



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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September 24, 2020

20-NWP-142

Brian T. Vance, Manager  
Richland Operations Office  
United States Department of Energy  
PO Box 550, MSIN: H5-30  
Richland, Washington 99352

Ty Blackford, President and CEO  
CH2M HILL Plateau Remediation Company  
PO Box 1600, MSIN: A7-01  
Richland, Washington 99352

Re: Dangerous Waste Compliance Inspection on April 30, 2020, at Low level Burial Grounds, 218-W-5, Trenches 31 and 34, RCRA Site ID: WA7890008967, Nuclear Waste Program (NWP) Compliance Index No.: 20.700

Dear Brian T. Vance and Ty Blackford:

Thank you for your staff's time during the Low level Burial Grounds, 218-W-5, Trenches 31 and 34 inspection on April 30, 2020. The Department of Ecology's (Ecology) compliance report of this inspection is enclosed. The report cites no areas of non-compliance and no concerns.

Specific deficiencies or violations not listed in the enclosed compliance report do not relieve your facility from having to comply with all applicable regulations.

If you have questions or need further information, please contact me at (509) 316-6323 or [phillip.buser@ecy.wa.gov](mailto:phillip.buser@ecy.wa.gov).

Sincerely,

**Buser,**

**Phillip (ECY)**

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Buser, Phillip (ECY)  
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Phillip Buser  
Dangerous Waste Compliance Inspector  
Nuclear Waste Program

pb/tla  
Enclosure

cc: See page 2

Brian T. Vance and Ty Blackford  
September 24, 2020  
Page 2 of 2

20-NWP-142  
Low level Burial Grounds, 218-W-5, Trenches 31 and 34  
RCRA Site ID: WA7890008967  
NWP Compliance Index No.: 20.700  
Inspection Date: April 30, 2020

cc electronic w/enc:

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Dave Einan, EPA  
Cheryl Williams, EPA  
Ben Harp, USDOE-ORP  
Duane Carter, USDOE-RL  
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Environmental Portal  
Hanford Facility Operating Record  
CHPRC Correspondence Control  
MSA Correspondence Control  
TPA Administrative Record  
USDOE-ORP Correspondence  
Control  
USDOE-RL Correspondence Control  
EPA Region 10 Hanford Field Office  
Correspondence Control

cc w/o enc:

Mason Murphy, CTUIR  
Jack Bell, NPT  
Laurene Contreras, YN

**Washington Department of Ecology  
Nuclear Waste Program  
Compliance Report**

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**Site:** Low Level Burial Grounds, 218-W-5, Trenches 31 and 34  
**RCRA Site ID:** WA7890008967  
**Inspection Date:** April 30, 2020  
**Site Contacts:** Linda Petersen – CH2M Hill Plateau Remediation Company (CHPRC)  
**Site Location:** 200 West, Hanford Site  
**At This Site Since:** 1943 **NAICS#:** 56221, 924110, 54171  
**Current Site Status:** Large Quantity Generator

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**Ecology**

Lead Contact: Phillip Buser

Phone: (509) 316-6323

Other Representatives:

Report Date: September 24, 2020

Index #: 20.700

Report By: Phillip Buser

Buser,  
Phillip (ECY)

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Buser, Phillip (ECY)  
Date: 2020.09.24  
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(Signed)

(Date)

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**Site Location**

The Hanford Site was assigned a single United States Environmental Protection Agency (EPA) identification number, and is considered a single *Resource Conservation and Recovery Act of 1976* (RCRA), as amended, facility even though the Hanford Site contains numerous processing areas spread over a large geographic area. The Hanford Site is a tract of land approximately 580 square miles and is located in Benton County, Washington. This site is divided into distinct Dangerous Waste Management Units (DWMUs) which are administratively organized into “unit groups.” A unit group may contain only one DWMU or many; currently, there are 30 unit groups at the Hanford Site. Individual DWMUs make up a small portion of the Hanford Site. Additional descriptive information on the individual DWMUs is contained in unit group permit applications and in Parts III, V, and VI of the Hanford Facility RCRA Permit, Dangerous Waste Portion, WA7890008967, Revision 8C (hereafter referred to as the Permit).

