



OFFICE OF RIVER PROTECTION

P.O. Box 450, MSIN H6-60
Richland, Washington 99352

JUN 13 2016

16-ECD-0024

Ms. Alexandra K. Smith, Program Manager
Nuclear Waste Program
Washington State
Department of Ecology
3100 Port of Benton Blvd.
Richland, Washington 99354

Ms. Smith:

**RESPONSE TO DANGEROUS WASTE COMPLIANCE INSPECTION ON JUNE 25, 2015,
AT LIQUID EFFLUENT RETENTION FACILITY AND EFFLUENT TREATMENT
FACILITY, RESOURCE CONSERVATION AND RECOVERY ACT SITE ID:
WA7890008967, NUCLEAR WASTE PROGRAM COMPLIANCE INDEX NO.: 15.537**

Reference: Ecology letter from J. Mathey to S. Charboneau, RL, J.A. Ciucci, CH2M HILL, K.W. Smith, ORP, and M. Lindholm, WRPS, "Dangerous Waste Compliance Inspection on June 25, 2015 at Liquid Effluent Retention Facility and Effluent Treatment Facility, RCRA Site ID: WA7890008967, NWP Compliance Index No.: 15.537," 16-NWP-071, dated April 21, 2016.

This letter responds to your Inspection Report (Reference) regarding a compliance inspection of the Liquid Effluent Retention Facility (LERF) and Effluent Treatment Facility (ETF) performed on June 25, 2015. The U.S. Department of Energy (DOE), Office of River Protection (ORP), Richland Operations Office, CH2M HILL Plateau Remediation Company (CHPRC), and the Washington River Protection Solutions LLC (WRPS) have reviewed the items of non-compliance with the Dangerous Waste Regulations cited by the Washington State Department of Ecology (Ecology).

The documented inspection observations and ORP/WRPS responses are below:

1. Failure to Place a Well Identification Tag

Permit No. WA7890008967 Revision 8C - Part III Operating Units - Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility Operating Unit Group 3 (OUG-3) Permit Condition III.3.R.2: All wells constructed pursuant to this Permit will be constructed in compliance with Chapter 173-160 WAC incorporated by reference through WAC 173-303- 645(8)(c).

WAC 173-160-420(5) Well tagging: (b) It shall be the well owner's responsibility to place a well identification tag with a unique identification number on every resource protection well they own and which was completed prior to the effective date of this regulation.

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(c) The well tag shall be permanently attached to: (i) The well casing and be visible above land surface for all wells which have been completed above land surface.

Action Required: On February 24, 2016, Ecology received photographic documentation showing that Well 299-E26-10 was tagged with a unique Washington State identification number (BIV 652). No further action required at this time.

Response: No response required.

2. Failure to Update Groundwater Monitoring Plan in Rev. 8c Permit, OUG 3

Permit No. WA7890008967 Revision 8C - Part III Operating Units - Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility Operating Unit Group 3 (OUG-3) Permit Condition III.3.R.3.a. The Permittees will install an additional down gradient monitoring well E-26-15 as identified in Permit Addendum D, Groundwater Monitoring Plan by December 2016.

Permit Condition III.3.R.3.b. Within 60 days of the well installation, the Permittees will submit a Class 2 Permit modification [WAC 173-303-830 Appendix I, C.1.a] to update Addendum D and include the additional monitoring well into the groundwater monitoring network.

Action Required: Within 60 days of receipt of this compliance report, submit a Class 2 permit modification in accordance with WAC 173-303-830 Appendix I, C.1.a., to update Addendum D to include the additional groundwater Well 299-E26-15 into the LERF groundwater monitoring network. Additionally within this timeframe, you must submit a revised "Liquid Effluent Retention Facility Characterization Report" for the additional monitoring Well 299-E26-15 that includes all of the requirements in Permit Conditions III.3.R.3.c, III.3.R.3.c.1, III.3.R.3.c.2, and III.3.R.3.c.2.a.

Response: ORP and WRPS propose submitting a draft revised groundwater monitoring plan and characterization report by July 30, 2016, for informal review by Ecology. After submittal of the draft document, ORP and WRPS request meetings with Ecology to resolve concerns and establish a schedule for preparing a Class 2 permit modification request.

