STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 29, 2019 19-NWP-084

Mr. Brian T. Vance, Acting Manager
Richland Operations Office
United States Department of Energy
PO Box 550, MSIN: H5-20
Richland, Washington 99352

Ty Blackford, President and CEO
CH2M Hill Plateau Remediation Company
PO Box 160, MSIN: A7-01
Richland, Washington 99352

Re: Final Class 3 Permit Modification 8C.2019.5F to the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8C (Permit), for the Treatment, Storage, and Disposal of Dangerous Waste*, Part V, Closure Unit Group 32, 276-BA Organic Storage Area, WA7890008967

References: See page 3

Dear Brian Vance and Ty Blackford:

This letter issues the Department of Ecology's (Ecology) final permit decision 8C.2019.5F on the draft 8C.2018.8D permit modification (References 1-4).

Ecology incorporated the final 8C.2019.5F permit modification in the 276-BA Organic Storage Area, Closure Unit Group 32. In accordance with Washington Administrative Code (WAC) 173-303-840(8)(b), this portion of the 276-BA Organic Storage Area, Closure Unit Group 32 is effective July 1, 2019.

The purpose of this Class 3 Permit Modification is to add the 276-BA Organic Storage Area Closure Plan and unit specific permit conditions to the Permit, which is located in Part V, Closure Unit Group 32.

As required by WAC 173-303-840(3)(d), Ecology held a 45-day public comment period from March 11, 2019, through April 26, 2019. Ecology received one public comment during the public comment period. Ecology reviewed the comment, and a *Response to Comments* document is on the enclosed DVD (Ecology Publication 19-05-006) and on Ecology's website at https://fortress.wa.gov/ecy/publications/SummaryPages/1905006.html.

The permit modification is also on the enclosed DVD. Copies of this DVD are located at the Hanford Public Information Repositories in Richland, Spokane, and Seattle, Washington, as well as Portland, Oregon. A hard copy and DVD is on file at the locations listed below:

Department of Ecology
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, Washington 99354

United States Department of Energy
Administrative Record
2440 Stevens Center Place
Richland, Washington 99354

Individuals can request copies of the DVD by contacting Ecology's Resource Center at (509) 372-7950.

In accordance with WAC 173-303-830(4)(f)(ii), Ecology's decision to grant or deny a Class 3 Permit Modification request under this section may be appealed under the permit appeal procedures of WAC 173-303-845.

You Have the Right to Appeal

You have a right to appeal this permit modification to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Permit. The appeal process is governed by Chapter 43.21B of the Revised Code of Washington (RCW) and Chapter 371-08 of the WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do all of the following within 30 days of the date of receipt of this Permit:

- File your appeal and a copy of this Permit with the PCHB (see addresses in this letter). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Permit on Ecology in paper form – by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B of the RCW and Chapter 371-08 of the WAC.

1. To file your appeal with the Pollution Control Hearings Boards

Mail appeal to: **OR** **Deliver your appeal in person to:**

The Pollution Control Hearings Board
PO Box 40903
Olympia, Washington 98504-0903

The Pollution Control Hearings Board
1111 Israel Road, Southwest, Suite 301
Tumwater, Washington 98501

2. To serve your appeal on the Department of Ecology

Mail appeal to: **OR** **Deliver your appeal in person to:**

The Department of Ecology
Appeals Processor
PO Box 47608
Olympia, Washington 98504-7608

The Department of Ecology
Appeals Processor
300 Desmond Drive Southeast
Lacey, Washington 98503

3. Send a copy of your appeal to:

Stephanie Schleif
Department of Ecology
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, Washington 99354

If there are any questions regarding this permit modification, please contact Brigitte Weese, Permit Lead, at brigitte.weese@ecy.wa.gov or (509) 372-7936 or Stephanie Schleif, Facility Transition Project Manager at stephanie.schleif@ecy.wa.gov or (509) 372-7929.

Sincerely,

Suzanne Dahl
Dangerous Waste Permit Manager
Nuclear Waste Program

bw/so
Enclosure

cc: See page 4

Reference 1: Letter 16-ESQ-0066 Reissue, dated May 4, 2016, "Reissue - Submittal of Permit Modification Request and Closure Plan for 276-BA Organic Storage Tank"

Reference 2: Letter 16-NWP-137, dated August 11, 2016, "Letter of Incompleteness and Notice of Deficiency (NOD) for Class 3 Permit Modification Request, Closure Plan for 276-BA Organic Storage Tank, received June 7, 2016"

Reference 3: Letter 18-AMRP-0155, dated August 30, 2018, "Response to the Notice of Deficiency (NOD) and Updated Closure Plan for 276-BA Organic Storage Area in Support of the Hanford Facility Dangerous Waste Class 3 Permit Modification Request Submitted May 4, 2016"

Reference 4: Letter 19-NWP-035, dated March 11, 2019, "Proposed Class 3 Permit Modification 8C.2018.8D of the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion 8C, for the Treatment, Storage, and Disposal of Dangerous Waste*, Part V, Closure Unit Group 32, 276-BA Organic Storage Area, WA7890008967"

cc electronic w/o enc:

Dave Bartus, EPA
David Einan, EPA
Mary Beth Burandt, USDOE
Duane Carter, USDOE
Joe Franco, USDOE
Rob Hastings, USDOE
Lori Huffman, USDOE
Mostafa Kamal, USDOE
Christopher Kemp, USDOE
Robert Long, USDOE
Tony McKarns, USDOE
Donna Yasek, BNI
Laura J. Cusack, CHPRC
Ray M. Geimer, CHPRC
Marie T. Gillespie, CHPRC
Moses N. Jaraysi, CHPRC
Jeff A. Lerch, CHPRC
Deborah G. Singleton, CHPRC
Jon Perry, MSA
Darci Teel, MSA
ERWM Staff, YN
Michael Stephenson, PNNL
Lucinda Borneman, WRPS
Debra Alexander, Ecology
Jennifer Cantu, Ecology
Annette Carlson, Ecology
Suzanne Dahl, Ecology
Mandy Jones, Ecology
Mark Pakula, Ecology
Stephanie N. Schleif, Ecology
Alex Smith, Ecology
Brigitte Weese, Ecology

cc w/enc, DVD:

Tim Hamlin, EPA
Tony McKarns, USDOE
Matt Johnson, CTUIR
Jack Bell, NPT
Alyssa Buck, Wanapum
Laurene Contreras, YN
Susan Leckband; HAB
Ken Niles, ODOE
John Fowler, ACHP
Robin Priddy, DCAA
Donald Redman, USACE
Trevor Fox, USFW
Mike Livingston, WDFW
John Martell, WDOH
John Wiesman, WDOH
Sonia Soelter, WSDA
Allyson Brooks, WSDAHP
Cindy Preston, WSDNR
BNI Correspondence Control
CHPRC Correspondence Control
Environmental Portal
Gonzaga University, Foley Center Library
Hanford Facility Operating Record
MSA Correspondence Control
PNNL Correspondence Control
Portland State University Library, Government Information
University of Washington Suzzallo Library, Government Publications
USDOE-ORP Correspondence Control
USDOE Public Reading Room, CIC
USDOE-RL Correspondence Control
USEPA Region 10 Hanford Field Office Correspondence Control
WRPS Correspondence Control

cc w/enc, DVD and hard copy:

Hanford Administrative Record: Hanford Site-wide Permit
NWP Central File

cc w/enc, hard copy:

NWP Library: Hanford Site-wide Permit

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

SIGNATURE PAGE FOR 8C.2019.5F

The enclosed portions of the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8c for the Treatment, Storage, and Disposal of Dangerous Waste were modified on May 29, 2019, and effective on July 1, 2019. These portions are the legal and current version of the permit. It will remain in effect unless modified, revoked and reissued under Washington Administrative Code (WAC) 173-303-830(3), terminated under WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7). All other portions of the permit remain unchanged.

ISSUED BY:
WASHINGTON STATE DEPARTMENT OF ECOLOGY

_____ Date: 5/29/19

Suzanne Dahl, Dangerous Waste Permit Manager
Nuclear Waste Program, Department of Ecology

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DEPARTMENT OF ECOLOGY
State of Washington

Response to Comments

276-BA Organic Storage Area

March 11, 2019 to April 26, 2019

Summary of a public comment period and responses to comments

May 2019

Publication no. 19-05-006

Publication and Contact Information

This publication is available on the Department of Ecology's (Ecology) website at https://fortress.wa.gov/ecy/publications/SummaryPages/1905006.html

For more information contact:

Stephanie Schleif
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354
Phone: 509-372-7950

Email: Hanford@ecy.wa.gov

Washington State Department of Ecology – www.ecology.wa.gov

- Headquarters, Lacey 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Lacey 360-407-6300
- Central Regional Office, Yakima 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

Ecology publishes this document to meet the requirements of Washington Administrative Code 173-303-840 (9).

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 509-372-7950 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Response to Comments

276-BA Organic Storage Area

March 11, 2019 to April 26, 2019

Nuclear Waste Program
Washington State Department of Ecology
Richland, Washington

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Table of contents

Introduction....1
Reasons for issuing the permit....1
Public involvement actions....3
List of Commenters....4
Attachment 1: Comments and responses
Appendix A: Copies of all public notices

Introduction

The Washington State Department of Ecology's Nuclear Waste Program (Ecology) manages dangerous waste within the state by writing permits to regulate its treatment, storage, and disposal.

When a new permit or a significant modification to an existing permit is proposed, Ecology holds a public comment period to allow the public to review the change and provide formal feedback. (See Washington Administrative Code [WAC] 173-303-830 for types of permit changes.)

The Response to Comments is the last step before issuing the final permit, and its purpose is to:

- Specify which provisions, if any, of a permit will become effective upon issuance of the final permit, providing reasons for those changes.
- Describe and document public involvement actions.
- List and respond to all significant comments received during the public comment period and any related public hearings.

This Response to Comments is prepared for:

Comment period:	276-BA Organic Storage Area, March 11, 2019, through April 26, 2019
Permit:	*Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part V, Closure Unit Group 32 (WA7890008967), 276-BA Organic Storage Area*
Permittee(s):	U.S. Department of Energy Richland Operations CH2M Hill Plateau Remediation Company

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our website: https://www.ecology.wa.gov/Hanford.

Reasons for modifying the permit

The Washington State Department of Ecology (Ecology) is proposing a change to the *Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Revision 8c* (Permit). This change incorporates the Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste for the 276-BA Organic Storage Area into the Permit. The 276-BA Organic Storage Area is located in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site.

The purpose of the proposed permit modification is to describe clean closure activities that will be completed within 180 days of the start date. Clean closure will eliminate the need for future post-closure inspections, monitoring, and maintenance of the 276-BA Organic Storage Area.

The proposed modification to the Permit will be located in Part V, Closure Unit Group 32. The following is a summary of the proposed additions to Part V of the Permit.

Permit Conditions: Ecology drafted unit-specific permit conditions to reflect the dangerous waste permit requirements for closure of the 276-BA Organic Storage Area.

Addendum H, Closure Plan: The closure plan proposes clean closure activities for the 276-BA Organic Storage Area. Closure activities include:

- Adding absorbent to stabilize the remaining liquid waste in the container (if found).
- Removing the container, intact, and transporting it to the Environmental Restoration Disposal Facility (ERDF).
- Flood grouting the interior of the container at ERDF prior to final disposal.
- Demolishing, containerizing, and disposing of the secondary containment structure at ERDF.
- Excavating soil beneath the structure up to 3 feet, containerizing the soil, and disposing at ERDF.
- Focused sampling of the site is proposed due to the relatively small size of the secondary containment structure.
- Sampling at locations where concrete joints, the trench, and the sump are located.

Public involvement actions

The Class 3 Permit Modification and first 60-day public comment period on the 276-BA Organic Storage Area was held in 2016 and significant changes were made to the Closure Plan as part of Ecology's completeness determination and technical review.

Ecology held a second 45-day public comment period for the Class 3 Permit Modification from March 11, 2019, through April 26, 2019.

The following actions were taken by Ecology to notify the public:

- Mailed a public notice announcing the comment period to 1282 members of the public.
- Placed a public announcement legal classified advertisement in the *Tri-City Herald* on March 10, 2019.
- Emailed a notice announcing the start of the comment period to the Hanford-Info email list, which has 1357 recipients.

The Hanford information repositories located in Richland, Spokane, and Seattle, Washington and Portland, Oregon received the following documents for public review:

- Focus Sheet
- Transmittal letter
- Response to comments document from the first part of the Class 3 modification
- Draft 276-BA Organic Storage Area Permit Modification documents

The following public notices for this comment period are in Appendix A of this document:

- Public notice (focus sheet)
- Classified advertisement in the *Tri-City Herald*
- Notice sent to the Hanford-Info email list

List of Commenters

The table below lists the names of organizations or individuals who submitted a comment on the 276-BA Organic Storage Area Permit modification. The comments and responses follow.

Commenter	Organization
Mike Conlan	Citizen

Attachment 1: Comments and responses

Letter I-1: Mike Conlan, 3/21/19 6:34 PM PT

Comment I-1-1

1. Remove all nuclear waste,
2. Do not allow anymore nuclear waste into the facilty,
3. Replace all the single storage tanks,
4. Stop all the nuclear leakage entering the Columbia River

Ecology Response to I-1-1

Ecology is working to ensure that long-term storage, treatment and disposal of the waste is protective of human health and the environment. The proposed permit changes are not to allow new waste, but to better manage the waste already at Hanford. Single-shell tanks are not in the scope of this comment period. Ecology does agree the tanks pose a threat. We believe a better approach to addressing it is to remove the waste from the single-shell tanks and put it in the compliant double-shell tanks to prepare for eventual treatment in the Waste Treatment Plant now being built. The permit modification proposes clean closure for the 276-BA Organic Storage Area. Clean closure will eliminate the need for future post-closure inspections, monitoring, and maintenance.

Appendix A: Copies of all public notices

Public notices for this comment period:

- Public notice (focus sheet)
- Classified advertisement in the *Tri-City Herald*
- Notice sent to the Hanford-Info email list

276-BA Organic Storage Area Permit Modification

Public comment period

March 11 – April 26, 2019

Please submit comments

Electronically (preferred) via:

http://wt.ecology.commentinput.com/?id=YPUpu

By U.S. Mail, or hand-delivery:
Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

Public hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Daina McFadden
509-372-7950
Hanford@ecy.wa.gov

Special accommodations

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 509-372-7950 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Public comment invited

The Washington State Department of Ecology (Ecology) is proposing a change to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Revision 8c (Permit). This change incorporates into the Permit, the Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste for the 276-BA Organic Storage Area. The 276-BA Organic Storage Area is located in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site. The proposed modification to the Permit will be located in Part V, Closure Unit Group 32.

The permittees are:

U.S. Department of Energy Richland Operations (USDOE)
P.O. Box 550
Richland, Washington 99352

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99354

Ecology invites you to review and comment on this proposed permit modification. The comment period begins March 11, 2019, and ends April 26, 2019.

The class 3 permit modification will include the following:

- Permit Conditions
- Addendum H, Closure Plan which proposes clean closure activities that will be completed within 180 days of the start date. The diagram on page 3 provides a schematic of the ISO-East Container. USDOE initiated a Class 3 permit modification to add the 276-BA Organic Storage Area to the Permit on May 4, 2016. The 60 day public comment period as required by Washington Administrative Code (WAC) 173-303-830(4)(c) began on April 25, 2016, and ended on August 6, 2016.

Ecology issued a Letter of Incompleteness and Notice of Deficiency for the Class 3 Permit Modification Request on August 11, 2016. We resolved the deficiencies with the permittees and the permit modification was determined to be complete. Ecology responded to one public comment submitted during that comment period. Changes to the closure plan include the following:

- The 276-BA container was previously classified as a tank in the B Plant Complex Part A Form concerning the B Plant Organic Mixed Waste Storage System. Upon further review, USDOE determined that 276-BA ISO East should be classified as a container because it meets the RCRA definition of a container in WAC-173-303-040. 276-BA ISO East will be closed under the container standards in WAC 173-303-630(10).
- In addition, the components of the United States Environmental Protection Agency 7 Step Data Quality Objectives were evaluated and identified in the Closure Plan for 276-BA Organic Storage Area.