**Owner and Operator Information**

The United States Department of Energy (USDOE) is the owner of the Low Level Burial Grounds (LLBG) Trenches 31 and 34. United States Department of Energy-Richland Office (USDOE-RL) oversees waste management and cleanup activities ongoing on the Hanford Site. CH2M Hill Plateau Remediation Company (CHPRC) is contracted by USDOE-RL to co-operate the LLBG Trenches 31 and 34.

**Facility Background**

In 2019, the LLBG Trenches 31 and 34 reported as a Large Quantity Generator (LQG) of hazardous waste on their Dangerous Waste Annual Report. The LLBG Trenches 31 and 34 are located in the WMA-218-W-5 Burial Ground on the southwest corner of the 200 West Area of

the Hanford Facility. The LLBG Trenches 31 and 34 are adjacent to the Waste Receiving and Processing Facility at the north end of the Solid Waste Operating Complex (SWOC). The LLBG Trenches 31 and 34 consist of two landfill trenches, each approximately 250 feet long and 100 feet wide, with a depth of approximately 30 feet. Construction of the LLBG Trenches 31 and 34 occurred in 1994 using polyethylene liners and leachate collection systems. The DWMUs began receiving waste for disposal on September 15, 1999. The *Hanford Facility Dangerous Waste Part B Permit Application; Low-Level Burial Grounds Trenches 31-34-94, T-Plant Complex, and Central Waste Complex-Waste Receiving and Processing Facility*, DOE/RL-2015-74, Revision 0, submitted December 2015 (Part B Application) describes the LLBG Trenches 31 and 34 as a pair of landfills with adjacent waste storage and treatment pads. The LLBG Trenches 31 and 34 operate to interim status standards for owner/operator of a landfill.

### **Compliance Background**

See Compliance Index 17.590 for a more complete compliance background for the LLBG Trenches 31 and 34 dating back to May 2015.

On February 26, 2018, Ecology conducted a Focused Compliance Inspection–Compliance Evaluation Partial (FCI–CEP) of the LLBG Trenches 31 and 34 (Index #18.624) and cited one area of non-compliance for failing to include the Approved Manifest Tracking Numbers (EPA Unified Hazardous Waste Manifest) in the facility Land Disposal Restrictions (LDR) notification and certification, a violation of Washington Administrative Code (WAC) Chapter 173-303(140) *Land disposal restrictions* and Title 40 of the Code of Federal Regulations (CFR) 268(7)(c).

On August 6, 2019 and October 9, 2019, Ecology conducted an FCI–CEP of the LLBG Trenches 31 and 34 (#19.677) and cited three areas of non-compliance. The areas of non-compliance included:

- The LLBG Trench 34 calculation of the action leakage rate was not calculated between March 18, 2019 through April 14, 2019, a violation of WAC 173-303-400(3) *Interim status facility standards* and WAC 173-303-320(3) *General inspection*.
- The location and quantity of wastes were not recorded or contained on the same map as the Trench 31 and Trench 34 landfill disposal cells, a violation of WAC 173-303-400(3) *Interim status facility standards*; WAC 173-303-380(1)(b) *Facility recordkeeping*; and 40 CFR Subpart N 265.309 *Landfills*.
- The sump level instrument TR34/SP-LI-2 was reported broken during this inspection. There was no information indicating the date and nature of any repairs or remedial actions taken on the inspection logs. In addition, the walls, berms and ramp of LLBG Trench 34 revealed erosion and deterioration. A notification was made to repair the items, but a work repair package and completion of repair were not included or documented on the inspection log, a violation of WAC 173-303-400(3) *Interim status facility standards*; WAC 173-303-320(2)(d) *General inspection*; and WAC 173-303-200(10)(b)(iii) *Conditions for exemption for a large quantity generator that accumulates dangerous waste*.

## **Inspection Summary**

Due to the COVID-19 pandemic, no site visit was performed as a part of this inspection. Instead, on April 30, 2020, I requested records to review for determining compliance.

### **Preparedness and Prevention**

I requested radio operability check inspection records for the LLBG Trenches 31 and 34 for the months of January and February 2020. I received SWSD-PRO-OP-51714, *Inspect CWC & Miscellaneous Buildings, Appendix X – Monthly CWC RCRA Telephone & Hand-Held Two-Way Radio Inspection Checklist*, dated January 16, 2020. I observed that phone number 373-5688 was marked “No” for operating properly. The additional comments stated the phone was dead and needed to be replaced. Another noted stated, “Added R-20-001 to RCRA Open Item list. Submitting request for replacement repair.”

