



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

16-ESQ-0036

**FEB 08 2016**

Ms. J. A. Hedges, Manager  
Nuclear Waste Program  
Washington State Department of Ecology  
3100 Port of Benton Boulevard  
Richland, Washington 99354

Dear Ms. Hedges:

RESPONSE TO THE DANGEROUS WASTE COMPLIANCE INSPECTION ON JUNE 30, 2015, FOR THE HANFORD SITE 241-CX TANK SYSTEM, RESOURCE CONSERVATION AND RECOVERY ACT SITE ID: WA7890008967, NUCLEAR WASTE PROGRAM COMPLIANCE INDEX NUMBER: 15.540

This is responding to your letter dated December 1, 2015, (15-NWP-205) regarding the 241-CX Tank System Compliance Inspection that was performed on June 30, 2015. The U.S. Department of Energy Richland Operations Office (RL) is the owner and operator of the 241-CX Tank System, and CH2M HILL Plateau Remediation Company (CHPRC) is the co-operator. The enclosures to this letter provide RL and CHPRC response to the Washington State Department of Ecology's (Ecology) compliance report for the 241-CX Tank System.

The actions requested in your letter have been completed as further described and documented in the enclosures. Responses to the concerns identified in the inspection report are also provided. As explained in the enclosure, RL and CHPRC do not agree with the inspection report conclusion that the requirement for the printed name of the inspector must be the inspector's full name.

Agreement on how inactive dangerous waste units should be managed pending closure has not been documented. On December 2, 2015, RL and CHPRC met with Ecology staff to discuss initiatives for environmental enhancements planned for 2016. One of the topics discussed was the lack of clarity regarding requirements for dangerous waste management units that no longer receive waste but will be closed on a schedule determined by Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones. Under the current tentative agreement, the 241-CX Tank System would be closed by September 30, 2022, under Milestone M-037-13. The tanks have been emptied or stabilized with grout and many interim standards for tanks actively managing dangerous waste would not be necessary to protect human health and the environment, while the tanks are awaiting closure. As proposed in the December meeting, RL and CHPRC would like to work with Ecology to formalize a document, under the Tri-Party Agreement, to establish requirements for managing these tanks until closure is completed.

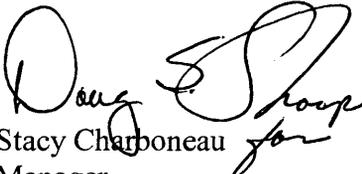
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If you have any questions, please contact me, or your staff may contact Jeffrey A. Frey, Assistant Manager for Safety and Environment, on (509) 376-7727.

Sincerely,

  
Stacy Charboneau  
Manager

ESQ:ACM

Enclosures:

1. DOE/CHPRC Response
2. Operating Record Documentation
3. Annual Inspection Data Sheet

cc w/encls:

D. J. Alexander, Ecology  
J. V. Borghese, CHPRC  
J. W. Cammann, MSA  
J. L. Cantu, Ecology  
J. A. Ciucci, CHPRC  
B. J. Dixon, CHPRC  
D. A. Faulk, EPA  
E. Holbrook, Ecology  
M. N. Jaraysi, CHPRC  
J. W. Mathey, Ecology  
R. E. Piippo, MSA

J. B. Price, Ecology  
D. G. Singleton, Ecology  
R. R. Skinnarland, Ecology  
R. T. Swenson, CHPRC  
J. Temple, Ecology  
M. J. Turner, MSA  
J. F. Williams Jr., CHPRC  
Administrative Record, S-2-9  
Ecology Environmental Portal Hanford  
Ecology NWP Library  
Environmental Portal, LMSI, A3-95  
HF Operating Record (J. K. Perry, MSA A3-01)

cc w/o encls:

G. Bohnee, NPT  
S. Harris, CTUIR  
R. Jim, YN  
NWP Reader File

ENCLOSURE 1

DOE/CHPRC RESPONSE TO WASHINGTON STATE DEPARTMENT OF ECOLOGY  
LETTER 15-NWP-205, DATED DECEMBER 1, 2015

Consisting of 4 page including this coversheet

DOE/CHPRC RESPONSE TO WASHINGTON STATE DEPARTMENT OF ECOLOGY  
LETTER 15-NWP-205, DATED DECEMBER 1, 2015

Requested Actions

Action Requested by Ecology: Within 30 days upon receipt of this compliance report, the U.S. Department of Energy Richland Operations Office (RL) and CH2M HILL Plateau Remediation Company (CHPRC) must note in their operating record the dates that inspection records were deficient and the description of the deficiency with the Washington Administrative Code (WAC) 173-303-320(2)(d) requirements and submit a copy of the documentation placed in the operating record to Ecology.