Background

The 276-BA Organic Storage Area is located in a secure fenced area in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site.

Historically, the 276-BA Organic Storage Area was part of the Organic Mixed Waste Storage System, which was used for chemical processing and to store organic chemicals used in the recovery and purification of strontium.

The 276-BA Organic Storage Area consists of a single storage container (ISO East) and secondary containment structure. The secondary containment structure has two separate compartments. The west compartment is empty and was never used for dangerous waste storage or treatment.

The east compartment contains the ISO East Container. This container, which received waste directly from the B Plant Complex, was placed in the 276-BA Organic Storage Area secondary containment structure, sealed and intact. The stored wastes were then removed from the ISO East container to a tanker truck for offsite disposal in 1997. Any potential releases from the ISO East container would likely be found in the location of the sump or trench within the ISO East portion of the secondary containment structure. These areas have been identified for soil sampling to demonstrate clean closure.

The ISO-East container currently contains less than two gallons of washed organic residues consisting of normal paraffin hydrocarbons (NPH), di-(2-ethyhexyl) phosphoric acid (D2EHPA), tributyl phosphate (TBP), and small amounts of strontium-89/90 and cesium-137.

Why cleanup matters

Ecology would like your comments on the proposed draft language that describes clean closure in the closure plan. Clean closure will eliminate the need for future post-closure inspections, monitoring, and maintenance, and will include the following:

- Adding absorbent to stabilize the remaining liquid waste in the container (if found).
- Removing the container, intact, and transporting it to the Environmental Restoration Disposal Facility (ERDF).
- Flood grouting the interior of the container at ERDF prior to final disposal.
- Demolishing, containerizing, and disposing of the secondary containment structure at ERDF.

Figure 2 - 276-BA Organic Storage Area including the ISO-East container

- Excavating soil beneath the structure up to 3 feet, containerizing, and disposing at ERDF.
- Focused sampling of the site is proposed due to the relatively small size of the secondary containment structure.
- Sampling will be at locations where concrete joints, the trench, and the sump are located.

View the full proposal

Ecology invites to you to review and comment on this proposed permit modification. This Focus Sheet is a summary of the proposed changes. See page 1 for comment period dates and information on how to submit comments. Copies of the proposed modification are available at the Administrative Record and Information Repositories listed on page 4. In addition, the proposed modification is online at https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods.

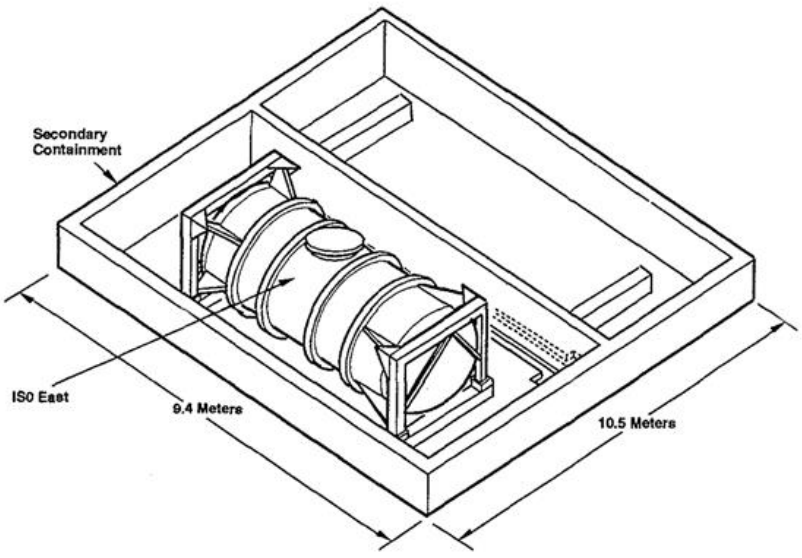

Figure 3 - A schematic of the ISO-East Container

Ecology will consider and respond to all comments received during the public comment period. We will make the final permitting decision after the close of the comment period. We will publish a Response to Comments document with the issuance of the final permit.

DEPARTMENT OF ECOLOGY
State of Washington

Nuclear Waste Program
3100 Port of Benton Blvd
Richland, WA 99354

Hanford's Information Repositories and Document Review Locations

Washington

Richland
Ecology Nuclear Waste Program
Resource Center
3100 Port of Benton Blvd.
Richland, WA 99354
509-372-7950

U.S. Department of Energy
Administrative Record
2440 Stevens Drive, Room 1101
Richland, WA 99354
509-376-2530

Washington State University Tri-Cities
Department of Energy Reading Room
2770 Crimson Way, Room 101L
Richland, WA 99354
509-375-7443

Seattle
University of Washington Suzzallo Library
P.O. Box 352900
Seattle, WA 98195
206-543-5597

Spokane
Gonzaga University
Foley Center
502 E Boone Avenue
Spokane, WA 99258
509-313-6110

Oregon

Portland
Portland State University
Millar Library
1875 SW Park Avenue
Portland, OR 97207
503-725-4542

276-BA Organic Storage Area Permit Modification
Public comment invited
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Richland, WA 99354
509-375-7443
Seattle
University of Washington Suzzallo Library
P.O. Box 352900
Seattle, WA 98195
206-543-5597
Spokane
Gonzaga University
Foley Center
502 E Boone Avenue
Spokane, WA 99258
509-313-6110
Oregon
Portland
Portland State University
Millar Library
1875 SW Park Avenue
Portland, OR 97207
503-725-4542

CALL FOR BIDS

NOTICE IS HEREBY GIVEN that Public Utility District No. 1 of Franklin County will receive sealed bids no later than 3:00 p.m., **Tuesday, April 2, 2019** at the offices of the District at 1411 West Clark Street, Pasco, Washington 99301. Bid is for furnishing and delivering two (2) fleet pick-ups, as per specifications, which may be obtained from the office of the District in Pasco, Washington.

Bid prices shall be firm for a minimum of sixty (60) days from the date of the bid opening. All bid prices shall exclude State and local sales taxes and use taxes.

All bids shall be sealed and shall be marked:

"Bid Document 9391 – Purchase of Two (2) Fleet Pick-Ups"

Bids will be publicly opened in the District office at 1411 West Clark Street, Pasco, Washington, on **Tuesday, April 2, 2019,** at **3:00 p.m.** The District reserves the right to reject any or all bids and to waive informalities that may arise during the bidding process.

Each bid shall be accompanied by a certified or cashier's check payable to the order of the Commissioners of Public Utility District No. 1 of Franklin County, for a sum not less than five percent (5%) of the amount of the bid or accompanied by a bid bond in an amount not less than five percent (5%) of the bid with a corporate surety licensed to do business in the State of Washington. This Call for Bids is in conformity with RCW. 54.04.070 and 54.04.080 and such statutes are incorporated into this Call for Bids.

PUBLIC UTILITY DISTRICT NO. 1 OF FRANKLIN COUNTY

By: /s/Rebecca Diaz
Rebecca Diaz
Contract Administrator

CITY OF PASCO
NOTICE OF SPECIAL MEETING
PLEASE TAKE NOTICE that the City Council of the City of Pasco, Washington, will hold a Special Meeting on Wednesday, March 13th at 6:00 p.m., in the City Council Chambers at 525 N. 3rd Avenue. The purpose of the meeting it to hear presentation from a delegation from Colima, Mexico as part of consideration prior to the City entering into a formal Cooperation Agreement (Sister City) relationship.
City Clerk

CITY OF RICHLAND, WASHINGTON
CALL FOR BIDS CONTRACT: 19-0025
HORN RAPIDS LANDFILL DISPOSAL CAPACITY IMPROVEMENTS – PHASE 1A EARTHWORK PROJECT BIDS DUE:
MARCH 19, 2019 2 PM PST
Public notice is hereby given that sealed bids will be received for the City of Richland's HORN RAPIDS LANDFILL DISPOSAL CAPACITY IMPROVEMENTS – PHASE 1A EARTHWORK PROJECT by the City of Richland Purchasing Division at 2700 Duportail, bldg. 100, until the date and time specified above, at which time bids will be opened and read publicly. This project provides for excavation and embankment construction of the Horn Rapids Landfill Disposal Capacity Improvements - Phase 1A Earthwork to the east of the existing landfill and northeast of the entrance to the landfill. The project area is approximately 18 acres. Generally, this requires over 500,000 cy of excavation and 38,000 cy of embankment, grading, and compacting subgrade for the future landfill and leachate pond.
Major portion of the excavation completed. However, the Contractor will be required to place and compact additional embankment in the excavated area in accordance with the Plans.
Full notice and complete details of the solicitation are available from www.PublicPurchase.com. Interested contractors must first register with Public Purchase. There is no charge to register, receive notifications or view and download the documents. Visit the City of Richland website at www.ci.richland.wa.us under Departments/Administrative Services/Purchasing/Public Purchase for information on how to register.
The City of Richland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 200d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color,

CITY OF WEST RICHLAND
MUNICIPAL SERVICE FACILITY FINANCE TI
You are invited to bid on a Municipal Services Facility Finance TI project for the City of West Richland located at 3100 Belmont Blvd., West Richland, WA.
This project consists of completing the tenant improvements of the finance portion of the Municipal Services Facility and all related items in accordance with the technical specifications, drawings, and contract documents.
The City of West Richland will receive sealed bids for the MUNICIPAL SERVICES FACILITY FINANCE TI, at the City of West Richland Municipal Services Facility, 3100 Belmont Blvd., Suite 102 West Richland, Washington 99353 until 2:00 p.m., Tuesday, March 26, 2019.
All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check, or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful Bidder fail to enter into such contract and furnish satisfactory performance bond or quality assurance submittals within the time stated in the contract documents, the bid proposal deposit shall be forfeited to the City of West Richland. Each Bidder shall warrant that he has not entered into collusion with another bidder or any other person, and does not discriminate in any manner against any person based solely on race, color, sex, or creed.
Upon request each firm, company, and/or corporation shall receive, at no cost, a PDF copy of all contract documents, specifications and plans by contacting the Public Works Department of the City of West Richland by either email: ilka@westrichland.org, phone: (509) 967-5434, or by mail: 3100 Belmont Blvd., Suite 102, West Richland, Washington.
Only properly executed proposals submitted on the forms furnished by the City of West Richland will be accepted. The City of West Richland reserves the right to reject any or all bids, to waive any informalities, to accept any bid deemed to be responsive in the best interest of the City of West Richland and reserves the right to readvertise for new proposals.
The City of West Richland is an Equal Opportunity Employer. Minority and women-owned businesses are encouraged to bid.
Roscoe C Slade, Director of Public Works

DEVELOPMENT SERVICES RFP NOTICE

NOTICE is hereby given that a Request for Proposals for Development Services has been released by the Housing Authority City of Kennewick, 1915 W. 4th Place, Kennewick, Washington 99336. Due date: Monday, April 22, 2019, 5:30 pm. The RFP is posted on the KHA website at www.kennewickha.org. Prospective proposers can secure a copy from L. Hammer or H. Sierra at KHA. MBE/WBE businesses and businesses who hire Section 3-eligible staff are encouraged to apply. KHA is an Equal Opportunity Agency.

INVITATION FOR BIDS

AMON PUMP STATION PIPING (MATERIALS ONLY)

The Kennewick Irrigation District (KID) is inviting and requesting bid proposals for the furnishing of materials only for the Amon Pump Station piping (Materials Only) project, related but not limited to, pipe, valves, fittings, and other appurtenant water work supplies. The materials include approximately 365total linear feet of 16-inch and12-inch pipe, and other related water work supplies. Included in the project is the delivery of all the materialsto the project site at the Amon Pump Station, located near the intersection between Bob Olson Parkway and Wheat Rd. in Kennewick, WA.

Bid documents, including a material list and specifications are available at the Kennewick Irrigation District, 2015 S. Ely Street, Kennewick WA, 99337 starting at 3:00 p.m. Tuesday, March 12, 2019.

Bids shall be titled, "Amon Pump Station Piping (Materials Only)" and shall be addressed to the Kennewick Irrigation District Board of Directors. Bids will be received by Lori Gibson, Executive Assistant, 2015 S. Ely Street, Kennewick, WA 99337, up to 10:00 a.m., on Monday, March 25, 2019,at which time they will be publically opened and read aloud at the Kennewick Irrigation District Office. Bids are to be submitted only on original forms provided in the specifications. Following receipt of a successful bid, award of the contract will proceed the week of the bid.

Technical questions regarding the scope of this project should be directed in writing, using the Request for Information form located in the appendices of the contract documents via fax at (509) 586-7663 or by calling Daniel Tissell, KID Engineer at (509) 586-6012 ext. 116.

The KID reserves the right to reject any or all bids, to waive technicalities, to combine this contract with other contracts when considering contract award, and to accept any bid which it deems in the best interest of the District.

The KID hereby notifies all bidders that it encourages and will affirmatively ensure that in any contract entered into, pursuant to this invitation, certified minority and women's business enterprises will be afforded full opportunity to submit

track storage building, shade structure, and asphalt and concrete paving at Horse Heaven Hills Middle School. Specifics regarding the project include building construction, track and field with surfacing and equipment, site lighting, electrical, landscaping, irrigation, selective demolition, concrete work, fencing, underground drainage, gravel, and asphalt paving. The Owner hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunities to submit bids and will not be discriminated against on the grounds of race, color, sex, handicap, or national origin in consideration for an award. This project is subject to the Benton County prevailing wage rate requirements.
The contract documents are available and will be posted on the Knutzen Engineering Share-File web site at https://knutzenengineering.sharefile.com/i/id54335201a34784a
then enter your email address, name, and company name to gain access to all the bid documents. Registered users on the ShareFile site will receive notifications when any new addendums (if applicable) are posted to the site. Contractor shall be required to obtain all required addendums prior to bidding and shall include in their bid. Each bid shall be accompanied by a certified check, cashier's check, bank draft, or money order payable to the Owner or a bid bond with a corporate surety licensed to do business in the State of Washington, in an amount not less than five (5) percent of the amount of the bid. The successful bidder for this project will be required to submit a payment and performance bond upon award of the contract.