I also received SWSD-PRO-OP-51714, *Inspect CWC & Miscellaneous Buildings, Appendix X – Monthly CWC RCRA Telephone & Hand-Held Two-Way Radio Inspection Checklist*, dated February 20, 2020. I observed an Open Item Description of R-20-001. The Corrective Action stated, “Verified phone was working.” I observed additional actions and comments stating “East phone works, no dial tone in west phone” and “905777 has been issued to Bob Parks, it’s not on our monthly checklist.” Another comment noted, “Verified phone at SA1 worked properly and dials emergency numbers. Removed R-20-001 from RCRA Open Item list.” One more comment at the bottom of the page stated, “Submitted procedure change request to add 905777 to monthly inspection.” I observed that each inspection record contained the printed name and handwritten signature of the inspector, and the date and time of the inspection.

### **Waste Analysis**

I requested waste analysis documentation including LDR certifications for all dangerous/mixed waste disposed in the LLBG Trenches 31 and 34 during February 2020. I requested January 2020 disposal records (if none for February). I received one LDR Notification and Certification Statements form for lead waste in container MW19700165 dated January 27, 2020. I observed the following:

- The EPA Hazardous Waste Number of D008.
- The Manifest Number of first shipment as 015483140 JJK.
- A statement that the waste is subject to the LDR code C2.
- The applicable Wastewater/Non-Wastewater category as Non-Wastewater.
- Waste analysis data.
- A signed certification statement, dated January 27, 2020, that the waste has been treated.

I received a second LDR form on August 6, 2020 as “Documents provided on 5/27/20 did not include the LDR certification below as this document was onsite and inaccessible due to COVID-19.” The second LDR Notification and Certification Statements form is for four containers: MW19700161, MW19700162, MW19700164, and MW20700005. I observed the following:

- The EPA Hazardous Waste Numbers:
  - MW19700161 – D008, F001, F002, F003, F004, F005.
  - MW19700162 – D007, F001, F002, F003, F004, F005.
  - MW19700164 – D005, D007, D008, D009, D011, F001, F002, F003, F004, F005.
  - MW20700005 – D005, D006, D009, D011, F001, F002, F003, F004, F005.
- The Manifest Number of first shipment as WR2002.
- A statement that the waste is subject to the LDR code C2.
- The applicable Wastewater/Non-Wastewater category as Non-Wastewater.
- A signed certification statement, dated February 6, 2020, that the waste has been treated.

The LDR certification and information appeared to be compliant per WAC 173-303-140. I did not observe any deficiencies noted on the record I reviewed.

### **Manifests**

I requested and reviewed manifests of any dangerous/mixed waste received for disposal at LLBG Trenches 31 and 34 during February 2020. I received one manifest form dated February 6, 2020. The manifest was for containers MW19700153, MW19700160 and MW19700165. I observed the following information:

- Name and mailing address of registrant as Perma-Fix Northwest, 2025 Battelle Blvd, Richland, WA 99354.
- Name and telephone number of contact person as Garrett Knox, (800) 424-9300.
- EPA ID number as WAR000010355.
- Tracking number suffix as 015483140 JJK.
- Signed certification by Jason Rowlette that waste was received on February 6, 2020.

I received a second manifest record on August 6, 2020 as “Documents provided on 5/27/20 did not include LDR the manifest below as this document was onsite and inaccessible due to COVID-19.” The second manifest form was dated February 19, 2020 for containers MW19700161, MW19700162, MW19700164, and MW20700005. I observed the following information:

- Name and mailing address of registrant as Perm-Fix Northwest, 2025 Battelle Blvd, Richland, WA 99354.
- Name and telephone number of contact person as Garrett Knox, (800) 424-9300.
- EPA ID number as WA7890008967.
- Tracking number suffix as 015483141 JJK.
- Signed certification by Daniel Tow that waste was received on February 20, 2020.

The manifest information appeared to be compliant per WAC 173-303-180. I did not observe any deficiencies noted on the record I reviewed.

