	0	4	8	200		K	S01			
95	P	0	4	9	200		K	S01			
96	P	0	5	0	200		K	S01			
97	P	0	5	1	200		K	S01			
98	P	0	5	4	200		K	S01			
99	P	0	5	6	200		K	S01			
100	P	0	5	7	200		K	S01			
101	P	0	5	8	200		K	S01			
102	P	0	5	9	200		K	S01			
103	P	0	6	0	200		K	S01			
104	P	0	6	2	200		K	S01			
105	P	0	6	3	200		K	S01			
106	P	0	6	4	200		K	S01			
107	P	0	6	5	200		K	S01			
108	P	0	6	6	200		K	S01			
109	P	0	6	7	200		K	S01			
110	P	0	6	8	200		K	S01			
111	P	0	6	9	200		K	S01			
112	P	0	7	0	200		K	S01			
113	P	0	7	1	200		K	S01			
114	P	0	7	2	200		K	S01			
115	P	0	7	3	200		K	S01			
116	P	0	7	4	200		K	S01			
117	P	0	7	5	200		K	S01			
118	P	0	7	6	200		K	S01			
119	P	0	7	7	200		K	S01			
120	P	0	7	8	200		K	S01			
121	P	0	8	1	200		K	S01			
122	P	0	8	2	200		K	S01			
123	P	0	8	4	200		K	S01			
124	P	0	8	5	200		K	S01			
125	P	0	8	7	200		K	S01			
126	P	0	8	8	200		K	S01			
127	P	0	8	9	200		K	S01			
128	P	0	9	2	200		K	S01			
129	P	0	9	3	200		K	S01			
130	P	0	9	4	200		K	S01			
131	P	0	9	5	200		K	S01			
132	P	0	9	6	200		K	S01			
133	P	0	9	7	200		K	S01			
134	P	0	9	8	200		K	S01			
135	P	0	9	9	200		K	S01			
136	P	1	0	1	200		K	S01			
137	P	1	0	2	200		K	S01			
138	P	1	0	3	200		K	S01			

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I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)		D. Processes			
								1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
139	P	1	0	4	200		K	S01			
140	P	1	0	5	200		K	S01			
141	P	1	0	6	200		K	S01			
142	P	1	0	8	200		K	S01			
143	P	1	0	9	200		K	S01			
144	P	1	1	0	200		K	S01			
145	P	1	1	1	200		K	S01			
146	P	1	1	2	200		K	S01			
147	P	1	1	3	200		K	S01			
148	P	1	1	4	200		K	S01			
149	P	1	1	5	200		K	S01			
150	P	1	1	6	200		K	S01			
151	P	1	1	8	200		K	S01			
152	P	1	1	9	200		K	S01			
153	P	1	2	0	200		K	S01			
154	P	1	2	1	200		K	S01			
155	P	1	2	2	200		K	S01			
156	P	1	2	3	200		K	S01			
157	P	1	2	7	200		K	S01			
158	P	1	2	8	200		K	S01			
159	P	1	8	5	200		K	S01			
160	P	1	8	8	200		K	S01			
161	P	1	8	9	200		K	S01			
162	P	1	9	0	200		K	S01			
163	P	1	9	1	200		K	S01			
164	P	1	9	2	200		K	S01			
165	P	1	9	4	200		K	S01			
166	P	1	9	6	200		K	S01			
167	P	1	9	7	200		K	S01			
168	P	1	9	8	200		K	S01			
169	P	1	9	9	200		K	S01			
170	P	2	0	1	200		K	S01			
171	P	2	0	2	200		K	S01			
172	P	2	0	3	200		K	S01			
173	P	2	0	4	200		K	S01			
174	P	2	0	5	200		K	S01			
175	U	0	0	1	200		K	S01			
176	U	0	0	2	200		K	S01			
177	U	0	0	3	200		K	S01			
178	U	0	0	4	200		K	S01			
179	U	0	0	5	200		K	S01			
180	U	0	0	6	200		K	S01			
181	U	0	0	7	200		K	S01			
182	U	0	0	8	200		K	S01			
183	U	0	0	9	200		K	S01			
184	U	0	1	0	200		K	S01			

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I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes			
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
185	U	0	1	1	200		K		S01			
186	U	0	1	2	200		K		S01			
187	U	0	1	4	200		K		S01			
188	U	0	1	5	200		K		S01			
189	U	0	1	6	200		K		S01			
190	U	0	1	7	200		K		S01			
191	U	0	1	8	200		K		S01			
192	U	0	1	9	200		K		S01			
193	U	0	2	0	200		K		S01			
194	U	0	2	1	200		K		S01			
195	U	0	2	2	200		K		S01			
196	U	0	2	3	200		K		S01			
197	U	0	2	4	200		K		S01			
198	U	0	2	5	200		K		S01			
199	U	0	2	6	200		K		S01			
200	U	0	2	7	200		K		S01			
201	U	0	2	8	200		K		S01			
202	U	0	2	9	200		K		S01			
203	U	0	3	0	200		K		S01			
204	U	0	2	1	200		K		S01			
205	U	0	2	2	200		K		S01			
206	U	0	2	3	200		K		S01			
207	U	0	2	4	200		K		S01			
208	U	0	2	5	200		K		S01			
209	U	0	2	6	200		K		S01			
210	U	0	2	7	200		K		S01			
211	U	0	2	8	200		K		S01			
212	U	0	2	9	200		K		S01			
213	U	0	3	0	200		K		S01			
214	U	0	3	1	200		K		S01			
215	U	0	3	2	200		K		S01			
216	U	0	3	3	200		K		S01			
217	U	0	3	4	200		K		S01			
218	U	0	3	5	200		K		S01			
219	U	0	3	6	200		K		S01			
220	U	0	3	7	200		K		S01			
221	U	0	3	8	200		K		S01			
222	U	0	4	1	200		K		S01			
223	U	0	4	2	200		K		S01			
224	U	0	4	3	200		K		S01			
225	U	0	4	4	200		K		S01			
226	U	0	4	5	200		K		S01			
227	U	0	4	6	200		K		S01			
228	U	0	4	7	200		K		S01			
229	U	0	4	8	200		K		S01			
230	U	0	4	9	200		K		S01			

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I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes			
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
231	U	0	5	0	200		K		S01			
232	U	0	5	1	200		K		S01			
233	U	0	5	2	200		K		S01			
234	U	0	5	3	200		K		S01			
235	U	0	5	5	200		K		S01			
236	U	0	5	6	200		K		S01			
237	U	0	5	7	200		K		S01			
238	U	0	5	8	200		K		S01			
239	U	0	5	9	200		K		S01			
240	U	0	6	0	200		K		S01			
241	U	0	6	1	200		K		S01			
242	U	0	6	2	200		K		S01			
243	U	0	6	3	200		K		S01			
244	U	0	6	4	200		K		S01			
245	U	0	6	6	200		K		S01			
246	U	0	6	7	200		K		S01			
247	U	0	6	8	200		K		S01			
248	U	0	6	9	200		K		S01			
249	U	0	7	0	200		K		S01			
250	U	0	7	1	200		K		S01			
251	U	0	7	2	200		K		S01			
252	U	0	7	3	200		K		S01			
253	U	0	7	4	200		K		S01			
254	U	0	7	6	200		K		S01			
255	U	0	7	7	200		K		S01			
256	U	0	7	8	200		K		S01			
257	U	0	7	9	200		K		S01			
258	U	0	8	0	200		K		S01			
259	U	0	8	1	200		K		S01			
260	U	0	8	2	200		K		S01			
261	U	0	8	3	200		K		S01			
262	U	0	8	4	200		K		S01			
263	U	0	8	5	200		K		S01			
264	U	0	8	6	200		K		S01			
265	U	0	8	7	200		K		S01			
266	U	0	8	8	200		K		S01			
267	U	0	8	9	200		K		S01			
268	U	0	9	0	200		K		S01			
269	U	0	9	1	200		K		S01			
270	U	0	9	2	200		K		S01			
271	U	0	9	3	200		K		S01			
272	U	0	9	4	200		K		S01			
273	U	0	9	5	200		K		S01			
274	U	0	9	6	200		K		S01			
275	U	0	9	7	200		K		S01			
276	U	0	9	8	200		K		S01			

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes			
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
277	U	0	9	9	200		K		S01			
278	U	1	0	1	200		K		S01			
279	U	1	0	2	200		K		S01			
280	U	1	0	3	200		K		S01			
281	U	1	0	5	200		K		S01			
282	U	1	0	6	200		K		S01			
283	U	1	0	7	200		K		S01			
284	U	1	0	8	200		K		S01			
285	U	1	0	9	200		K		S01			
286	U	1	1	0	200		K		S01			
287	U	1	1	1	200		K		S01			
288	U	1	1	2	200		K		S01			
289	U	1	1	3	200		K		S01			
290	U	1	1	4	200		K		S01			
291	U	1	1	5	200		K		S01			
292	U	1	1	6	200		K		S01			
293	U	1	1	7	200		K		S01			
294	U	1	1	8	200		K		S01			
295	U	1	1	9	200		K		S01			
296	U	1	2	0	200		K		S01			
297	U	1	2	1	200		K		S01			
298	U	1	2	2	200		K		S01			
299	U	1	2	3	200		K		S01			
300	U	1	2	4	200		K		S01			
301	U	1	2	5	200		K		S01			
302	U	1	2	6	200		K		S01			
303	U	1	2	7	200		K		S01			
304	U	1	2	8	200		K		S01			
305	U	1	2	9	200		K		S01			
306	U	1	3	0	200		K		S01			
307	U	1	3	1	200		K		S01			
308	U	1	3	2	200		K		S01			
309	U	1	3	3	200		K		S01			
310	U	1	3	4	200		K		S01			
311	U	1	3	5	200		K		S01			
312	U	1	3	6	200		K		S01			
313	U	1	3	7	200		K		S01			
314	U	1	3	8	200		K		S01			
315	U	1	4	0	200		K		S01			
316	U	1	4	1	200		K		S01			
317	U	1	4	2	200		K		S01			
318	U	1	4	3	200		K		S01			
319	U	1	4	4	200		K		S01			
320	U	1	4	5	200		K		S01			
321	U	1	4	6	200		K		S01			
322	U	1	4	7	200		K		S01			

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)		D. Processes			
	1	2	3	4		1	2	1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
323	U	1	4	8	200		K	S01			
324	U	1	4	9	200		K	S01			
325	U	1	5	0	200		K	S01			
326	U	1	5	1	200		K	S01			
327	U	1	5	2	200		K	S01			
328	U	1	5	3	200		K	S01			
329	U	1	5	4	200		K	S01			
330	U	1	5	5	200		K	S01			
331	U	1	5	6	200		K	S01			
332	U	1	5	7	200		K	S01			
333	U	1	5	8	200		K	S01			
334	U	1	5	9	200		K	S01			
335	U	1	6	0	200		K	S01			
336	U	1	6	1	200		K	S01			
337	U	1	6	2	200		K	S01			
338	U	1	6	3	200		K	S01			
339	U	1	6	4	200		K	S01			
340	U	1	6	5	200		K	S01			
341	U	1	6	6	200		K	S01			
342	U	1	6	7	200		K	S01			
343	U	1	6	8	200		K	S01			
344	U	1	6	9	200		K	S01			
345	U	1	7	0	200		K	S01			
346	U	1	7	1	200		K	S01			
347	U	1	7	2	200		K	S01			
348	U	1	7	3	200		K	S01			
349	U	1	7	4	200		K	S01			
350	U	1	7	6	200		K	S01			
351	U	1	7	7	200		K	S01			
352	U	1	7	8	200		K	S01			
353	U	1	7	9	200		K	S01			
354	U	1	8	0	200		K	S01			
355	U	1	8	1	200		K	S01			
356	U	1	8	2	200		K	S01			
357	U	1	8	3	200		K	S01			
358	U	1	8	4	200		K	S01			
359	U	1	8	5	200		K	S01			
360	U	1	8	6	200		K	S01			
361	U	1	8	7	200		K	S01			
362	U	1	8	8	200		K	S01			
363	U	1	8	9	200		K	S01			
364	U	1	9	0	200		K	S01			
365	U	1	9	1	200		K	S01			
366	U	1	9	2	200		K	S01			
367	U	1	9	3	200		K	S01			
368	U	1	9	4	200		K	S01			

