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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600  
(360) 407-6000 • TDD: Only (Hearing Impaired) (360) 407-6006

August 16, 1996

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

Dr. LeMar Trego, President  
Westinghouse Hanford Company  
P.O. Box 1970  
Richland, WA 99352

Mr. Joe F. Némec, President  
Bechtel Hanford Company  
P.O. Box 969  
Richland, WA 99352

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

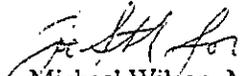


Dear Messrs. Wagoner, Trego, Némec, and Madia:

This letter transmits draft modifications to the Dangerous Waste Portion of the *Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste* (Permit). We have also enclosed the supporting documentation for the Permit, which includes a Focus Sheet/Statement of Basis copies of Ecology review completion letters (six applications) and a letter of tentative approval of a Class III modification.

The public comment period for this modification begins August 29, 1996, and ends on October 15, 1996. Any formal comments you have regarding the draft modifications must be received by our office during that time. Any questions you may have should be directed to Moses Jaraysi, Washington State Department of Ecology. Moses can be contacted at (509) 736-3016.

Sincerely,

  
Michael Wilson, Manager  
Nuclear Waste Program

MW:MJ:sb

cc: Cliff Clark, USDOE  
Dan Duncan, EPA

Doug Sherwood, EPA  
Harold Tilden, PNL

L. A. Mehalik, BHI  
Sue Price, WHC

**Modifications to Part III of the Permit**

## CHAPTER 3

### PUREX Storage Tunnels

The PUREX Storage Tunnels are a mixed waste storage unit consisting of two underground railroad tunnels: Tunnel Number 1, designated 218-E-14, and Tunnel Number 2, designated 218-E-15. This chapter sets forth the operating conditions for this TSD unit.

#### III.3.A COMPLIANCE WITH APPROVED PERMIT APPLICATION

The Permittees shall comply with all requirements set forth in the PUREX Storage Tunnels Dangerous Waste Storage Permit Application, Rev. 3, as found in Attachment 28, including the amendments specified in Condition III.3.B, if any exist. Enforceable portions of the application are listed below. All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise.

##### Part A Application

Section 2.1	The PUREX Storage Tunnels Description
Section 2.2	Topographic Map
Chapter 3.0	Waste Analysis
Chapter 4.0	Process Information
Chapter 6.0	Procedures to Prevent Hazards
Chapter 7.0	Contingency Plan
Chapter 8.0	Personnel Training
Chapter 10.0	Waste Minimization
Chapter 11.0	Closure and Financial Assurance
Chapter 12.0	Reporting and Record Keeping
Chapter 13.0	Other Federal and State Laws
Appendix 2A	Topographic Map
Appendix 3A	Waste Analysis Plan for PUREX Storage Tunnels
Appendix 4A	Engineering Drawings
Appendix 7A	Unit-Specific Contingency Plan for the 218-E-14 and 218-E-15 Storage Tunnels
Appendix 8A	Dangerous Waste Training Plan for the PUREX Facility

III.3.B

AMENDMENTS TO THE APPROVED PERMIT APPLICATION

III.3.B

(None Required.)

## **Modifications to Part V of the Permit**

## CHAPTER 12

### 4843 Alkali Metal Storage Facility Closure Plan

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

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

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

##### Part A Application

Section 1.1	Executive Summary
Section 2.2	Unit Description and Operations
Section 2.3	Security
Section 3.0	Process Information
Section 4.0	Waste Characteristics
Section 6.0	Closure Strategy and Performance Standards
Section 7.0	Closure Activities
Section 8.0	Post-Closure
Section 9.0	References
Appendix G	Quality Assurance Project Plan

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

- V.12.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan, including these unit-specific Conditions to the Plan, a written notification shall be submitted to Ecology within 30 days after the Plan is approved.
- V.12.B.b. The Permittees shall notify the Department of Ecology, in writing, if at any time it is determined the clean closure levels specified in this plan are exceeded.
- V.12.B.c. The Permittees and the independent, registered, professional engineer certification of closure shall be prepared and submitted to the Department of Ecology by registered mail within 60 days of closure as described in the Plan. The Permittees shall continue to address the unit as a dangerous waste management unit until receipt of the

Department of Ecology's written notification stating the unit is accepted as clean closed.

V.12.B.d.

The Permittees shall complete 4843 AMSF closure activities 180 days after the effective date of Revision 3 to this Permit.

## CHAPTER 13

### 3718-F Alkali Metal Treatment And Storage Facility Closure Plan

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

#### V.13.A

#### COMPLIANCE WITH THE APPROVED CLOSURE PLAN

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

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

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

#### Part A Permit Application

Section 1.2	Closure Strategy
Chapter 2.0	Facility Description and Location Information
Chapter 5.0	Groundwater Monitoring
Chapter 6.0	Closure Performance Standards
Chapter 7.0	Closure Activities
Chapter 8.0	Post-Closure Plan

#### V.13.B.

#### AMENDMENTS TO THE APPROVED CLOSURE PLAN

#### V.13.B.a.

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

- V.13.B.b. Ecology shall be provided, for review and approval, a soil sampling and analysis plan at least 30 days prior to initiating actual sampling. Such a plan shall include a schedule for conducting sampling events. The analytical results of the sampling event will be used to determine if corrective action will be required to close the 3718-F Alkali Metal Treatment And Storage Facility.
- V.13.B.c. Ecology shall be provided a diagram of the 3718-F Alkali Metal Treatment And Storage Facility unit boundary to be closed, addressing the maximum extent of operation. The diagram should incorporate the fenced area surrounding the building indicating which areas intentionally, or unintentionally, received waste. This diagram is to be submitted with the sampling and analysis plan required by Condition V.13.B.b.
- V.13.B.d. The soil samples shall be analyzed for all dangerous constituents documented to have been potentially spilled or released at the 3718-F Alkali Metal Treatment And Storage Facility during its operating life. These analyses shall be performed in accordance with WAC 173-303-110 including the quality assurance and quality control requirements delineated in SW-846.
- V.13.B.e. The results of all sampling shall be submitted to Ecology. These submittals shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary with conclusions.
- V.13.B.f. The Permittees and the independent, registered, professional engineer shall prepare and submit the certification of closure to Ecology by registered mail within 60 days of closure.
- V.13.B.g. The Permittees shall continue to address the 3718-F Alkali Metal Treatment And Storage Facility as a dangerous waste management unit until receipt of Ecology's written notification that the closure certification is accepted as clean closed.
- V.13.B.h. The Permittees shall complete the 3718-F Alkali Metal Treatment And Storage Facility closure activities within 180 days after the effective date of this Permit. This schedule may be extended at Ecology's discretion based on the results of sampling conducted at the unit.
- V.13.B.i. Any solid waste remaining at the unit or generated during sampling and/or decontamination activities shall be designated and managed accordingly. Ecology shall be informed in writing of the final disposition of the waste.
- V.13.B.j. A written notification shall be submitted to Ecology regarding the final disposition of equipment associated with or subject to decontamination, designation, removal, disposal, recycling or reuse at the 3718-F Alkali Metal Treatment And Storage Facility.
- V.13.B.k. The Permittees shall notify Ecology, in writing, if at any time it is determined the clean closure levels specified in this Plan are exceeded.
- V.13.B.l. Ecology will consider removal and decontamination complete when the concentrations of dangerous waste, dangerous waste constituents, and dangerous waste residues, which originated from the 3718-F Alkali Metal Treatment And Storage Facility, throughout the areas affected by releases from this unit do not exceed numeric cleanup levels for soils, groundwater, surface water, and air, determined using residential exposure assumptions according to the MTCA 173-340, method A or B.