## Personnel Training

I requested training history reports for the Nuclear Chemical Operators (NCO), Field Work Supervisors and any other approving managers performing/approving all daily dangerous waste inspections for inspection period February 16, 2020 through February 22, 2020. I received records for the following individuals:

- Curt Dehmer – NCO Disposal Operations.
- Bryan Harting – NCO LLBG Trench 31/34 Operations.
- Jay Jones – NCO LLBG Surveillance Operations.
- Sasa Kosjerina – Environmental Compliance Officer.
- Sean Larson – NCO LLBG Surveillance Operations.
- Linda Phillips – NCO LLBG Surveillance Operations.
- Ruben Rivera – NCO LLBG Trench 31/34 Operations.
- Kathy Shumway – NCO LLBG Trench 31/34 Operations.

I requested the current version of the dangerous waste training plan if it is not PRC-STD-TQ-40227, *Low Level Burial Grounds Dangerous Waste Training Plan*, Rev 4, dated May 29, 2018. I was provided PRC-STD-TQ-40227, *Low Level Burial Grounds Dangerous Waste Training Plan*, Rev 4, Change 1, dated September 17, 2019. I reviewed each individual's training history report and compared it with the requirements identified in the training plan. I did not observe any deficiencies for individual's training history or with the training plan.

## Facility Inspections

I requested all dangerous waste daily inspections for LLBG Trench 31 for February 16, 2020 through February 22, 2020. I received two copies of SWSD-PRO-OP-52763, *Trench 31/34 Leachate Collection and Removal System Inspections, Appendix A – Trench 31 RCRA Daily Rounds*. One contained records for February 10-16, 2020. The other contained records for February 17–23, 2020. I observed that each inspection record contained the printed name and handwritten signature of the inspector, the date and time of the inspection, and notations of the observations made. I did not observe any deficiencies noted on the inspection records.

I requested all action leakage rate calculations for LLBG Trench 34 for January 19 2020, through January 25, 2020. I was provided with two copies of SWSD-PRO-OP-52763, *Trench 31/34 Leachate Collection and Removal System Inspections, Appendix B – Trench 34 RCRA Daily Rounds*. One contained records for January 13-19, 2020. The other contained records for January 20–26, 2020. I observed that secondary containment collected rainwater on January 24–26, 2020. I did not observe any notation for the amount of rainwater collected in the secondary containment. I observed that each inspection record contained the printed name and handwritten signature of the inspector, the date and time of the inspection, and notations of the observations made. I did not observe any deficiencies noted on the inspection records.

I requested all weekly wind dispersal control system inspection records for LLBG Trenches 31 and 34 during February 2020. I received four records of SW-040-041, *Inspect Low-Level Burial Grounds, Appendix B – Weekly LLBG RCRA Inspection for Trench 31 in 218-W-5*; and four

records of SW-040-041, *Inspect Low-Level Burial Grounds, Appendix C – Weekly LLBG RCRA Inspection for Trench 34 in 218-W-5*.

I observed that each inspection record contained the printed name and handwritten signature of the inspector, the date and time of the inspection, and notations of the observations made. I did not observe any deficiencies noted on the inspection records.

I requested records of any Significant Weather Event inspections conducted for January 1, 2020 through February 29, 2020. I received nine records of SW-040-041, *Inspect Low-Level Burial Grounds, Appendix P – RCRA Significant Storm Event for 218-W-5 Trench 31*; and nine records of SW-040-041, *Inspect Low-Level Burial Grounds, Appendix Q – RCRA Significant Storm Event for 218-W-5 Trench 34*. I retrieved data from the Hanford Meteorological Station to compare against the inspection records. The significant weather inspection criteria are defined as:

A significant storm event is defined for LLBG Trenches 31 & 34 as any atmospheric disturbance with either winds gusts  $\geq 45$  mph, or precipitation (rain)  $\geq 0.5$  inches within a 24-hour period.

The precipitation parameter was chosen based on data for a 25-year storm in a 24-hour period on the Hanford Site. The Integrated Disposal Facility Final Status Permit lists the same precipitation limit. The high wind criteria are based on historic Hanford Meteorological Station data and the frequency of wind gusts.

Data used to determine whether a storm meets these criteria is obtained through Hanford Meteorological Station #21 on a daily basis and is reviewed by facility operations management. When either criteria is met, significant storm inspections are performed on the following business day.

(Excerpt taken from Compliance Report 18.624, dated August 31, 2018.)

The table below compares inspection dates to the dates of significant weather events that occurred during January and February 2020. I did not request inspection records for March to capture the last significant weather event of the month of February.