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)			D. Processes			
									1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
369	U	1	9	6	200		K		S01			
370	U	1	9	7	200		K		S01			
371	U	2	0	0	200		K		S01			
372	U	2	0	1	200		K		S01			
373	U	2	0	2	200		K		S01			
374	U	2	0	3	200		K		S01			
375	U	2	0	4	200		K		S01			
376	U	2	0	5	200		K		S01			
377	U	2	0	6	200		K		S01			
378	U	2	0	7	200		K		S01			
379	U	2	0	8	200		K		S01			
380	U	2	0	9	200		K		S01			
381	U	2	1	0	200		K		S01			
382	U	2	1	1	200		K		S01			
383	U	2	1	3	200		K		S01			
384	U	2	1	4	200		K		S01			
385	U	2	1	5	200		K		S01			
386	U	2	1	6	200		K		S01			
387	U	2	1	7	200		K		S01			
388	U	2	1	8	200		K		S01			
389	U	2	1	9	200		K		S01			
390	U	2	2	0	200		K		S01			
391	U	2	2	1	200		K		S01			
392	U	2	2	2	200		K		S01			
393	U	2	2	3	200		K		S01			
394	U	2	2	5	200		K		S01			
395	U	2	2	6	200		K		S01			
396	U	2	2	7	200		K		S01			
397	U	2	2	8	200		K		S01			
398	U	2	3	4	200		K		S01			
399	U	2	3	5	200		K		S01			
400	U	2	3	6	200		K		S01			
401	U	2	3	7	200		K		S01			
402	U	2	3	8	200		K		S01			
403	U	2	3	9	200		K		S01			
404	U	2	4	0	200		K		S01			
405	U	2	4	3	200		K		S01			
406	U	2	4	4	200		K		S01			
407	U	2	4	6	200		K		S01			
408	U	2	4	7	200		K		S01			
409	U	2	4	8	200		K		S01			
410	U	2	4	9	200		K		S01			
411	U	2	7	1	200		K		S01			
412	U	2	7	8	200		K		S01			
413	U	2	7	9	200		K		S01			
414	U	2	8	0	200		K		S01			

Photocopy this page before completing if you have more than 26 wastes to list.

I.D. Number (enter from page 1)											
W	A	7	8	9	0	0	0	8	9	6	7

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

Line No.	A. Dangerous Waste No. (enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)		D. Processes			
								1. Process Codes (enter)		2. Process Description (if a code is not entered in D(1))	
415	U	3	2	8	200		K	S01			
416	U	3	5	3	200		K	S01			
417	U	3	5	9	200		K	S01			
418	U	3	6	4	200		K	S01			
419	U	3	6	7	200		K	S01			
420	U	3	7	2	200		K	S01			
421	U	3	7	3	200		K	S01			
422	U	3	8	7	200		K	S01			
423	U	3	8	9	200		K	S01			
424	U	3	9	4	200		K	S01			
425	U	3	9	5	200		K	S01			
426	U	4	0	4	200		K	S01			
427	U	4	0	9	200		K	S01			
428	U	4	1	0	200		K	S01			
429	U	4	1	1	200		K	S01			
430	W	0	0	1	5,000		K	S01			
431	W	P	0	1	5,000		K	S01			
432	W	P	0	2	1,000		K	S01			
433	W	P	0	3	500		K	S01			
434	W	T	0	1	30,000		K	S01			
435	W	T	0	2	20,000		K	S01			
436	W	S	C	2	5,000		K	S01			
437	K	0	1	3	200		K	S01			
438	K	0	4	4	200		K	S01			
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**IV. DESCRIPTION OF DANGEROUS WASTE (continued)**

E. Use this space to list additional process codes from Section D(1) on page 3.

The waste stored at the 305-B Storage Facility consists of listed waste, waste from nonspecific sources, characteristic waste, and state-only waste.

**V. FACILITY DRAWING** Refer to attached drawing(s).

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

**VI. PHOTOGRAPHS** Refer to attached photograph(s).

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

**VII. FACILITY GEOGRAPHIC LOCATION**

This information is provided on the attached drawings and photos.

LATITUDE (degrees, minutes, & seconds)

LONGITUDE (degrees, minutes, & seconds)

46	22	18		119	16	42	

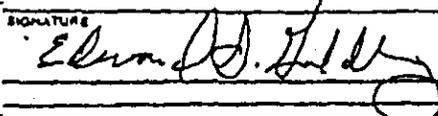
**VIII. FACILITY OWNER**

- A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information," place an "X" in the box to the left and skip to Section XI below.
- B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. Name of Facility's Legal Owner			2. Phone Number (area code & no.)		
3. Street or P.O. Box			4. City or Town	5. St.	6. Zip Code

**IX. OWNER CERTIFICATION**

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

Name (print or type) John D. Wagoner, Manager U.S. Department of Energy Richland Operations	Signed for John D. Wagoner	SIGNATURE 	Date Signed Revision 1 signed 12/20/90
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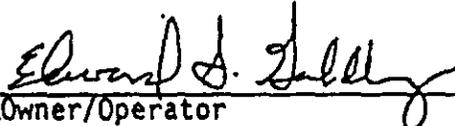
**X. OPERATOR CERTIFICATION**

*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.*

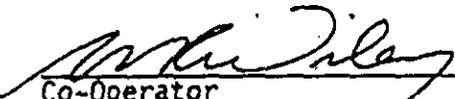
Name (Print Or Type) See attachment	Signature	Date Signed
--	-----------	-------------

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

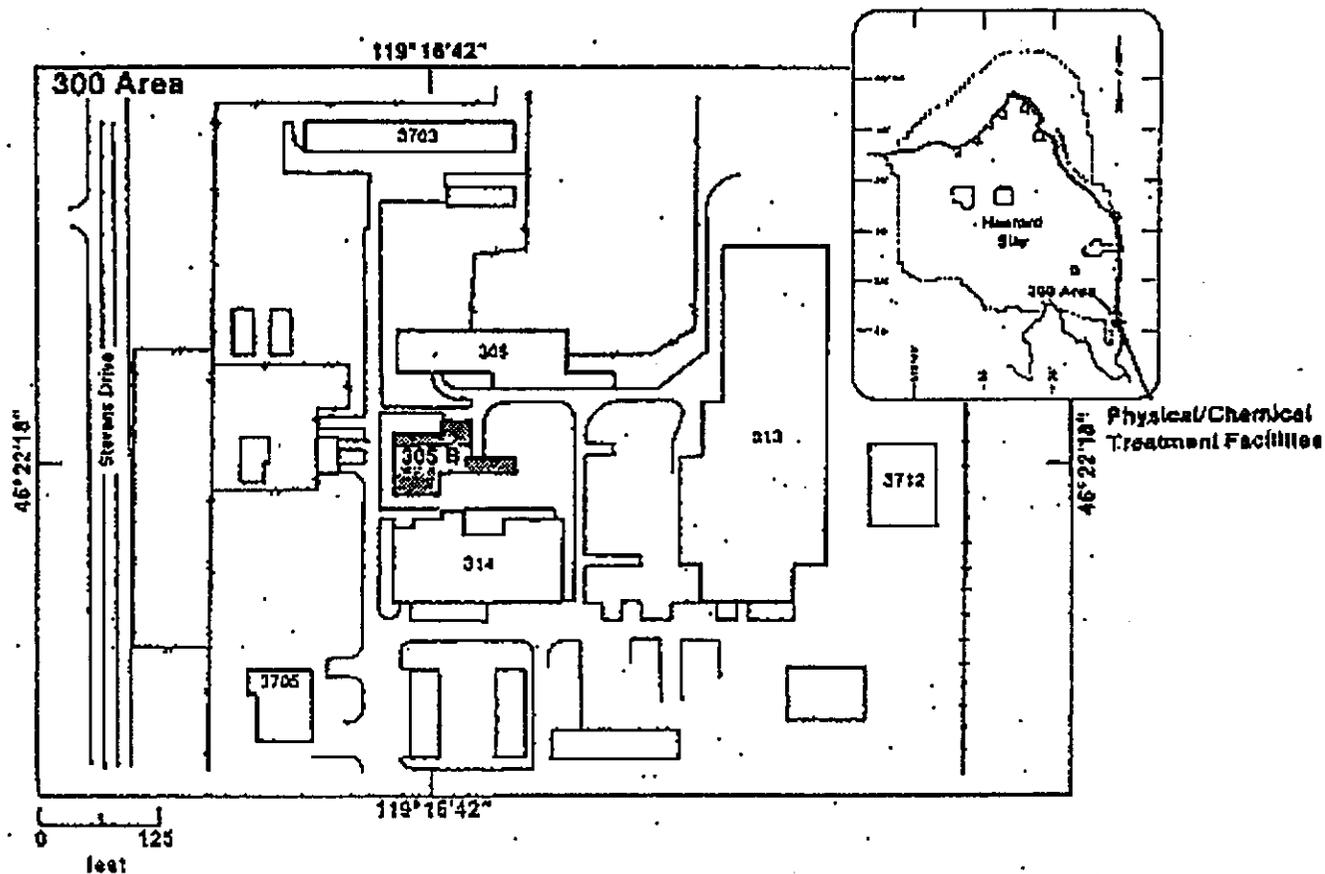
  
\_\_\_\_\_  
Owner/Operator  
John D. Wagoner, Manager  
U.S. Department of Energy  
Richland Operations Office

12-20-90  
Date

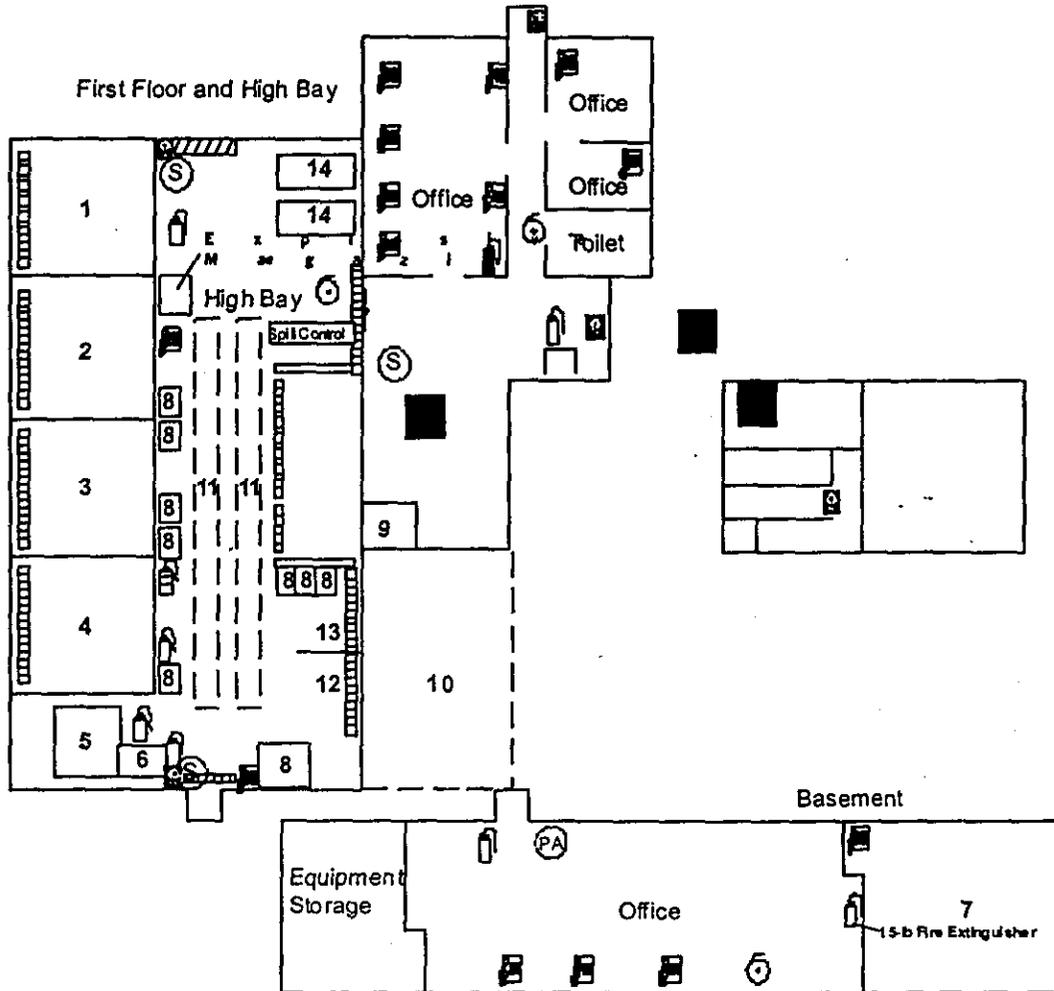
  
\_\_\_\_\_  
Co-Operator  
William R. Wiley, Director  
Pacific Northwest Laboratory

