



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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June 21, 2019

19-NWP-096

By certified mail

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 1600, MSIN: A7-01
Richland, Washington 99352

Re: Department of Ecology (Ecology) Review of Responses to Dangerous Waste Compliance Inspection on August 8 and 23, 2017, at 400 Area Dangerous Waste Management Units (DWMUs), Operating Unit Group (OUG) 16, Resource Conservation and Recovery Act (RCRA) Site ID: WA7890008967, NWP Compliance Index No.: 17.598.

Reference: See page 6

Dear Brian T. Vance and Ty Blackford:

Ecology has reviewed your response letter and enclosures, received on January 23, 2019 (Reference). Your letter included corrective actions for items of non-compliance identified in Ecology's August 8 and 23, 2017 inspection of the 400 Area DWMU, OUG-16. As of October 5, 2018, area of non-compliance three, has been addressed. As of January 23, 2019, areas of non-compliance two and five, have been addressed.

In regards to area of non-compliance seven, Ecology does not agree with the United States Department of Energy - Richland Operations Office (USDOE-RL) response because Washington Administrative Code (WAC) 173-303-161 is explicitly a requirement for containers. However, Ecology has decided to withdraw area of non-compliance seven from Compliance Index No.: 17.598.

Areas of non-compliance one, four, and six have not been adequately addressed.

1. WAC 173-303-016(5)(c): From reviewing your response, USDOE-RL has neither provided designation records for the residual sodium in the Fuel Storage Facility (FSF) vessel, loop, and cold trap, nor demonstrated that this residual sodium is not solid waste. This residual waste was generated post 1987, the waste has not been disposed to any standard, and there are no past practice units identified in the Fast Flux Test Facility (FFTF). Accordingly, inclusion of the residual sodium in Appendix C of the *Annual Report on Hanford Site Land Disposal Restrictions* (LDR) is not appropriate and would not satisfy applicable LDR reporting requirements.

Unless USDOE-RL can demonstrate that the residual sodium is not solid waste, Ecology expects the residual sodium to be included in the next LDR report as current waste. Once designated this waste must be included in annual ignitable and reactive waste inspections and managed pursuant to regulatory requirements, including WAC 173-303-640(9), until it is dispositioned in accordance with Section 8.0 of the Tri Party Agreement. Ecology requires USDOE-RL submit WAC compliant designation, or waste determination records, but adjusts the time to complete the corrective action from the date listed in the October 5, 2018, 400 Area DWMU inspection report to 60 days from receipt of this letter.

4. Permit Condition III.16.F.1 and Addendum F.3.1: From reviewing your response, you failed to take precautions to ensure that the Interim Storage Area (ISA) storage module provides protection from precipitation. Ecology adjusts the time to complete the corrective action from the date listed in the October 5, 2018, 400 Area DWMU inspection report to 60 days from receipt of this letter.

6. III.16.B.1: From reviewing your response, USDOE-RL has not provided a schedule to treat and dispose of waste streams in containers referenced in area of non compliance six. USDOE-RL indicated the LDR notification information was located in the 2014 LDR Report. Ecology will consider this violation partially resolved, as long as USDOE-RL and CH2M Hill Plateau Remediation Company (CHPRC) understand that by choosing not to identify Underlying Hazardous Constituents (UHC) the Permittees are committing to treat to LDR standards for *all* UHCs.

Ecology clarifies the containers referenced in area of non-compliance six are unauthorized for storage in the ISA because the Permittees transferred the undocumented containers from unpermitted, greater than ninety day storage without adhering to the permitted process for waste acceptance and storage. The permitted process for waste acceptance in the 400 Area DWMU has always included a pre-transfer review for all waste prior to acceptance and storage. The containers cited in non-compliance six were physically placed in the ISA module between March 12, 2008, and June 24, 2009. When the pre-transfer review process was completed in 2012 (see below), the waste was not authorized because it did not meet the acceptance criteria (as cited in the report).

Pre-Transfer Review Dates	
Package	Date
0016549	June 4, 2012
0043409	June 4, 2012
0044912	June 4, 2012
0044929	August 13, 2012
0044930	June 4, 2012
0046665	June 4, 2012
0049499	June 4, 2012
0055593	August 13, 2012
CP-12-11-F	June 4, 2012
CP-12-12-F	August 13, 2012
CP-12-13-F	June 4, 2012
CP-12-14-F	June 4, 2012
CP-12-16-F	June 4, 2012
CP-12-19-F	June 4, 2012

Ecology amends the citation for area of non-compliance six to also include these conditions from *Modification of the Hanford Facility Resource Conservation and Recovery Act Permit for Storage (WA7 89000 8967), Revision 8C, to Incorporate Final Permit Conditions for the 400 Area Waste Management Unit Located at the Fast Flux Test Facility (FFTF)*, effective November 21, 2007:

Permit Condition III.16.A, "Compliance with Permit Conditions"

The Permittees are authorized to accept and store mixed waste in the 400 Area WMU container storage units, the FSF and the ISA. These DWMUs and corresponding waste management activities will be subject to conditions in this Chapter, its addendums, and the applicable requirements in Parts I and II.