3. Failure to Submit a Permit Modification for Closure Plan; Amendment of Plan

Permit No. WA7890008967 Revision 8C - Part II General Facility Conditions - II.J.3. The Permittees will submit a written notification of, or request for, a Permit modification in accordance with the provisions of WAC 173-303-610(3)(b), whenever there is a change in operating plans, facility design, or the approved closure plan. The written notification or request must include a copy of the amended closure plan for review, or approval, by Ecology.

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Action Required: Within 60 days of receipt of this compliance report, DOE ORP and WRPS must submit a written notification of, or request for, a permit modification in accordance with the provisions of WAC 173-303-610(3)(b), for Load-In Tank 109 (2025ED-59A-TK-109) and Load-In Tank 117 (2025ED-59A-TK-117). The written notification or request must include a copy of the amended closure plan for review, or approval, by Ecology.

Response: ORP and WRPS propose submitting a draft revised the LERF ETF closure plan by October 31, 2016, for informal review by Ecology. This draft revision will address the 2025-ED Load-In Station Tanks 59A-TK-109 and 59A-TK-117. After submittal of the draft document, ORP and WRPS request meetings with Ecology to resolve concerns and establish a schedule for preparing a Class 2 permit modification request.

4. Failure to Properly Complete Dangerous Waste Inspection Logs

Permit No. WA7890008967 Revision 8C - Part II General Facility Conditions - II.O.1. The Permittees will inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges, which may cause or lead to the release of dangerous waste constituents to the environment, or threaten human health. Inspections must be conducted in accordance with the provisions of WAC 173-303-320(2).

WAC 173-303-320(2)(d). The owner or operator must keep an inspection log or summary, including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made, an account of spills or discharges in accordance with WAC 173-303-145, and the date and nature of any repairs or remedial actions taken. The log or summary must be kept at the facility for at least five years from the date of inspection.

Action Required: Immediately upon receipt of this compliance report, DOE ORP and WRPS must include the printed name, the handwritten signature, notations of the observations made, and the date and nature of any repairs or remedial actions taken on inspection records. Within 60 days of receiving this compliance report, DOE ORP and WRPS must submit one week of LERF ETF inspection records to Ecology showing that they are compliant with WAC 173-303-320(2)(d) requirements.

Response: ORP and WRPS acknowledge that a number of procedures and inspection checklists do not specifically address all of the information required by WAC 173-303-320(2)(d). As stated in previous inspection responses, WRPS is currently reviewing and updating procedures for inspection logs company-wide to ensure that all required information is included. Procedures are being updated according to standard WRPS processes and updates should be completed by June 30, 2016.

Attachment 1 is a copy of the weekly waste area inspection sheets for the week of April 10 through 16, 2016, which shows compliance with WAC 173-303-320(2)(d) criteria.

5. Failure to Maintain Operating Records

Permit No. WA7890008967 Revision 8C - Part III Operating Units - Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility Operating Unit Group 3 (OUG-3) Permit Condition III.3.D.1. The Permittees will place the following into the Hanford Facility Operating Record, LERF and 200 Area ETF file required by Permit Condition II.I.1:

Permit Condition II.I.1.b. Records and results of waste analyses required by WAC 173-303-300; WAC 173-303-300, General Waste Analysis. (2) The owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste, or nondangerous wastes if applicable under WAC 173-303-610(4)(d), before they store, treat, or dispose of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter. The analysis must include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes, or data obtained by testing, or a combination of these.

Action Required: Maintain, in the operating record, all records and results of waste analyses required by WAC 173-303-300 for all wastes stored at ETF. DOE ORP and WRPS must place a notation in the LERF ETF operating record that chemical, physical, and/or biological analysis of a dangerous waste for the fluorescent tubes stored at ETF were missing from the operating record. Within sixty (60) days of receipt of this report, DOE ORP and WRPS must submit to Ecology documentation that the notation was included in the operating record.

Response: The following note has been added to the LERF ETF operating record.