12-6-90  
Date

# 305-B Storage Facility Site Plan



# 305-B Storage Facility Floor Plan



### Legend

- 1. Acids, Oxidizers
- 2. Poisons, Class 9's
- 3. Alkalines, WSDW, Organic Peroxides
- 4. Organics and Compressed Aerosols
- 5. Flammable Liquid Bulking Module  
and compressed gases
- 6. Asbestos Cabinet
- 7. RMW Storage Cell
- 8. Flammable Storage
- 9. Small Quantity Flammable RMW
- 10. Outdoor Non-Regulated Drum Storage
- 11. WSDW/ORM/Non-Reg Drums
- 12. Oxidizer Drums
- 13. Acid Drums
- 14. Alkaline Drums

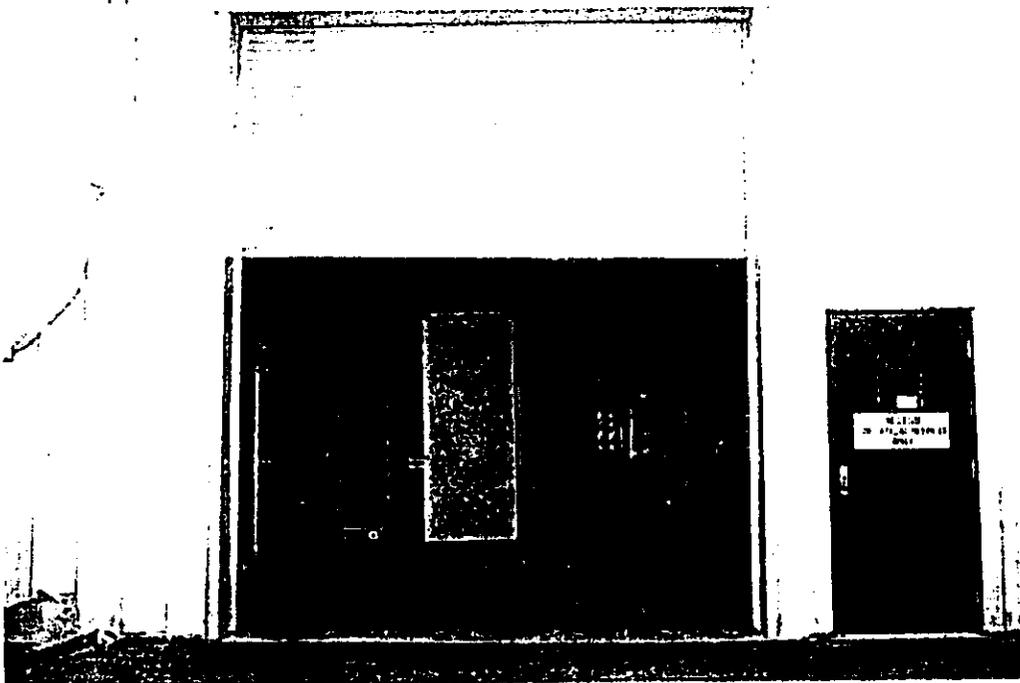
- Ⓢ Safety Shower/Eyewash
- ☎ Phone
- 🔔 Fire Alarm Bell
- 🔑 Fire Alarm Pull Box
- 🧯 14-lb Halon Fire Extinguisher
- 🧯 10-lb ABC Fire Extinguisher
- 🧯 15-lb Class D Fire Extinguisher
- Removable Access to Basement
- 🚪 Emergency Equipment Cabinet
- 🔍 Collection Sumps

# 305-B Storage Facility



View Looking West  
46°22'18"  
119°16'42"

88A907-8CN  
(PHOTO TAKEN 1988)



View Looking South  
46°22'18"  
119°16'42"

88A907-1CN  
(PHOTO TAKEN 1988)

**CONTENTS**

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1.0 PART A [A]..... 1-ii

1  
2 **1.0 PART A [A]**

3 The following is a chronology of the regulatory history of the 305-B Storage Facility.

- 4 • In December 1990, the Part A, Form 3, Revision 1 was submitted to the Washington State  
5 Department of Ecology (Ecology). The revision fulfilled requirements of 40 CFR 270.72 for new  
6 TCLP waste numbers D018 through D043 and WAC 173-303-805 for newly added waste numbers  
7 D012 through D017.
- 8 • On June 30, 1998, the Part A, Form 3, Revision 1A deleted dangerous waste numbers WC01 and  
9 WC02 and added dangerous waste number WSC2.
- 10 • On December 31, 2001, the Part A, Form 3, Revision 1B was revised for the following dangerous  
11 waste numbers that have been eliminated in accordance with Federal Register's (FR) 50 FR 51125,  
12 62 FR 32977, and Washington Administrative Code 173-303: P019, P025, P032, P035, P052, P053,  
13 P055, P061, P079, P080, P083, P086, P090, P091, P100, P107, P117, U013, U040, U054, U065,  
14 U100, U104, U139, U175, U195, U198, U199, U212, U224, U229, U230, U231, U232, U233, U241,  
15 U242, U245. The following dangerous waste numbers have been added in accordance with Federal  
16 Register's (FR) 50 FR 51125, 62 FR 32977, and Washington Administrative Code 173-303: P127,  
17 P128, P185, P188, P189, P190, P191, P192, P194, P196, P197, P198, P199, P201, P202, P203, P204,  
18 P205, U271, U278, U279, U280, U364, 367, U372, U373, U387, U389, U394, U395, U404, U409,  
U410, U411, K013, K044.

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1 **3.0 WASTE ANALYSIS [C]**

2 The purpose of this Waste Analysis Plan (WAP) is to document the waste acceptance process, sampling  
3 methodologies, analytical techniques, and processes that are undertaken for sampling and analysis of  
4 dangerous and or mixed waste managed in the 305-B Storage Facility.

5 This chapter also provides information on the chemical, biological, and physical characteristics of the  
6 waste stored at the 305-B Storage Facility.

7 **3.1 CHEMICAL, BIOLOGICAL, AND PHYSICAL ANALYSIS [C-1]**

8 The dangerous waste and RMW stored at 305-B Storage Facility can be categorized as originating from  
9 five basic sources:

- 10 • Listed Waste from specific and nonspecific sources  
11 • Discarded commercial chemical products  
12 • Waste from research activities using radioactive isotopes  
13 • Waste from chemicals synthesized or created in research laboratories  
14 • Discarded commercial products exhibiting dangerous waste characteristics and/or criteria.

15 Each of these waste categories is discussed below, including waste descriptions, hazard characteristics,  
16 and bases for hazard designations. This information includes that which must be known to treat, store, or  
17 dispose of the waste, as required under WAC 173-303-806(4)(a)(ii).

18 Listed Waste from Specific and Nonspecific Sources. Waste from specific and nonspecific sources  
19 consist of those listed waste identified in WAC 173-303-9904. The Part A, Form 3 for 305-B Storage  
20 Facility identifies the waste from this category with their estimated annual management quantities.

21 Halogenated and nonhalogenated solvents are in the form of spent solvents. Degreasing solvents (F001),  
22 as well as spent halogenated solvents (F002), are used primarily in research although some commercial  
23 applications do exist (e.g., printing, duplicating). Spent non-halogenated solvents (F003, F004, and F005)  
24 also come primarily from research laboratories, although some is generated through maintenance  
25 applications. Manufacturing activities are not performed at Hanford; therefore, dangerous waste from  
26 specific sources (WAC 173-303-9904 "K" Waste) typically are not generated at PNNL. However, small  
27 quantities of K-listed waste have been generated from treatability studies and sample characterization  
28 activities at PNNL from time to time and could be stored at 305-B Storage Facility. W001 state source  
29 waste (PCB electrical equipment waste) has been generated in limited amounts in the past and could be  
30 stored at 305-B Storage Facility if other generation activities occur.

31 F-listed waste is designated on the basis of process knowledge (i.e., information from container labels or  
32 material safety data sheets), or by sampling. Sampling is performed if the generating unit does not have  
33 sufficient information to document the composition and characteristics of the waste. The waste generator  
34 is responsible for specifying the characteristics of the waste on the basis of knowledge of the chemical  
35 products used (i.e., information supplied by the manufacturer) and the process generating the waste.  
36 These listed waste are all designated as dangerous waste (DW) or extremely hazardous waste (EHW)  
37 based on the criteria given in WAC 173-303-100. Waste F027 is designated as an LDR waste under 40  
38 CFR 268.31 (dioxin-containing waste).

39 Waste code W001 is assigned to wastes meeting the criteria given in WAC 173-303-9904 and not  
40 exempted by WAC 173-303-071(3)(k).

41 Discarded Chemical Products. Discarded chemical products consist of those products described in  
42 WAC 173-303-081. The Part A, Form 3, for 305-B Storage Facility identifies all of the discarded  
43 chemical products listed in WAC 173-303-9903 and specifies an estimated maximum annual management  
44 quantity, based on prior experience. The Part A permit application lists all of these waste codes, however,

1 because the wide variety of research activities conducted at Hanford presents the potential to generate any  
2 of these waste.

3 These waste (P waste and U waste) are typically received at 305-B Storage Facility in the manufacturer's  
4 original container. These containers typically consist of glass and polyethylene jars or bottles and metal  
5 cans that have a volume equal to or less than 4 liters.

6 Waste in this category are designated on the basis of the generator's knowledge. As these waste are  
7 usually in original containers, information on the container label is verified by generator knowledge  
8 (i.e., knowledge that material is in its original container) and is used to identify contents. Waste in 'as  
9 procured' containers (i.e., original container with intact label) are not sampled. These listed waste contain  
10 those designated as DW as well as those designated as EHW. These waste are also subject to LDR  
11 regulations under 40 CFR 268, including disposal prohibitions and treatment standards.

12 Waste from Research Activities Using Radioactive Isotopes. Dangerous waste from research activities  
13 using radioactive isotopes are RMW. These waste are generated in laboratories performing chemical and  
14 physical research, and consist primarily of radiologically contaminated chemicals. These waste are  
15 designated on the basis of the generator's knowledge or on the basis of sampling and analysis. The  
16 generator's knowledge is used if the generator has kept accurate records of the identities and  
17 concentrations of constituents present in the waste. For example, many generating units keep log sheets  
18 for accumulation containers in satellite areas to keep a record of waste constituents. If information  
19 available from the generator is inadequate for waste designation, the waste are sampled and the results of  
20 the analysis are used for designation. These waste include those designated as state only dangerous waste  
21 under WAC 173-303-100 and also those designated as characteristic dangerous waste under  
22 WAC 173-303-090. The Part A Permit Application for 305-B Storage Facility includes all categories of  
23 toxic, and persistent, waste (i.e., both DW and EHW). The wide variety of research activities conducted  
24 at Hanford presents the potential that these waste could be generated and require subsequent management  
25 at 305-B Storage Facility. Similarly, the Part A, Form 3, permit application includes the characteristic  
26 dangerous waste categories D001 through D043 (i.e., ignitable, corrosive, reactive, and TCLP toxic due to  
27 metals or organics content).