ORDINANCE NO. 14-19 AN ORDINANCE of the City of Richland amending Title 23: Zoning Regulations of the Richland Municipal Code and the Official Zoning Map of the City to change the zoning on 1.07 acres from Neighborhood Retail (C-1) to Commercial Limited Business (C-LB); said property being located at 1019 Wright Avenue, and adopting the findings and conclusions of the Hearing Examiner as the findings and conclusions of the Richland City Council. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388

ORDINANCE NO. 15-19 AN ORDINANCE of the City of Richland amending the 2019-2024 Capital Improvement Plan and 2019 Budget to provide for additional appropriations in the City's Streets Capital Construction Fund, City Streets Fund, Capital Improvements Fund and Industrial Development Fund and declaring that a public emergency exists in the Capital Improvements Fund and Industrial Development Fund. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

ORDINANCE NO. 16-19 AN ORDINANCE of the City of Richland amending the 2019 Budget and 2019-2024 Capital Improvement Plan to provide for additional appropriations and declaring that a public emergency exists in the City's Equipment Replacement Fund. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

ORDINANCE NO. 17-19 AN ORDINANCE of the City of Richland amending Chapter 2.18 of the Richland Municipal Code related to the Parks and Recreation Commission. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

Reclamation Announces Negotiations with the East Columbia Basin Irrigation District for Amendment of Renewal Master Water Service Contract
The Bureau of Reclamation invites interested members of the public to observe a working session with the East Columbia Basin Irrigation District (District). The purpose of this session will be for Reclamation and the District to arrive at mutually agreeable terms and conditions for a proposed amendment to Renewal Master Water Service Contract No. 159E101882 that would, among other things, authorize the District to provide Columbia Basin Project irrigation water as groundwater replacement irrigation water service to additional irrigable lands located within the Odessa Subarea and within the service area of the District.
The contract amendment will reflect existing Federal Reclamation law and policy governing water service contracts. The goal of the negotiations is to arrive at a mutually agreeable contract. The negotiation session will be held:
March 21, 2019 at 10:00 a.m.
Wingate by Wyndham, Spokane Airport
2726 S. Flint Road
Spokane, WA 99224
Only persons authorized to act on behalf of the contracting parties may negotiate the terms and conditions of the contract amendment which is the subject of this negotiation session. However, interested parties are welcome to attend and will have the opportunity to provide comments regarding this contracting action. The negotiators do not plan to respond at the session to comments from observers.
Copies of the latest draft of proposed contract amendment will be available at the session. For additional information regarding this notice, please contact: Amy Rodman, Bureau of Reclamation, Ephrata Field Office, at (509) 754-0238, or Michael Cobell, Regional Of-

East will be closed under the container standards in WAC 173-303-630(10).
· In addition, the components of the United States Environmental Protection Agency 7 Step Data Quality Objectives were evaluated and identified in the Closure Plan for 276-BA Organic Storage Area.
Background
The 276-BA Organic Storage Area is located in a secure fenced area in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site. Historically, the 276-BA Organic Storage Area was part of the Organic Mixed Waste Storage System, which was used for chemical processing and to store organic chemicals used in the recovery and purification of strontium. The 276-BA Organic Storage Area consists of a single storage container (ISO East) and secondary containment structure. The secondary containment structure has two separate compartments. The west compartment is empty and was never used for dangerous waste storage or treatment. The east compartment contains the ISO East Container. This container, which received waste directly from the B Plant Complex, was placed in the 276-BA Organic Storage Area secondary containment structure, sealed and intact. The stored wastes were then removed from the ISO East container to a tanker truck for offsite disposal in 1997. Any potential releases from the ISO East container would likely be found in the location of the sump or trench within the ISO East portion of the secondary containment structure. These areas have been identified for soil sampling to demonstrate clean closure. The ISO-East container currently contains less than two gallons of washed organic residues consisting of normal paraffin hydrocarbons (NPH), di-(2-ethyhexyl) phosphoric acid (D2EHPA), tributyl phosphate (TBP), and small amounts of strontium-89/90 and cesium-137.
Why cleanup matters
Ecology would like your comments on the proposed draft language that describes clean closure in the closure plan. Clean closure will eliminate the need for future post-closure inspections, monitoring, and maintenance, and will include the following:
· Adding absorbent to stabilize the remaining liquid waste in the container (if found).
· Removing the container, intact, and transporting it to the Environmental Restoration Disposal Facility (ERDF).
· Flood grouting the interior of the container at ERDF prior to final disposal.
· Demolishing, containerizing, and disposing of the secondary containment structure at ERDF.
· Excavating soil beneath the structure up to 3 feet, containerizing, and disposing at ERDF.
· Focused sampling of the site is proposed due to the relatively small size of the secondary containment structure.
· Sampling will be at locations where concrete joints, the trench, and the sump are located.
View the full proposal
Ecology invites to you to review and comment on this proposed permit modification. This Focus Sheet is a summary of the proposed changes. See belowfor comment period dates and information on how to submit comments. Copies of the proposed modification are available at the Administrative Record and Information Repositories listed below. In addition, the proposed modification is online at https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-commentperiods.
Ecology will consider and respond to all comments received during the public comment period. We will make the final permitting decision after the close of the comment period. We will publish a Response to Comments document.
Public comment period
March 11 – April 26, 2019
Please submit comments
Electronically (preferred) via: http://wt.ecology.commentinput.com/?id=YPUpu
By U.S. Mail, or hand-delivery: Daina McFadden, 3100 Port of Benton Blvd.Richland WA 99354
Public hearing
A public hearing is not scheduled,but if there is enough interest, wewill consider holding one. Torequest a hearing or for moreinformation, contact:Daina McFadden, 509-372-7950, Hanford@ecy.wa.gov
Special accommodations
To request ADA accommodationincluding materials in a format forthe visually impaired, call Ecology at509-372-7950 or visithttps://ecology.wa.gov/accessibility.People with impaired hearing maycall Washington Relay Service at711. People with speech disabilitymay call TTY at 877-833-6341.
Hanford's Information Repositories and Document Review Locations
Washington
Richland
Ecology Nuclear Waste Program
Resource Center
3100 Port of Benton Blvd.
Richland, WA 99354
509-372-7950
U.S. Department of Energy
Administrative Record
2440 Stevens Drive, Room 1101
Richland, WA 99354
509-376-2530
Washington State University Tri-Cities
Department of Energy Reading Room
2770 Crimson Way, Room 101L

ton. This Call for Bids is in conformity with RCW. 54.04.070 and 54.04.080 and such statutes are incorporated into this Call for Bids.

PUBLIC UTILITY DISTRICT NO. 1 OF FRANKLIN COUNTY

By: /s/Rebecca Diaz
Rebecca Diaz
Contract Administrator

CITY OF PASCO
NOTICE OF SPECIAL MEETING
PLEASE TAKE NOTICE that the City Council of the City of Pasco, Washington, will hold a Special Meeting on Wednesday, March 13th at 6:00 p.m., in the City Council Chambers at 525 N. 3rd Avenue. The purpose of the meeting it to hear presentation from a delegation from Colima, Mexico as part of consideration prior to the City entering into a formal Cooperation Agreement (Sister City) relationship.
City Clerk

CITY OF RICHLAND, WASHINGTON
CALL FOR BIDS CONTRACT: 19-0025 HORN RAPIDS LANDFILL DISPOSAL CAPACITY IMPROVEMENTS – PHASE 1A EARTHWORK PROJECT BIDS DUE: MARCH 19, 2019 2 PM PST
Public notice is hereby given that sealed bids will be received for the City of Richland's HORN RAPIDS LANDFILL DISPOSAL CAPACITY IMPROVEMENTS – PHASE 1A EARTHWORK PROJECT by the City of Richland Purchasing Division at 2700 Duportail, bldg. 100, until the date and time specified above, at which time bids will be opened and read publicly. This project provides for excavation and embankment construction of the Horn Rapids Landfill Disposal Capacity Improvements - Phase 1A Earthwork to the east of the existing landfill and northeast of the entrance to the landfill. The project area is approximately 18 acres. Generally, this requires over 500,000 cy of excavation and 38,000 cy of embankment, grading, and compacting subgrade for the future landfill and leachate pond.
Major portion of the excavation completed. However, the Contractor will be required to place and compact additional embankment in the excavated area in accordance with the Plans.
Full notice and complete details of the solicitation are available from www.PublicPurchase.com. Interested contractors must first register with Public Purchase. There is no charge to register, receive notifications or view and download the documents. Visit the City of Richland website at www.ci.richland.wa.us under Departments/Administrative Services/Purchasing/Public Purchase for information on how to register.
The City of Richland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 200d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

CITY OF RICHLAND, WASHINGTON
CALL FOR BIDS CONTRACT: 19-0027 2019 ASPHALT RUBBERIZED CHIP SEAL BIDS DUE: MARCH 19, 2019, 2:30 P.M.
Public notice is hereby given that sealed bids will be received for the City of Richland's 2019 Asphalt Rubberized Chip Seal Project by the City of Richland Purchasing Division at 2700 Duportail, bldg. 100, until the date and time specified above, at which time bids will be opened and read publicly. This project provides for the construction of 3/8 Inch Asphalt Rubberized Chip Seal, Type IV (63,500 square yards); traffic control, pavement marking removal, temporary and permanent pavement marking, and crack sealing.
Full notice and complete details of the solicitation are available from www.PublicPurchase.com. Interested contractors must first register with Public Purchase. There is no charge to register, receive notifications or view and download the documents. Visit the City of Richland website at www.ci.richland.wa.us under Departments/Administrative Services/Purchasing/Public Purchase for information on how to register.
The City of Richland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 200d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

DEVELOPMENT SERVICES RFP NOTICE

NOTICE is hereby given that a Request for Proposals for Development Services has been released by the Housing Authority City of Kennewick, 1915 W. 4th Place, Kennewick, Washington 99336. Due date: Monday, April 22, 2019, 5:30 pm. The RFP is posted on the KHA website at www.kennewickha.org. Prospective proposers can secure a copy from L. Hammer or H. Sierra at KHA. MBE/WBE businesses and businesses who hire Section 3-eligible staff are encouraged to apply. KHA is an Equal Opportunity Agency.

INVITATION FOR BIDS

AMON PUMP STATION PIPING (MATERIALS ONLY)

The Kennewick Irrigation District (KID) is inviting and requesting bid proposals for the furnishing of materials only for the Amon Pump Station piping (Materials Only) project, related but not limited to, pipe, valves, fittings, and other appurtenant water work supplies. The materials include approximately 365total linear feet of 16-inch and12-inch pipe, and other related water work supplies. Included in the project is the delivery of all the materialsto the project site at the Amon Pump Station, located near the intersection between Bob Olson Parkway and Wheat Rd. in Kennewick, WA.

Bid documents, including a material list and specifications are available at the Kennewick Irrigation District, 2015 S. Ely Street, Kennewick WA, 99337 starting at 3:00 p.m. Tuesday, March 12, 2019.

Bids shall be titled, "Amon Pump Station Piping (Materials Only)" and shall be addressed to the Kennewick Irrigation District Board of Directors. Bids will be received by Lori Gibson, Executive Assistant, 2015 S. Ely Street, Kennewick, WA 99337, up to 10:00 a.m., on Monday, March 25, 2019,at which time they will be publically opened and read aloud at the Kennewick Irrigation District Office. Bids are to be submitted only on original forms provided in the specifications. Following receipt of a successful bid, award of the contract will proceed the week of the bid.

Technical questions regarding the scope of this project should be directed in writing, using the Request for Information form located in the appendices of the contract documents via fax at (509) 586-7663 or by calling Daniel Tissell, KID Engineer at (509) 586-6012 ext. 116.

The KID reserves the right to reject any or all bids, to waive technicalities, to combine this contract with other contracts when considering contract award, and to accept any bid which it deems in the best interest of the District.

The KID hereby notifies all bidders that it encourages and will affirmatively ensure that in any contract entered into, pursuant to this invitation, certified minority and women's business enterprises will be afforded full opportunity to submit bids in response to the invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award. Certification information for the MWBE businesses is available at http://www.omwbe.wa.gov.

Bidders shall certify that it or its principles are not presently debarred, suspended proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

DATED: March 7, 2019

Charles Freeman, District Manager

Kennewick School District
Horse Heaven Hills Middle
School Track and Field
The Kennewick School District (Owner) will receive sealed bids for the Horse Heaven Hills Middle School Track and Field from qualified contractors.
Bids will be received until 2:00 P.M. (PST) on Tuesday, March 26, 2019 at the Owner's administrative offices located at 5501 W Metaline Avenue, Kennewick, WA 99336. Bids received after the stated time will not be accepted. The bids will be publicly opened by Owner staff. Official bid results shall be made public within 48 hours of bid opening. Bids will be on a lump-sum basis awarded to the lowest responsive bidder. The Owner reserves the right to reject any or all bids or to waive informalities in the bidding. No bids shall be withdrawn for a period of 30 days subsequent to the opening of the bids without the written consent of the Owner. There will be a non-mandatory pre-bid walk through for all bidding general contractors on Tuesday, March 20, 2019 at 4:00 p.m. at Horse Heaven Hills Middle School located at 3500 S Vancouver Street, Kennewick WA 99336. Subcontractors are also welcome. The Owner is proposing to construct a new paved track and field,

ORDINANCE NO. 15-19 AN ORDINANCE of the City of Richland amending the 2019-2024 Capital Improvement Plan and 2019 Budget to provide for additional appropriations in the City's Streets Capital Construction Fund, City Streets Fund, Capital Improvements Fund and Industrial Development Fund and declaring that a public emergency exists in the Capital Improvements Fund and Industrial Development Fund. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

ORDINANCE NO. 16-19 AN ORDINANCE of the City of Richland amending the 2019 Budget and 2019-2024 Capital Improvement Plan to provide for additional appropriations and declaring that a public emergency exists in the City's Equipment Replacement Fund. Ordinance effective the day following its publication. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

ORDINANCE NO. 17-19 AN ORDINANCE of the City of Richland amending Chapter 2.18 of the Richland Municipal Code related to the Parks and Recreation Commission. Ordinance available at the City Clerk's Office, 975 George Washington Way, Richland, WA 99352 or (509) 942-7388.

Reclamation Announces Negotiations with the East Columbia Basin Irrigation District for Amendment of Renewal Master Water Service Contract
The Bureau of Reclamation invites interested members of the public to observe a working session with the East Columbia Basin Irrigation District (District). The purpose of this session will be for Reclamation and the District to arrive at mutually agreeable terms and conditions for a proposed amendment to Renewal Master Water Service Contract No. 159E101882 that would, among other things, authorize the District to provide Columbia Basin Project irrigation water as groundwater replacement irrigation water service to additional irrigable lands located within the Odessa Subarea and within the service area of the District.
The contract amendment will reflect existing Federal Reclamation law and policy governing water service contracts. The goal of the negotiations is to arrive at a mutually agreeable contract. The negotiation session will be held:
March 21, 2019 at 10:00 a.m.
Wingate by Wyndham, Spokane Airport
2726 S. Flint Road
Spokane, WA 99224
Only persons authorized to act on behalf of the contracting parties may negotiate the terms and conditions of the contract amendment which is the subject of this negotiation session. However, interested parties are welcome to attend and will have the opportunity to provide comments regarding this contracting action. The negotiators do not plan to respond at the session to comments from observers.
Copies of the latest draft of proposed contract amendment will be available at the session. For additional information regarding this notice, please contact: Amy Rodman, Bureau of Reclamation, Ephrata Field Office, at (509) 754-0238, or Michael Cobell, Regional Office, Boise, at (208) 378-5223.

Tuesday March 12: Benton Irrigation District is having a Board of Directors meeting at 3:00 PM at the Benton Irrigation District office at 47506 Highland Rd. The meeting is open to the public.

Monday March 25: The Benton Irrigation District is having a Board of Directors meeting at 8:00 AM at the Benton Irrigation District office at 47506 Highland Rd. The meeting is open to the public.

Print

276-BA Organic Storage Area permit modification 30-Day Advance Notice

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting early to mid-March 2019. This comment period will address proposed modifications to the Hanford Facility Resource Conservation and Recovery Act Permit, Revision 8c (Permit) for the 276-BA Organic Storage Area. The proposed changes will be located in Part IV, Closure Unit Group 32 of the Permit. The Permittees are U.S. Department of Energy Richland Operations and CH2M Hill Plateau Remediation Company. The draft class 3 permit modification was submitted to Ecology on May 4, 2016, with the first 60 day comment period held in the summer of 2016. The 276-BA Organic Storage Area is located in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

The proposed permit modification will add 276-BA Organic Storage Area Closure Plan and Permit Conditions to the Permit. The proposed draft language describes clean closure in the closure plan.

Public Hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Daina McFadden
Hanford@ecy.wa.gov
509-372-7950

DEPARTMENT OF ECOLOGY
State of Washington

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Subscribe or Unsubscribe

From: Wireman, Ginger (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: 276-BA Organic Storage Area Public Comment Period Notification
Date: Monday, March 11, 2019 11:07:57 AM

276-BA Organic Storage Area Public Comment Period Notification

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting March 11 through April 26, 2019. This comment period will address proposed modifications to the *Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste* for the 276-BA Organic Storage Area. The Permittees are the U.S. Department of Energy Richland Operations (USDOE) and CH2MHill Plateau Remediation Company. The 276-BA Organic Storage Area is located on the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

The Class 3 permit modification will include the following:

- Unit Specific Permit Conditions
- Addendum H, Closure Plan which proposes clean closure activities that will be completed within 180 days of the start date. USDOE initiated a Class 3 permit modification to add the 276-BA Organic Storage Area to the Permit on May 4, 2016. The 60-day public comment period as required by Washington Administrative Code (WAC) 173-303-830(4)(c) began on April 25, 2016, and ended on August 6, 2016.