**Table 1 Hanford Meteorological Station Historical Charts and Trench 31/34 Significant Storm Inspections**

<b>Inspection Date (2020)</b>	<b>Weather Event (2020)</b>	<b>Precipitation (inches)</b>	<b>Peak Gust (MPH)</b>	<b>Days Between</b>
January 02	January 01	0.02	49	1
January 06	January 05	T	47	1
January 08	January 07		48	1
January 13	January 12		42	1
January 27	January 24	0.04	44	3
February 03	February 01	T	46	2
February 10	February 07	T	48	3
February 24	February 23	0.02	51	1
February 25	February 24		43	1
	February 28		46	NA

T = Trace

I observed that inspections were usually done within a day of significant weather events, unless the event occurred on a weekend or holiday. I observed that some inspections were conducted even though the weather parameters fell below the criteria.

I observed that *Appendix P - RCRA Significant Storm Event Inspection for 218-W-5 Trench 31* asked two questions for the inspection, with “Yes” and “No” check boxes. The first question states “Are trench berms, walls and floor intact (not deteriorated, damaged or eroded)?” The second question states “Is trench entrance ramp intact (not deteriorated, damaged or eroded)?” I observed that *Appendix Q - RCRA Significant Storm Event Inspection for 218-W-5 Trench 34* has three additional questions. These state “Backfill covers bulk waste; Backfill not eroded by wind or water; and Subsidence areas or sinkholes in backfill are NOT observed.” I observed that each inspection record contained the printed name and handwritten signature of the inspector, the date and time of the inspection, and notations of the observations made. I did not observe any deficiencies noted on the inspection records.

I requested all data gathered from monitoring leak detection equipment for LLBG Trenches 31 and 34 from January 19, 2020 through January 25, 2020. I received SWSD-PRO-OP-52763, *Trench 31/34 Leachate Collection and Removal System Inspections, Appendix A – Trench 31 RCRA Daily Rounds*; and SWSD-PRO-OP-52763, *Trench 31/34 Leachate Collection and Removal System Inspections, Appendix B – Trench 34 RCRA Daily Rounds*. I observed written entries of quantities for the “Current level reading,” “Current volume,” “Previous volume,” and “Difference between current and previous volume” for the following fields:

- Primary/Secondary Flowmeter: TR31-SP-FI-1 and TR34-SP-LI-1.
- Secondary Flowmeter: TR31-SP-FI-2 and TR34-SP-FI-2.
- Leachate Tank Digital Indicator: TR31-ST-LI-3 and TR34-ST-LI-3.

- Primary Pump: TR31-SP-LI-1 and TR34-SP-LI-1.
- Secondary Sump: TR31-SP-LI-2 and TR34-SP-LI-2.
- Daily Leak Rate.
- Trench 31 Calculation of Action Leakage Rate and Trench 34 Calculation of Action Leakage Rate.

I received the following response for additional pump data requested. “The Trench 34 pumps TR34-PS-P1, TR34-SS-P3 and TR34-PS-P2 (and corresponding Trench 31 pumps), Primary and Secondary Sumps, Leachate Tank, and Primary and Secondary Flow Meters are not considered leak detection equipment. They are leachate collection and transfer equipment.” I observed a series of questions addressing the physical condition of infrastructure for each daily inspection with “Yes/No” for answers. I observed that each inspection record contained the printed name and handwritten signature of the inspector, the date and time of the inspection, and notations of the observations made. I did not observe any deficiencies noted on any of the inspection records I reviewed.

### **Records Management**

I asked if Solid Waste Information and Tracking System (SWITS) still the waste tracking system, and if addition or different systems are used to please explain. I received the answer as “Yes” for SWITS.

### **Security**

I asked that given staff reduction during COVID-19 period, explain any changes made for how the facility prevents the unknowing/unauthorized entry of persons onto the LLBG Trenches 31 and 34. I received the answer as, “There are no changes to the methods for prevention of unknowing/unauthorized entry of persons onto the LLBG Trenches 31 and 34 during the COVID-19 period.”

I asked if the LLBG Trenches 31 and 34 received any damaged containers in the previous 12 months. If no damaged containers were received for this requested period, I asked to indicate that. The response given was, “No damaged containers have been received in the last 12 months.”