28 Flammables (i.e., flash point less than 100° Fahrenheit) will not be stored in the below-grade RMW cell;  
29 however, ignitables (D001 due to oxidizer content) will be stored in this cell. Flammable RMW is not  
30 stored below grade due to Fire Code restrictions. These waste are stored above the RMW cell in a  
31 flammable storage module. The flammable RMW module is equipped with secondary containment to  
32 provide greater than 100% secondary containment volume.

33 The waste in this category includes those designated as either DW or EHW. The waste could also be  
34 federal LDR waste regulated under 40 CFR 268 as well as state LDR waste regulated under  
35 WAC 173-303-140 (e.g., organic/carbonaceous waste).

36 Waste from Chemicals Synthesized or Created in Research Laboratories. Waste from chemicals  
37 synthesized or created in research laboratories typically consist of organics in quantities of 100 g or less,  
38 received in small containers.

39 These waste are designated on the basis of the generator's knowledge or on the basis of sampling and  
40 analysis. The generator's knowledge is used if the generating unit has kept accurate records of the  
41 identities and concentrations of constituents present in the waste (e.g., log sheets for accumulation  
42 containers). If information available from the generating unit is inadequate for waste designation, the  
43 waste are sampled and the results of the analysis are used for designation. These waste include those  
44 designated as state only dangerous waste under WAC 173-303-100 and also those designated as  
45 characteristic dangerous waste under WAC 173-303-090. The Part A, Form 3, for 305-B Storage Facility  
46 includes all categories of toxic, and persistent waste (i.e., both DW and EHW). The wide variety of  
47 research activities conducted at Hanford presents the potential that these wastes could be generated and  
48 require subsequent management at 305-B Storage Facility.

1 The wastes in this category includes those designated as either DW or EHW. These wastes could also be  
2 federal LDR wastes regulated under 40 CFR 268 as well as state LDR wastes regulated under  
3 WAC 173-303-140 (e.g., organic/carbonaceous wastes).

4 Discarded Chemical Products Exhibiting Dangerous Waste Characteristics and/or Criteria. Many  
5 discarded chemical products handled in 305-B Storage Facility are not listed in WAC 173-303-9903 and  
6 are still considered dangerous waste since they exhibit at least one dangerous waste characteristic and/or  
7 criterion (WAC 173-303-090 and WAC 173-303-100). These wastes are included with those listed in the  
8 Part A, Form 3, under waste codes D001 through D043, WT01, WT02, WP01, WP02, and WP03. These  
9 containers typically consist of glass and polyethylene jars or bottles and metal cans that have a maximum  
10 volume of 4 liters.

11 Waste in this category are designated based on the generator's knowledge. As these waste are usually in  
12 their original containers, information on the container label is verified by the generator's knowledge and is  
13 used to identify the contents. These waste contain those designated as DW as well as those designated as  
14 EHW. These waste could also be federal LDR waste regulated under 40 CFR 268 as well as state LDR  
15 waste regulated under WAC 173-303-140 (e.g., organic/carbonaceous waste).

### 16 3.1.1 Containerized Waste

17 The container storage areas at 305-B Storage Facility meet the containment system requirements of  
18 WAC 173-303-630(7)(c). Testing or documentation that the dangerous waste stored at 305-B Storage  
19 Facility does not contain free liquids is not required.

### 20 3.1.2 Waste in Tank Systems

21 This section does not apply to the 305-B Storage Facility because wastes are not stored in tanks.

### 22 3.1.3 Waste in Piles [C-1a]

23 This section does not apply to the 305-B Storage Facility because wastes are not stored in piles.

### 24 3.1.4 Landfill Waste [C-1b]

25 This section does not apply to the 305-B Storage Facility because wastes are not placed in landfills.

### 26 3.1.5 Waste Incinerated and Waste Used in Performance Tests [C-1c]

27 This section does not apply to the 305-B Storage Unit because wastes are not incinerated.

### 28 3.1.6 Waste to be Land Treated

29 This section does not apply to the 305-B Storage Facility because waste does not undergo land treatment.

## 30 3.2 WASTE ANALYSIS PLAN [C-2]

31 This section describes the procedures used to obtain the information necessary to manage waste in  
32 accordance with the requirements of WAC 173-303 (Ecology 2000).

### 33 3.2.1 Facility Description

34 The 305-B Storage Facility is a dangerous waste and RMW storage unit owned and operated by the  
35 Department of Energy and co-operated by Pacific Northwest National Laboratory. The unit is used for  
36 the collection, consolidation, packaging, storage, and preparation for transport and disposal of both  
37 dangerous waste and RMW. It is an integral part of the Hanford Site's waste management system.

38 The 305-B Storage Facility is a one-story frame and masonry building with basement constructed in the  
39 early 1950s, with an attached two-story-high metal and concrete building constructed in January 1978,  
40 referred to in this document as the "high bay." The unit is located within the 300 Area, and was formerly  
41 used for engineering research and development. Unit upgrades were completed in 1988 to meet

1 requirements for storage of dangerous waste and RMW. Waste storage under interim status began in  
2 March 1989.

### 3 3.2.2 Description of Facility Processes and Activities

4 A variety of small volume chemical wastes are generated by PNNL's research laboratory activities. These  
5 wastes are brought to the 305-B Storage Facility and segregated by compatibility for storage in the unit  
6 until enough waste is accumulated to fill a labpack or bulking container, usually a 30 - 55-gallon drum.  
7 When a sufficient number of shipping containers of waste have accumulated, they are manifested for  
8 shipment, generally to permitted off-site recycling, treatment or disposal facilities.

9 Dangerous wastes are stored in the high bay. The high bay has been equipped with a secondary  
10 containment system to facilitate storage of containerized wastes. In addition, four storage "cells" have  
11 been constructed within the high bay area for segregated storage of incompatible waste streams. Each of  
12 the cells is approximately 14' x 14', enclosed by 4' high concrete block walls; each cell has its own  
13 separate secondary containment system. Drum-quantity storage for incompatible wastes is allowed in  
14 these cells and in separated areas of the high bay.

15 Radioactive mixed waste (RMW) is stored in the basement of the original wing of the building in an area  
16 approximately 18' x 32'. Flammable RMW cannot be stored below grade (per Uniform Fire Code) and is  
17 stored in an independent area on the first floor of the original wing in the RMW flammable storage  
18 module.

19 Most of the information necessary to manage waste at 305-B Storage Facility is obtained from generating  
20 units without the need to perform detailed chemical, physical, and biological analysis. This approach is  
21 used for the following reasons:

- 22 • Waste stored at 305-B Storage Facility are generated on the Hanford Site and/or by PNNL research  
23 programs; effective administrative control can be maintained over individual waste generating units  
24 (i.e., the same organization generates the waste and operates the storage unit)
- 25 • Wastes stored at 305-B Storage Facility may be discarded chemical products for which knowledge of  
26 waste characteristics is available without further analysis
- 27 • Many of the waste stored at 305-B Storage Facility result from research activities that are carefully  
28 controlled and documented; this documentation includes information on chemical constituents.

29 Information provided by waste generating units is verified before wastes are accepted for transport to  
30 305-B Storage Facility (e.g., wastes are inspected to verify that they are as described in the disposal  
31 request). Generating units are not required to sample wastes unless they have inadequate process  
32 knowledge to designate waste, additional LDR information is needed, or visual verification failure occurs.  
33 Verification sampling of waste to be shipped offsite from 305-B Storage Facility is required by the  
34 disposal contractor and the contractor performs these analyses.

35 Because of the importance of administrative controls for the purposes of waste analysis, procedures for  
36 management of wastes from the time of generation through storage at 305-B Storage Facility are  
37 described below. These procedures demonstrate how sufficient knowledge is obtained from generating  
38 units to properly manage dangerous and mixed waste at 305-B Storage Facility. In the event that such  
39 knowledge is not available, sampling and analysis is required by 305-B Storage Facility procedures prior  
40 to shipment to the storage unit.

41 The 305-B Storage Facility personnel shall collect from the generating unit(s) the information pursuant to  
42 40 CFR 268.7(a) regarding LDR wastes, the appropriate treatment standards, whether the waste meets the  
43 treatment standards, and the certification that the waste meets the treatment standards, if necessary, as  
44 well as any waste analysis data that supports the generator's determinations. If this information is not  
45 supplied by the generating unit, then the 305-B Storage Facility personnel shall be responsible for  
46 completion and transmittal of all subsequent information regarding LDR wastes, pursuant to  
47 40 CFR 268.7(b). All waste streams must be re-characterized at least annually, or when generating unit

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

3 Volumetric Description of Waste. A wide range of waste volumes is collected from research and support  
4 activities. The largest unit container collected is a DOT container <0.46 m<sup>3</sup>, while the smallest is a trace  
5 amount in a small vial.

6 Large volume containers (greater than 4 L) (commonly contain chemicals such as those listed in  
7 WAC 173-303-9903 and -9904 and in 40 CFR 261.33), or commercial products which exhibit one or  
8 more of the dangerous waste characteristics or criteria. Greater than 99 percent of the containers  
9 generally contain chemicals for which information is easily accessible to determine dangerous  
10 designation. This information is generally obtained from the container label, for those waste in original  
11 containers, or from the material safety data sheet (MSDS) for the product.

12 Notification for Storing of Waste: The waste analysis process begins when the waste management  
13 organization is notified of the presence of a chemical or mixed waste. This notification is accomplished  
14 by the generating unit completing and transmitting a Chemical Disposal/Recycle Request Form ( for  
15 example see Figure 2-8). The form describes the volume and chemical composition of waste in each  
16 waste container for disposal. Hazard and compatibility information are obtained for each item on the  
17 disposal request form to ensure the safety of the waste management organization staff that collect and  
18 transport the waste and to ensure safe and appropriate storage in 305-B Storage Facility.

19 The compatibility and hazard class are determined using reference material that may include, Condensed  
20 Chemical Dictionary, Merck Index, 49 CFR, NIOSH, Sigma-Aldrich or any other reference material that  
21 is applicable. The priority of hazard designation for those substances with multiple hazards or for  
22 mixtures is the same used by the DOT in 49 CFR 173.2 (DOT 2000) as shown below:

- 23 1) Radioactive material
- 24 2) Poison A
- 25 3) Flammable gas
- 26 4) Nonflammable gas
- 27 5) Flammable liquid
- 28 6) Oxidizer
- 29 7) Flammable solid
- 30 8) Corrosive material (liquid)
- 31 9) Poison B
- 32 10) Corrosive material (solid)
- 33 11) Irritating materials
- 34 12) Combustible liquid (exceeding 110 gal)
- 35 13) Other Regulated Material (ORM)-B
- 36 14) ORM-A
- 37 15) Combustible liquid (less than 110 gal)
- 38 16) ORM-E.

39 Chemical Disposal and Recycle Requests (CDRR) and other information used for determining waste  
40 designations and compatibility must meet four distinct needs of the dangerous waste manager and sample  
41 collector. They must enable each to:

- 42 • Identify those waste which are designated dangerous in accordance with WAC 173-303 and whether  
43 those waste are DW or EHW
- 44 • Determine whether the waste is restricted from land disposal under 40 CFR 268 or  
45 WAC 173-303-140 and, as whether it, complies with applicable treatment standards under  
46 40 CFR 268 or WAC 173-303-140
- 47 • Identify and verify specific morphological characteristics of waste in solid or solution form

- Outline how to safely handle, transport, analyze, store, and dispose of the waste product or sample.

**Physical Analysis.** Visual validation as a physical analysis procedure is strongly relied upon to confirm the nature of a waste collected or sampled, and to determine the accuracy of the disposal request information received from the generating unit. It is impractical for the waste management organization to chemically analyze each container or vial of waste accepted for storage in 305-B Storage Facility since the amount can exceed 10,000 per year. A more realistic approach to reducing risks to safety and the environment, and one implemented at 305-B Storage Facility, includes trained and experienced personnel performing a visual inspection of the waste and direct inquiry of the generating unit's personnel. The waste is inspected to verify that it matches the description on the disposal request. If the waste is a discarded product, the contents of the container are inspected to verify that they match the description of the product. For other waste, e.g., spent solvents, waste descriptions are compared with the products in use at the generating unit. Generating unit personnel are queried concerning the source of the waste and the materials used in the process generating the waste. This information is compared to the description of the waste on the disposal request. If, after visual inspection of the waste and interrogation of the generating unit personnel, any doubt remains as to the true identity of the waste, the waste is sampled and analyzed by the generating unit as described in Section 3.5.