Ecology issued a Letter of Incompleteness and Notice of Deficiency for the Class 3 Permit Modification Request on August 11, 2016. We resolved the deficiencies with the permittees and the permit modification to be complete. Ecology responded to comments submitted by two members of the public during that comment period. Following the comment period held in 2016, significant changes were made to the Closure Plan as part of Ecology's completeness determination and technical review. Changes to the closure plan include the following:

- The 276-BA container was part of the B Plant Organic Mixed Waste Storage System and previously classified as a tank in the B Plant Complex Part A Form. Upon further review, USDOE determined that 276-BA ISO East should be classified as a container because it meets the RCRA definition of container in WAC-173-303-040. 276-BA ISO East will be closed under the container standards in WAC 173-303-630(10).
- In addition, the components of the United States Environmental Protection Agency 7 Step Data Quality Objectives were evaluated and identified in the Closure Plan for 276-BA Organic Storage Area.

How to Comment

Ecology invites you to review and comment on this proposed 276-BA Organic Storage Area Permit Modification. Copies of the proposed modification are located in the Administrative Record and Information Repositories. In addition, the proposed modification is online at https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods.
Please submit comments by **April 26, 2019.** Electronic submission (preferred):
http://wt.ecology.commentinput.com/?id=YPUpu

Mail or hand-deliver to:
Daina McFadden
3100 Port of Benton Blvd

Richland WA 99354
Fax 509-372-7971

Public Hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:
Daina McFadden
Hanford@ecy.wa.gov
509-372-7950

For more information, contact:
Stephanie Schlief
Hanford@ecy.wa.gov
(509)372-7950

Ecology logo

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276-BA ORGANIC STORAGE AREA
CHANGE CONTROL LOG

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have a "**Last Modification Date**" which represents the last date the portion of the unit has been modified. The "**Modification Number**" represents Ecology's method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Last modification to 276-BA Organic Storage Area **May 29, 2019**

Addenda	Last Modification Date	Modification Number
Unit-Specific Conditions	05/29/2019	8C.2019.5F
A. Reserved		
B. Reserved		
C. Reserved		
D. Reserved		
E. Reserved		
F. Reserved		
G. Reserved		
H. Closure Plan	05/29/2019	8C.2019.5F

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276-BA ORGANIC STORAGE AREA
PART V, CLOSURE UNIT GROUP 32 PERMIT CONDITIONS
CHANGE CONTROL LOG

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The "**Modification Number**" represents Ecology's method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

Modification Date	Modification Number
05/29/2019	8C.2019.5F

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PART V, CLOSURE UNIT GROUP 32 CONDITIONS
276-BA ORGANIC STORAGE AREA

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PART V, CLOSURE UNIT GROUP 32 CONDITIONS
276-BA ORGANIC STORAGE AREA

UNIT DESCRIPTION

The 276-BA Organic Storage Area Dangerous Waste Management Unit (DWMU) is located in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site. The unit consists of a single storage container (ISO East) and secondary containment, which was used to temporarily store organic mixed waste during the B Plant Facility deactivation.

Organic mixed waste stored in the ISO East container was removed in 1997 and transported offsite for disposal. At the present time, only the concrete secondary containment structure and a residual heel (less than 7.6 L [2 gal]) of organic mixed waste remain in the container.

The 276-BA Organic Storage Area is proposed to be clean closed as detailed in Addendum H, Closure Plan. The soil will be sampled and must meet clean closure levels. The 276-BA container was previously classified as a tank. Upon further review, the U.S. Department of Energy (USDOE) determined that 276-BA ISO East should be classified as a container because it meets the Resource Conservation and Recovery Act (RCRA) definition of a container in WAC 173-303-040. The 276-BA Organic Storage Area will be closed under the container standards in WAC 173-303-630(10).

LIST OF ADDENDA SPECIFIC TO CLOSURE UNIT GROUP 32

Addenda H Closure Plan

DEFINITIONS

Reserved

ACRONYMS

ISO International Organization for Standardization

V.32.A COMPLIANCE WITH PERMIT CONDITIONS

The Permittees shall comply with all requirements set forth in the Hanford Facility Resource Conservation and Recovery Act Permit (Permit) as specified in Permit Attachment 9, Permit Applicability Matrix, including all approved modifications. All addenda, subsections, figures, tables, and appendices included in the following Unit-Group Permit Conditions are enforceable in their entirety. In the event that the Part V, Unit-Group Conditions for Closure Unit 32, the 276-BA Organic Storage Area conflict with the Part I Standard Conditions and/or Part II General Facility Conditions of the Permit, the Unit-Group Conditions will prevail for Closure Unit 32, 276-BA Organic Storage Area.

V.32.B CLOSURE

V.32.B.1 The Permittees will comply with all requirements set forth in the Addendum H, Closure Plan for the 276-BA Organic Storage Area, and close the 276-BA Organic Storage Area in accordance with the Addendum H, Closure Plan. [WAC 173-303-610(3)(a)]

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276-BA ORGANIC STORAGE AREA
ADDENDUM H
DANGEROUS WASTE MANAGEMENT UNIT CLOSURE PLAN
CHANGE CONTROL LOG

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The "**Modification Number**" represents Ecology's method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

Modification Date	Modification Number
05/29/2019	8C.2019.5F

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ADDENDUM H
276-BA ORGANIC STORAGE AREA
DANGEROUS WASTE MANAGEMENT UNIT CLOSURE PLAN

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ADDENDUM H
276-BA ORGANIC STORAGE AREA
DANGEROUS WASTE MANAGEMENT UNIT CLOSURE PLAN

TABLE OF CONTENTS

H.1	Introduction	7
H.1.1	Physical Description	7
H.1.2	Process Information	10
H.1.3	Waste Inventory and Characteristics	10
H.1.4	Security Information	11
H.2	Groundwater Monitoring	11
H.3	Closure Performance Standards	11
H.3.1	Clean Closure Levels	11
H.3.2	Null Hypothesis	12
H.3.3	Clean Closure	12
H.4	Closure Strategy	13
H.4.1	Pre-Closure Activities	13
H.4.2	Clean Closure Strategy	14
H.5	Closure Activities	15
H.5.1	Facility Demolition and Disposal	16
H.5.1.1	Mobilization and Site Preparation	16
H.5.1.2	Container Removal and Disposal	16
H.5.1.3	Secondary Containment Structure Demolition and Soil Removal	16
H.5.1.4	Decontamination	17
H.5.1.5	Stabilization	17
H.5.1.6	Completion Criteria	17
H.5.2	Waste Management	17
H.5.2.1	Projected Waste Streams	18
H.5.2.2	Waste Management and Characterization	18
H.5.2.3	Waste Handling, Storage, and Packaging	19
H.5.2.4	Waste Treatment	20
H.5.2.5	Waste Minimization and Recycling	20
H.5.2.6	Identifying and Managing Contaminated Environmental Media	20
H.5.3	Air Emissions	20

H.5.4 Health and Safety Requirements 21
H.5.5 State Environmental Policy Act Requirements 23
H.6 Soil Verification Sampling and Analysis 23
H.6.1 Closure Sampling and Analysis Plan 23
H.6.1.1 Target Analytes 23
H.6.1.2 Verification Sampling Schedule 24
H.6.1.3 Project Management 24
H.6.2 Sampling Design 24
H.6.2.1 Sampling Methods and Handling 25
H.6.2.2 Analytical Methods 27
H.6.2.3 Quality Control 27
H.6.2.4 Data Verification 32
H.6.2.5 Data Validation 32
H.6.2.6 Documents and Records 32
H.6.2.7 Revisions to the Sampling and Analysis Plan and Constituents to be Analyzed 33
H.7 Contingent Closure Plan 33
H.8 Schedule for Closure 33
H.9 Certification of Closure 35
H.10 Post-Closure Plan 35
H.11 Amendment of Closure Plan 35
H.12 References 36

FIGURES

Figure H.1. Aerial Photograph and Schematic of B Plant Complex with 276-BA Organic Storage Area 8
Figure H.2. 276-BA Organic Storage Area Schematic and Photograph 9
Figure H.3. Proposed Focused Sampling Locations for the 276-BA Organic Storage Area 15
Figure H.4. 276-BA Organic Storage Area Closure Plan Schedule 34

TABLES

Table H.1. Closure Performance Standards for Target Analytes 12
Table H.2. Annual Inspection Summary for 276-BA 13
Table H.3. Training Matrix for the 276-BA Organic Storage Area Closure 22
Table H.4. Target Analyte List 24
Table H.5. Preservation, Container, and Holding Time Requirements for Soil Samples 26

Table H.6. Soil Analytical Performance Requirements 29
Table H.7. Project Quality Control Sampling Summary 31
Table H.8. Closure Activity Description 34

1
2
3
4

TERMS

ASTM	American Society for Testing and Materials
DOE	U.S. Department of Energy
DWMU	Dangerous Waste Management Unit
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ERDF	Environmental Restoration Disposal Facility
GPS	Global Positioning System
HASQARD	Hanford Analytical Services Quality Assurance Requirements Document
HEIS	Hanford Environmental Information System
HEPA	High-Efficiency Particulate Air (Filter)
IQRPE	Independent Qualified Registered Professional Engineer
LDR	Land Disposal Restriction
MTCA	Model Toxics Control Act
PQL	Practical Quantitation Limit
QA	Quality Assurance
QC	Quality Control
RCRA	Resource Conservation and Recovery Act of 1976
SAF	Sampling Authorization Form
SAP	Sampling and Analysis Plan
TSD	Treatment, Storage, and Disposal
WAC	Washington Administrative Code
WESF	Waste Encapsulation Storage Facility

5

H.1 INTRODUCTION

The purpose of this plan is to describe the *Resource Conservation and Recovery Act of 1976* (RCRA) closure process for the 276-BA Organic Storage Area Dangerous Waste Management Unit (DWMU), located in the northeast portion of the B Plant Complex in the 200 East Area of the Hanford Site. The 276-BA Organic Storage Area, which consists of a single storage container (ISO East) and secondary containment, was used to temporarily store organic mixed waste during B Plant Facility deactivation.

Organic mixed waste stored in the ISO East container was removed in 1997 and transported offsite for disposal. At the present time, only the concrete secondary containment structure and a residual heel (less than 7.6 L [2 gal]) of organic mixed waste remain in the container.

Closure will be performed in accordance with the schedule provided in Section H.8. This closure plan complies with Washington Administrative Code (WAC) 173-303-610(2) through WAC 173-303-610(6), and represents the baseline for closure and the enforceable compliance requirements for conducting closure. Amendments to this closure plan will be submitted as a permit modification in accordance with WAC 173-303-610(3)(b). The 276-BA container was previously classified as a tank in the B Plant Complex Part A Form concerning the B Plant Organic Mixed Waste Storage System. Upon further review, the U.S. Department of Energy (DOE) determined that 276-BA ISO East should be classified as a container because it meets the RCRA definition of a container in WAC 173-303-040. This classification error that will be corrected with a revised B Plant Complex Part A and the 276-BA Organic Storage Area will be closed under the container standards in WAC 173-303-630(10).

H.1.1 Physical Description

The 276-BA Organic Storage Area is located in the 200 East Area, northeast of the 221-B Building (B Plant) within the B Plant Complex. The 276-BA Organic Storage Area is surrounded by a chain-link fence and is accessible through a locked gate. When it was constructed in 1996, the 276-BA Organic Storage Area consisted of a secondary containment structure and two identical aboveground stainless-steel storage vessels: ISO West and ISO East. The secondary containment structure provided individual containment for both vessels and was lined with compatible coating for organic mixed waste as a precaution for unplanned releases. The structure was built per drawing H-2-926596 and polymer coating was applied to all interior surfaces including retaining walls, sumps, trenches, and the top of curbs, as specified.

Each storage vessel was a cylindrically shaped, 3 m (9.8 ft) diameter, 6.1 m (20 ft) long transport vessel with a capacity of 17,500 L (4,623 gal). There was no specific ancillary equipment associated with either vessel. The unused ISO West vessel was removed from the site in 1998. The remaining container (ISO East) received organic waste from the B Plant Organic Mixed Waste Storage System.

At present, the 276-BA Organic Storage Area consists of one aboveground container (ISO East) and the coated concrete secondary containment structure. No known spills have occurred within the secondary containment. Except for the degradation of the coating, no other structural deterioration has been identified.

Figure H.1 shows the location of the 276-BA Organic Storage Area within the B Plant Complex area. Figure H.2 provides a schematic of the ISO East container and secondary containment structure associated with the 276-BA Organic Storage Area.

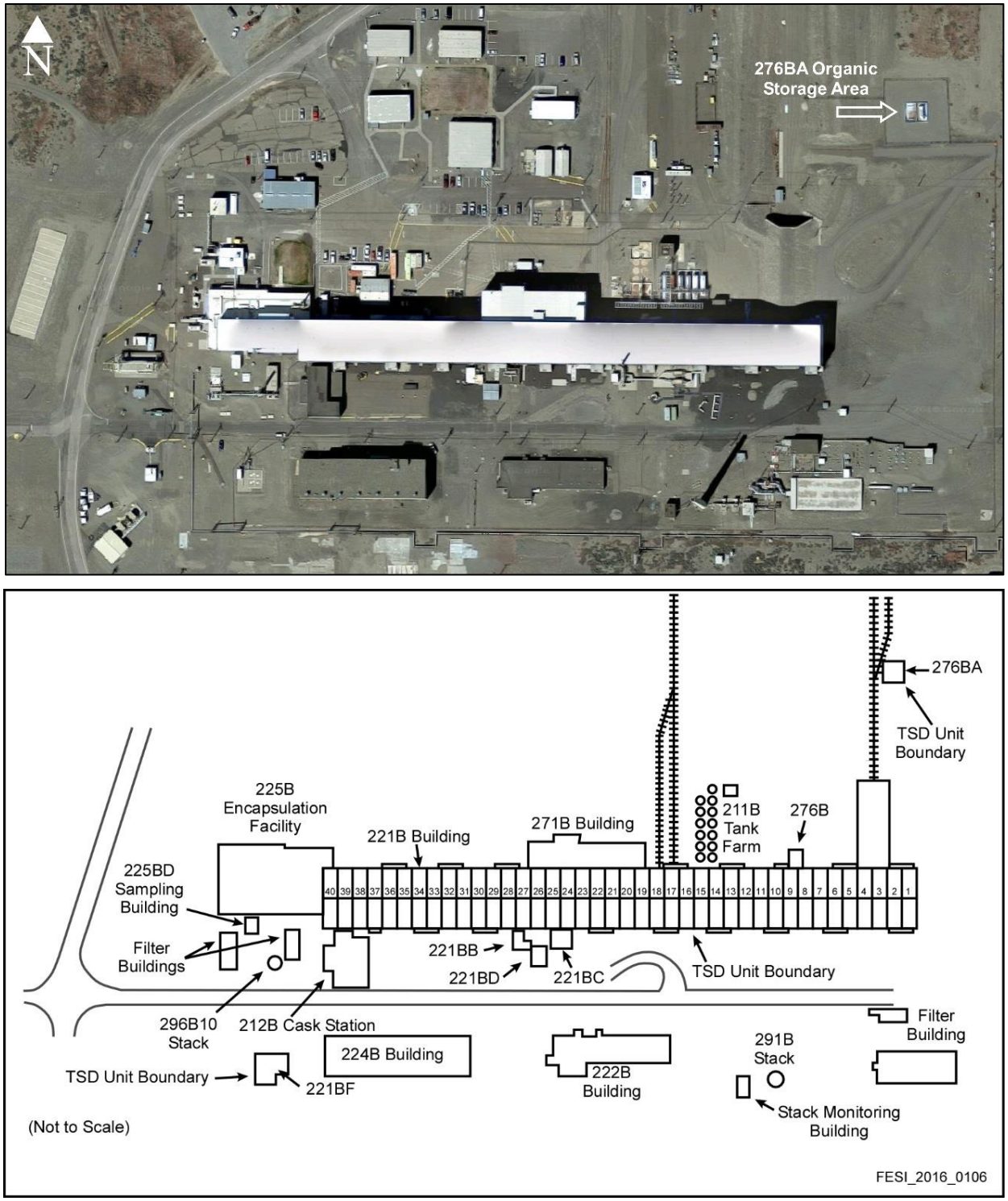

Figure H.1. Aerial Photograph and Schematic of B Plant Complex with 276-BA Organic Storage Area