“During the Ecology Inspection June 25, 2015 a plastic bag containing three fluorescent tubes was found in the 2025E drum storage area. WRPS had not been aware of this bag of waste prior to this initial observation. The bag had not been seen before WRPS took over the facility from CHPRC. WRPS Waste Services (WS) asked the CHPRC Waste Management Representative (WMR) assigned to help during transition if there was any record of this bag. There were no records of the waste or its designation in the LERF/ETF operating record. *While the bag containing the bulbs was labelled as D001, the chemical, physical, and/or biological analysis of these fluorescent tubes being stored at ETF was missing from the operating record.* WRPS WS then performed a full designation of the waste tubes. WS examined the tubes, obtained the manufacturer information, and then contacted the manufacturer (Phillips Lighting Company) for information to designate the bulbs. The tubes had been incorrectly labelled with a D001 (ignitable) waste code. The designation was completed and the information placed into IDMS in July 2015.” *(emphasis added)*

The LERF ETF unit specific operating record is maintained electronically in the Integrated Document Management System. Permit Condition II.I.1 allows for maintaining the operating record on electronic media.

In performing a full designation of the waste tubes, the manufacturer information was retrieved and found to be identical for each tube; all three tubes were the same make and model. Therefore, one designation was sufficient for all three tubes.

6. Missing Integrity Assessment Schedule for Purgewater Tank 59A-TK-1

Permit No. WA7890008967 Revision 8C - Part III Operating Units - Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility Operating Unit Group 3 (OUG-3) Permit Condition III.3.P.1.a. The Permittees will develop a schedule for conducting integrity assessments (IA). The schedule will meet the requirements of Addendum C, Section C.4.2, and consideration of the factors in WAC 173-303-640(2)(e) or WAC 173-303-640(3)(b) as applicable:

The Permittees will maintain a copy of the schedule required by Permit Condition III.3.P.1.a, in the Hanford Facility Operating Record, LERF and 200 Area ETF file, and conduct periodic integrity assessments according to the schedule. The Permittees will document results of integrity assessments conducted according to the IA in the Hanford Facility Operating Record, LERF and 200 Area ETF file.

Action Required: Within 60 days of receipt of this inspection report, update your tank integrity assessment schedule to include integrity assessments for Purgewater Tank 59A-TK-1.

Response: Purgewater Tank 59A-TK-1 is currently not in use. An integrity assessment of Tank 59A-TK-1 is currently underway. The associated field inspection was completed in March 2016. The final report, certified by an Independent Qualified Registered Professional Engineer, is scheduled to be completed by June 15, 2016. Future integrity assessments will be scheduled based on the findings and recommendations documented in this assessment report. Once developed, this schedule will be placed in the Operating Record, as required Permit condition III.3.P.1.b.

7. Failure to Properly Accumulate Dangerous Waste

WAC 173-303-200(2) Satellite accumulation. (a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) in containers at or near any point of generation where waste initially accumulates (defined as a satellite accumulation area in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes to a satellite container. Satellite

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accumulation is allowed without a permit provided the generator: (i) Complies with WAC 173-303-630(2), (4), (5)(a) and (b), (8)(a), and (9)(a) and (b); and (ii) Complies with subsection (1)(d) of this section. (b) When fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) is accumulated, the container(s) must be marked immediately with the accumulation date and moved within three days to a designated storage or accumulation area.

Action Required: Starting immediately upon receipt of this compliance report, DOE ORP and WRPS must accumulate dangerous waste in the ETF Process Area (at the time of the inspection container number 200LEF-15-001) in accordance with WAC 173-303-200. Within 60 days of receipt of this compliance report, submit to Ecology evidence of your completed corrective action including the date(s) of completion.

Response: The container observed during the inspection was located within a permitted storage and was, therefore, not subject to the generator provisions of WAC 173-303-200. At ETF certain wastes (including maintenance waste) may be immediately placed into permitted storage areas, as occurred in this instance.

The waste is stored in compliance with WAC 173-303-170(3) which requires that generators storing dangerous waste onsite to perform operations in accordance with the Treatment Storage and Disposal Facility requirements as specified by WAC 173-303-600. LERF ETF operates under a final status permit which provides for storage of an estimated 153,932 kilograms of containerized waste annually.

The three container storage areas identified in the Permit Part A represent the indoors at the ETF (Building 2025E), outdoor storage area and container storage at the truck Load-In Station (Building 2025-ED). Concerns regarding the number and location of permitted storage areas at the 200 Area ETF has been previously identified and discussed with Ecology.