V.13.B.m. A Post-Closure permit will be required if dangerous wastes constituents, residues, or decomposition products are left in place at concentrations above the numeric cleanup levels determined using residential exposure assumptions under MTCA method A or B.

V.13.C CHANGES TO TEXT OF REVISION 2 OF THE CLOSURE PLAN (CHAPTER X)

V.13.C.a. Page 6-2, line 8. Disregard first bullet. The bullet inaccurately states radioactive waste was not managed at the unit. The 3718-F Alkali Metal Treatment And Storage Facility did manage radioactive sodium according to *DOE-RL 1992a, 3718-F Alkali Metal Treatment And Storage Facility Closure Plan, DOE-RL-91-35, Rev. 1, U. S. Department of Energy, Richland Field Office, Richland, Washington* and the *300-FF-2 Operable Unit Technical Baseline Report, BHI-00012, Rev. 00, Bechtel Hanford, Inc., Richland, Washington.*

## CHAPTER 14

### 303-K Storage Facility

The 303-K Storage Facility (303-K) was used primarily for storage, and some treatment, of dangerous wastes produced during the fuel fabrication process. These wastes consist of beryllium/zircalloy-2 chips which were concreted at the 304 Concretion Facility, and other process wastes.

#### V.14.A COMPLIANCE WITH THE APPROVED CLOSURE PLAN

The Permittees shall comply with all the requirements set forth in the 303-K Storage Facility Closure Plan (Plan), as found in Attachment 32, including the amendments specified in Condition V.14.B. Enforceable portions of the Plan are listed below. All subsections, figures, and tables included in these portions are also enforceable unless stated otherwise.

##### Part A Application

Section 2.1	Description of the 303-K Storage Facility
Section 2.2	Security
Chapter 4.0	Waste Characteristics
Chapter 6.0	Closure Strategy and Performance Standards
Chapter 7.0	Closure Activities
Chapter 8.0	Post-Closure
Appendix B	Random Sampling Locations
Appendix E	Personnel Training
Appendix F	Quality Assurance Project Plan for Sampling and Analysis for the 304 Concretion Facility Closure Activities

#### V.14.B AMENDMENTS TO THE APPROVED CLOSURE PLAN

- V.14.B.a. If closure activities have not begun and/or will not be conducted in accordance with the Plan, including these unit-specific Conditions to the Plan, a written notification shall be submitted to Ecology within 30 days after the Plan is approved.
- V.14.B.b. The results of all sampling required by the Plan shall be provided to Ecology. This submittal shall include raw analytical data, a summary of analytical results, a data validation package, and a narrative summary of conclusions.
- V.14.B.c. Ecology shall be provided, for review and approval, a sampling and analysis plan and date of sampling for any sampling event not addressed in the Plan, which provides data used to support the 303-K cleanup activities at least 30 days prior to initiating actual sampling activities. The results of this sampling shall be submitted to Ecology. These

submittals shall include the raw analytical data, a summary of analytical results, a data validation package, and a narrative summary of conclusions.

V.14.B.d.

The Permittees shall notify Ecology, in writing, if action levels cited in Section 6.1 of the Plan are exceeded. The notification shall include a request for Ecology's approval of alternative action levels or identify interim measures to be taken in the 303-K until closure activities are performed in conjunction with the 300-FF-3 Operable Unit. The interim measures must be approved by Ecology.

V.14.B.e.

The Permittees' and the independent, registered, professional engineer's certifications of closure shall be prepared and submitted to Ecology by registered mail within 60 days of closure as described in Section 7.8 of the Plan. The Permittees shall continue to address the 303-K as a dangerous waste management unit until receipt of Ecology's written notification that the 303-K is accepted as clean closed.

V.14.B.f.

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

**Addition of Part VI to the Permit  
Inclusion of Chapter 1, Part VI**

## CHAPTER 1

### 300 Area Process Trenches

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

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

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

#### Part A Application

Section ADD-1	Addendum, Introduction
Section 1.3.	Content of the Modified Closure/Post-Closure Plan
Chapter 4.0	Waste Characteristics. Summary of non-radionuclide data. Data is located in the <i>Expedited Response Action Assessment for the 316-5 Process Trenches</i> (DOE/RL-92-32, Rev. 0)
Section 6.2.1.	Minimize Need for Post-Closure Maintenance and Controls
Section 6.2.2.	Minimize Post-Closure Escape of Dangerous Waste
Section 7.9.	Amendment to Closure Plan
Section 7.10.	Certification of Closure, Survey Plat, Notice in Deed, and Financial Requirements
Section 8.2.	Inspection Plan
Section 8.4.	Maintenance Plan
Section 8.5.	Personnel Training
Appendix 2A	Photographs
Appendix 5A	Groundwater References
Appendix 5B	RCRA, Final Status Compliance Monitoring (WHC-SD-EN-AP-185, Rev. 0A)
Appendix 7A	Sampling and Analysis Plan

Appendix 7B	Sampling Data and Evaluation Package for the 300 Area Process Trenches
Appendix 7C	Training Course Descriptions
Appendix 7D	Summary of Pre- and Post- Expedited Response Action (ERA) Sampling Data. Radionuclide data.

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

- VI.1.B.a. Page 1-1, line 34 will reference section II.K.3. of the Hanford Facility Wide Permit, which covers modified closures.
- VI.1.B.b. Pursuant to condition II.K.7. of the Hanford Facility Wide Permit, the 300 Area Process Trenches (APT) closure shall be a Modified Closure in coordination with the Record of Decision (ROD) for 300-FF-1 and 300-FF-5. Sections of CERCLA documents (examples include, but are not limited to, Remedial Design/Remedial Action CERCLA work plan, the Operation and Monitoring Work Plan, etc.) which satisfy requirements and conditions of this Modified Closure Plan will be reviewed and approved by Ecology.
- VI.1.B.c. The Sampling and Analysis Plan, Appendix 7A (Verification Sampling), will be submitted to Ecology for approval. This will occur prior to all remedial actions within the 300 APT.
- VI.1.B.d. Page 1-7, lines 9-13. This portion of the paragraph will be replaced by the following: "Disposal of TSD unit soil into the Environmental Restoration Disposal Facility (ERDF) (or a comparable RCRA Subtitle C Landfill) within the boundaries of the Hanford Facility is allowed through an approved, contained in demonstration, based on MTCA B cleanup levels (WAC-173-340) for the contamination carrying the F and U codes, and with TCLP data for the characteristic waste."
- VI.1.B.e. Page 6-1, lines 8-10. This portion of the paragraph will be replaced by the following: "Based on data in addition to ERA data (DOE/RL-92-32), remediation will occur to meet all Applicable Relevant and Appropriate Requirements (ARARs) within the trenches. This will include removal of the spoils pile for chemical contamination above MTCA C Industrial cleanup values. It has been concluded that when uranium is removed to the CERCLA cleanup standard of 350 pCi/g, the Chemical Contaminants of Concern (COCs) will likely be removed to below the cleanup standard, as well. Verification samples will be collected for both chemicals and radioisotopes, as directed in the remedial action sampling and analysis plan, to determine whether performance standards for the modified closure have been met."
- VI.1.B.f. Page 6-1, line 11. The sentence here is deleted and replaced with the following: "When SD soils are remediated, the cleanup levels achieved for RCRA constituents could qualify the unit for clean closure of the soil."
- VI.1.B.g. Page 6-1, lines 22-27. This portion of the paragraph will be removed.
- VI.1.B.h. Page 6-2, line 23-27. These sentences will be deleted and replaced with the following: "Final closure specifications are known and will be coordinated with the CERCLA cleanup activities."