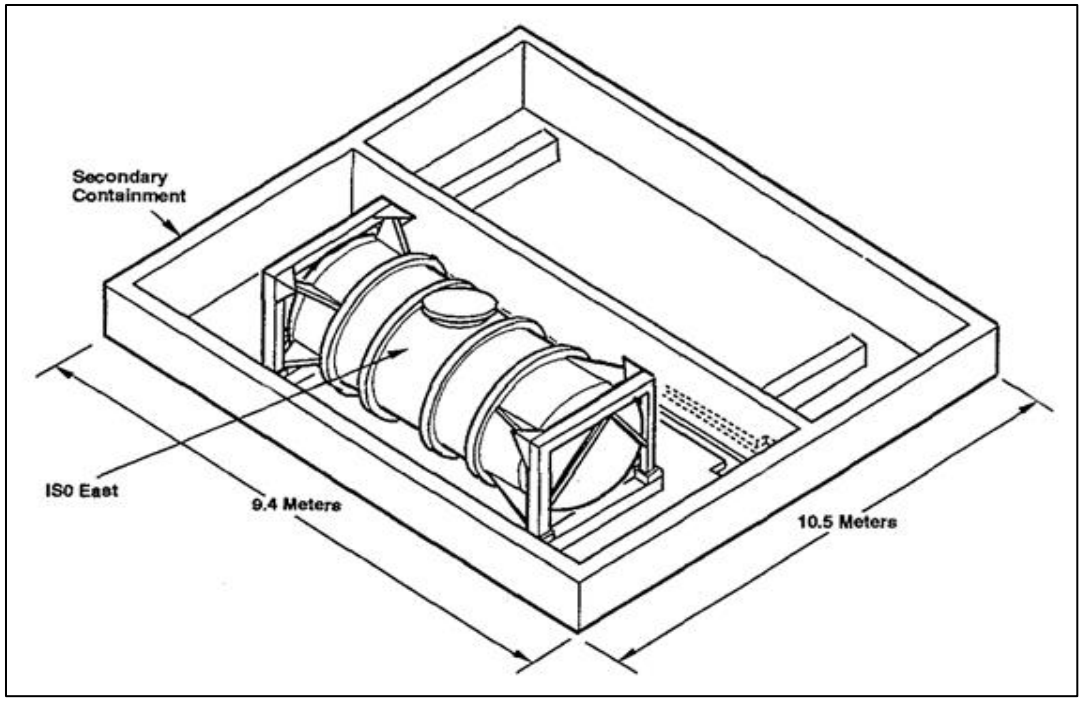

Figure H.2. 276-BA Organic Storage Area Schematic and Photograph

H.1.2 Process Information

The B Plant Organic Mixed Waste Storage System included 10 vessel systems, the 276-BA Organic Storage Area, and five process cells in B Plant. The organic tank system included tanks TK-26-1, TK-27-2, TK-27-3, TK-27-4, TK-28-3, TK-28-4, TK-29-4, and TK-30-3, and the 276-BA Organic Storage Area, which consisted of two external storage vessels (ISO West and ISO East). The Organic Mixed Waste Storage System was used for chemical processing and to store organic chemicals used in the recovery and purification of strontium. Strontium was purified through a series of solvent extraction columns, scrubbed, and concentrated for encapsulation as strontium fluoride at the Waste Encapsulation Storage Facility (WESF).

Previous activities covered under DOE/RL-98-12, *B Plant Preclosure Work Plan*, were implemented between 1995 and 1997 (including waste removal in 1997) as part of the overall facility transition process to place the B Plant Complex in a safe configuration with respect to human health and the environment. To prepare for the removal and disposal of organic mixed wastes, radionuclide concentrations in the organic mixed waste were reduced through chemical washing and filtering. The organic and aqueous phases were separated and stored separately. Rare earth elements and calcium impurities were stripped from the organic stream and routed to the Double-Shelled Tank System. The organic solvents remained in the B Plant Organic Mixed Waste Storage System.

The successful completion of the treatment reduced the radionuclide concentrations to allow for transfer of the majority of the organic waste for storage or disposal. In March 1997, the organic mixed waste was pumped via temporary transfer line from the B Plant Organic Mixed Waste Storage System to the ISO East container, staged on a flatbed hauler. Approximately 10,900 L (2,880 gal) of organic mixed waste were transferred to the ISO East container, and the container was subsequently moved to the secondary containment at the 276-BA Organic Storage Area. There are no permanent connections between the ISO East container and the B Plant process cells.

The ISO West vessel was placed as an emergency receiving vessel in the 276-BA Organic Storage Area but was never used.[1] The ISO West vessel was administratively closed and repurposed to manage low-level radioactive waste at WESF in 1998.

Process information for the organic liquid material indicated the presence of normal paraffin hydrocarbons (NPH), di-(2-ethylhexyl) phosphoric acid (D2EHPA), tributyl phosphate (TBP), and small amounts of strontium-89/90 and cesium-137. The organic solvent was managed as mixed waste based on historical processing data for the B Plant Complex. In November 1997, contents of the ISO East container were pumped to a minimum heel and were transferred to a tanker truck for disposal.

H.1.3 Waste Inventory and Characteristics

The ISO East container received organic mixed waste from the B Plant Organic Mixed Waste Storage System in 1997. Because of the derived-from and mixture rules that applied to liquid mixed waste from the B Plant Complex, all of the treatment and storage vessel systems that handled liquid mixed waste were managed as listed waste upon disposal. As a result, the organic solvent stored by the ISO East container was managed as mixed waste and designated with the listed dangerous waste codes F001 through F005 (spent solvents) D004 through D011 (metals characteristic) and D002 (corrosive characteristic).

The total quantity of organic mixed waste received by the ISO East container was approximately 10,900 L (2,880 gal). The residual content of the ISO East container was estimated to be less than 7.6 L (2 gal) of material, including NPH, D2EHPA, and TBP. Sections H.3 and H.6 of this closure plan describes the target analytes associated with each of the waste codes assumed for this closure.

[1] In 1998, the ISO West vessel was administratively closed (98-EAP-136, "Certified ISO West Interim Organic Storage Tank [ISO West Tank] Administrative Closure Technical Data Synopsis [TSD: TS-2-3]").

H.1.4 Security Information

The 276-BA Organic Storage Area is located in the 200 East Area; therefore, security information pertaining to the 200 Areas applies to this Treatment, Storage, and Disposal (TSD) DWMU. A chain-link cyclone fence with a locked gate surrounds the 276-BA Organic Storage Area container and secondary containment structure. Security measures that limit entry to authorized personnel and that preclude unknowing access by unauthorized individuals will remain in place until closure of the DWMU.

H.2 GROUNDWATER MONITORING

The 276-BA Organic Storage Area will be closed by removal, and is not subject to any groundwater monitoring requirements.

H.3 CLOSURE PERFORMANCE STANDARDS

The closure performance standards for the 276-BA Organic Storage Area are based on WAC 173-303-610(2), which requires the owner or operator of a TSD Facility to close the facility in a manner that will accomplish the following objectives:

- Minimize the need for further maintenance.
- Control, minimize, or eliminate post-closure escape of dangerous waste, dangerous waste constituents, leachate, contaminated runoff, or dangerous waste decomposition products to the ground, surface water, or atmosphere to the extent necessary to protect human health and the environment.
- Return the land to the appearance and use of surrounding land areas.

According to WAC 173-303-610(2)(b)(ii), the Washington State Department of Ecology (Ecology) will set the container and secondary containment clean closure standards individually in accordance with the closure performance standards of WAC 173-303-610(2)(a)(ii) and in a manner that minimizes or eliminates post-closure escape of dangerous waste. Clean closure of the ISO East container and secondary containment structure will be achieved by removal.

These performance standards as well as the closure requirements listed in WAC 173-303-630(10) are met through Section H.3.1 and Section H.9.

H.3.1 Clean Closure Levels

The 276-BA Organic Storage Area will be clean closed. The soil will be sampled and must meet clean closure levels. In accordance with WAC 173-303-610(2)(b)(i), clean closure levels for soil are the numeric cleanup levels calculated using unrestricted use exposure assumptions according to WAC 173-340, *Model Toxics Control Act—Cleanup* (MTCA) regulations (WAC 173-340-700 through WAC 173-340-760, excluding WAC 173-340-745). According to WAC 173-303-610(2)(b)(i), these numeric cleanup levels, including carcinogens, noncarcinogens, groundwater protection, and ecological indicator values, have been calculated as of the effective date of the permit modification. Table H.1 includes the closure performance standards for the target analytes. A discussion about how the target analytes were selected is included in Section H.6.1.1. The closure performance standards considered all risk exposure pathways and are the most conservative values. Groundwater protection is the driver for these closure performance standards.

Table H.1. Closure Performance Standards for Target Analytes

Target Analyte (EPA Hazardous Waste Code)	CAS Number	Closure Performance Standard (mg/kg)
Arsenic (D004)	7440-38-2	20.0
Barium (D005)	7440-39-3	132
Cadmium (D006)	7440-43-9	0.69
Chromium (D007)	7440-47-3	42.0
Lead (D008)	7439-92-1	50.0
Mercury (D009)	7439-97-6	0.2
Selenium (D010)	7782-49-2	10.0
Silver (D011)	7440-22-4	2.0
Methylene chloride (F001, F002)	75-09-2	0.0218
1,1,1-Trichloroethane (F001, F002)	71-55-6	1.58
Acetone (F003)	67-64-1	28.9
Methyl isobutyl ketone (F003)	108-10-1	2.73
o-cresol (F004)	95-48-7	2.33
p-cresol (F004)	106-44-5	8.00
Methyl ethyl ketone (F005)	78-93-3	19.6

CAS = Chemical Abstracts Service
EPA = U.S. Environmental Protection Agency

H.3.2 Null Hypothesis

A null hypothesis is generally assumed true until evidence indicates otherwise. As defined in WAC 173-340-200, the null hypothesis for the 276-BA Organic Storage Area is that soil is assumed to be above unrestricted use cleanup levels, commonly called MTCA (WAC 173-340) Method B cleanup levels. Therefore, the site is presumed to be contaminated. Rejection of the null hypothesis means sampling and analysis results of the site indicated that soil contains contamination below the MTCA (WAC 173-340) Method B cleanup levels. Sampling and analysis will be used to determine whether the null hypothesis can be rejected, thereby confirming that soil meets closure performance standards (MTCA [WAC 173-340] Method B).

Should sampling and analysis provide a basis that the null hypothesis can be accepted, such an event will be considered an unexpected event during closure and the soil would be identified as contaminated environmental media and managed in accordance with Section H.5.2.6.

H.3.3 Clean Closure

Clean closure will eliminate the need for future post-closure inspections, monitoring, and maintenance resulting from contamination from ISO East container constituents. After clean closure, appearance of the land will be consistent with future land use determinations for adjacent portions of the 200 Areas as an industrial-exclusive portion of the Hanford Site. This land use is consistent with the formal determination made for this portion of the 200 Areas as described in 64 FR 61615, *Record of Decision: Hanford Comprehensive Land-Use Plan Environmental Impact Statement (HCP EIS)*.

H.4 CLOSURE STRATEGY

The proposed closure strategy is based primarily on review of the operational history, operational records, waste management records, and a visual inspection of the 276-BA Organic Storage Area. Table H.2 provides an inspection summary. Waste was removed from the ISO East container in 1997 during B Plant's transition phase, and routine surveillance and maintenance inspections have been performed annually since that time. Windblown debris is removed on a periodic basis from the secondary containment structure. Rainfall and snowmelt accumulate on the floor of the containment structure and evaporate naturally. Inspections performed in the late 1990s indicated some loss of adhesion and rippling of the surface coating that was applied to the secondary containment concrete at installation. However, no evidence of spills or leaks from the ISO East container have been documented (DOE/RL-98-12).

Table H.2. Annual Inspection Summary for 276-BA

Requirement Description	Inspection Event
Signage	Signs are posted and visible at each approach visible from 25 feet with legible, unobscured print
Building/Area secure	Fence locks and related postings are in place and functional, no obvious indication of unauthorized entry into or use of area
Structural integrity	No damage or deterioration; no obvious abnormal or unsafe conditions; no leaking
Ground subsidence	No indications of ground subsidence
Water intrusion (leaks)	No standing water or evidence of current or recent water pathways

Based on these reviews, the 276-BA Organic Storage Area is a candidate for clean closure under WAC 173-303, and verification sampling will be performed. Sampling and analysis activities were developed using the results of record reviews and visual inspection (EPA/240/R-02/005, *Guidance on Choosing a Sampling Design for Environmental Data Collection*; Ecology Publication 94-111, *Guidance for Clean Closure of Dangerous Waste Units and Facilities*) and will be conducted via a Sampling and Analysis Plan (SAP) (see Section H.6.1 of this closure plan). The objective of sampling described in this closure plan is to determine if MTCA (WAC 173-340) unrestricted use standards for soil will be met for the target analytes identified in Table H.4 after removal of the 276-BA Organic Storage Area, demonstrating clean closure of the soil underneath the secondary containment enclosure. The components of the U.S. Environmental Protection Agency (EPA) Data Quality Objective seven-step process are contained within this closure plan.

H.4.1 Pre-Closure Activities

The stored organic mixed waste was transferred out of the ISO East container for offsite disposal in November 1997 during B Plant's transition phase. Originally part of the 276-BA Organic Storage Area, the ISO West vessel did not receive waste but underwent administrative closure in 1998 and was removed from the site (98-EAP-136, *Certified ISO West Interim Organic Storage Tank [ISO West Tank] Administrative Closure Technical Data Synopsis [TSD: TS-2-3]*).

H.4.2 Clean Closure Strategy

The 276-BA Organic Storage Area will be clean closed by removing the ISO East storage container and secondary containment structure, including up to 1 m (3 ft) of soil beneath the structure, which will meet WAC 173-303-610(2)(b)(ii) requirements. In accordance with WAC 173-303-610(2)(b)(i), the clean closure levels for soil will be the numeric cleanup levels calculated using unrestricted use exposure assumptions in accordance with MTCA (WAC 173-340) (see Section H.6 of this closure plan).

Once the container has been removed, a visual inspection will be performed of the secondary containment structure. The condition of the coating and structural integrity of the concrete pad will be evaluated. Based on the operating record review, waste management records, and past visual inspections, a focused sampling approach will be utilized, as described in Section H.6.2. Focused sampling involves the selective sampling of areas where potential or suspected soil contamination would be expected if the release of a hazardous substance had occurred. Focused sampling is distinguished from probability based sampling in that inferences are based on professional judgment, not statistical scientific theory. Focused sampling is considered biased sampling and therefore cannot be statistically demonstrated to meet the MTCA B closure performance standards. The decision criteria for the focused sampling results will be a direct comparison to ensure individual values do not exceed the MTCA Method B clean closure performance standards.