RL/CHPRC Response: A Note to the File was submitted to the operating record for the CX-Tank System on December 17, 2015, noting the deficiencies cited by Ecology. A copy of the notice to the operating record was provided to Ecology on December 29, 2015. (See Enclosure 2).

RL/CHPRC do not agree with the inspection report conclusion that the requirement for the printed name of the inspector must be the inspector's full name. The terms 'name' and 'printed name' are not defined in the Resource Conservation and Recovery Act of 1976 (RCRA) or the U.S. Environmental Protection Agency (EPA) RCRA regulations, nor in RCW 70.105.010 or WAC 173-303-040. Therefore, per WAC 173-303-040, the meaning of the word "name" in the regulations is the "standard, technical meaning" in common usage by Americans. For the inspection records in question, in all cases the printed initials and surname are sufficiently distinctive for clearly identifying each and every individual who conducted an inspection at this facility.

WAC 173-303-320 requires that the log used to record inspections of dangerous waste containers must include "the printed name and the handwritten signature of the inspector." The regulation does not specify "first and last name" or "full name" or "first name and middle initial." Everyone is familiar with government rules which require us to record these more expansive versions of our names under certain circumstances, but this regulation is not one of them. The purpose of the requirement to record "the printed name . . . of the inspector" is to identify which one of the persons employed as inspectors at that particular Treatment, Storage, and Disposal Facility on that date actually conducted the inspection. This identification can easily be made with an abbreviated version of the inspector's name. There is no need to include the inspector's full first name or full middle name.

Action Requested by Ecology: RL and CHRPC must immediately start documenting the time of the inspection on the inspection records and within 60 days upon receipt of this compliance report, RL and CHPRC must also update and submit to Ecology, data sheets with a space to document the time of the inspection that meets the requirements of WAC 173-303-320(2)(d).

RL/CHPRC Response: The data sheet has been revised to document the time of the inspection. The revised data sheet is provided in Enclosure 3.

### Concerns

Ecology Concern 1: Both the lids associated with the 241-CX -70 and 241-CX -72 tanks were not closed. It is unclear if the lids are a part of the tank system or just on top of the tank system. Since only annual inspections are conducted, it is unclear how long the lids were not closed. If maintenance or other inspections were conducted that prompted the removal of the lids, those procedures or documentation were not directly associated or referenced in the data sheets (1 or 2) utilized.

RL/CHPRC Response: The CX-70 tank has been empty since 1991. The wooden structure visible at the surface is not a tank lid. It is the roof over some plywood shoring that was installed in support of an excavation performed in 1991 TO to gain access to the tank to allow the tank to be emptied. In 2009, the excavation was partially filled due to collapse of the plywood shoring. The tank top is 11 feet below grade and lids to access points to the tank remain closed. It is presumed that the data sheet entry was referring to the wooden cover over CX-70.

The top of the CX-71 tank is about 3.5 feet below grade. A riser with a lid is visible on tank CX-71. However, the low density grout used to stabilize the tank in 1986 extends to the top of the riser. Based on these conditions, no issues requiring correction were identified. The data sheet developed in response to compliance Item 1 above provides additional clarification about the need to note observations and the date and nature of any repairs or remedial actions taken. If a hazard to the public health and environment is imminent or has already occurred, remedial action will be taken immediately. Problems that could lead to hazards to public health and environment will be corrected on a schedule that would prevent those hazards.

Ecology Concern 2: From the records provided, there appears to be no inspection schedule required for dangerous waste inspection under 40 CFR Part 265 Subpart J-Tank Systems for the 241-CX Tank System. There were from Ecology letters noting a frequency other than the annual inspection completed in accordance with the 241-CX Tank System Technical Procedure. Documentation regarding the reasons for not scheduling other frequencies for inspections is referenced as 0302422, when the actual reference number 0059691 is stamped on the letter. The frequency of inspections will need review because the lids on 241-CX-70 and 241-CX -72 were noted as off during the July 10, 2013, annual inspection.