8. Failure to Accumulate Waste in a Closed Container

WAC 173-303-200(2) Satellite accumulation. (a) A generator may accumulate as much as fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) in containers at or near any point of generation where waste initially accumulates (defined as a satellite accumulation area in WAC 173-303-040). The satellite area must be under the control of the operator of the process generating the waste or secured at all times to prevent improper additions of wastes to a satellite container. Satellite accumulation is allowed without a permit provided the generator: (i) Complies with WAC 173-303-630(2), (4), (5)(a) and (b), (8)(a), and (9)(a) and (b); and (ii) Complies with subsection (1)(d) of this section. (b) When fifty-five gallons of dangerous waste or one quart of acutely hazardous waste (as defined in WAC 173-303-040) is accumulated, the

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container(s) must be marked immediately with the accumulation date and moved within three days to a designated storage or accumulation area.

WAC 173-303-630(5) Management of containers. (a) A container holding dangerous waste must always be closed, except when it is necessary to add or remove waste.

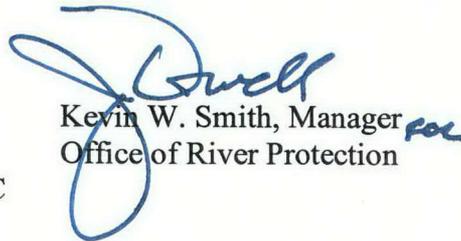
Action Required: Starting immediately upon receipt of this compliance report, DOE ORP and WRPS must ensure that dangerous waste is accumulated in a container which can be closed and is kept closed when while holding dangerous waste unless dangerous waste is being added or removed from the container. Within 60 days of receipt of this compliance report, submit to Ecology evidence of your completed corrective action including the date(s) of completion.

Response: The container observed during the inspection was located within a permitted storage and was, therefore, not subject to the generator provisions of WAC 173-303-200. As required by Permit Condition III.3.O.2.c: *"The Permittees will comply with the requirements for managing wastes in containers in WAC 173-303-630(5), incorporated by reference."* The process has been revised to place a cover over the container (referred to as a Maverick Container) at all times as required, except when adding or removing waste (Attachment 2). Maverick Containers are only used for non-liquid waste. This cover is in place while the Maverick Container is inside in the stainless steel enclosure.

If you have any questions, please contact Bryan R. Trimmerger, Environmental Compliance Division, (509) 376-2674, or Jessica A. Joyner, Washington River Protection Solutions LLC, (509) 376-7533.



Mark A. Lindholm
President and Project Manager
Washington River Protection Solutions LLC



Kevin W. Smith, Manager *for*
Office of River Protection

ECD:BRT

Attachments: (2)

cc: See page 8

Ms. Alexandra K. Smith
16-ECD-0024

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cc w/attachs:

D.J. Alexander, Ecology

J.J. Lyon, Ecology

J.W. Mathey, Ecology

S.L. Nichols, Ecology

J.B. Price, Ecology

S.N. Schlieff, Ecology

R.R. Skinnarland, Ecology

C.E. Clark, RL

C.P. Allen, WRPS

M.R. Greene, WRPS

D.L. Halgren, WRPS

W.F. Johnson, WRPS

J.A. Joyner, WRPS

A.L. Prignano, WRPS

J.A. Voogd, WRPS

Administrative Record (S-2-8)

Environmental Portal, LMSI

WRPS Correspondence

Attachment 1
16-ECD-0024
(3 Pages Excluding Cover Sheet)

Weekly Waste Area Inspection Sheet

Inspect Waste Management Areas

Attachment 1 – Weekly Waste Area Inspection Sheet

Date: 4/13/16

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Inspection Item	Storage Unit HS-0011	2025ED	2025E		LERF BASINS	TEDF		
	Exterior TSD Pad	Exterior /Interior	Interior TSD Pad	LLW				
1. Are the waste containers closed and free from damage (rust, cracks, leaks, dents)?	✓	N/W	✓	N/W	✓	✓		
2. Is the aisle space at least 36" wide between rows, and the rows are not greater than two drums wide? NOTE - Aisle space must be maintained at 36 inches to meet the life safety requirements.	✓	↓	✓	↓	✓	✓		
3. Do the waste containers present in the waste management area match those listed on the inventory obtained from WTS? NOTE - Only applies to active containers on 90-day pad Universal Waste Storage, Satellite areas and TSD pad.	✓		✓		✓			
4. Is the waste management area clear of all combustible material? NOTE - Any material stored or used in the waste management area for waste packaging that is appropriately stored or staged for work (e.g., absorbent pads, bags) is excluded from combustible material check.	✓		✓		✓			
5. Are incompatible waste (e.g., acid vs. caustic, flammable vs. oxidizers, reactives) separated by one physical barrier?	✓		✓		✓			
6. Are the waste container inventory sheet(s) present and completely filled out for each entry including MSDS # for chemical products?	✓		✓		✓			
7. Are the entries recorded on the inventory sheet(s) for the waste collection container appropriate and compatible with the waste type identified on the container? (Active containers on TSD pad only)	✓		✓		N/W			
8. Do waste containers with free liquids (e.g., oil in bung drum) have secondary containment. MARK "Y" for container(s) already stored in areas where secondary containment is provided as part of the facility (ETF, HS-0011)?	No liquids containers		Y		No liquid containers in use			
9. Is secondary containment free from cracks, gaps, open drains, and residue?	↓		N/W		Y	↓	34	4-13-16