Focused sampling of the 276-BA Organic Storage Area will be at locations where concrete joints, the trench, and the sump are located (Figure H.3). Sampling locations will be field adjusted if the visual inspection of the secondary containment structure indicates any areas where the structural integrity is compromised. Focused soil samples will be collected beneath the footprint of the secondary containment up to 1 m (3 ft) depth. The locations proposed for focused sampling are shown in Figure H.3. Following removal of soil beneath the secondary containment structure, a second visual inspection will be performed. If any stains are observed on the soil, additional soil will be removed, and additional focused sampling locations will be designated. Should sampling and analysis of soils underlying the 276-BA Organic Storage Area secondary containment structure indicate contamination above the MTCA (WAC 173-340) Method B unrestricted use standards, additional soil deeper than the initial removal of up to 1 m (3 ft) will be removed and the unit will be resampled. Post-closure escape of contamination is not anticipated. If not all contaminated soils can be practicably removed, then a permit modification will be submitted to Ecology in accordance with WAC 173-303-830(4).

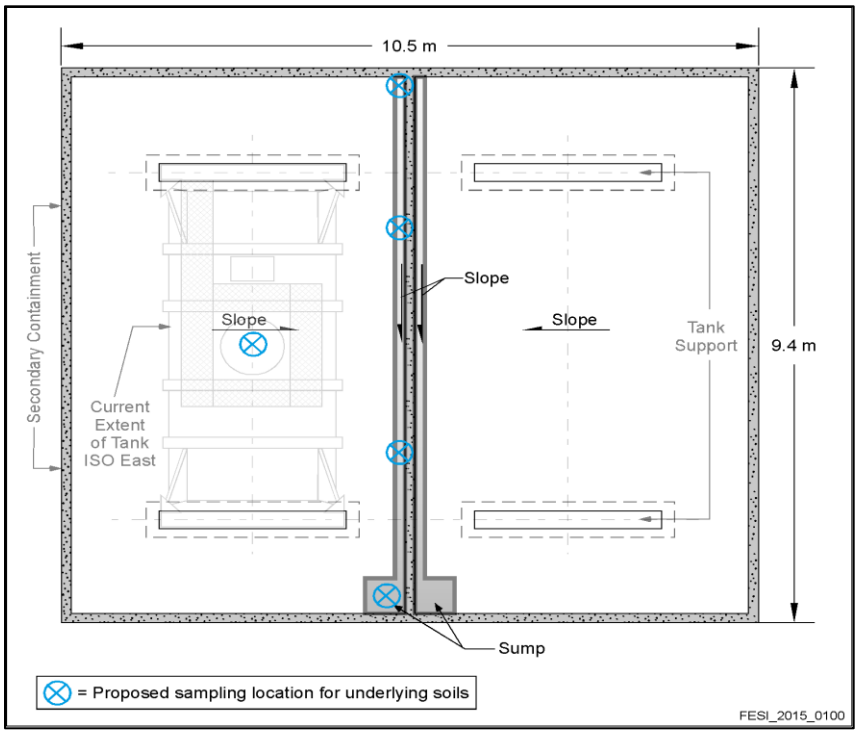

Figure H.3. Proposed Focused Sampling Locations for the 276-BA Organic Storage Area

H.5 CLOSURE ACTIVITIES

Clean closure of the 276-BA Organic Storage Area will include the following activities:

- Review operating and inspection records.
- Remove and transport the ISO East container to Environmental Restoration Disposal Facility (ERDF) or another approved facility for disposal.
- Perform visual inspection of secondary containment structure.
- Demolish and remove the secondary containment structure.
- Perform visual inspection of soil beneath secondary containment (after 1 m of soil removed) to identify additional focused sampling locations (i.e., staining).
- Perform focused sampling of the soil to confirm that clean closure standards are met.
- If detected during initial sampling efforts, remove any contaminated environmental media present.
- Resample as necessary to confirm that MTCA (WAC 173-340) Method B clean closure levels have been met.
- Transmit closure certification to the Washington State Department of Ecology.

In accordance with WAC 173-303-610(3)(a)(iv), a detailed description of the closure activities is described in the sections below.

H.5.1 Facility Demolition and Disposal

Demolition of the 276-BA Organic Storage Area will include removal of the ISO East container and secondary containment structure. The ISO East container is itself a transport vessel and will be removed intact using a flatbed hauler. Any residual heel remaining in the ISO East container will stabilized for disposal. The container, its contents, and any waste generated from stabilization and demolition activities will be disposed in accordance with WAC 173-303-610(5) and applicable regulations. The ISO East container meets the WAC 173-303-160(2) definition of an empty container because "all wastes have been taken out that can be removed using the practices commonly employed to remove materials from that type of container" and "no more than 3 percent by weight of the total capacity of the container remains in the container." Because the container meets the definition of empty, it does not need additional treatment at ERDF to meet WAC 173-303 requirements, and consideration for land disposal restrictions (LDRs) will therefore not be necessary. The following subsections provide details on the closure activities.

H.5.1.1 Mobilization and Site Preparation

Demolition mobilization and site preparation include the activities necessary for field setup and closure action implementation. This includes obtaining field crew resources, equipment, and materials; and performing field job site activities (e.g., site assessments and map development, worker support infrastructure, waste management areas, and other site preparation, as required). Global Positioning System (GPS) coordinates will be taken prior to removal of the secondary containment to ensure that focused sampling locations will be laid out (see Section H.6 of this closure plan). GPS coordinates will be taken using the NAD83 State Plane Washington South Coordinate System. Other pre-work tasks may include installing barriers and postings, performing site walkdowns, completing pre-demolition reviews, and testing equipment.

H.5.1.2 Container Removal and Disposal

Prior to removal of the ISO East container, absorbent material will be added to stabilize any remaining liquid content. The container will then be lifted with a forklift or crane and placed on a flatbed hauler for intact disposal at ERDF. To meet ERDF waste acceptance criteria for void space, the container will be grouted. Grouting will be performed at ERDF. The container meets the definition of an empty container provided in WAC 173-303-160(2) and therefore does not require additional treatment at ERDF to meet requirements of WAC 173-303.

H.5.1.3 Secondary Containment Structure Demolition and Soil Removal

The secondary containment structure walls and floor will be demolished and removed. Demolition will require the use of an excavator with various attachments. Other standard industry or conventional demolition practices also will be used (hydraulic shears with steel shear jaws, concrete pulverizer jaws, or breaker jaws). The decision to remove the secondary containment is not due to any history of spills but is instead to clear the structure footprint for future land use to support B Plant cleanup.

Soil below the containment structure will be excavated to a depth of up to 3 ft (1 m) using an excavator and grading equipment, and loaded into roll-on/roll-off containers. Treatment for disposal (if required) will be performed at ERDF. Based on the secondary containment structure footprint of 9.4 m (30.8 ft) long by 10.5 m (34.4 ft) wide by 0.6 m (2 ft) tall/deep, the excavation will be approximately 12.4 m (40.8 ft) long by 13.5 m (44.4 ft) wide. If necessary, field adjustments may be made and provided in the closure report.

Water may be used to control dust generated from demolition activities. The amount of water used will be minimized to prevent ponding and runoff. While unlikely, other controls such as portable ventilation filter units, high-efficiency particulate air (HEPA) filter vacuum cleaners, greenhouses, and/or fogging agents may be used. Additional stormwater run-on/runoff controls may be implemented, as needed. The demolition activities presume that the waste will be treated, if applicable, to meet all applicable requirements of WAC 173-303-140, *Land Disposal Restrictions*, and (by reference) 40 Code of Federal Regulations (CFR) 268, *Land Disposal Restrictions*, prior to disposal in the Hanford Site ERDF, as discussed in Section H.5.2 of this closure plan. If the waste is not disposed at ERDF, then the waste will be disposed at a permitted RCRA TSD unit authorized for disposal.

If contaminated soil is identified as a result of clean closure verification sampling activities (i.e., samples indicate contamination above clean closure standards), the nature and extent of contamination will be evaluated. Contaminated soil will be removed using equipment capable of removing the quantity of material required to complete removal and clean close the DWMU. Following removal of contaminated soil, additional confirmatory sampling efforts will be conducted in accordance with the approved closure plan SAP to demonstrate clean closure levels.

H.5.1.4 Decontamination

The ISO East container, the secondary containment structure, and the equipment used to support clean closure will not be decontaminated. The storage container will be removed intact, and the secondary containment structure will be demolished and placed in roll-on/roll-off disposal containers for transport to ERDF. If equipment is contaminated, it will be decontaminated using dry methods (e.g., brushing, wiping, and using HEPA filtered vacuum cleaners) to the extent possible. When the use of wet methods (e.g., water wash and pressure washers) is required to achieve decontamination objectives, the associated water or cleaning solutions will be collected, and work will be conducted by trained site workers in accordance with best management practices.

H.5.1.5 Stabilization

Upon completion of closure activities at the 276-BA Organic Storage Area, the site will be leveled to mitigate potential industrial safety hazards and not unduly hinder future remediation in the immediate vicinity.

H.5.1.6 Completion Criteria

The demolition is considered complete after the container and containment structure have been removed, all waste generated during demolition has been dispositioned, the bottom of the excavation has been sampled, and results have been documented. When the sample results verify that the soil meets the cleanup criteria, the excavation will be backfilled.

H.5.2 Waste Management

A variety of waste streams may be generated under this closure action and will be in solid form. All of the waste will be designated and managed as non-dangerous or dangerous/mixed waste. For dangerous or mixed waste, the generator requirements of WAC 173-303-200, *Accumulating Dangerous Waste On-Site*, will be followed as applicable.

Waste generated through implementation of this closure action will be treated, if required, and disposed of at ERDF or an approved RCRA TSD unit. ERDF is the preferred waste disposal facility. Waste is expected to meet the waste acceptance criteria of ERDF-00011, *Environmental Restoration Disposal Facility Waste Acceptance Criteria*, formerly WCH-191, as is. Waste volume-reduction practices (e.g., minimizing cross-contamination during the remedial action or segregation of clean materials from contaminated materials) will be implemented where feasible. Waste management activities include waste characterization, designation, staging, packaging, handling, marking, labeling, segregation, storage, transportation, treatment, and disposal. These waste management activities are briefly described in the following subsections.

The 276-BA Organic Storage Area was included in DOE/RL-2010-102, *Action Memorandum for Decontamination, Deactivation, Decommissioning, and Demolition (D4) Activities for 200 East Tier 2 Buildings/Structures*, by a modification through TPA-CN-722, Tri-Party Agreement Change Notice Form: DOE/RL-2010-102, Revision 0, Action Memorandum for Decontamination, Deactivation, Decommissioning, and Demolition (D4) Activities for 200 East Tier 2 Buildings/Structures. This inclusion provides a disposition pathway for placing waste from this closure activity into ERDF, following approval of a Removal Action Work Plan.

H.5.2.1 Projected Waste Streams

One or all of the following solid waste streams are anticipated to be generated during the closure action and may fall into any combination of these categories: nondangerous/nonradioactive, radioactive, mixed, hazardous, dangerous, suspect radioactive, suspect dangerous, and suspect mixed:

- Stainless-steel container and residual heel contents.
- Concrete and associated debris.
- Soils.
- Miscellaneous waste (e.g., rubber, glass, paper, personal protective equipment, cloth, plastic, and metal).
- Equipment and construction materials.

H.5.2.1.1 Hazardous/Dangerous Waste, Low-Level Waste, and Mixed Waste Management

These wastes will be packaged, stored, and transported to prevent dispersion and public exposure. Waste-specific storage and packaging requirements will comply with WAC 173-303 requirements, as applicable.

H.5.2.1.2 Solid Waste Management

Solid waste (e.g., personal protection equipment) will be managed as appropriate for the nonradiological and radiological contaminants present or suspected to be present, if any. Miscellaneous solid waste that has contacted suspect dangerous or suspect mixed waste will be managed as such. Field screening will be used to segregate radioactive waste from nonradioactive waste. Container(s) will be properly marked and labeled. The containers will be segregated, as appropriate, and then staged at a designated waste container storage area. Miscellaneous solid waste will be dispositioned based on waste characterization information.

H.5.2.2 Waste Management and Characterization

Dangerous and mixed wastes will be packaged, stored, and transported to prevent dispersion and public exposure. Waste-specific storage and packaging requirements will comply with WAC 173-303 requirements, as applicable. Miscellaneous solid waste will be managed, as appropriate, for the nonradiological and radiological contaminants present or suspected to be present, if any.

Waste generated through implementation of this closure action will be characterized in accordance with the waste acceptance criteria of the receiving facility. Characterization is performed using a variety of information that includes but is not limited to process knowledge, historical analytical data, sampling and analysis, and radiological and chemical screening.

Demolition waste will be characterized and managed as dangerous/mixed waste based on the historical operations, the RCRA Part A Form, and previous characterization information.

H.5.2.3 Waste Handling, Storage, and Packaging

Marking, labeling, segregating, and staging of waste containers will be performed or directed by the waste specialist. If waste containers cannot be shipped directly to the disposal site, dangerous or mixed wastes may be stored at Hanford TSD units that are permitted to operate as container storage areas until the wastes can be disposed. Dangerous or mixed waste may also be accumulated in accordance with the generator requirements of WAC 173-303-200.

H.5.2.3.1 Management of Bulk Waste

Bulk waste will be placed in ERDF cans for eventual disposal at ERDF or other approved RCRA TSD units. These bulk containers will be accumulated in a suitable area adjacent to the 276-BA Organic Storage Area or may be accumulated for up to 90 days in another suitable Hanford Site location. Bulk containers will be covered when waste is not being added or removed. Lightweight material (e.g., plastic and paper) will be bagged, if appropriate, prior to placement in the bulk container to eliminate the potential for materials blowing out of the bulk container or truck. Applicable packaging and pre-transportation requirements for dangerous or mixed waste generated by the closure action will be identified and implemented before the waste container is moved. Additionally, a fixative will be applied as needed to the demolition site and any loose soil to help control dust and radiological and nonradiological contaminants.

H.5.2.3.2 Management of Waste Containers

Prior to disposal, dangerous waste containers will be managed in accordance with WAC 173-303-200, as applicable.

H.5.2.3.3 Waste Profile

Waste profiling for establishing values for the waste-tracking form may take place concurrently with closure action activities. Field screening measurements may be used to obtain data to adjust the waste-tracking form. The waste profile may be adjusted (as necessary) through a combination of in-process field screening methods and analytical laboratory analysis.

H.5.2.3.4 Final Waste Disposal

All demolition waste generated through implementation of the closure action will be treated as dangerous/mixed waste and will be managed according to the ERDF waste acceptance criteria. ERDF is the preferred disposal location for waste meeting the facility's waste acceptance criteria, as it is engineered to meet appropriate RCRA technological requirements for landfills as described in EPA et al., 1995, *Record of Decision, U.S. DOE Hanford Environmental Restoration Disposal Facility, Hanford Site, Benton County, Washington*.

H.5.2.3.5 Waste Disposal Records

Original sample reports and a copy of the shipping papers for each container will be retained and forwarded to the assigned waste specialist for inclusion in the project file following final waste disposition.

H.5.2.4 Waste Treatment

Based on available information, typical treatment of waste from demolition activities (e.g., grouting, macroencapsulation, solidification, separation, size reduction, and/or repackaging) may be needed. If treatment is required to provide safe transport or meet waste disposal facility waste acceptance criteria, such treatment may be conducted at the generating site or at ERDF. It is expected that the waste may need to be grouted or size reduced at ERDF. Residuals from treatment of waste originating from activities addressed in this closure plan can be disposed at ERDF if the treatment residuals meet ERDF waste acceptance criteria. Because ISO East meets the definition of an empty container and is therefore not subject to LDR regulations, treatment to meet LDR requirements will not be necessary.

Contaminated soil is not expected to be encountered. In the event that soil is contaminated, it will be addressed as described in Section H.5.2.6.

H.5.2.5 Waste Minimization and Recycling

Waste minimization practices will be followed to the extent technically and economically feasible during waste management. Introduction of clean materials into a contamination area, as well as contamination of clean materials, will be minimized to the extent practicable. Emphasis will be placed on source reduction to eliminate or minimize the volume of waste generated.