**Waste Collection at the Generating Unit.** When satisfactory information has been obtained from the CDRR Form, waste management organization staff visit the generating unit site and make a final inspection of the waste containers to determine whether the disposal request form and contents label information match completely. If the information on the disposal request matches with the container labeling and visual inspection, the waste are approved for storage. If discrepancies are found, the generating unit is required to resubmit the disposal request with accurate information. Unknown or unidentified materials are sampled by generating unit staff for identification of constituents and remain at the generating unit until the composition has been determined.

**Labeling and Marking.** After inspection of the waste at the generating unit, the approved waste are assigned a unique computer identification number and hazard classification. The waste containers are then marked and labeled in compliance with WAC 173-303-190 (DOT marking and labeling), and Washington "Hazardous Waste" markings. Waste meeting Washington dangerous waste criteria under WAC 173-303-090 or 173-303-100 are marked "Toxic" (for waste designated WT01 or WT02), and/or "Persistent" (for waste designated WP01, WP02, or WP03), in accordance with WAC 173-303-630(3). In addition, each waste container is labeled with a list of constituents and/or an appropriate hazard description. The containers are also labeled indicating compatibility group and cell location, and with a unique computer-generated identification number created by the tracking system described below. This computerized information helps the waste handlers ensure safe handling, storage, retrieval and transportation of dangerous waste.

**Transportation.** The labeled containers are transported to 305-B Storage Facility by PNNL staff trained in applicable DOT requirements and emergency response. Waste is transported using a truck or light utility vehicle. For transport on roads accessible to the public, the vehicles are placarded in compliance with DOT regulations and documented in compliance with WAC 173-303-180, Hanford Facility Permit conditions II.P. and/or II.Q as applicable.

**Waste Handling, Storage, and Tracking at 305-B Storage Facility.** Waste received at 305-B Storage Facility is put into 13 separate hazard classifications based on building and fire code restrictions for that type of facility:

- 1) Nonflammable RMW
- 2) Oxidizers
- 3) Acids, (organic and inorganic)
- 4) Poison
- 5) Caustics
- 6) Halogenated Hydrocarbons
- 7) Non-Regulated

- 1 8) Miscellaneous (ORM categories)
- 2 9) Washington State only waste (e.g., sodium chloride, sodium bicarbonate)
- 3 10) Flammable and combustible liquids
- 4 11) Flammable and combustible RMW
- 5 12) TSCA waste (PCB and asbestos) waste
- 6 13) Special Case waste (organic peroxides, explosives, etc.)

7 Each hazard class has designated and clearly identified locations within 305-B Storage Facility.  
8 Containers of dangerous waste (10 gal or less) are stored in a specific storage cabinet or shelf designed for  
9 that hazard class. The cabinets are located inside the appropriate storage cell (i.e., acid storage cabinet in  
10 acid cell). DOT-approved containers (typically 10 gal and larger but less than 0.46m<sup>3</sup>) are segregated by  
11 hazard class and can be stored in a appropriate storage cell or on the main high bay floor in 305-B Storage  
12 Facility.

13 Only sealed containers of nonflammable RMW are received in the below-grade RMW storage area  
14 located in the basement of 305-B Storage Facility. Containers of flammable RMW are stored above  
15 grade in a flammable storage module adjacent to the high bay area. All chemical storage is in accordance  
16 with fire protection requirements of the 1988 Uniform Fire Code (International Conference of Building  
17 Officials 1988).

18 Storage limits for all chemicals are listed in Table 4-1, (Uniform Building Code Table numbers 9-A and  
19 9-B). This table is incorporated into this section by reference.

20 Recordkeeping and Inventory Control. A computer tracking system has been developed to ensure that  
21 complete records of current inventory, packaging, and shipping data are maintained. Records of the  
22 initial waste disposal request form, waste analysis results if required, waste designation, and shipping  
23 manifest are maintained. As waste are received for disposal, the containers are labeled with the  
24 information described in the Labeling and Marking section above, including a unique computer  
25 identification number. This number is also written on the disposal request form. The label information is  
26 then entered into the computerized database, along with the storage location within 305-B Storage  
27 Facility.

28 The endpoint of the process for most waste is proper packaging and transport of the waste to an approved  
29 recycler or treatment/disposal facility. Some commercial chemical products, however, are redistributed to  
30 other Hanford Site contractors, as described in Section 10.4. Final computer verification of the history  
31 and ultimate disposal of each waste container is entered when the material is shipped from the  
32 305-B Storage Facility.

33 Current waste quantities in inventory are periodically verified and reported to the Unit Operations  
34 Supervisor. The inventory is checked by hazard class and provides a measure of current inventory versus  
35 established limits.

36 If it is determined that 305-B Storage Facility inventory is within 5 percent of the limit for a given hazard  
37 classification, additional waste of that hazard class is not accepted into 305-B Storage Facility until the  
38 inventory has been reduced. Exceptions must be approved by the unit operating supervisor.

39 Unknown Waste and Waste Constituent Verification. Containers with unknown waste compositions are  
40 not accepted at 305-B Storage Facility. In the event that 305-B Storage Facility staff are required to  
41 respond to a critical need of a generating unit in the future and pick up an unknown waste, it will be  
42 sampled and analyzed as described in Sections 3.2.1 through 3.2.6.

43 If, for any reason, 305-B Storage Facility personnel believe that more stringent analysis of non-reagent  
44 grade chemical waste is needed (i.e., flash cans and mixtures), they will request that the generating unit  
45 have the waste analyzed by an approved analytical laboratory. Reasons for this request may be  
46 questionable appearance of the waste, periodic confirmation of waste composition, or historically  
47 unreliable information from a particular generating unit. There is no established frequency for this  
48 sampling and analysis; it is conducted on an as-needed basis. This analysis must be performed in

1 accordance with EPA SW-846 procedures (EPA 1986). Analytical laboratories in the area with these  
2 capabilities include commercial, Hanford Site and Battelle operated laboratories. The generating unit  
3 must also provide the laboratory analysis confirming the waste composition when the waste management  
4 organization picks up the waste. This analysis will become part of the 305-B Storage Facility Operating  
5 Record.

### 6 3.2.3 Identification/EPA Classification and Quantities of Hazardous Wastes Managed Within the 7 305-B Storage Facility

8 Refer to Section 3.1 for a description of the types and quantities of wastes managed at 305-B Storage  
9 Facility.

### 10 3.2.4 Description of Hazardous Waste Management Units

11 The 305-B Storage Facility Waste Management Units are described in Attachment 18, 305- Storage  
12 Facility , Chapter 4.0 of the Hanford Facility RCRA Permit..

## 13 3.3 SELECTING WASTE ANALYSIS PARAMETERS

14 State and federal regulations [WAC 173-303-300(2) and (5)(a); WAC 173-303-140; 40 CFR 268.7(a)]  
15 require that information be obtained, documented, and/or reported on wastes received by a TSD unit.  
16 These requirements include ensuring that only waste which meet 305-B Storage Facility unit-specific  
17 permit requirements are accepted, and reporting the information required by WAC 173-303-380. In  
18 addition to providing a general description of the waste, the focus of the information collected for  
19 regulatory purposes is to ensure that the 305-B Storage Facility is permitted to accept and store the waste.

20 The 305-B Storage Facility only accepts wastes that have been characterized properly. Before receipt or  
21 acceptance of waste at the 305-B Storage Facility, generators must supply adequate information to  
22 characterize and manage wastes properly.

23 One of the most important aspects of operating the 305-B Storage Facility in a safe manner is to ensure  
24 that incompatible wastes are not mixed together. For the purposes of this document, waste are considered  
25 compatible if, when mixed, they do not: (1) generate extreme heat or pressure, fire, or explosion, or  
26 violent reaction; (2) produce uncontrolled toxic mists, dusts, or gases in sufficient quantities to threaten  
27 human health; (3) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of  
28 fire or explosions; (4) damage the structural integrity of the device or facility containing the waste; or  
29 (5) through other like means threaten human health or the environment.

30 Sampling and laboratory analysis could be required to verify or establish waste characteristics for waste  
31 that is stored at the 305-B Storage Facility. The following are instances where sampling and laboratory  
32 analysis is required:

- 33 • inadequate information on PNNL-generated waste
- 34 • 5 percent waste verification for PNNL-generated waste
- 35 • 10 percent waste verification for non-PNNL-generated waste
- 36 • identification and characterization for unknown waste and spills within the unit.

### 37 3.3.1 Parameter Selection Process

38 The selection of analytical parameters is based on the State of Washington's "Dangerous Waste  
39 Regulations," WAC 173-303-300 and *EPA Waste Analysis at Facilities That Generate, Treat, Store, and  
40 Dispose of Hazardous Wastes, A Guidance Manual* (EPA 1994).

41 At least five percent (5%) of the waste containers received at 305-B during a federal fiscal year  
42 (October 1 through September 30) will undergo confirmation of designation pursuant to Sections 3.2.2  
43 and 3.2.3 (Test Methods and Sampling Methods, respectively). The number of containers needed to meet  
44 the five percent (5%) requirement is five percent (5%) of the average of containers for the previous three  
45 months. For example if two hundred (200) containers are received in January, one hundred eighty (180) in

1 February, and two hundred twenty (220) in March, then ten (10) containers of received waste must  
2 undergo confirmation of designation in April. All generating units which ship more than twenty  
3 (20) containers through 305-B Storage Facility in a fiscal year will have at least one (1) container sampled  
4 and analyzed. Containers, for which there is insufficient process knowledge, or analytical information to  
5 designate without sampling and analysis, may not be counted as part of the five percent (5 percent)  
6 requirement unless there is additional confirmation of designation independent of the generator  
7 designation. The generating unit's staff shall not select the waste containers to be sampled and analyzed  
8 other than identifying containers for which insufficient information is available to designate.

9 Containers of the following are exempt from the confirmation calculation above: Laboratory reagents or  
10 other unused products such as paint, lubricants, solvent, or cleaning products, whether received for  
11 redistribution, recycling, or as waste. To qualify for this exemption, such materials must be received at  
12 305-B Storage Facility in their original containers.

13 "Prior to acceptance of wastes at 305-B Storage Facility, confirmation of designation may be required  
14 (Section 3.7.3). The wastes that shall undergo confirmation of designation are identified in  
15 Condition III.2.B.f. of this Permit and may be divided into two groups; those that easily yield a  
16 representative sample (Category I), and those that do not (Category II). The steps for each type are  
17 outlined below along with a description of which wastes fall into each category:

18 Category I. If a waste which easily yields a representative sample is received, a representative sample will  
19 be taken from the waste containers selected. If more than one phase is present, each phase must be tested  
20 individually. The following field tests will be performed as appropriate for the waste stream:

- 21 • Reactivity - HAZCAT<sup>TM</sup> oxidizer, cyanide, and sulfide tests. These tests will not be performed on  
22 materials known to be organic peroxides, ethers, and/or water reactive compounds.
- 23 • Flashpoint/explosivity - by HAZCAT<sup>TM</sup> flammability procedure, explosive atmosphere meter<sup>1</sup>, or a  
24 closed cup flashpoint measurement instrument<sup>1</sup>.
- 25 • pH - by pH meter<sup>1</sup> or pH paper (SW-846-9041)<sup>2</sup>. This test will not be performed on non- aqueous  
26 materials.
- 27 • Halogenated organic compounds - by Chlor-D-Tect<sup>TM</sup> kits.
- 28 • Volatile organic compounds - by photo or flame ionization tester<sup>1</sup>, by gas chromatography with or  
29 without mass spectrometry, or by melting point and/or boiling point determination.

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

31 <sup>2</sup> The pH paper must have a distinct color change every 0.5 pH units and each batch of paper must be  
32 calibrated against certified pH buffers, or by comparison with a pH meter calibrated with certified pH  
33 buffers.