### **Groundwater**

I requested an update on installation of any new wells. I also asked if there was a fourth well, and if so, when was it installed, and if not, if this is being planned. I was given the response as, “There are four wells (299-W9-2, 299-W10-29, 299-W10-30 and 299-W10-31) listed as the wells in the network in DOE/RL-2009-68, Rev 2 (provided), in Table 3-1. All network wells were sampled in accordance with DOE/RL-2009-68, Rev 2 for calendar year 2019. No new wells are planned for this network. See Table 3-1 of this document for well completion dates.”

I requested well monitoring records, well inspection records, and maintenance records for well numbers 299-W9-2, 299-W10-29 and 299-W10-30 (and any additional wells associated with Trenches 31 and 34) during the second half of 2019.

I examined monitoring records for well numbers:

299-W9-2	299-W10-29	299-W10-30	299-W10-31
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I requested all groundwater well monitoring records for the second half of calendar year 2019 for Trenches 31 and 34. I compared the groundwater monitoring records to requirements in DOE/RL 2009-68, *Interim Status Groundwater Monitoring Plan for the LLBG WMA-3*, Revision 2, dated September 2012. I observed wells 299-W9-2, 299-W10-29, 299-W10-30, and 299-W10-31 were sampled semi-annually for dissolved oxygen, phenols, total organic carbon, and total organic halides, as well as oxidation-reduction potential, pH, specific conductance, temperature, and turbidity.

**Note:** Alkalinity, anions (bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulfate), and metals (cadmium, calcium, iron, magnesium, manganese, potassium and sodium) are sampled annually. The samples tested for these parameters were collected outside of my record request time frame. I requested records for the second half of calendar year 2019 and these sample were collected in the first half of calendar year 2019.

I examined Groundwater Well Pre-Trip Inspection records from July 25, 2019 and September 9, 2019. I observed that each well was checked for well number, ID labeling, well access is clear and free of hazards, well is secure, protected and in good condition, equipment appears serviceable, and the well is ready to sample. I observed a written comment that the pump type is “3 prong electric” for each well on each inspection record. The response to my document request noted that the September pre-trip inspection forms were also used for the early October samples.

Well Number	Dates of Groundwater Well Pre-Trip Inspections	
299-W9-2	July 25, 2019	September 3, 2019
299-W10-29	July 25, 2019	September 3, 2019
299-W10-30	July 25, 2019	September 3, 2019
299-W10-31	July 25, 2019	September 3, 2019

I received the following Groundwater Sample Reports:

Well Number	Dates of Sample Collection, Pump Check Inspection, and Depth to Water Measurements		
299-W9-2	July 25, 2019	September 6, 2019	October 16, 2019
299-W10-29	July 25, 2019	September 6, 2019	October 16, 2019
299-W10-30	July 25, 2019	September 6, 2019	October 16, 2019
299-W10-31	July 25, 2019	September 6, 2019	October 16, 2019

I observed that each inspection record contained hand written measurements for pH, temperature, conductance, turbidity, dissolved oxygen and oxidation-reduction potential. I observed the sample numbers and the associated laboratory that each sample was sent to for analysis. I observed that each inspection record contained the printed name and handwritten signature of the inspector, the date and time of the inspection, and notations of the observations made. I did not observe any deficiencies noted on any of the inspection records I reviewed.

The response to my request for well maintenance records was “There were no well maintenance requests for the second half of 2019 for this RCRA groundwater monitoring well network.”

To verify semi-annually sampling during the second half of 2019, I compared the data to “Table 20, Critical Means for Low-Level Waste Management Area 3 for CY 2019 Comparisons” and “Table 21, Intrawell Critical Means for Low-Level Waste Management Area 3 for CY 2019 Comparisons” of the document ECF-HANFORD-18-0079, *Calculation of Critical Means for Calendar Year 2019 RCRA Groundwater Monitoring*, dated May 2019. I observed sampling parameters within the critical means range for each sampled constituent of each well.