H.5.2.6 Identifying and Managing Contaminated Environmental Media

Contaminated media is not expected once the container and secondary containment are removed. If contaminated environmental media (soil) is identified as a result of clean closure verification sampling activities (i.e., samples indicate contamination above clean closure standards), the nature and extent of contamination will be evaluated. Contaminated soil will be removed using equipment capable of removing the quantity of material required to complete removal and clean closure. Following removal of contaminated soil, additional confirmatory sampling efforts will be conducted in accordance with the approved closure plan SAP to demonstrate clean closure levels (see Section H.6.2).

If contaminated soil removal is required, it will be managed as a newly generated waste stream in accordance with WAC 173-303-610(5). Contaminated soil generated during the closure period will be properly disposed.

The contaminated soil will be a newly generated waste and must be handled in accordance with all applicable requirements of WAC 173-303-170 through WAC 173-303-230. The contaminated soil will be containerized, labeled, sampled for waste characterization, designated as dangerous or non-dangerous waste, stored, and transported offsite where it will be treated (if necessary) to meet LDRs in 40 CFR 268 incorporated into WAC 173-303-140(2)(a) by reference, then ultimately disposed of in an appropriate waste disposal facility.

H.5.3 Air Emissions

There is no expectation that substantial emissions criteria and toxic air pollutants will result from demolition activities. Reasonable precautions will be taken to minimize visible dust emissions from active structural demolition with standard emission control techniques. Active excavations shall use water or crusting agents (e.g., Soil-Sement®) as approved for dust control. Water usage for dust control will be minimized to protect against contaminant migration. Crusting agents or fixatives will be applied to any disturbed portion of the contamination area that will be inactive for more than 24 hours. Material to be disposed at ERDF will also comply with the moisture content and other applicable requirements of the ERDF waste acceptance criteria (ERDF-00011). A dust fixative will be applied to the demolition and excavation site when potential concerns arise regarding health issues or the spread of contamination.

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Airborne emissions associated with closure activities will be minimized by the use of appropriate work controls. Potential radiological air emissions will be evaluated and licensed as a separate action from RCRA closure requirements under the *Clean Air Act of 1990*, which is achieved by following the requirements of WAC 246-247, *Radiation Protection—Air Emissions*. Airborne releases of contaminants during closure activities will be controlled in accordance with DOE radiation control and substantive air pollution control standards in order to maintain emissions of air pollutants at the Hanford Site to as low as reasonably achievable levels. Minimal operations associated with deactivation methods (e.g., welding or laser cutting) reaching temperatures of greater than 100°C (212°F) are be expected.

The applicability of WAC 173-400-110, General Regulations for Air Pollution Sources, *New Source Review (NSR) for Sources and Portable Sources*, and WAC 173-460, *Controls for New Sources of Toxic Air Pollutants*, was evaluated. The scope of the proposed activity does not meet the definitions of a new source per WAC 173-400-030, *Definitions*, a modification per WAC 173-400-030(44), or a new toxic air pollutant source per WAC 173-460. A review of the ISO East container constituents was conducted, and none of the toxic air pollutants regulated under WAC 173-460-150, *Table of ASIL, SQER and de minimis Emission Values*, were potentially present above de minimis concentrations.

H.5.4 Health and Safety Requirements

Closure will be performed in a manner to ensure the safety of human health and the environment. Qualified personnel will perform any necessary closure activities in compliance with established safety and environmental procedures. Personnel will be equipped with appropriate personal protective equipment. Qualified personnel will be trained in safety and environmental procedures and have received appropriate training and experience in sampling activities. Field operations will be performed in accordance with health and safety requirements. If an emergency would occur, the on-call building emergency director will be notified, and the requirements associated with DOE/RL-94-02, *Hanford Emergency Management Plan*, will be implemented. The permittees have instituted training or qualification programs to meet training requirements imposed by regulations, DOE orders, and national standards (e.g., standards published by the American National Standards Institute/American Society of Mechanical Engineers). For example, the environmental, safety, and health training program provides workers with the knowledge and skills necessary to execute assigned duties safely. The Hanford Facility RCRA Permit describes specific requirements for the Hanford Facility Personnel Training program. The permittees will comply with the training matrix shown in Table H.3, which provides training requirements for Hanford Facility personnel associated with 276-BA.

Field personnel will have completed the following training before starting work:

- Occupational Safety and Health Administration 40-Hour Hazardous Waste Worker Training.
- 8 Hour Hazardous Waste Worker Refresher Training (as required).
- Hanford General Employee Training.

Project-specific safety training will explicitly address the project and activities to be performed, including the following:

- Training will provide the knowledge and skills needed for sampling personnel to perform work safely and in accordance with quality assurance (QA) requirements.
- Samplers are required to be qualified in the type of sampling being performed in the field.

Table H.3. Training Matrix for the 276-BA Organic Storage Area Closure

Job Title/Position	General Hanford Facility/ Orientation Program	Contingency Plan/ Emergency Response	Emergency Coordinator	Operations	
				General Waste Management and Closure Support	Container Management
NCO	X	X		X*	X
Building Emergency Director	X		X		
Operations Manager	X	X			
Field Work Supervisor	X	X			
ECO	X			X*	
Waste Service Provider	X			X*	X
D&D Worker	X	X			
Sampler	X			X*	

*Training received is commensurate with the duties performed. Individuals in this category who do not perform these duties are not required to receive this training.

D&D = decontamination and demolition

ECO = environmental compliance officer

NCO = nuclear chemical operator

Pre-job briefings will be performed to evaluate activities and associated hazards by considering the following factors:

- Objective of the activities.
- Individual tasks to be performed.
- Hazards associated with the planned tasks.
- Environment in which the job will be performed.
- Facility where the job will be performed.
- Equipment and material required.
- Safety protocols applicable to the job.
- Training requirements for individuals assigned to perform the work.
- Level of management control.
- Proximity of emergency contacts.

Training records are maintained for each employee in an electronic training record database. The permittee training organization maintains the training records system. Training records for personnel will be kept until Ecology approves certification of closure for the 276-BA Organic Storage Area.

H.5.5 State Environmental Policy Act Requirements

Revised Code of Washington (RCW) 43.21C, *State Environmental Policy*, (also known as the State Environmental Policy Act) requires the environmental effects of a proposal to be described and evaluated before Ecology makes decisions. A State Environmental Policy Act checklist was prepared for this proposed closure action to provide information to help identify impacts for the action (i.e., closure of the 276-BA Organic Storage Area) and to reduce or avoid impacts from this action.

H.6 SOIL VERIFICATION SAMPLING AND ANALYSIS

Sampling and analysis of soil will be conducted to confirm that clean closure levels in the soil have been achieved. The SAP summarizes the sampling design used and associated assumptions based on the operational history 276-BA Organic Storage Area. The sampling design includes input parameters used to determine the number and location of samples.

H.6.1 Closure Sampling and Analysis Plan

All sampling and analysis will be performed in accordance with the sampling and quality standards established in the closure SAP. The components of the EPA Data Quality Objective seven-step process are contained within this closure plan. This closure SAP utilizes SW-846, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, Third Edition; Final Update V*; the American Society for Testing and Materials (ASTM) *Annual Book of ASTM Standards* (ASTM, 2014); and applicable EPA guidance. Sampling and analysis activities will meet applicable requirements of the most current versions of SW-846, ASTM standards, EPA-approved methods, and DOE/RL-96-68, *Hanford Analytical Services Quality Assurance Requirements Document* (HASQARD). This SAP was also developed using Section 7.0 in Ecology Publication 94-111 and EPA/240/R-02/005.

H.6.1.1 Target Analytes

The characteristics of B Plant Complex liquid mixed waste (DOE/RL-98-12) was reviewed, which identified the applicable dangerous waste codes for the ISO East container and the appropriate constituents of concern. The metal constituents of concern for the B Plant Complex are arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The listed organic constituents of concern include acetone, *o*-cresol, *p*-cresol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, and 1,1,1-trichloroethane.

Table H.4 provides the waste codes listed for 276-BA Organic Storage Area and the target analyte associated with each waste code based on facility process records. The soil will be sampled to demonstrate clean closure of the ISO East container and secondary containment structure.

Table H.4. Target Analyte List

Target Analyte (EPA Hazardous Waste Code)	CAS Number
Arsenic (D004)	7440-38-2
Barium (D005)	7440-39-3
Cadmium (D006)	7440-43-9
Chromium (D007)	7440-47-3
Lead (D008)	7439-92-1
Mercury (D009)	7439-97-6
Selenium (D010)	7782-49-2
Silver (D011)	7440-22-4
Methylene chloride (F001, F002)	75-09-2
1,1,1-trichloroethane (F001, F002)	71-55-6
Acetone (F003)	67-64-1
Methyl isobutyl ketone (F003)	108-10-1
o-cresol (F004)	95-48-7
p-cresol (F004)	106-44-5
Methyl ethyl ketone (F005)	78-93-3

CAS = Chemical Abstracts Service

H.6.1.2 Verification Sampling Schedule

Verification closure sampling and analysis will be performed in accordance with the closure plan schedule provided in Section H.8.

H.6.1.3 Project Management

The permittee is responsible for planning, coordinating, sampling, preparing, packaging, and shipping samples to the laboratory.

H.6.2 Sampling Design

The objective of sampling the soil underneath the secondary containment structure is to obtain analytical data to confirm that the soil does not contain contaminants exceeding the MTCA (WAC 173-340) Method B clean closure performance standards for the target analytes listed in Table H.4. Closure performance standards are discussed in Section H.3.

This SAP utilizes Ecology Publication 94-111, Section 7.0, *Sampling and Analysis for Clean Closure*, to determine the type of sampling design to be used to demonstrate clean closure. When designing a sampling plan, both focused and area wide (grid) sampling methods were considered. Ecology Publication 94-111, Section 7.2.1, identifies that area wide sampling is appropriate when the spatial distribution of contamination at or from the closure unit is uncertain. Focused sampling (as identified in Section 7.2.2 of Ecology Publication 94-111) involves selective sampling of areas where contamination is expected or releases have been documented. The 276-BA Organic Storage Area briefly stored organic mixed waste and shows no history of spills, leaks, or other monitoring concerns. There is no history of releases, but due to the configuration of the secondary containment, which has a sloped floor, trench, and sump (Figure H.3), a focused sampling approach is proposed for collecting soil samples underlying the 276-BA Organic Storage Area.

Focused sampling is defined as follows: The selection of sampling units (i.e., the number and location and/or timing of collecting samples) is based on knowledge of the feature or condition under investigation and professional judgment. Focused sampling is distinguished from probability based sampling in that interferences are based on professional judgment, not statistical scientific theory. Therefore, conclusions about the target population are limited and depend entirely on the validity and accuracy of professional judgment. Probabilistic statements about parameters are not possible.

The secondary containment is a single structure consisting of two basins that held the individual ISO East and ISO West vessels. The basin formerly housing the empty ISO West vessel never received waste of any kind. The ISO East container, which received waste directly from the B Plant Complex, was placed in the 276-BA Organic Storage Area secondary containment structure, sealed and intact. Stored wastes were then removed from the ISO East container to a tanker truck for offsite disposal. Any potential releases from the ISO East container would likely be encountered in the location of the sump or trench within the ISO East portion of the secondary containment structure. These areas have been identified for soil sampling to demonstrate clean closure.

For focused sampling beneath the concrete secondary containment structure, the number and location of samples was determined based on the configuration of the secondary containment. The basin cell that housed the ISO West vessel was administratively clean closed and will not be sampled. Five sampling locations beneath the ISO East secondary containment structure were determined to be sufficient to support the overall sampling approach. No structural degradation of the secondary containment has been noted, so all sampling locations were designated to soil beneath low spots and concrete seams in the secondary containment. If upon inspection it is observed that the structural integrity of the secondary containment has been compromised, additional samples will be taken at those locations. In addition, any discoloration or concrete staining will be examined to determine if additional focused sampling locations are warranted upon removal of the concrete structure. Figure H.3 provides the proposed sampling locations beneath the secondary containment. GPS coordinates will be obtained to determine the locations for the sample sites within the sump and along concrete seams. After the secondary containment structure is removed, these locations will then be sampled.

H.6.2.1 Sampling Methods and Handling

A grab sample matrix normally consists of soil collected in pre-cleaned sample containers, taken at a depth of 0 to 15.24 cm (0 to 6 in.) below ground surface. No historical dangerous waste releases were identified; therefore, subsurface sampling is deemed unnecessary. For the purpose of this SAP, the “soil surface” is defined as the exposed surface layer once the secondary containment structure and up to 1 m of soil has been removed. The exposed soil surface will be leveled prior to sample collection. Collection of soil samples would be accomplished with tools such as shovels, trowels, pick-axes, and scoops.

After the soil is sampled, the sampled media will be screened to remove material larger than approximately 2 mm (0.08 in.) in diameter per WAC 173-340-740(7)(a), which will allow for a larger surface area to volume ratio and would be more likely to identify any potential contamination in the sample. Grab samples will be collected and placed into containers at the chosen node sample locations. To ensure sample and data usability, sampling will be performed in accordance with established sampling practices, procedures, and requirements pertaining to sample collection, collection equipment, and sample handling.

Sample container, preservation, and holding time requirements are specified in Table H.5 for soil samples. These requirements are in accordance with the specified analytical methods. The final container type and volumes will be identified on the sampling authorization form (SAF) and the chain-of-custody form.

Table H.5. Preservation, Container, and Holding Time Requirements for Soil Samples

Method*	Analyte	Preservation Requirement	Holding Time	Bottle Type
EPA 8260	Volatile organic analytes	Cool ~4°C	14 days	Glass
EPA 8270	Semivolatile organic compound	Cool ~4°C	14/40 days	Amber glass
EPA 6010	Metals	Cool ~4°C	6 months	Amber glass
EPA 6020	Metals	Cool ~4°C	6 months	Amber glass
EPA 7471	Mercury	None	28 days	Glass

*For the four-digit EPA methods, see SW-846, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, Third Edition; Final Update V.

To prevent potential contamination of the samples, care will be taken to use decontaminated equipment for each sampling activity.

EPA Level 1 pre-cleaned sample containers will be used for samples collected for chemical analysis. Container sizes may vary depending upon laboratory-specific volumes/requirements for meeting analytical detection limits.

The sample location, depth, and corresponding record numbers from the Hanford Environmental Information System (HEIS) database will be documented in the sampler's field logbook. A custody seal (e.g., evidence tape) will be affixed to each sample container and/or sample collection package to provide evidence of potential tampering.

Each sample container will be labeled with the following information on firmly affixed, water resistant labels:

- SAF and form number.
- HEIS number.
- Sample collection date and time.
- Sampler identification.
- Analysis required.
- Preservation method (if applicable).

Sample records must include the following information:

- Analysis required.
- Sample location.
- Matrix (e.g., water or soil).

Sample custody will be maintained in accordance with existing Hanford Site protocols to ensure that sample integrity is maintained throughout the analytical process. Chain-of-custody protocols will be followed throughout sample collection, transfer, analysis, and disposal to ensure that sample integrity is maintained.

All waste (including unexpected waste) generated by sampling activities will be managed in accordance with WAC 173-303-170 through 173-303-230.

H.6.2.2 Analytical Methods

All analyses and testing will be performed consistent with this closure plan, laboratory analytical procedures, and HASQARD (DOE/RL-96-68). The approved laboratory must achieve the lowest practical quantitation limits (PQLs) consistent with the selected analytical method to confirm clean closure levels. If a target analyte is detected at or above clean closure level but less than the PQL of the analytical method, Ecology will be notified, and alternatives will be discussed to demonstrate clean closure level. If a target analyte is detected above the clean closure levels and the PQL, additions actions will be taken, as discussed in Section H.7. Analytical methods and performance requirements associated with the target analytes are outlined in Table H.6.