- VI.1.B.i. As stipulated through the RCRA Final Status Compliance Monitoring Plan (i.e., WHC-SD-EN-AP-185) Appendix IX, sampling shall not be required unless Post-Closure monitoring results indicate a need to do so.
- VI.1.B.j. Page 6-3, line 12-24. Presenting the option for Modified Closure is redundant. This paragraph will be deleted.
- VI.1.B.k. Page 6-4, lines 26-33. Presenting the Landfill Closure Option is not supported by sufficient technical data. This paragraph will be deleted.
- VI.1.B.l. Page 6-6, lines 14-15. This paragraph will be replaced with the following: "RCRA closure verification will occur as part of the spoils pile removal, and will be in coordination with CERCLA remedial activities."
- VI.1.B.m. Page 6-6, lines 17-19. This paragraph will be replaced with the following: "The analytical results of TSD screening/verification sampling will be reviewed by Ecology. This review will be allowed at any point during the process (i.e., raw data, as well as, completed data summaries)."
- VI.1.B.n. Page 7-1, lines 5-10. This portion of the paragraph will be replaced by the following: "These closure activities will reflect the closure specifications stipulated in the Modified Closure/Post-Closure Plan, Hanford Facility Wide Permit (#WA7890008967), and the CERCLA ROD for 300-FF-1. Groundwater remediation will be addressed as part of the remedial actions for 3-FF-5."
- VI.1.B.o. Page 7-6, lines 20-22. These sentences will be replaced by the following: "Sampling will be appropriate to the applicable remedial alternatives under consideration for remediation of both CERCLA and RCRA Constituents."
- VI.1.B.p. Page 8-3, line 6. Security Control Devices (SCD) will be developed pursuant to Condition II.K.3.a. of the Permit. Design will occur during the CERCLA RD/RA process. Implementation of SCD will occur through Ecology approval of pertinent sections of the CERCLA Operations and Maintenance Plan.
- VI.1.B.q. Page 8-3, line 20. Well condition will be assessed pursuant to Condition II.F. of the Permit.
- VI.1.B.r. Page 8-5, Section 8.5. This section will reference Section II.C. of the Permit for additional training requirements.
- VI.1.B.s. Pursuant to CERCLA, removal of the spoils pile within the trenches will begin 15 months after the signature of the 300-FF-1/300-FF-5 ROD.

**Ecology Letters for Completion of Review**

**One Part B Permit Application,  
Three Proposed Closure Plans,  
One Modified Closure Plan,  
and Class 3 Permit Modification**

44889



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

July 31, 1996

Mr. James E. Rasmussen  
U. S. Department of Energy  
P.O. Box 550  
Richland, WA 99352

Mr. Ronald J. Bliss  
Westinghouse Hanford Company  
P. O. Box 1970  
Richland, WA 99352

Dear Messrs. Rasmussen and Bliss:

Re: Plutonium Uranium Extraction Facility (PUREX) Storage Tunnels Part B Permit Application, Revision 1, Notice of Deficiency (NOD) List

Enclosed is the Washington State Department of Ecology's (Ecology) NOD comments to the PUREX Storage Tunnels Part B Permit Application, Revision 1, and the U. S. Department of Energy responses. Ecology has received and reviewed Revision 3 of the application and all comments have been closed-out and accepted by Ecology. Revision 3 of the Permit Application is accurate and complete in accordance with the Washington Administrative Code 173-303, with final decision pending public review.

Ecology will move forward to include the PUREX Storage Tunnels in the Dangerous Waste Portion of the Hanford Facility Wide Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste through Modification B in 1996.

Mr. James E. Rasmussen  
July 31, 1996  
Page 2

If you have any questions regarding the above, or the enclosed NOD, please contact me at  
(509) 736-5702.

Sincerely,



Robert J. Julian  
PUREX Unit Manager  
Nuclear Waste Program

RJ:sb  
Enclosure

cc: Clifford Clark, USDOE  
Doug Sherwood, EPA  
Roger Bowman, WHC  
Sue Price, WHC  
Administrative Records: PUREX Storage Tunnels Part B Permit Application



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

January 30, 1996

Mr. James Rasmussen  
U.S. Department of Energy  
Richland Operations Office  
P.O. Box 550, MSIN: A5-15  
Richland, WA 99352

Dear Mr. Rasmussen:

Re: 3718-F Alkali Metal Treatment and Storage Facility (DOE/RL-91-35, Revision 2,  
November 1995, TSD: TS-3-3)

The Washington State Department of Ecology has reviewed the 3718-F Alkali Metal Treatment and Storage Facility Closure Plan, Revision 2 (dated November 1995) and determined it is complete and accurate as required by WAC 173-303.

This closure plan was compared with the 3718-F Deficiency Response Table, dated July 10, 1992, and was determined to be revised according to the commitments accepted in the response table. The closure plan is considered complete and will be included in the Second Modification to the Facility Wide Permit, which is planned for the second half of 1996. Preparations for public review of the closure plan should be initiated. However, final acceptance of this closure is pending the public comment process.

If you have any questions, please contact me at (509) 736-3010.

Sincerely,

Handwritten signature of Clinton D. Stuart in cursive.

Clinton D. Stuart, 3718-F Unit Manager  
Nuclear Waste Program

CS:skr

cc: Ellen Mattlin, USDOE  
Fred Ruck III, WHC

Susan Price, WHC  
Jack Sonnichsen, WHC  
Administrative Records: 3718-F

42158



NMWMP - Hanford

AUG 7 1996

Kennewick

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600  
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

April 28, 1995

Ms. Ellen Mattlin  
U.S. Department of Energy  
P.O. Box 550 - A5-15  
Richland, WA 99352

Dear Ms. Mattlin:

Re: Close-out of Notice of Deficiencies for the 303-K Storage Facility Closure Plan

The above closure plan has been through several rounds of Notice of Deficiency (NOD) and NOD Response Table exchanges. During the course of these exchanges and parallel meetings by the Unit Managers, the outstanding issues surrounding completion of the Closure Plan have been resolved. Resolution of these comments was satisfactorily addressed in your latest transmittal to Ecology titled, "Close-out of the 303-K Storage Facility Closure Plan Notice of Deficiency Comments (S-3-1, M-20-13), date February 3, 1995, and in previous correspondence between Ecology and DOE.

Ecology is formally notifying you that we concur with your letter, and consider all outstanding issues regarding previous NOD's to be resolved. The 303-K Storage Facility Closure Plan is considered complete. Formal approval of the Closure Plan will not occur until after completion of the public review cycle and Hanford Facility Permit modification process.

If you have any questions regarding the completeness of the NOD Response Table, or the Permit modification process, please contact me at (360) 407-7146.