AND

Addendum B.2, "Confirmation Process"

The confirmation process is the process by which the 400 Area WMU staff will confirm their knowledge about a waste before it is placed into storage to ensure the waste is managed properly. The confirmation process includes completing appropriate pre-transfer reviews and verification steps as described in this section.

AND

Addendum B.2.1, "Pre-Transfer Review"

Pre-transfer review takes place before waste can be placed in the 400 Area WMU. The review focuses on whether the analysis information (e.g., waste profile documentation) is sufficient to determine that the waste can be safely stored and that the waste was generated at the 400 Area. The pre-transfer review will be documented and maintained in the unit-specific operating record. The analysis must include data obtained by testing the waste and/or 'knowledge' of the waste (i.e., sufficient information about a waste to substitute reliably for direct testing of the waste). 'Knowledge' consists of existing published or documented analysis data on the waste or data from waste generated in similar processes, including but not limited to the following:

- MSDSs on chemical products
- Analytical data on the waste or a waste from a similar process
- Interview information
- Logbooks
- Procurement records
- Qualified analytical data
- Procedures and/or methods
- Process flow charts
- Inventory sheets
- Vendor information

AND

Addendum B.2.2, "Verification of Waste"

Verification is an assessment performed at waste receipt to substantiate that the waste stream received at the 400 Area WMU is the same as represented by the analysis information and/or supporting documentation. Verification includes a container receipt inspection. Documentation to be reviewed as part of verification activities may include the container inventory documentation, a container listing report, and the waste profile documentation. For all TSD locations within the 400 Area WMU, each container or group of containers is inspected before acceptance by waste operations personnel for damage, proper closure, marking, and proper accompanying documentation.

AND

Addendum B.2.3, "Waste Acceptance"

Acceptance of waste into the 400 Area WMU occurs only after the confirmation process (pre-transfer review and verification) is complete. Conformance issues identified during the confirmation process are documented and managed in accordance with Section H.2.4.

Conformance issues that must be corrected before waste acceptance include:

- Waste that does not match approved waste profile documentation,
- Designation discrepancy, and
- Packaging discrepancy

Emphasis added

AND

WAC 173-303-800(2)

The owner/operator of a dangerous waste facility that transfers, TSD or recycles dangerous waste must, when required by this chapter, obtain a permit in accordance with WAC 173-303-800 through WAC 173-303-840 covering the active life, closure period, groundwater protection compliance period, and for any regulated unit (as defined in WAC 173-303-040) or for any facility which at closure does not meet the removal or decontamination limits of WAC 173-303-610 (2)(b), post-closure care period, unless they demonstrate closure by removal or decontamination as provided under WAC 173-303-800 (9) and (10), or obtain an enforceable document in lieu of a post-closure permit, as provided under subsection (12) of this section. If a post-closure permit is required, the permit must address applicable groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements of this chapter. The denial of a permit for the active life of a dangerous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this section.

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June 21, 2019
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19-NWP-096
400 Area DWMUs
RCRA Site ID: WA7890008967
NWP Compliance Index No.: 17.598
Inspection Date: October 5, 2018

Ecology amends the corrective action for area of non-compliance six, from the date listed on the October 5, 2018, 400 Area DWMU inspection report to the following:

Within 60 days of receipt of this letter, USDOE-RL and CHPRC must transfer the containers listed in area of non-compliance six to an authorized TSD.

Not correcting areas of non-compliance may result in an escalation of enforcement and the issuance of an administrative order, a penalty (up to \$10,000 per day, per violation), or both, as provided by the Hazardous Waste Management Act (Revised Code of Washington 70.105.080 and/or .095).

If you have questions or need further information, please contact me at jackson.davis@ecy.wa.gov or (509) 372-7930.

Sincerely,



Jackson Davis
Dangerous Waste Compliance Inspector
Nuclear Waste Program

so

cc: See page 6

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June 21, 2019
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19-NWP-096
400 Area DWMUs
RCRA Site ID: WA7890008967
NWP Compliance Index No.: 17.598
Inspection Date: October 5, 2018

Reference: Letter 19-ESQ-0029, dated January 17, 2019, "Dangerous Waste Compliance Inspection on August 8, and 23, 2017, at 400 Area Dangerous Waste Management Units (DWMUs), Resource Conservation and Recovery Act (RCRA) Site ID: WA7890008967 Nuclear Waste Program (NWP) Compliance Index Number: 17.598"

cc electronic:

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Jared Mathey, Ecology
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John Price, Ecology
Alex Smith, Ecology
Stephanie Schleif, Ecology
Environmental Portal
Hanford Facility Operating Record
CHPRC Correspondence Control
MSA Correspondence Control
USDOE-RL Correspondence Control

cc: Susan Leckband, HAB
Hanford Administrative Record
NWP Central File
NWP Compliance Index File: 17.598
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