34 If the sample data observed meets the parameters specified in its documentation, confirmation of  
35 designation is complete and the waste may be accepted. If not, the waste is rejected and returned to the  
36 generating unit for additional characterization. The waste will be required to be resubmitted with a revised  
37 Chemical Disposal/Recycle Request (CD/RR) following the additional characterization activity.

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

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

- 43 a. Visually verify the waste. Examine each selected container to ensure that it matches the data provided  
44 on the CD/RR form(s) provided to document the waste. Labpacks and combination packages must be  
45 removed from the outer container. If the waste matches the description specified in its documentation,  
46 confirmation of designation is complete and the waste may be accepted. If not, the waste is rejected

1 and returned to the generating unit, and the generating unit revises and resubmits the documentation  
2 to reflect the actual contents. If necessary, the waste shall be re-designated utilizing the designation  
3 methods identified in WAC 173-303-070 through 173-303-100."

4 Wastes must be analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) in accordance  
5 with Appendix II of 40 CFR 261, as amended, in order to provide sufficient information for proper  
6 management and for decisions regarding LDR pursuant to 40 CFR 268.

### 7 3.3.2 Criteria and Rational for Parameter Selection

8 Waste-testing methods, parameters and the rationale for these parameters are summarized in Table 3-1.  
9 Waste testing methods and references to these methods are as specified in WAC 173-303-110(3) or  
10 approved by Ecology in accordance with WAC 173-303-110(5). These methods are summarized in  
11 Table 3-1. All methods are specified in *Chemical Testing Methods*, WDOE 83-13 (Ecology 1983) and/or  
12 *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA SW-846 (EPA 1986).

13 Testing parameters for each type of waste were selected to obtain data sufficient to designate the waste  
14 properly under WAC 173-303-070, meet requirements for Land Disposal Restrictions, and to manage the  
15 waste properly. If information on the source of the waste is available, then all parameters might not be  
16 required, e.g., exclusion of testing for pesticides from a metal-machining operation.

17 Some of the parameters that are considered for waste received at the 305-B Storage Facility are as  
18 follows.

- 19 • Physical description – used to determine the general characteristics of the waste. This facilitates  
20 subjective comparison of the sampled waste with previous waste descriptions or samples. Also, a  
21 physical description is used to verify the observational presence or absence of free liquids.
- 22 • pH – used to identify the pH and corrosive nature of an aqueous or solid waste, to aid in establishing  
23 compatibility strategies, and to indicate if the waste is acceptable for treatment and/or storage in the  
24 325 HWTUs.
- 25 • Cyanide – used to indicate whether the waste produces hydrogen cyanide upon acidification below  
26 pH 2.
- 27 • Sulfide screen – used to indicate if the waste produces hydrogen sulfide upon acidification below  
28 pH 2.
- 29 • Halogenated hydrocarbon content screen – used to indicate whether chlorinated hydrocarbons or  
30 polychlorinated biphenyls (PCBs) are present in waste and to determine if the waste needs to be  
31 managed in accordance with the regulations prescribed in the *Toxic Substance Control Act of 1976*.
- 32 • Ignitability – used to identify waste that must be managed and protected from sources of ignition or  
33 open flame.
- 34 • HAZCAT™ testing tests – used to determine waste characteristics and verify generator knowledge.  
35 The testing procedures for each HAZCAT™ test are included in the HAZCAT™ kit.

### 36 3.3.3 Special Parameter Selection Requirements

37 The 305-B Storage Facility does not have any process vents that manage hazardous waste with organic  
38 concentrations of at least 10 part per million by weight percent, or pumps, or compressors used more than  
39 300 hours per year that come into contact with hazardous waste with an organic concentration of at least  
40 10 percent by weight.

41 A variety of small volume chemical wastes are generated by PNNL's research laboratory activities. These  
42 containers typically range in sizes from 10 mil to 20 gallon. These wastes are brought to the  
43 305-B Storage Facility and segregated by compatibility for storage in the unit until enough waste is  
44 accumulated to fill a labpack or bulking container, usually a 30- to 55-gallon drum. All containers having  
45 a design capacity greater than 0.1 m<sup>3</sup> to less than or equal to 0.46 m<sup>3</sup> are equipped with a cover and

1 complies with all applicable Department of Transportation regulations on packaging hazardous waste for  
2 transport under 49 CFR part 178.

3 DOT approved intermediate bulk packaging may be utilized for some solid wastes. These containers  
4 range in size from 0.1 cu yard (27 cu ft) to 1.6 cu yard (43 cu ft) and are approved for solid waste only.

### 5 3.4 SELECTING SAMPLING PROCEDURES

#### 6 3.4.1 Sampling Strategies and Equipment

7 Sample collection methods conform to the representative sample methods referenced in  
8 WAC 173-303-110(2). The summary of test parameters, rationales and sampling methods are identified  
9 in Table 3-1.

10 Representative samples of liquid waste from containers (vertical 'core sections') are typically obtained  
11 using a composite liquid waste sampler (COLIWASA) or tubing, as appropriate. The sampler is long  
12 enough to reach the bottom of the container in order to provide a representative sample of all phases of  
13 the containerized liquid waste. If a liquid waste has more than one phase, each phase is separated for  
14 individual testing depending on the waste management pathways of the phases.

15 Other waste types that might require sampling are sludge's, powders, and granules. In general, non-  
16 viscous sludge's are sampled using a COLIWASA. Highly viscous sludge's and cohesive solids are  
17 sampled using a trier, as specified in SW-846. Dry powders and granules are sampled using a thief, also  
18 as specified in SW-846.

19 Samplers are constructed of material compatible with the waste. In general, aqueous liquids are sampled  
20 using polyethylene samplers, organic liquids using glass samplers, and solids using polyethylene  
21 samplers. Disposable samplers are used whenever possible to eliminate the potential for cross-  
22 contamination. If non-disposable sampling equipment is used, it is decontaminated between samples  
23 using the guidelines in the unit sampling procedure.

24 Representative sampling may be requested by unit staff to ensure proper waste identification. Sampling  
25 may be performed by unit personnel or the generating unit producing the waste. The number of grab  
26 samples collected from a container depends on the amount of waste present and on the homogeneity of  
27 the waste as determined by observation. In some cases, there will be only one container of waste present.  
28 In such cases, only one vertical composite sample will be collected (e.g., COLIWASA). If more than one  
29 container is present, a random number of samples will be collected and analyzed statistically using the  
30 procedures specified in Section 9.2 of SW-846 (EPA 1986).

31 In all instances, sampling methods will conform to the representative sample method referenced in  
32 WAC 173-303-110(2), i.e., ASTM standards for solids and SW-846 for liquids. The specific sampling  
33 methods and equipment used varies with the chemical and physical nature of the waste material and the  
34 sampling circumstances.

#### 35 3.4.2 Sampling Preservation and Storage

36 All sample containers, preservation techniques, and hold times follow SW-846 protocol. Many samples  
37 are analyzed at the 305-B Storage Facility utilizing prepackaged test kits and are not preserved.

#### 38 3.4.3 Sampling QA/QC Procedures

39 Pacific Northwest National Laboratory is committed to maintaining a high standard of quality for all of its  
40 activities. A crucial element in maintaining that standard is a quality-assurance program that provides  
41 management controls for conducting activities in a planned and controlled manner and enabling the  
42 verification of those activities.

43 The QA/QC objective of the 305-B Storage Facility is to control and characterize errors associated with  
44 collected data, and to illustrate that waste testing has been performed according to specification in this  
45 waste analysis plan.

1 The 305-B Storage Facility has developed procedures to ensure that precision and accuracy are  
2 maintained throughout the waste analysis process. For analysis using SW-846 methods, the program will  
3 follow the QA/QC guidance set forth in SW-846 at a minimum. Good laboratory practices which  
4 encompasses sampling, sampling handling, housekeeping, and safety are followed throughout the process.  
5 There are many elements of QA/QC associated with the sampling processes at the 305-B Storage Facility.  
6 These practices ensure that all data and the decisions based on that data are technically sound, statistically  
7 valid, and properly documented.

8 Activities pertaining to waste analysis include, but are not limited to, the preparation, review, and control  
9 of procedures and the selection of analytical laboratories. The Laboratory's QA manual has  
10 administrative procedures that establish requirements and provide guidance for the preparation of  
11 analytical and technical (i.e., sampling, chain-of-custody, work processes) procedures, as well as other  
12 administrative procedures. Procedures undergo a review cycle and, once issued, are controlled to ensure  
13 that only current copies are used.

14 The primary purpose of waste testing is to ensure that the waste is properly characterized in lieu of  
15 process-knowledge data, in compliance with RCRA requirements for general waste analysis  
16 [WAC 173-303-300(2); 40 CFR 264.13]. Waste testing also is performed to ensure the safe management  
17 of waste being stored, proper disposition of residuals from incidents that might occur, and control of the  
18 acceptance of waste for storage. The specific objectives of the waste-sampling and analysis program at  
19 the 305-B Storage Facility are as follows:

- 20 • Identify the presence of waste that is substantially different from waste currently stored.
- 21 • Provide a detailed chemical and physical analysis of a representative sample of the waste, before the  
22 waste is accepted at or transferred from the 305-B Storage Facility to an offsite TSD facility, to  
23 ensure proper management and disposal.
- 24 • Provide an analysis that is accurate and up-to-date to ensure that waste is properly treated and  
25 disposed of.
- 26 • Ensure safe management of waste undergoing storage at the 305-B Storage Facility.
- 27 • Ensure proper disposal of residuals.
- 28 • Ensure compliance with LDR's.
- 29 • Identify and reject waste that does not meet the 305-B Storage Facility's acceptance requirements  
30 (e.g., incomplete information).
- 31 • Identify and reject waste that does not meet specifications for the 305-B Storage Facility (i.e., Part A,  
32 Form 3, listing, restricted from storage at the 305-B Storage Facility).

### 33 QA/QC Objectives

34 The objectives of the QA/QC program are two-fold. The first objective is to control and characterize any  
35 errors associated with the collected data. Quality-assurance activities, such as the use of standard  
36 procedures for locating and collecting samples, are intended to limit the introduction of error. Quality-  
37 control activities, such as the collection of duplicate samples and the inclusion of blanks in sample sets,  
38 are intended to provide the information required to characterize any errors in the data. Other QC  
39 activities, such as planning the QC program and auditing ongoing and completed activities, ensure that  
40 the specified procedures are followed and that the QA information needed for characterizing error is  
41 obtained.

42 The second QA/QC objective is to illustrate that waste testing has been performed according to  
43 specification in this waste-analysis plan. The QA/QC activities will include the following:

- 44 • Field inspections – performed and documented by 305-B Storage Facility staff or designee,  
45 depending on the activity. The inspections primarily are visual examinations but might include

1 measurements of materials and equipment used, techniques employed, and the final products. The  
2 purpose of these inspections is to verify that a specific guideline, specification, or procedure for the  
3 activity is completed successfully.

- 4 • Field testing – performed onsite by 305-B Storage Facility staff (or designee) according to specified  
5 procedures.
- 6 • Laboratory analyses – performed by onsite or offsite laboratories on samples of waste. The purpose  
7 of the laboratory analyses is to determine constituents or characteristics present and the concentration  
8 or level.

#### 9 **Sampling Objectives**

10 The data-quality objectives (DQO) for the waste sampling and data analyses are as follows:

- 11 • Determine if waste samples are representative of the contents of the containers at the time the samples  
12 were taken.
- 13 • Determine if waste samples are representative of long-term operations affecting the 305-B Storage  
14 Facility.
- 15 • Determine if waste accepted for storage is within the RCRA permit application documentation  
16 limitations.
- 17 • Determine if waste accepted for storage meets the requirements of the 305-B Storage Facility waste-  
18 acceptance criteria.
- 19 • Determine if waste accepted for storage meets the information provided by the generator.