Sincerely,

Scott E. McKinney  
304 Concretion Facility Unit Manager  
Nuclear Waste Program

SEM:djb

cc: Jason Adler, WHC  
Fred Ruck, WHC  
Douglas Sherwood, EPA-RL  
Dan Duncan, EPA  
Administrative Record





STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

February 16, 1996

Mr. James E. Rasmussen, Director  
Environmental Assurance, Permits, and Policy Division  
U.S. Department of Energy  
P.O. Box 550, MSIN: A5-15  
Richland, WA 99352

Ms. Sue Price  
RCRA Permitting and Closures Division  
Westinghouse Hanford Company  
P.O. Box 1970, MSIN: H6-23  
Richland, WA 99352

Dear Mr. Rasmussen and Ms. Price:

Re: 4843 Alkali Metal Storage Facility Closure Plan

The Washington State Department of Ecology has reviewed the 4843 Alkali Metal Storage Facility (4843 AMSF) Closure Plan, Revision 1 (dated September 20, 1995), and determined it is complete and accurate in accordance with WAC 173-303 and applicable Code of Federal Regulations requirements.

The closure plan was compared with the 4843 AMSF Notice of Deficiency Response Table, dated September 20, 1995, and was determined to be revised in accordance with the commitments, which were accepted in the response table. The closure plan is considered complete, and will be included in the Second Modification to the Facility Wide Permit, which is planned for the second half of 1996. Preparations for public review of the closure plan should be initiated. However, final acceptance of this closure is pending the public comment process.

If you have any questions regarding the above, please contact me at (509) 736-3025.

Sincerely,

Greta P. Davis  
Unit Manager  
Nuclear Waste Program

GD:skr

cc: Ellen Mattlin, USDOE  
Fred A. Ruck, WHC  
Administrative Record: 4843 AMSF





STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

July 31, 1996

Mr. James Rasmussen  
U. S. Department of Energy  
P.O. Box 550  
Richland, WA 99352

Mr. Vernon Dronen  
Bechtel Hanford, Inc.  
3350 George Washington Way  
Richland, WA 99352

Dear Messrs. Rasmussen and Dronen:

Re: Approval of the 300 Area Process Trenches Modified Closure/Post-Closure Plan  
(DOE/RL-93-73 Rev 1)

The Washington State Department of Ecology has completed its review of the closure plan for the 300 Area Process Trenches. The closure plan has been approved for inclusion in the Hanford Facility Wide Permit (Permit) as part of Modification B, to occur August 1996.

Unit specific conditions (see attachment) will also be included in the Permit to further specify the modified closure performance standards. These conditions, negotiated by the Tri-Parties, went through public comment, along with the closure plan, in March 1996.

If you have any questions or concerns, please contact me at (509) 736-3012.

Sincerely,

Ted A. Wooley  
Sub-Project Manager  
300 Area Process Trenches

TW:sb  
Attachment

cc: Ellen Matlin, USDOE  
Bob Mcleod, USDOE  
Dave Einan, EPA  
Linda Mihalik, BHI



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

August 13, 1996

Mr. James E. Rasmussen  
U. S. Department of Energy  
P.O. Box 550  
Richland, WA 99352

Mr. William H. Hamilton  
Westinghouse Hanford Company  
P.O. Box 1970  
Richland, WA 99352

Dear Messrs. Rasmussen and Hamilton:

Re: Formal Notification of Class 3 Modification to the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Part III, Chapter 1, 616 Non-radioactive Dangerous Waste Storage Facility (TSD: S-6-1)

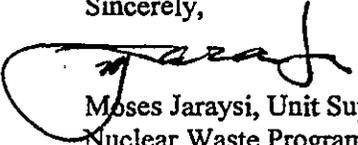
This is in response to your letter dated July 26, 1996, regarding the aforementioned Class 3 modification to Part III, Chapter 1 of the Hanford Facility Resource Conservation and Recovery Act Permit.

Washington State Department of Ecology (Ecology) staff have completed the review of the details of this modification enclosed with your formal notification. The proposed modification matches item B. 4 of WAC 173-303-830, Appendix I (list of modification classification). This modification is tentatively approved by Ecology. Final approval is pending Public Comment.

This modification will be included in the Permit Modification Package to be sent out for Public Comment around the end of August 1996.

If you have any questions or concerns regarding this decision, please contact me at (509) 736-3016.

Sincerely,

  
Moses Jaraysi, Unit Supervisor  
Nuclear Waste Program

MJ:sb

cc: C. Clark, USDOE  
R. Bowman, WHC  
W. Dixon, WHC

R. Pierce, WHC  
S. Price, WHC  
D. Sherwood, EPA

J. Wilkinson, CTUIR  
D. Powaukee, NPT



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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

August 15, 1996

Mr. James E. Rasmussen  
U. S. Department of Energy  
P.O. Box 550  
Richland, WA 99352

Mr. William T. Dixon  
Westinghouse Hanford Company  
P.O. Box 1970  
Richland, WA 99352

Mr. Kenneth C. Brog  
Pacific Northwest National Laboratory  
P.O. Box 999  
Richland, WA 99352

Mr. Michael C. Hughes  
Bechtel Hanford, Inc.  
P.O. Box 969  
Richland, WA 99352

Dear Messrs. Rasmussen, Dixon, Brog, and Hughes:

Re: Hanford Facility Dangerous Waste Permit Application, General Information Portion,  
Revision 2, (DOE/RL-91-28)

This letter is in response to your letter dated July 26, 1996, regarding the aforementioned supporting document (DOE/RL-91-28). The Washington State Department of Ecology (Ecology) has received this document and reviewed it for accuracy and adherence with agreed resolutions to Ecology's comments on the initial draft of the document. This document is tentatively approved for inclusion in the Hanford Facility Resource Conservation and Recovery Act Permit (Permit) as an attachment. The final approval is pending Public Comment.

This "General Information Portion" of the *Hanford Facility Dangerous Waste Permit Application* will be referenced in all the Unit Specific Applications (Part B's, Closure Plans, and Post-Closure Plans) to be approved and included in the Permit. Changes to information in this

**Class 3 Permit Modification  
Part III, Chapter 1**



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

NMWMP - Hanford

JUL 26 1996

JUL 26 1996

File Name SWP  
 Integrated Kennewick  
 RCRA \_\_\_\_\_ CERCLA \_\_\_\_\_  
 WQ \_\_\_\_\_ AQ \_\_\_\_\_  
 Administrative \_\_\_\_\_  
 EFSFC \_\_\_\_\_ N-Reactor \_\_\_\_\_  
 Memoranda \_\_\_\_\_  
 Cross-reference \_\_\_\_\_

96-EAP-247

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

Mr. Joseph J. Witczak  
 Unit Supervisor  
 Regulatory and Technical Support  
 Nuclear Waste Program  
 State of Washington  
 Department of Ecology  
 P.O. Box 47600  
 Olympia, Washington 98504-7600

Dear Messrs. Jaraysi and Witczak:

FORMAL NOTIFICATION OF CLASS 3 MODIFICATION TO THE HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT, DANGEROUS WASTE PORTION, PART III, CHAPTER 1, 616 NONRADIOACTIVE DANGEROUS WASTE STORAGE FACILITY (TSD: S-6-1)

Enclosed is a formal notification of Class 3 modification to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Dangerous Waste Portion, Part III, Chapter 1, 616 Nonradioactive Dangerous Waste Storage Facility (616 NRDFS).

The enclosure contains Revision 2A of Chapter 6.0 (Procedures to Prevent Hazards) and DOE/RL-89-03, Addendum 1 (14.0 Certification [K]). Chapter 6.0 has been modified to allow daily inspections to take place only when waste handling activities are performed. Chapter 6.0 also has been modified to remove weekly inspections if no waste is being stored in the unit. DOE/RL-89-03, Addendum 1 also has been included attesting that the information provided is true, accurate, and complete.