(Continued on Next Page)

Inspect Waste Management Areas

Attachment 1 – Weekly Waste Area Inspection Sheet (Cont.)

Date: 4/13/16

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Inspection Item	Storage Unit HS-0011	2025ED	2025E		LERF BASINS	TEDF
	Exterior TSD Pad	Interior /Exterior	Interior TSD Pad	LLW		
10. Are the following available and in good working order: <ul style="list-style-type: none"> • ABC fire extinguisher is unobstructed and within 75 feet of the waste container • Inspection tag current • Spill kit available and in good condition 	✓	✓	✓	N/W	✓	✓
11. Are all waste containers properly labeled and are labels readable, in good condition, legible, and unobscured? LERF/TSD pad: Barcode, ID#, EPA, Major Risk, and/or DOT Label, Radioactive label. <ul style="list-style-type: none"> • Is accumulation start date clearly visible on each container? • Are LERF containers within their 90-day accumulation period? • Are Universal Waste or TSD containers within the one year accumulation period? NOTE - Containers with a Class 9 DOT label will require a second label identifying major risk.	✓	✓	✓	↓	✓	✓
12. Are the area posting(s) intact, unobscured, and in good condition? (e.g., low-level mixed waste, radiological postings) (includes 90-day and SAA signs)	✓	✓	✓	↓	✓	✓
13. Is the waste area free from any accumulated liquids?	✓	N/W	✓	↓	N/W	✓
14. Are the waste containers stored in a way that will not result in personal injury or damage and are no more than two drums wide?	✓	N/W	✓	↓	N/W	✓

NOTE: Any questions marked with an "N" require corrective actions and are circled in red ink per substep 5.2.3.3.

<p><u>Larry Rosane</u> Signature Inspector</p>	<p><u>Larry Rosane</u> Print</p>	<p><u>4/13/16</u> Date</p>	<p><u>1430</u> Time</p>
<p><u>[Signature]</u> Signature SOM/FWS</p>	<p><u>Mike G...</u> Print</p>	<p><u>4/13/16</u> Date</p>	
<p><u>[Signature]</u> Signature WTS</p>	<p><u>Mark R. Kerns</u> Print</p>	<p><u>4/13/16</u> Date</p>	
<p><u>[Signature]</u> Signature EFR</p>	<p><u>Clyde Allan</u> Print</p>	<p><u>4-13-16</u> Date</p>	

Inspect Waste Management Areas

Attachment 2 – Comment/Corrective Actions Sheet

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DATE	Comments/Corrective Actions
4/13/16	Large recycle lead acid Batteries are packaged in wooden box 200LEF-16-009 (8 total) stored in 219C
4/13/16	Paint Drums from LERF were brought down and staged next to RO/RO boxes on SE corner of 2025E LERF-16-001, 002, 003, 004, 005, 006, 008, 010 Drums LERF-16-007 & 009 are empty still at LERF will be used on 44 Basins NO waste @ LERF at this time
4/13/16	Maintance is still accumulating waste Drum 0081729 near polishers on going
4/13/16	all rain water was removed off of RO/RO covers.

Larry Rosane / Larry Rosane / 4/13/16
Signature Inspector Print Date

Mike B. H. / Mike B. H. / 4/13/16
Signature SOM/FWS Print Date

Mark R. Kerns / Mark R. Kerns / 4/13/16
Signature WTS Print Date

Ch. de Alben / Ch. de Alben / 4-18-16
Signature EFR Print Date

Attachment 2
16-ECD-0024
(1 Page Excluding Cover Sheet)

Closed Maverick Container

Closed Maverick Container