#### 20 **Data Collection/Sampling Objectives**

21 The acquired data need to be scientifically sound, of known quality, and thoroughly documented. The  
22 DQOs for the data assessment will be used to determine compliance with national quality standards,  
23 which are as follows:

- 24 • Precision – The precision will be the agreement between the collected samples (duplicates) for the  
25 same parameters, at the same location, and from the same collection vessel.
- 26 • Representativeness – The representativeness will address the degree to which the data accurately and  
27 precisely represent a real characterization of the population, parameter variation at a sampling point,  
28 sampling conditions, and the environmental condition at the time of sampling. The issue of  
29 representativeness will be addressed for the following points:
- 30 • Based on the generating process, the waste stream, and its volume, an adequate number of sampling  
31 locations are selected

32 The representativeness of selected media has been defined accurately

- 33 • The sampling and analytical methodologies are appropriate.
- 34 • The environmental conditions at the time of sampling are documented.
- 35 • Completeness – The completeness will be defined as the capability of the sampling and analytical  
36 methodologies to measure the contaminants present in the waste accurately.
- 37 • Comparability – The comparability of the data generated will be defined as the data that are gathered  
38 using standardized sampling methods, standardized analyses methods, and quality-controlled data-  
39 reduction and validation methods.

#### 40 **Analytical Objectives**

1 Analytical data will be communicated clearly and documented to verify that laboratory data-quality  
2 objects are achieved.

### 3 **Field Quality Assurance and Quality Control**

4 Internal QA/QC checks will be established by submitting QA and QC samples to the analytical  
5 laboratory. The number of field QA samples will be approximately 5 percent of the total number of field  
6 samples taken. The 5 percent criterion commonly is accepted for a minimum number of QA/QC samples.  
7 The types and frequency of collection for field QA samples are as follows:

- 8 • **Field Blanks** – A sample of analyte-free media taken from the laboratory to the sampling site and  
9 returned to the laboratory unopened. Field blanks are prepared and preserved using sample containers  
10 from the same lot as the other samples collected that day. A sample blank is used to document  
11 contamination attributable to shipping and field-handling procedures. This type of blank is useful in  
12 documenting contamination of volatile organics samples.
- 13 • **Field Duplicates** – defined as independent samples collected in such a manner that the samples are  
14 equally representative of the variables of interest at a given point in space and time. The laboratory  
15 will use the field duplicate as laboratory duplicate and/or matrix spikes. Thus, for the duplicate  
16 sample, there will be the normal sample analysis, the field duplicate, and the laboratory duplicate  
17 (inorganic analysis). Duplicate samples will provide an estimate of sampling precision.

### 18 **Laboratory Quality Assurance and Quality Control**

19 All analytical work, whether performed by independent laboratories, is defined and controlled by a  
20 Statement of Work, prepared in accordance with administrative procedures. The daily quality of  
21 analytical data generated in the analytical laboratories will be controlled by the implementation of an  
22 analytical laboratory QA plan. At a minimum, the plan will document the following:

- 23 • sample custody and management practices
- 24 • requirements for sample preparation and analytical procedures
- 25 • instrument maintenance and calibration requirements
- 26 • internal QA/QC measures, including the use of method blanks
- 27 • required sample preservation protocols
- 28 • analysis capabilities.

29 The types of internal quality-control checks are as follows:

- 30 • **Method Blanks** – Method blanks usually consist of laboratory reagent-grade water treated in the same  
31 manner as the sample (i.e., digested, extracted, distilled) that is analyzed and reported as a standard  
32 sample would be reported.
- 33 • **Method Blank Spike** – A method blank spike is a sample of laboratory reagent-grade water fortified  
34 (spiked) with the analytes of interest, which is prepared and analyzed with the associated sample  
35 batch.
- 36 • **Laboratory Control Sample** – A QC sample introduced into a process to monitor the performance of  
37 the system.
- 38 • **Matrix Spikes** – An aliquot of sample spiked with a known concentration of target analyte(s). The  
39 spiking occurs prior to sample preparation and analysis. Matrix spikes will be performed on 5 percent  
40 of the samples (1 in 20) or one per batch of samples.
- 41 • **Laboratory Duplicate Samples** – Duplicate samples are obtained by splitting a field sample into two  
42 separate aliquots and performing two separate analyses on the aliquots. The analyses of laboratory  
43 duplicates monitor the precision of the analytical method for the sample matrix; however, the  
44 analyses might be affected by nonhomogeneity of the sample, in particular, by nonaqueous samples.  
45 Duplicates are performed only in association with selected protocols. Duplicates are performed only  
46 in association with selected protocols. Laboratory duplicates are performed on 5 percent of the

1 samples (1 in 20) or one per batch of samples. If the precision value exceeds the control limit, then  
2 the sample set must be reanalyzed for the parameter in question.

- 3 • **Known QC Check Sample** – This is a reference QC sample as denoted by SW-846 of known  
4 concentration, obtained from the EPA, the National Institute of Standards and Technology, or an  
5 EPA-approved commercial source. This QC sample is taken to check the accuracy of an analytical  
6 procedure. The QC sample is particularly applicable when a minor revision or adjustment has been  
7 made to an analytical procedure or instrument. The results of a QC-check- standard analysis are  
8 compared with the true values, and the percent recovery of the check standard is calculated.

### 9 PNNL Analytical Chemistry Laboratory QA/QC

10 PNNL's analytical chemistry laboratory may need to be used to analyze samples of high-activity  
11 dangerous waste. It has a rigorous QA plan that ensures that data produced are defensible, scientifically  
12 valid, and of known precision and accuracy, and meets the requirements of its clients.

### 13 **Offsite Laboratory QA/QC**

14 When it is necessary to send samples to an independent laboratory, contracts are not awarded until a pre-  
15 award evaluation of the prospective laboratory has been performed. The pre-award evaluation process  
16 involves the submittal of its QA plan to PNNL QA staff and the unit-operating supervisor. It also may  
17 involve a site visit by QA personnel and a technical expert, or may consist of a review of the prospective  
18 laboratories' QA/QC documents and records of surveillances/inspections, audits, non-conformances, and  
19 corrective actions maintained by PNNL or other Hanford Facility contractors.

### 20 **Recordkeeping**

21 Records associated with the waste-analysis plan and waste-verification program are maintained by the  
22 waste-management organization. A copy of the CDRR for each waste stream accepted at the  
23 305-B Storage Facility is maintained as part of the operating record. Generators maintain their sampling  
24 and analysis records. The waste-analysis plan will be revised whenever regulation changes affect the  
25 waste-analysis plan.

26 Staff of the 305-B Storage Facility has a goal of continuous improvement by ensuring that all analytical  
27 data produced is of known accuracy and precision, exceeds all industry standards and is scientifically  
28 valid. Using the above practices and following the appropriate 305-B Storage Facility operating  
29 procedures staff can monitor and ensure that progress is being made in the quality of the data produced.

### 30 **3.4.4 Health and Safety Protocols**

31 During all sampling activities, precautions will be taken to ensure that waste containers do not expel gases  
32 and/or pressurized liquids. All personnel will be properly trained in safety and handling techniques.

## 33 **3.5 SELECTING A LABORATORY, AND LABORATORY TESTING AND ANALYTICAL** 34 **METHODS**

### 35 **3.5.1 Selecting a Laboratory**

36 Laboratory selection is limited; only a few laboratories are equipped to handle mixed waste because of  
37 special equipment and procedures that must be used to minimize personnel exposure. Preference will be  
38 given to any PNNL facility or other laboratories on the Hanford Facility that exhibit demonstrated  
39 experience and capabilities in three major areas:

- 40 • comprehensive written QA/QC program based on DOE-RL requirements specifically for that  
41 laboratory
- 42 • audited for effective implementation of QA/QC program
- 43 • participate in performance-evaluation samples to demonstrate analytical proficiency.

44 All laboratories (onsite or offsite) are required to have the following QA/QC documentation:

- 1 • Daily analytical data generated in the contracted analytical laboratories is controlled by the
- 2 implementation of an analytical laboratory QA plan.
- 3 • Before commencement of the contract for analytical work, the laboratory will, have their QA plan
- 4 available for review. At a minimum, the QA plan will document the following:
- 5 • sample custody and management practices
- 6 • requirements for sample preparation and analytical procedures
- 7 • instrument maintenance and calibration requirements
- 8 • internal QA/QC measures, including the use of method blanks
- 9 • required sample preservation protocols
- 10 • analysis capabilities.

### 11 3.5.2 Selecting Testing and Analytical Methods

12 PNNL waste generators may need to conduct analyses to provide information to fill out Chemical  
13 Disposal & Recycle Requests (CDRRs), and to determine compatibility, safety, and operating  
14 information. As needed, 305-B Storage Facility staff also will conduct analyses to determine  
15 completeness of information and if the waste meets the acceptance criteria for disposal, treatment or  
16 storage at one of the Hanford Facility-permitted treatment/storage/disposal areas or that of one of the  
17 offsite TSD facilities. Testing and analytical methods will depend on the type of analysis sought and the  
18 reason for needing the information.

19 Chemists and/or appropriate personnel working under approved QA guidelines perform all testing.  
20 Analytical methods will be selected from those that are described in Section 3.3.1.

### 21 3.6 SELECTING WASTE RE-EVALUATION FREQUENCIES

22 Some analysis will be needed to verify that waste streams received by the 305-B Storage Facility conform  
23 to the information on the CDRR and or the waste analysis sheet supplied by the generator. If  
24 discrepancies are found between information on the CDRR, hazardous-waste manifest, shipping papers,  
25 waste- analysis documentation and verification analysis, then the discrepancy will be resolved by:

- 26 • returning waste to the generator, or sample and analyze the materials in accordance with
- 27 WAC 173-303-110; and/or
- 28 • reassessing and redesignating the waste; repackaging and labeling as necessary or return to the
- 29 generator.

30 Periodic re-evaluation provides verification that the results from the initial verification are still valid.  
31 Periodic re-evaluation also checks for changes in the waste stream.

#### 32 Exceptions to physical screening for verification are:

33 Analysis and characterization, as required by WAC 173-303-300(2), are performed on each waste before  
34 acceptance at the 305-B Storage Facility to determine waste designation and characteristics. The  
35 characterization of the waste, based on this information, is reviewed each time a waste is accepted. The  
36 information must be updated by the generator when the waste stream changes or if the following occurs.

- 37 • The 305-B Storage Facility personnel have reason to suspect a change in the waste, based on
- 38 inconsistencies in packaging, labeling or visual inspection of the waste.
- 39 • The information submitted previously does not match the characteristics of the waste submitted.

40 Sampling and laboratory analysis could be required to verify or establish waste characteristics for waste  
41 that is stored at the 305-B Storage Facility. The following are instances where sampling and laboratory  
42 analysis are required:

- 1 • inadequate information on PNNL-generated waste
- 2 • waste streams generated onsite will be verified at 5 percent of each waste stream
- 3 • inadequate information before waste was shipped or discrepancy discovered
- 4 • waste streams received from offsite generators will be verified at 10 percent of each waste stream
- 5 applied per generator, per shipment
- 6 • identification and characterization for unknown waste and spills.

### 7 3.7 SPECIAL PROCEDURAL REQUIREMENTS

#### 8 3.7.1 Procedures for Receiving Waste From off-site Generators

9 Most of the waste stored at 305-B Storage Facility is generated on the Hanford Site and/or by PNNL  
10 research programs within the 300 Area. Additional requirements for waste generated outside the  
11 300 Area include proper manifesting (if appropriate) to 305-B Storage Facility and proper packaging for  
12 transport over public roadways. Although PNNL waste generated outside of the 300 Area is considered  
13 to be generated offsite since it may be transported to 305-B Storage Facility on roads accessible to the  
14 public, it is under the same administrative controls as waste that are generated onsite (i.e., in the  
15 300 Area).

16 The generator is responsible for identifying waste composition accurately and arranging for the transport  
17 of the waste. The 305-B Storage Facility maintains a copy of any pertinent operating record in  
18 accordance with WAC 173-303 and the time frames described in Attachment 33, Chapter 12 of the  
19 Hanford Facility RCRA Permit, Dangerous Waste Portion, General Information Portion.) The waste-  
20 tracking methods are as follows.