These changes to the Part III, Chapter 1 of the Hanford Facility RCRA Permit were made in compliance with the Washington Administrative Code (WAC) 173-303-830, which sets forth the requirements for making modifications to final status permits. This Class 3 modification to the Hanford Facility RCRA Permit is scheduled to be incorporated into Modification B of the Hanford Facility RCRA Permit.

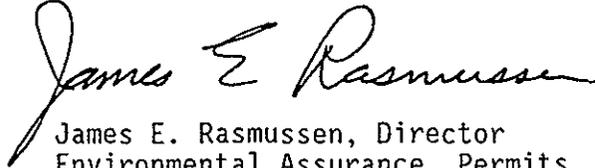
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Messrs. Witczak and Jaraysi  
96-EAP-247

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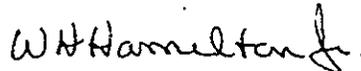
Should you have any questions regarding the Class 3 modification to the 616 NRDWSF portion of the Hanford Facility RCRA Permit, please contact Tony McKarns, U.S. Department of Energy, Richland Operations Office (RL), on (509) 376-8981 or Glen C. Triner, Westinghouse Hanford Company (WHC), on (509) 372-0771.

Sincerely,



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

EAP:ACM



William H. Hamilton, Jr., Director  
Solid Waste Disposal  
Projects and Site Services  
Westinghouse Hanford Company

Enclosure:

Class 3 Modification to the  
Hanford Facility RCRA Permit,  
Dangerous Waste Portion,  
Part III, Chapter 1, 616 NRDWSF  
and DOE/RL-89-03, Addendum 1

cc w/encl:

EDMC, H6-08  
R. Bowman, WHC  
W. Hamilton, Jr., WHC  
R. Jim, YIN  
R. Pierce, WHC  
D. Powaukee, NPT  
S. Price, WHC  
G. Triner, WHC  
J. Wilkinson, CTUIR

cc w/o encl:

W. Dixon, WHC  
D. Sherwood, EPA

ENCLOSURE

Formal Notification of Class 3 Modification to the Hanford  
Resource Conservation and Recovery Act Permit  
Dangerous Waste Portion, Part III, Chapter 1  
.616 Nonradioactive Dangerous Waste Storage Facility (TSD: S-6-1)

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6		



1 6.2 INSPECTION SCHEDULE [F-2]  
2

3 This section describes the method and schedule for inspection of the  
4 616 NRDWSF. The purpose of inspection procedures at the 616 NRDWSF is to  
5 identify leaking containers, improperly stored containers, and degradation of  
6 containment and safety equipment and/or systems. These inspections help  
7 ensure that situations do not exist that could cause or lead to the release of  
8 dangerous waste to the environment or pose a threat to human health.  
9 Abnormal conditions identified by an inspection must be corrected on a  
10 schedule that prevents hazards to workers, the public, and the environment.  
11

12  
13 6.2.1 General Inspection Requirements [F-2a]  
14

15 The content and frequency of inspections are described in this section.  
16 The inspections are documented on inspection datasheets and logsheets. The  
17 schedule and inspection records are kept at the 616 NRDWSF in the inspection  
18 logbooks. Inspection records are retained for a minimum of 5 years.  
19

20 6.2.1.1 Types of Problems [F-2a(1)]. Each day the 616 NRDWSF is occupied for  
21 the purpose of waste handling, a nuclear operator performs a daily inspection  
22 of areas subject to spills (e.g., loading and unloading areas and waste  
23 handling areas).  
24

25 Weekly inspections are performed to ensure operation and management of  
26 the 616 NRDWSF is in accordance with WAC 173-303-630. These items are listed  
27 in Section 6.2.1.2.  
28

29 The fire systems at the 616 NRDWSF are inspected annually by  
30 representatives of the Hanford Fire Department. Their inspection includes the  
31 following:  
32

- 33 • Fire protection system inspection and testing  
34 - Fire alarm pull box inspection and test  
35 - Manual and automatic fire door inspection and test  
36  
37
- 38 • Wet-pipe sprinkler system inspection and testing  
39 - System visual inspection  
40 - System internal inspection  
41 - Pressure of incoming water supply inspection  
42 - Condition of gages by visual inspection  
43 - Flow alarm device testing  
44 - Zone indicated on fire alarm control panel by visual inspection  
45
- 46 • Ignitable or reactive waste storage area inspection.  
47  
48

49 The 616 NRDWSF supervisor conducts a monthly inspection and test of the  
50 communication and alarm systems. This inspection and test includes the  
51 following:  
52

- 1 • Storage building evacuation alarms
- 2 • Storage building take cover alarms
- 3 • Public address system
- 4 • Portable radios and base station
- 5 • Crash alarm.

6  
7 6.2.1.2 Frequency of Inspections [F-2a(2)]. Each day the 616 NRDWSF is  
8 occupied for the purpose of waste handling, a nuclear operator performs an  
9 inspection of the loading/unloading areas and waste handling areas. During  
10 this inspection, the following items are addressed as required by  
11 WAC 173-303-630:

- 12
- 13 • Curbing is in good condition
- 14 • Pads/loading areas are crack free
- 15 • Trenches/sumps are locked closed, empty, and crack free
- 16 • Spill kit seal is intact
- 17 • Overpack containers are present.

18  
19 The inspection results are recorded in the daily logbook.

20  
21 Weekly inspections are performed to ensure operation and management of  
22 the 616 NRDWSF is in accordance with WAC 173-303-630. If the 616 NRDWSF has  
23 no containerized waste in storage, weekly inspections would not be conducted.  
24 A knowledgeable person cognizant of the 616 NRDWSF operations performs the  
25 weekly inspection and completes the inspection form (Figure 6-1).  
26 Discrepancies are noted in the comments section. Items inspected include the  
27 following:

- 28
- 29 • Condition of concrete floor, walls, and curbing
- 30 • Storage building structural integrity
- 31 • Safety equipment operational and in place
- 32 • Fire extinguishers in place
- 33 • Lights and fixtures
- 34 • Appropriate safety and packaging equipment
- 35 • Container structural integrity
- 36 • Secondary containment systems integrity
- 37 • Containers closed
- 38 • Corrosion of containers
- 39 • Evidence of spills or leaks
- 40 • Container labels and markings in place
- 41 • Container storage locations
- 42 • Proper aisle space
- 43 • Materials wrapped in plastic for signs of deterioration.

44  
45 As required by WAC 173-303-395, an annual inspection of the 616 NRDWSF  
46 areas where ignitable or reactive waste is stored is performed by a  
47 professional knowledgeable of the Uniform Fire Code. The following  
48 information is entered into the 616 NRDWSF logbook as a result of this  
49 inspection:

- 50
- 51 • The date and time of the inspection
- 52 • The name of the person who performed the inspection

- 1 • A notation of the observations made
- 2 • Any remedial actions that were taken as a result of this inspection.

3  
4 At least annually, the emergency equipment cabinet will be opened and the  
5 contents examined for degradation, respiratory protection equipment exceeding  
6 certification date, and the contents restocked as needed.

## 7 8 9 6.2.2 Specific Process Inspection Requirements [F-2b].

10 The following sections detail the inspections to be performed at the  
11 616 NRDWSF.

12  
13  
14 6.2.2.1 Container Inspection [F-2b(1)]. As required by WAC 173-303-630,  
15 specific items and/or problems identified during inspections are detailed in  
16 Section 6.2.1.2. The inspection records are maintained at the 616 NRDWSF for  
17 5 years.