H.6.2.3 Quality Control

Quality control (QC) procedures must be followed in the field and laboratory to ensure that decisions made using the data are within an acceptable range of uncertainty. Field QC samples will be collected to evaluate the potential for cross-contamination and to provide information pertinent to field sampling variability. Field QC will include collection of the following types of samples:

- Full trip blanks.
- Field transfer blanks.
- Equipment rinsate blanks.
- Field duplicates.
- Field split samples.

Laboratory QC samples estimate the precision and bias of the analytical data. Field and laboratory QC samples and summarized in Table H.7.

A data quality assessment will be performed utilizing the guidance in EPA/240/B-06/002, *Data Quality Assessment: A Reviewer's Guide*, and implementing the specific requirements in Section H.6.2.5.

Data verification, data validation, and data quality assessment will include both the primary samples and the QC samples.

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Table H.6. Soil Analytical Performance Requirements

CAS Number	Analyte	Analytical Method	Soil Cleanup Level[a] (mg/kg)		Closure Performance Standard[b] (mg/kg)	Practical Quantitation Limit[c] (mg/kg)	Accuracy Req't (Percent Recovery)[d]	Precision Req't (Relative Percent Difference)[d]
			Carcinogens	Noncarcinogens				
7440-38-2	Arsenic	SW-846 Method 6020	0.667	24	20.0	0.2	±30	≤30
7440-39-3	Barium	SW-846 Method 6010		16,000	132	2.0	±30	≤30
7440-43-9	Cadmium	SW-846 Method 6010		80	0.69	0.5	±30	≤30
7440-47-3	Chromium (total)	SW-846 Method 6010		120,000	42.0	1.0	±30	≤30
7439-92-1	Lead	SW-846 Method 6010		250	50.0	5.0	±30	≤30
7439-97-6	Mercury	SW-846 Method 7471		24	0.2	0.002	±30	≤30
7782-49-2	Selenium	SW-846 Method 6010		400	10.0	0.75	±30	≤30
7440-22-4	Silver	SW-846 Method 6010		400	2.0	1.0	±30	≤30
71-55-6	1,1,1-trichloroethane	SW-846 Method 8260		160,000	1.58	0.005	±30	≤30
67-64-1	Acetone	SW-846 Method 8260		72,000	28.9	0.02	±30	≤30
75-09-2	Methylene chloride	SW-846 Method 8260		480	0.0218	0.005	±30	≤30
78-93-3	Methyl ethyl ketone	SW-846 Method 8260		48,000	19.6	0.01	±30	≤30
108-10-1	Methyl isobutyl ketone	SW-846 Method 8260		6,400	2.73	0.01	±30	≤30
95-48-7	*o*-cresol	SW-846 Method 8270		4,000	2.33	0.33	±30	≤ 0

Table H.6. Soil Analytical Performance Requirements

CAS Number	Analyte	Analytical Method	Soil Cleanup Level[a] (mg/kg)		Closure Performance Standard[b] (mg/kg)	Practical Quantitation Limit[c] (mg/kg)	Accuracy Req't (Percent Recovery)[d]	Precision Req't (Relative Percent Difference)[d]
			Carcinogens	Noncarcinogens				
106-44-5	*p*-cresol	SW-846 Method 8270			8.00	0.33	±30	≤30

Reference: SW-846, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, Third Edition; Final Update V.

a. Soil cleanup levels are the numeric cleanup levels calculated according to WAC 173-340, *Model Toxics Control Act—Cleanup*, Method B (unrestricted use standards).

b. Closure performance standards are numeric cleanup levels listed in 17-AMRP-0217, Attachment 1.

c. For these analytical performance requirements, the required detection limit and practical quantitation limit are identical.

d. Accuracy criteria for associated batch matrix spike percent recoveries. Evaluation based on statistical control of laboratory control samples is also performed. Precision criteria for batch laboratory replicate matrix spike analyses or replicate sample analyses.

CAS = Chemical Abstracts Service

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Table H.7. Project Quality Control Sampling Summary

QC Sample Type	Frequency	Characteristics Evaluated
Field QC		
Full trip blank	One per 20 samples per media sampled.	Contamination from containers or transportation
Equipment rinsate blank	As needed. If only disposable equipment is used, then an equipment blank is not required. Otherwise, one per 20 samples, per media.[a]	Adequacy of sampling equipment decontamination and contamination from nondedicated equipment
Field duplicate	One per batch,[b] 20 samples maximum of each media sampled (soil samples).[c]	Precision, including sampling and analytical variability
Field split sample	As needed. When needed, the minimum is one per analytical method, per media sampled, for analyses performed where detection limit and precision and accuracy criteria have been defined in Table H.6.	Precision, including sampling, analytical, and interlaboratory
Laboratory QC[b]		
Method blanks	One per batch[b]	Laboratory contamination
Laboratory duplicates	[d]	Laboratory reproducibility and precision
Matrix spikes	[d]	Matrix effect/laboratory accuracy
Matrix spike duplicates	[d]	Laboratory reproducibility, accuracy, and precision
Surrogates	[d]	Recovery/yield
Tracers	[d]	Recovery/yield
Laboratory control samples	One per batch[b]	Evaluate laboratory accuracy
Performance evaluation parameters	Annual	Evaluate laboratory accuracy
Double-blind standards	Quarterly[e]	Evaluate laboratory accuracy
Audit/assessment	Annually[f] or every 3 years[g]	Evaluate overall laboratory performance and operations

a. Whenever a new type or nondedicated equipment is used, an equipment blank shall be collected every time sampling occurs until it can be shown that less frequent collection of equipment blanks is adequate to monitor the decontamination procedure or the nondedicated equipment.

b. Batching across projects is allowing for similar matrices.

c. Soil grab samples are exempted from duplicate sampling.

d. As defined in the laboratory contract or QA plan and/or analysis procedures.

e. Soil matrix double-blind standards are submitted by request.

f. The DOE quality systems for analytical services require annual audit for commercial laboratories.

g. DOE/RL-96-68, *Hanford Analytical Services Quality Assurance Requirements* Document does not define a frequency for assessment or onsite laboratories. Three-year evaluated supplier list requirement is typically applied.

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H.6.2.4 Data Verification

Analytical results will be received from the laboratory, loaded into a database (e.g., HEIS), and verified. Verification includes but is not limited to the following items:

- Amount of data requested matches that received (number of samples for requested methods of analytes).
- Correct procedures and methods are used.
- Documentation/deliverables are complete.
- Hard copy and electronic versions of the data are identical.
- Data appear to be reasonable based on analytical methodologies.
- Sample results are evaluated against QA/QC parameters.

H.6.2.5 Data Validation

Data validation is performed by a third party. The laboratory will use program-equivalent analytical data packages that are intended to support data validation by a third party. The laboratory submits data packages that are supported by QC test results and raw data.

Controls are in place to preserve the data sent for data validation in order to allow only additions to be made and not allowing changes to the raw data.

The format and requirements for data validation activities are based upon the most current version of EPA-540-R-014-002, *National Functional Guidelines for Superfund Organic Methods Data Review*, and EPA-540-R-013-001, *National Functional Guidelines for Inorganic Superfund Data Review*. As defined by the validation guidelines, 5% of the results will undergo Level C validation.

H.6.2.6 Documents and Records

The project manager is responsible for ensuring that the current version of the SAP is being used and for providing any updates to field personnel. Version control is maintained by the administrative document control process. Changes to the SAP affecting data needs will be submitted as a RCRA permit modification in accordance with WAC 173-303-610(3)(b) to DOE and the lead regulatory agency (Ecology).

Logbooks are required for field activities. A logbook must be identified with a unique project name and number. The individual(s) responsible for logbooks will be identified in the front of the logbook and only authorized persons may make entries into the logbooks. Logbooks will be signed by the field manager, supervisor, cognizant scientist/engineer, or other responsible individual. Logbooks will be permanently bound, waterproof, and ruled with sequentially numbered pages. Pages will not be removed from logbooks for any reason. Entries will be made in indelible ink. Corrections will be made by marking through the erroneous data with a single line, entering the correct data, and initialing and dating the changes.

The project manager is responsible for ensuring that a project file is properly maintained. The project file will contain the records or references to their storage locations. The following items will be included in the project file, as appropriate:

- Field logbooks or operational records.
- Data forms.
- GPS data.
- Chain-of-custody forms.
- Sample receipt records.

- Inspection or assessment reports and corrective action reports.
- Interim progress reports.
- Final reports.
- Laboratory data packages.
- Verification and validation reports.

The laboratory is responsible for maintaining, and having available upon request, the following items:

- Analytical logbook.
- Raw data and QC sample records.
- Standard reference material and/or proficiency test sample data.
- Instrument calibration information.

Records may be stored in either electronic or hard copy format. Documentation and records, regardless of medium or format, are controlled in accordance with internal work requirements and processes to ensure the accuracy and retrievability of stored records. Records will be kept for five years after Ecology approves clean closure certification.

H.6.2.7 Revisions to the Sampling and Analysis Plan and Constituents to be Analyzed

If changes to the SAP are necessary due to unexpected events during closure that will affect sampling, a revision to this SAP will be submitted no later than 30 days after the unexpected event as a RCRA permit modification as required in WAC 173-303-610(3)(b)(iii) and WAC 173-303-830.

H.7 CONTINGENT CLOSURE PLAN

A contingent closure plan is not required at this time since the expected outcome is clean closure. If analytical data indicate that soil contamination is above clean closure standards, the nature and extent of contamination will be evaluated. If further closure actions are needed but cannot be performed under this closure plan, a contingent post-closure plan will be developed and submitted to Ecology for inclusion in the permit.

H.8 SCHEDULE FOR CLOSURE

Table H.8 describes the primary and secondary closure activities and the expected duration of activities. Container removal, secondary containment demolition, verification sampling, and analysis activities will be completed within 180 days after approval of the permit modification incorporating this closure plan (Figure H.4). Should unexpected circumstances arise and an extension to the 180-day closure activity expiration date be deemed necessary, a permit modification request will be submitted to Ecology for approval at least 30 days prior to the 180-day expiration date in accordance with WAC 173-303-610(4)(c) and WAC 173-303-830. The extension request would also demonstrate that all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements and criteria in WAC 173-303-610(4)(b)(i) or (ii), have been and will be taken.

Table H.8. Closure Activity Description

Primary Activity	Secondary Activity	Expected Duration
ISO East container removal and disposal: • Stabilize liquid container contents (if present) with absorbent material • Remove stabilized container from secondary containment structure • Place container on flatbed truck for transport for disposal • Dispose container in ERDF or other approved disposal facility	Verify sampling and analysis of soils for clean closure levels: • Locate focused sampling nodes • Collect soil samples • Analyze samples • Validate data • Analyze data	180 days
Secondary containment structure demolition and disposal: • Demolish concrete structure • Load rubble/debris in ERDF cans • Transport to ERDF • Dispose at ERDF		
Closure Activities Complete		
Prepare closure documentation and obtain independent qualified registered professional engineer (IQRPE) certification	Transmit closure certification to Ecology	60 days

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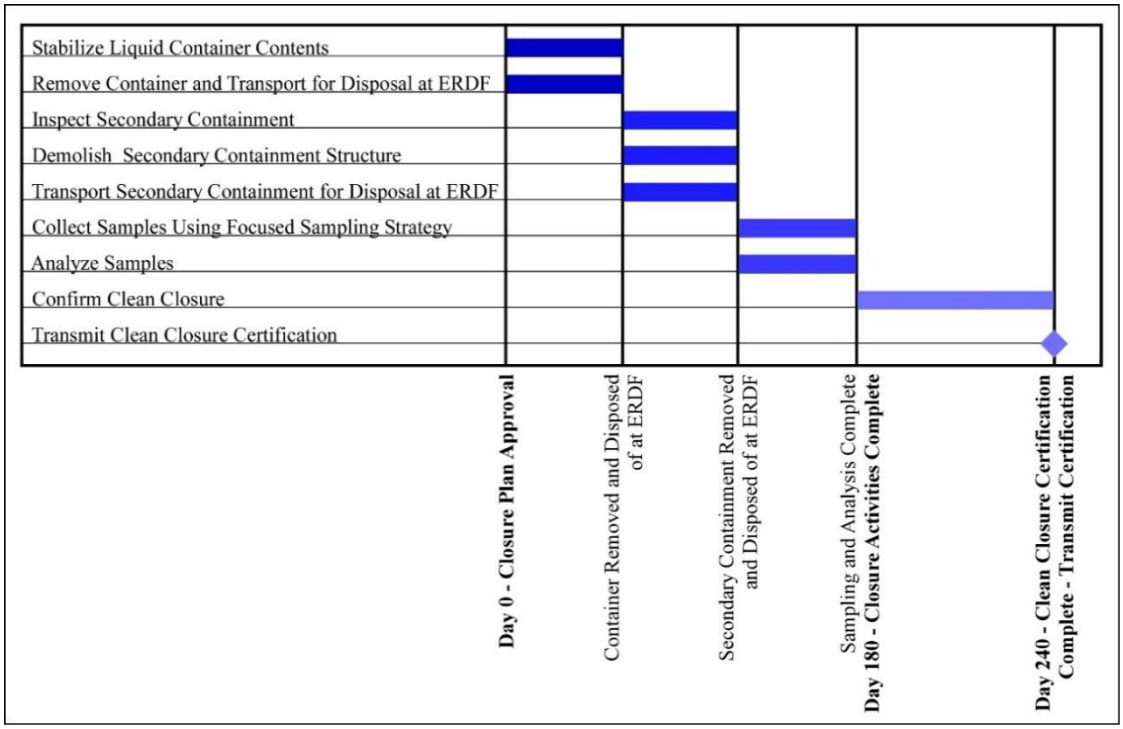

2 **Figure H.4. 276-BA Organic Storage Area Closure Plan Schedule**

H.9 CERTIFICATION OF CLOSURE

Within 60 days of completion of closure, a certification that the 276-BA Organic Storage Area has been closed in accordance with the specifications in the approved closure plan will be submitted to Ecology by registered mail. Both DOE and the co-operator identified on the current RCRA Part A Form will sign the certification of closure, and an IQRPE will certify that the unit has been closed in accordance with the approved closure plan.

An IQRPE will be retained to provide certification of the closure, as required by WAC 173-303-610(6). The IQRPE will be responsible for observing field activities and reviewing documents associated with closure of the 276-BA Organic Storage Area. At a minimum, field activities and documents reviewed include the following:

- Review of the 276-BA Organic Storage Area visual inspection (ISO East container and containment).
- Review of sampling procedures and results.
- Observation and/or review of sampling activities.
- Observation and/or review of contaminated environmental debris removal, as applicable.
- Verification that sample locations are correct, as specified in the SAP.

The IQRPE will record the observations and reviews in a written report. The resulting report will be used to develop the clean closure verification, which will then be provided to Ecology. Documentation supporting certification by the IQRPE will be placed in the Administrative Record.

Additional documentation supporting closure certification will also be placed in the Administrative Record and will be provided to Ecology upon request. At a minimum, the following documentation and information supporting closure certification will be included:

- Field notes and photographs related to closure activities.
- Description of minor deviations from approved closure plan and their justifications.
- Documentation of removal and final disposition of all dangerous wastes and waste residues, including contaminated media, debris, and any treated residuals.
- Documentation that decontamination procedures were followed and decontamination standards have been achieved.
- All laboratory and/or field data, including sampling procedures and locations, QA/QC samples, chain-of-custody procedures, and required sample measurements.
- Final summary report from the IQRPE, itemizing all data reviewed and including analytical results used to determine a final closure status.

H.10 POST-CLOSURE PLAN

The closure strategy is to attain clean closure of the 276-BA Organic Storage Area. If the conditions for verification described in Section H.6 meet the closure performance standards, then a post-closure plan will not be necessary. If clean closure is not achieved, then a revised closure plan will be provided within 180 days after the permittee has demonstrated that not all contaminated soils can be practicably removed or decontaminated.

H.11 AMENDMENT OF CLOSURE PLAN

As required by WAC 173-303-610(3)(b), a permit modification request will be submitted if changes to closure activities require modification of the approved closure plan.

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