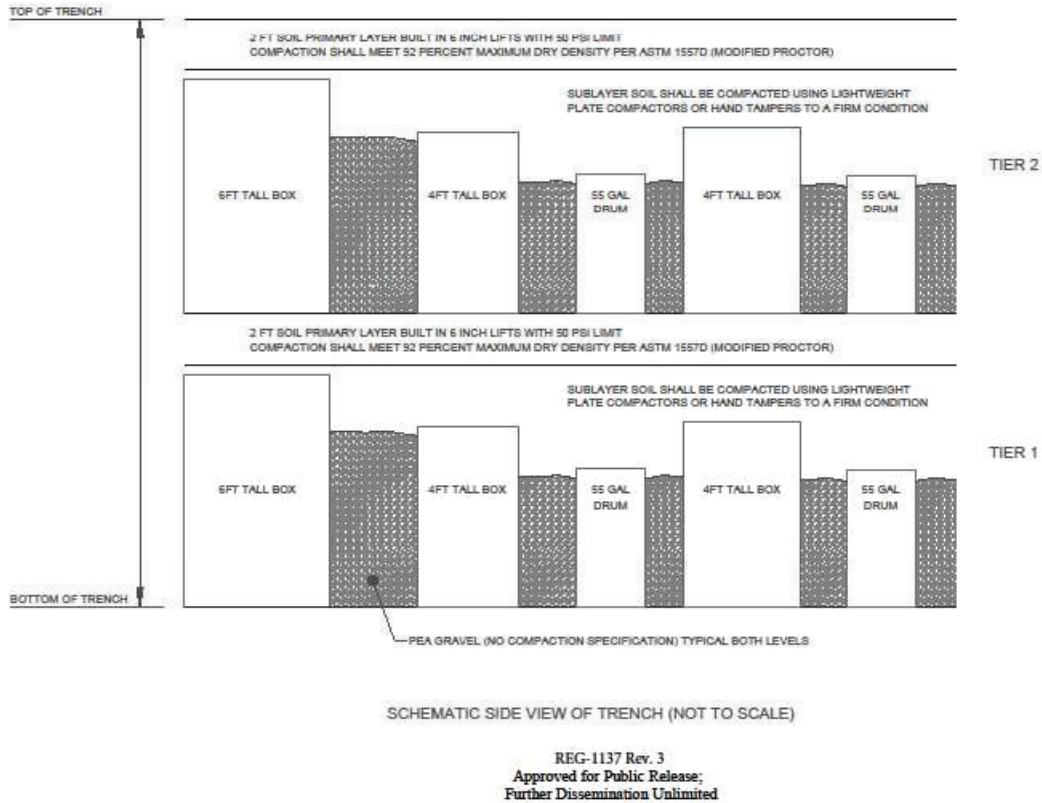
### Facility Operations

I requested a list of all of the different types of waste management equipment used at the LLBG Trenches 31 and 34 (e.g. cranes, forklifts, trucks, etc.). I was given the response “The following list identifies the types of equipment utilized to move containers into place for disposal:

- Forklifts.
- Forklift attachments for various container shapes and sizes.
- Cranes.”

I asked if there is any crane that could generate unacceptable stress on buried waste packages working on a 24-inch operational cover layer and if so, how will jack bearing pressures for the lift be checked to ensure that the ground pressure at depth of 24 inches will not exceed 40 psi. I received the response as “Only the AT1100 crane could generate unacceptable stresses on buried waste packages. The AT1100 crane is currently out of service and not expected to be utilized in Trenches 31 or 34 in the future. There are no additional cranes in use at LLBG Trenches 31 and 34 that could generate unacceptable stress on buried waste packages working on a 24-inch operational cover layer.”

I requested a drawing for the compaction specifications at various depths of LLBG Trenches 31 and 34. I was provided the following item:



**Figure 1 Compaction Specifications at Various Depths of LLBG Trenches 31 and 34**

I asked what the updated process is of daily inspections of the primary and secondary sump levels to ensure proper management and timely removal of leachate from the LCRS. I received a response as “Updated SWSD-PRO-OP-52760, *Trench 31/34 Leachate Collection and Removal System Operations*, Step 2.2.4 to maintain the sump level below 20 inches. In addition, CR-2019-2194, *Corrective Action #5* includes a corrective action to revise operating procedure SWSD-PRO-OP-52760, *Trench 31/34 LCRS Operations*, to include automatic operation of the primary sump pumps. The Corrective Action was extended from April 30, 2020 to June 30, 2020.”

I requested any records showing the flow calculations for the transfer of leachate from the collection sumps to the CAA leachate collection tanks if it is measured from a liquid level from January 19, 2020 through January 25, 2020. I received the response as “Provided records 6.1, 6.2, 9.1, and 9.2 identify the transfer of leachate from the collection sumps to the CAA leachate collection tanks.”

Compliance Problems
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I observed no compliance problems during this inspection.
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*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.*