18  
19 6.2.2.2 Tank Inspection [F-2b(2),(2)a-(2)f]. Operation of the 616 NRDWSF  
20 does not involve the placement of dangerous waste in tanks. Therefore, the  
21 inspection requirements of WAC 173-303-640 are not applicable to the  
22 616 NRDWSF.

23  
24 6.2.2.3 Waste Pile Inspection [F-2b(3),(3)a-(3)d]. Operation of the  
25 616 NRDWSF does not involve the placement of dangerous waste in piles.  
26 Therefore, the inspection requirements of WAC 173-303-660 are not applicable  
27 to the 616 NRDWSF.

28  
29 6.2.2.4 Surface Impoundment Inspection [F-2b(4),(4)a-(4)b]. Operation of the  
30 616 NRDWSF does not involve the placement of dangerous waste in surface  
31 impoundments. Therefore, the inspection requirements of WAC 173-303-650 are  
32 not applicable to the 616 NRDWSF.

33  
34 6.2.2.5 Incinerator Inspection [F-2b(5),(5)a-(5)b]. Operation of the  
35 616 NRDWSF does not involve the incineration of dangerous waste. Therefore,  
36 the inspection requirements of WAC 173-303-670 are not applicable to the  
37 616 NRDWSF.

38  
39 6.2.2.6 Landfill Inspection [F-2b(6),(6)a-(6)d]. Operation of the 616 NRDWSF  
40 does not involve the placement of dangerous waste in landfills. Therefore,  
41 the inspection requirements of WAC 173-303-665 are not applicable to the  
42 616 NRDWSF.

43  
44 6.2.2.7 Land Treatment Facility Inspection [F-2b(7),(7)a-(7)b]. Operation of  
45 the 616 NRDWSF does not involve the land treatment of dangerous waste.  
46 Therefore, the inspection requirements of WAC 173-303-655 are not applicable  
47 to the 616 NRDWSF.

1 6.3 WAIVER OR DOCUMENTATION OF PREPAREDNESS AND PREVENTION  
2 REQUIREMENTS [F-3]  
3

4 The following sections document the preparedness and prevention measures  
5 taken at the 616 NRDWSF.  
6

7  
8 6.3.1 Equipment Requirements [F-3a]  
9

10 The following sections describe the internal and external communications  
11 systems and the emergency equipment required.  
12

13 6.3.1.1 Internal Communications [F-3a(1)]. The 616 NRDWSF is equipped with  
14 an internal communication system to provide immediate emergency instruction to  
15 personnel. The onsite communication system at the 616 NRDWSF includes  
16 telephones, a public address system, and alarm systems. The telephone system  
17 provides internal and external communication. Telephones are available in the  
18 operations office, Packaging Material and Handling Equipment Area, and on a  
19 telephone pole 75 feet (22.9 meters) east of the 616 NRDWSF, between the  
20 616 NRDWSF and the primary staging area [the location of internal  
21 communication equipment and the primary staging area is identified in the  
22 building emergency plan (Appendix 7A)]. Alarm systems exist at the 616 NRDWSF  
23 to allow personnel to appropriately respond to various emergencies, including  
24 the following emergency situations: building evacuations, take cover events,  
25 and fire and/or explosion (Appendix 7A).  
26

27 Immediate emergency instruction to personnel is provided by a public  
28 address system via speaker horns and ceiling-mounted speakers located  
29 throughout the storage building, as well as speaker horns located on the  
30 outside of the storage building.  
31

32 6.3.1.2 External Communications [F-3a(2)]. The 616 NRDWSF is equipped with  
33 devices for summoning emergency assistance from the Hanford Fire Department,  
34 the Hazardous Materials Response Team, and/or local emergency response teams,  
35 as necessary. External communication is made via a telephone communication  
36 system, a two-way radio base station, and two-way portable radios. Telephones  
37 are available in the operations office, Packaging Material and Handling  
38 Equipment Area, and on a telephone pole 75 feet (22.9 meters) east of the  
39 616 NRDWSF, between the 616 NRDWSF and the primary staging area [the location  
40 of external communication equipment and the primary staging area is identified  
41 in the building emergency plan (Appendix 7A)]. In addition, the following  
42 external communication systems are available for notifying persons assigned to  
43 emergency response organizations.  
44

- 45 • Fire alarm pull boxes and fire sprinkler flow monitoring devices--  
46 connected to a system monitored around the clock by the Hanford Fire  
47 Department.  
48

49 [Amendment III.1.B.ii.]

- 50 • Telephone number 911--contact point for the Hanford Facility; on  
51 notification, the Hanford Patrol Operations Center notifies and/or  
52 dispatches required emergency responders.

- 1 • Telephone number 373-3800--single point of contact for the emergency  
2 duty officer; this number can be dialed from any Hanford Site  
3 telephone.
- 4
- 5 • Crash alarm telephone system--consists of selected telephones that are  
6 disassociated from the regular system and automatically are connected  
7 to control stations.
- 8
- 9 • Two-way radio system--the system accesses the Hanford Site emergency  
10 network and can summon the Hanford Fire Department, Hanford Patrol,  
11 and/or any other assistance requested to handle emergencies.
- 12

13 6.3.1.3 Emergency Equipment [F-3a(3)]. A detailed list of equipment is  
14 included in the Building Emergency Plan (Appendix 7A).

15  
16 6.3.1.4 Water for Fire Control [F-3a(4)]. The 616 NRDWSF has a potable water  
17 main installed for fire control. The available water pressure [measured at  
18 the 609-A Fire Station fire hydrant--across the street from the 616 NRDWSF  
19 (Chapter 2.0, Figure 2-2)] has a static pressure of 79 pounds per square inch,  
20 with a residual pressure of 39 pounds per square inch when flowing at  
21 910 gallons (3,444.7 liters) a minute.

#### 22 23 24 6.3.2 Aisle Space Requirement [F-3b]

25  
26 The container storage arrangement and aisle spacing for each storage cell  
27 are shown in Figure 6-2. Aisle spacing is sufficient to allow the movement of  
28 personnel and fire protection equipment in and around the containers.  
29 A minimum 30 inch (0.76 meter) aisle space will be maintained between rows of  
30 containers as required by WAC 173-303-630.

### 31 32 33 6.4 PREVENTIVE PROCEDURES, STRUCTURES, AND EQUIPMENT [F-4]

34  
35 The following sections describe preventive procedures, structures, and  
36 equipment.

#### 37 38 39 6.4.1 Unloading Operations [F-4a]

40  
41 The loading and unloading areas of the 616 NRDWSF are described in  
42 Chapter 2.0, Section 2.1.2.6. All loading and unloading operations are  
43 carried out on concrete pads that are equipped with containment trenches.  
44 The nuclear operators ensure the following before waste is unloaded at the  
45 616 NRDWSF.

- 46
- 47 • All trench and sump gratings are in place.
- 48
- 49 • All interior sumps and trenches are clean and dry.
- 50
- 51 • All exterior loading pad trenches have minimum residual water  
52 (Chapter 2.0, Section 2.5.1).