- 21 • **Inspection of Shipping Papers/Documentation** – The necessary shipment papers for the entire  
22 shipment are verified (i.e., signatures are dated, all waste containers included in the shipment are  
23 accounted for and correctly indicated on the shipment documentation, there is consistency throughout  
24 the different shipment documentation, and the documentation matches the labels on the containers).
- 25 • **Inspection of Waste Containers** – The condition of waste containers is checked to verify that the  
26 containers are in good condition (i.e., free of holes and punctures).
- 27 • **Inspection of Container Labeling** – Shipment documentation is used to verify that the containers are  
28 labeled with the appropriate "Hazardous/Dangerous Waste" labeling and associated markings  
29 according to the contents of the waste container.
- 30 • **Acceptance of Waste Containers** – The 305-B Storage Facility personnel sign the Shipment  
31 documents and retain a copy.

32 If Shipment will be received from or destined offsite, then a Uniform Hazardous Waste Manifest will be  
33 prepared identifying the 305-B Storage Facility as the receiving unit (Hanford Facility Permit,  
34 Condition II.P. The 305-B Storage Facility operations staff will sign and date the manifest to certify that  
35 the dangerous waste covered by the manifest was received. The transporter will be given at least one  
36 copy of the signed manifest. A copy of the manifest will be returned to the generator within 30 days of  
37 receipt at the 305-B Storage Facility. A copy of the manifest also will be retained in the 305-B Storage  
38 Facility operating record.

39 For onsite waste transfers subject to Hanford RCRA Permit, Dangerous Waste Portion, Condition II.Q.1,  
40 documentation meeting that requirement will be prepared and accompany the shipment. The  
41 documentation will be maintained in the Operating Record.

#### 42 **Response to Significant Discrepancies**

43 The primary concern during acceptance of containers for storage is improper packaging or manifest  
44 discrepancies. Containers with such discrepancies are not accepted at the 305-B Storage Facility until the

1 discrepancy has been resolved. Depending on the nature of the condition, such discrepancies can be  
2 resolved through the use of one or more of the following alternatives.

- 3 • Incorrect or incomplete entries on the Uniform Hazardous Waste Manifest can be corrected or  
4 completed with concurrence of the onsite generator or offsite generator. Corrections are made by  
5 drawing a single line through the incorrect entry. Corrected entries are initialed and dated by the  
6 individual making the correction.
- 7 • The waste packages can be held and the onsite generator or offsite waste generator requested to  
8 provide written instructions for use in correcting the condition before the waste is accepted.
- 9 • Waste packages can be returned as unacceptable.
- 10 • If a noncompliant dangerous waste package is received from an offsite waste generator, and the waste  
11 package is non-returnable because of condition, packaging, etc., and if an agreement cannot be  
12 reached among the involved parties to resolve the noncompliant condition, then the issue will be  
13 referred to DOE-RL and Ecology for resolution. Ecology will be notified in writing if a discrepancy  
14 is not resolved within 15 days after receiving a noncompliant shipment. Pending resolution, such  
15 waste packages, although not accepted, might be placed in the 305-B Storage Facility. The package(s)  
16 will be segregated from other waste and an entry will be made into the 305-B Storage Facility  
17 logbook describing the actions that were taken to store the packages in a safe manor until a resolution  
18 has been reached.

#### 19 **Activation of Contingency Plan for Damaged Shipment**

20 If waste shipments arrive at the 305-B Storage Facility in a condition that presents a hazard to public  
21 health or the environment, the Building Emergency Procedure is implemented as described in the Hanford  
22 Facility RCRA Permit, Attachment 18, 305-B Storage Facility, Chapter 7.0.

#### 23 **3.7.2 Procedures for Ignitable, Reactive, and Incompatible Wastes**

24 Ignitable, reactive and incompatible wastes are stored in compliance with Uniform Fire Code Division II  
25 regulations for Container and Portable Tank Storage Inside Buildings (International Conference of  
26 Building Officials 1988). Containers of ignitable, reactive and incompatible wastes are stored in  
27 individual flammable material storage cabinets within the storage cells.

28 Section 6.5.2 describes procedures used at 305-B Storage Facility to determine the compatibility of  
29 dangerous wastes so that incompatible wastes are not stored together. Chemical wastes stored in  
30 305-B Storage Facility are separated by compatibility, chemical makeup and hazard class and stored in  
31 areas having appropriate secondary containment, as described in Section 4.1.1.6.

32 As shown in Figures 4-1 through 4-10, each storage area has individual storage configurations; secondary  
33 containment structures are provided to assure that incompatible materials will not commingle if spilled.  
34 Further segregation is provided by chemical storage cabinets located throughout the facility in various  
35 areas as shown in Figures 4-1 through 4-10. Cabinet types are noted in those figures and capacities  
36 described in Table 4-2. Incompatible wastes are never placed in the same container, or in unwashed  
37 containers that previously held incompatible waste.

38 Compliance with WAC 173-303-395(1)(b) is assured by utilizing this system, and the procedure for  
39 handling ignitable or reactive waste and mixing of incompatible waste, as described in Section 6.5.2.

#### 40 **3.7.3 Procedures To Ensure Compliance With LDR Requirements**

##### 41 **LDR Waste-Analysis Requirements**

42 The *Hazardous and Solid Waste Amendments of 1984* prohibit the land disposal of certain types of waste  
43 that are subject to RCRA. Many of the waste types stored at the 305-B Storage Facility fall within the  
44 purview of these land-disposal restrictions (LDRs). Information presented below describes how

1 generators and 305-B Storage Facility personnel characterize, document, and certify waste subject to  
2 LDR requirements.

### 3 **Waste Characterization**

4 Before being received at the 305-B Storage Facility, the RCRA waste characteristics, the level of toxicity  
5 characteristics, and the presence of listed waste are determined during the physical and chemical analyses  
6 process. This information allows waste-management personnel to make all LDR determinations  
7 accurately and complete appropriate notifications and certifications.

### 8 **Sampling and Analytical Procedures**

9 The LDR characterization and analysis is generally performed as part of the waste-characterization and  
10 analysis process. If waste is sampled and analyzed for LDR characterization, then only EPA or equivalent  
11 methods are used to provide sufficient information for proper management and for decisions regarding  
12 LDRs pursuant to 40 CFR 268.

### 13 **Frequency of Analysis**

14 Before acceptance and during the waste-characterization and analysis process, all LDR characterizations  
15 and designations are made. The characterization and analysis process is performed when a CDRR is  
16 submitted for waste pick-up, unless there is insufficient data or if the waste stream has changed.  
17 Instances where sampling and laboratory analysis may be required to determine accurate LDR  
18 determinations include the following:

- 19 • when waste-management personnel have reason to suspect a change in the waste based on  
20 inconsistencies on the CDRR, packaging, or labeling of the waste
- 21 • when the information submitted previously by a generator does not match the characteristics of the  
22 waste that was submitted
- 23 • when the offsite TSD facility rejects the waste because the fingerprint samples are inconsistent with  
24 the waste profile provided by the 305-B Storage Facility that was established using generator  
25 information.

26 Dangerous waste types listed in Table 3-1 are sampled as needed on an individual container or batch basis  
27 before they are collected from the point of generation or prior to shipment offsite. After the dangerous  
28 constituents have been characterized, these waste streams will not be analyzed again until process or raw  
29 material changes occur.

### 30 **Documentation and Certification**

31 The 305-B Storage Facility has and will continue to receive and store LDR waste. Because 305-B Storage  
32 Facility personnel determine designations and characterization, including LDR determinations, all  
33 notifications and certifications, as required by 40 CFR 268, are prepared by qualified staff for  
34 PNNL-generated waste. The 305-B Storage Facility staff collects from the generator(s) the information  
35 pursuant to 40 CFR 268 regarding LDR wastes. The notifications and certifications are submitted to  
36 onsite and offsite TSD units during the waste-shipment process. Additionally, any necessary LDR  
37 variances are prepared and submitted by PNNL qualified staff.

38 The 305-B Storage Facility staff requires applicable LDR information/notifications from non-PNNL  
39 generators.

40 Where an LDR waste does not meet the applicable treatment standards set forth in 40 CFR 268,  
41 Subpart D, or exceeds the application prohibition levels set forth in 40 CFR 268.32 or Section 3004(d) of  
42 RCRA, the 305-B Storage Facility provides to the onsite and offsite TSD a written notice that includes  
43 the following information:

- 44 • EPA hazardous-waste number

- 1 • the corresponding treatment standards and all applicable prohibitions set forth in WAC 173-303,
- 2 40 CFR 268.32, or RCRA Section 3004(d)
- 3 • the manifest number associated with the waste
- 4 • all available waste-characterization data.
- 5 • identification of underlying hazardous constituents.

6 In instances where 305-B Storage Facility staff determines that a restricted waste is being managed that  
7 can be land-disposed without further treatment, 305-B Storage Facility staff submits a written notice and  
8 certification to the onsite or offsite TSD where the waste is being shipped, stating that the waste meets  
9 applicable treatment standards set forth in WAC 173-303-140 (40 CFR 268, Subpart D), and the  
10 applicable prohibition levels set forth in 40 CFR 268.32 or RCRA Section 3004(d). The notice includes  
11 the following information:

- 12 • EPA hazardous-waste number
- 13 • corresponding treatment standards and applicable prohibitions
- 14 • waste-tracking number associated with the waste
- 15 • all available waste-characterization data
- 16 • identification of underlying hazardous constituents.

17 The certification accompanying any of the previously described notices is signed by an authorized  
18 representative of the generator and states the following:

19 I certify under penalty of law that I personally have examined and am familiar with the waste through  
20 analysis and testing or through knowledge of the waste to support this certification that the waste  
21 complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable  
22 prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I  
23 submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a  
24 false certification, including the possibility of a fine and imprisonment.

25 Copies of all notices and certifications described are retained at the TSD unit for at least 5 years from the  
26 date that the waste was last sent to an onsite or offsite TSD unit. After that time, the notices and  
27 certifications are sent to Records Storage.

Table 3-1. Summary of Test Parameters, Rationales, and Methods

Parameter <sup>a</sup>	Method <sup>b</sup>	Rationale for Selection
<b>Physical Screening</b>		
Visual inspection	Field method - observe phases, presence of solids in waste	Ensure that waste matches that described on waste acceptance documentation; identify waste prohibited by LDR requirements related to downstream TSD unit acceptance criteria
<b>Chemical Screening</b>		
Water miscibility/separable organics	Water mix screen	Ensure that waste matches that described on waste acceptance documentation; identify separable organics; identify waste prohibited by LDR requirements related to downstream TSD unit acceptance criteria
Water reactivity	Water mix screen	Ensure that waste matches that described on waste acceptance documentation; ensure compliance with WAC 173-303-395(1)(b)
pH	pH screen	Ensure that waste matches that described on waste acceptance documentation; ensure compliance with WAC 173-303-395(1)(b)
Cyanides	Cyanide screen	Ensure that waste matches that described on waste acceptance documentation; ensure compliance with WAC 173-303-395(1)(b)
Sulfides	Sulfide screen	Ensure that waste matches that described on waste acceptance documentation; ensure compliance with WAC 173-303-395(1)(b)
<b>Pre-Shipment Review</b>		
Mercury (total)	Generator knowledge or SW-846 Method 7470/7471	Identify waste prohibited by LDR requirements related to downstream TSD unit acceptance criteria.
Toxicity characteristic organic compounds	Generator knowledge or SW-846 Methods 1311 and 8260 (volatile organic compounds) and 8270 (semivolatile organic compounds)	Identify waste not identified on the Part A, Form 3
Polycyclic aromatic hydrocarbons	Generator knowledge or SW-846 Method 8270 or 8100	Identify waste not identified on the Part A, Form 3 (for waste with >1% solids and for which WP03 could apply)

<sup>a</sup> Addition parameters can be used on current waste acceptance criteria of the downstream TSD unit. Operation limits transfer/shipments are based on current waste acceptance criteria.

<sup>b</sup> Procedures based on EPA SW-846, unless otherwise noted. When regulations require a specific method, the method shall be followed. For other cases, method will be reliable.

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