- 1 • Loading pad trench drain plugs are closed and locked.
- 2
- 3 • Necessary storage building access doors are open.
- 4
- 5 • Area from loading pad to appropriate storage cell is clear of
- 6 obstructions.
- 7
- 8 • If used, the fork truck lift is operational and raised.
- 9
- 10 • The truck is placed so that container movement occurs over the loading
- 11 pad.
- 12

13 After a shipment has been accepted for storage (Chapter 2.0,  
14 Section 2.8.1), the transporter is requested to unload the truck. Multiple  
15 waste containers are placed on pallets for movement into the 616 NRDWSF using  
16 pallet jacks or a forklift; the forklift is prohibited from operating in the  
17 Class 1A flammable liquid storage cell. Single containers are hand carried or  
18 moved on a dolly. The containers are placed in the storage cell as assigned  
19 on the associated hazardous waste disposal analysis record (Chapter 3.0,  
20 Section 3.2). When the storage of containers is completed, all storage  
21 building doors are closed.

#### 22 23 24 6.4.2 Run-Off [F-4b]

25  
26 Chapter 4.0, Section 4.1.1.7, contains information on run-off and run-on  
27 of liquid at the 616 NRDWSF.

#### 28 29 30 6.4.3 Water Supplies [F-4c]

31  
32 Water is supplied to the 616 NRDWSF from the Columbia River via the  
33 Hanford Site potable water system. All hose connections to the potable water  
34 line have a one-way check valve installed to prevent back flow. These check  
35 valves prevent contamination from entering the water supply lines from within  
36 the 616 NRDWSF.

37  
38 The water supply system (potable and fire sprinkler supply) for the  
39 616 NRDWSF has no backup. A backup is not necessary because of the proximity  
40 of the 609-A Fire Station, which can provide a 2 minute response time  
41 (Drawing H-13-000014 in Appendix 2A).

#### 42 43 44 6.4.4 Equipment and Power Failure [F-4d]

45  
46 The only powered equipment at the 616 NRDWSF is a forklift, fork truck  
47 lift, and the ventilation system. If the forklift or fork truck lift fails,  
48 the 616 NRDWSF supervisor makes the necessary notifications for repairs.  
49 Actions taken in response to a loss of ventilation are detailed in the  
50 building emergency plan (Appendix 7A).

1 As described in Section 6.3.1.2, emergency communication equipment is  
2 available to summon emergency assistance in the event of a power loss.  
3  
4

#### 5 6.4.5 Personnel Protection Equipment [F-4e] 6

7 At the 616 NRDWSF, procedures, structures, and equipment are used to  
8 prevent undue exposure of personnel to dangerous waste. The 616 NRDWSF  
9 includes eyewash stations and safety showers in the combustible storage cell  
10 and the packaging and sampling room. Protective clothing and equipment are  
11 used by personnel handling dangerous waste. Protective clothing used at the  
12 616 NRDWSF consists of foot, eye, and face protection.  
13

14 The following protective clothing is worn when handling waste containers:  
15

- 16 • Safety glasses
- 17 • Chemical-resistant gloves
- 18 • Chemical-resistant coveralls
- 19 • Approved safety shoes
- 20 • Face shield.

21  
22 The following protective clothing is worn when handling empty new  
23 containers:  
24

- 25 • Safety glasses or goggles
- 26 • Leather gloves
- 27 • Approved safety shoes.

#### 28 29 30 6.5 PREVENTION OF REACTION OF IGNITABLE, REACTIVE, AND 31 INCOMPATIBLE WASTES [F-5] 32

33 The following sections describe prevention of reaction of ignitable,  
34 reactive, and incompatible waste.  
35  
36

##### 37 6.5.1 Precautions to Prevent Ignition or Reaction of Ignitable 38 or Reactive Waste [F-5a] 39

40 All waste, including ignitable waste, is stored in sealed U.S. Department  
41 of Transportation-approved containers. Ignitable waste is stored in the  
42 Class 1A or Class 1B flammable liquid storage cells (Chapter 2.0, Figure 2-3).  
43 The 1A cell is equipped with National Fire Protection Association 70 Class I/  
44 Division I (NFPA 1989) electrical fixtures, intrinsically safe chemical  
45 transfer pumps and receptacles, an explosion relief wall, 'blow out' pressure  
46 relief ceiling panels, and grounding cables. Operation of the electric  
47 forklift is prohibited in the Class 1A flammable liquid storage cell.  
48

49 The 616 NRDWSF does not store reactive waste as defined in  
50 WAC 173-303-090(7)(a) (vi), (vii), or (viii).  
51

1 Water-reactive waste is stored in U.S. Department of  
2 Transportation-approved containers inside portable weatherproof storage  
3 cabinets. These cabinets are standalone units that are placed in the  
4 | flammable liquid storage cells (Figure 6-2) on an as-needed basis. Other  
5 reactive waste is stored throughout the storage building depending on waste  
6 type and compatibility.

7  
8 Smoking is prohibited in the storage building. Multiple "NO SMOKING"  
9 signs are present to remind occupants.

10  
11  
12 6.5.2 General Precautions for Handling Ignitable or Reactive  
13 Waste and Mixing of Incompatible Waste [F-5b]  
14

15 Based on the dangerous characteristics identified by the generating unit,  
16 specific packaging instructions are provided. General guidance is provided to  
17 the generating unit in an internal document concerning waste packaging and  
18 disposal requirements. A compatibility analysis is performed on the waste as  
19 well. Incompatible waste is not packaged within the same container or placed  
20 in the same storage cell.

Building 616 Weekly Inspection (sheet 1 of 3)

Inspection No. \_\_\_\_\_ Status: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

	Yes	No	If no, specify
<b>1.0 Office Area</b>			
Emergency light operable			
Exit unobstructed			
Fire extinguisher charged			
Public address system operating			
Ventilation indicator lights operating			
Telephone operating			
Radio operating			
Evacuation alarm tested once monthly; date tested:			
<b>2.0 Hallway</b>			
Exit sign operating			
Fire extinguisher charged			
Exits unobstructed			
[Amendment III.1.B.x.] Protective equipment supply present per the emergency equipment list*			
Pressure differential gage working-reading:			
<b>3.0 Receiving Material and Handling Equipment Area</b>			
Absorbents present			
Emergency equipment present			
Emergency light operable			
Exit light operating			
Exit unobstructed			
Fire extinguisher charged			
Overpack drums present			
Public address system (audible)			
Telephone operating			
Radio operating			
<b>4.0 Structure Exterior</b>			
Curbing in good condition			
Exits unobstructed			
Pads/loading area crack free			
Trenches locked closed/empty			
No combustibles stored within 50 feet of structure			
Roads/fire lanes unobstructed			
Exterior telephone operating			

\* This equipment shall be individually inspected and documented by type, and be in adequate condition, and in the quantities listed. The revised checklist shall be submitted for approval to the Department within 30 days of the effective date of this Permit.

Figure 6-1. Building 616 Weekly Inspection.  
(sheet 1 of 3)

Building 616 Weekly Inspection. (sheet 2 of 3)

	Packaging and Sampling Room <sup>a</sup>	Oxidizer <sup>a</sup>	Caustic <sup>a</sup>	Acid <sup>a</sup>	Combustible <sup>a</sup>	Flammable 1B <sup>a</sup>	Flammable 1A <sup>a</sup>
<b>5.0 Storage Areas</b>							
<b>A. Container Condition:</b>							
Closed							
Corrosion							
Evidence of leakage							
Required labels							
Structural defects							
<b>B. Structures:</b>							
Curbing							
Exits unobstructed							
Floor							
Roof/walls							
Signs							
<b>C. Safety/Emergency Equipment</b>							
{Amendment III.1.B.x.] Personal Protective Equipment <sup>a</sup>		NA	NA	NA	NA	NA	NA
Emergency light operable		NA		NA			NA
Exit light operating							
Fire extinguisher charged	NA	NA	NA	NA			NA
Public address system (audible)							
Safety shower/eye wash tested/flushed (weekly); date tested:		NA	NA	NA		NA	NA
<b>D. Container Location<sup>b</sup></b>							
Waste Tracking Form ID No./Location							
Waste Tracking Form ID No./Location							
Waste Tracking Form ID No./Location							
Waste Tracking Form ID No./Location							
Waste Tracking Form ID No./Location							

<sup>a</sup>N/A - Not applicable.

X - No problems noted.

C - See comments for problem description or remedial action required.

<sup>b</sup>Five container locations are verified against the storage building inventory. Record the waste tracking form ID No./location for each container checked above. Record discrepancies identified in the comments section.

\* {Amendment III.1.B.x.] Located in sealed cabinet. Check for integrity of seal.

Figure 6-1. Building 616 Weekly Inspection. (sheet 2 of 3)

F6-1.2

940240-29084 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

Building 616 Weekly Inspection. (sheet 3 of 3)

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6. Comments

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Inspector

\_\_\_\_\_ (print name)

\_\_\_\_\_ (sign name)

7. Remedial Action Taken

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8. Solid Waste Operations Supervisor Acknowledgment of Action Completed:

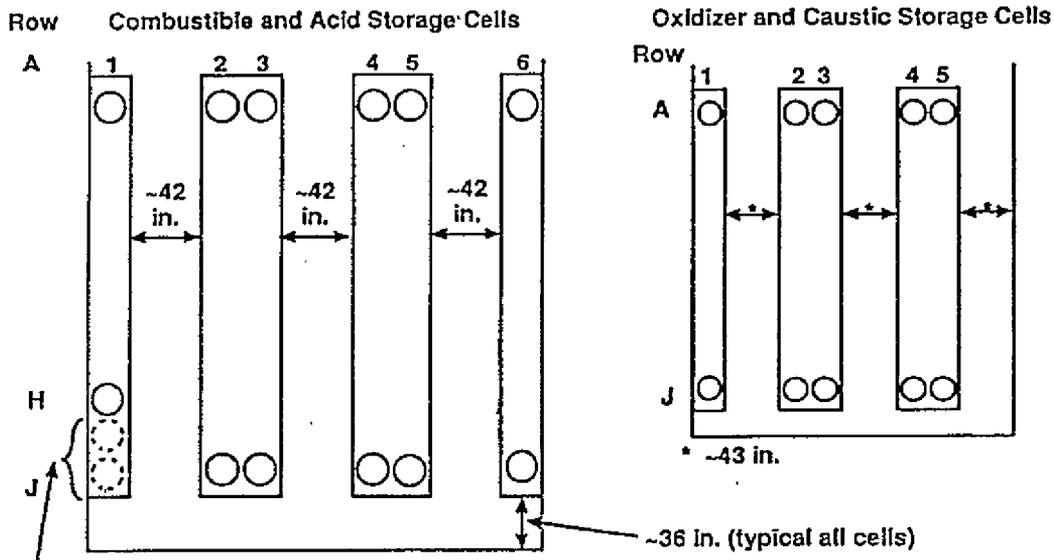
Completion Date: \_\_\_\_\_

Today's Date: \_\_\_\_\_

\_\_\_\_\_ (print name)

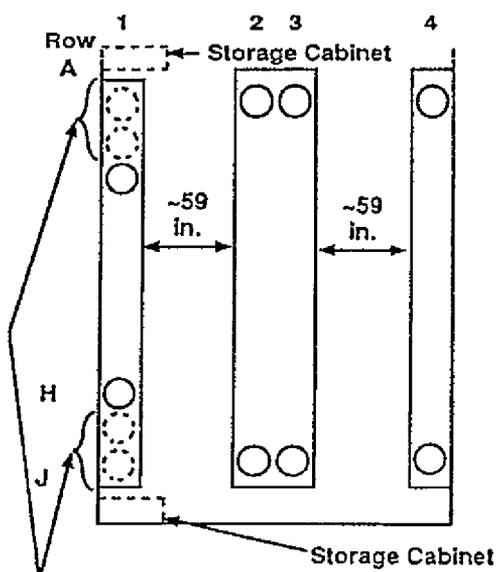
\_\_\_\_\_ (sign name)

Figure 6-1. Building 616 Weekly Inspection. (sheet 3 of 3)



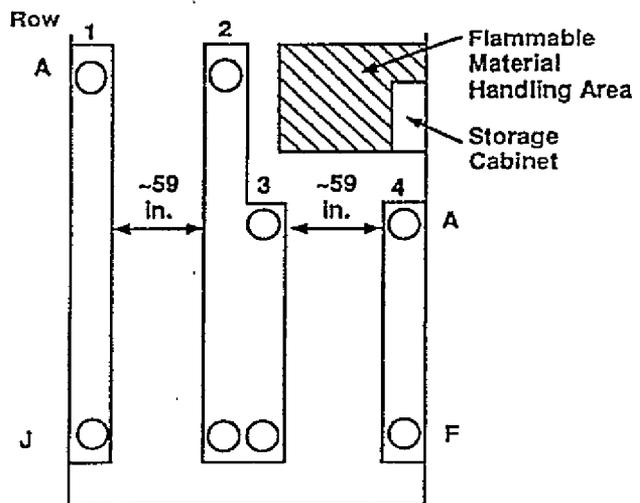
These two locations not present in the Combustible Cell to make room for the Safety Shower/Eyewash Station

**Class 1B Flammable Liquid Storage Cell**



These four locations not present when Storage Cabinets are used

**Class 1A Flammable Liquid Storage Cell**



(Not to Scale)

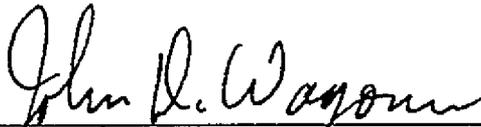
79005021.1

1 | Figure 6-2. Current Container Storage Layout.

DOE/RL-89-03, Addendum 1  
14.0 Certification [K]

14.0 CERTIFICATION [K]\*

1  
2  
3  
4 I certify under penalty of law that this document and all attachments  
5 were prepared under my direction or supervision in accordance with a system  
6 designed to assure that qualified personnel properly gather and evaluate the  
7 information submitted. Based on my inquiry of the person or persons who  
8 manage the system, or those persons directly responsible for gathering the  
9 information, the information submitted is, to the best of my knowledge and  
10 belief, true, accurate, and complete. I am aware that there are significant  
11 penalties for submitting false information, including the possibility of fine  
12 and imprisonment for knowing violations.  
13  
14  
15  
16

17 

18  
19  
20  
21 Owner/Operator  
22 John D. Wagoner, Manager  
23 U.S. Department of Energy  
24 Richland Operations Office  
25

7/26/96

Date

26  
27 

28  
29  
30 Co-operator  
31 A. LaMar Trego, President  
32 Westinghouse Hanford Company

7/17/96

Date

33 \* This certification statement is only for Chapter 6.0, Revision 2A  
34 (Procedures to Prevent Hazards) for the 616 Nonradioactive Dangerous Waste  
35 Storage Facility.