RL/CHPRC Response: The inspection frequency for the 241-CX tank system was established as annual per the letter from Ecology dated June 10, 2003. Since Ecology did not provide a letter number on the letter, it is appropriate to use the number that was stamped on it when it was entered into the Administrative Record (0059691). RL/CHPRC will consider revising the procedure to provide a clearer reference to the June 10, 2003, letter from Ecology. In regards to the inspection frequency, based on the fact that CX-70 is empty with no access to the tank interior, and CX-71 has been filled with grout, RL/CHPRC consider annual inspections to be sufficient.

Ecology Concern 3: I observed that "yes" was marked for all of the items during the July 10, 2013, inspection of 241-CX-72. I also observed the number "1" written next to the mark for "Site Security." I observed the following observations made on the Data Sheet 2- Hot Semi Tanks 241-CX-70, -71, and -72 Surveillance-Comments Sheet for the Tank 241-CX-72 inspection.

Lid off tank make's area open to environment with the initials DP next to the comment. Personnel training should be reviewed for personnel who conduct and document observations made during inspections in accordance with WAC 173-303-320. The criteria item should have been marked "No." The observation was appropriately documented on the Data Sheet 2. The date and nature of repair or remedial action should have been documented on the Data Sheet 2.

RL/CHPRC Response: As noted in the response to Compliance Issue 1, the data sheet has been revised and will address this concern. Personnel who use and review the data sheet will be briefed on how the data sheet should be used to ensure compliance with requirements including those for documenting deficiencies and associated corrective actions.

ENCLOSURE 2

RECEIPT OF REGULATORY REQUESTED DOCUMENTS  
NOTE TO THE FILE FOR THE 241-CX TANK SYSTEM OPERATING RECORD

Consisting of 4 pages including this coversheet

**RECEIPT OF REGULATORY REQUESTED DOCUMENTS**

**TITLE: RESPONSE TO THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY (ECOLOGY) LETTER 15-NWP-205, "DANGEROUS WASTE COMPLIANCE INSPECTION ON JUNE 30, 2015 AT THE HANFORD SITE 241-CX TANK SYSTEM, RESOURCES CONSERVATION AND RECOVERY ACT (RCRA) SITE ID: WA7890008967, NWP: 15.540, ECOLOGY ALLEGED VIOLATION ITEM NUMBER 1**

REGULATORY AGENCY: WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY)

DOE/RL: Cliff Clark/Mike Collins/Tony McKarns

CH2M HILL PRC REPRESENTATIVE: Joel F. Williams Jr.

INSPECTION NUMBER: 2015-061

ECOLOGY NWP NUMBER: 15.540

Requested Information:

Copies of HEXONE "Note to File" dated December 14, 2015, (2 copies - 4 page)

**Note: The Ecology Letter 15-NWP-205 was sent by Ecology December 1, 2015, but "officially" received by DOE-RL/CHPRC on December 8, 2015.**

**Note: Submittal of the attached "Note to File" dated December 14, 2015 meets the intent of letter 15-NWP-205 from Ms. Edward Holbrook, Ecology to Ms. Stacy Charboneau, Manager, USDOE-RL, Dangerous Waste Compliance Inspection on June 30, 2015 for the Hanford Site 241-CX Tank System, Resource Conservation and Recovery Act (RCRA) Site ID: ,WA7890008967, Nuclear Waste Program (NWP) Compliance Index No. 15.540," Alleged Ecology Violation Compliance Issue Item 1 requires of submittal to the 241-CX Tank System operating record identifying the deficiencies 1) missing times, 2) missing printed names and handwritten signatures of the inspector, and 3) Notations of observations documented and missing dates and nature of any repairs or remedial action "within 30 days of receipt of the letter."**

**DOE-RL will submit a formal response letter to Ecology with the attached corrected alleged violation compliance issue.**

REPRESENTATIVE NAME AND TITLE:

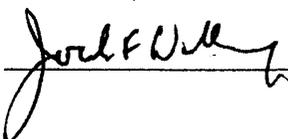
(PRINT): Edward Holbrook/Ecology

SIGNATURE: 

DATE: 12/29/15

CHPRC REPRESENTATIVE NAME AND TITLE:

(PRINT): Joel Williams Jr/CHPRC

SIGNATURE: 

DATE: 12-26-2015

## Operating Record for Treatment, Storage, and Disposal Units

Published Date: 02/26/15

Effective Date: 02/26/15

## Appendix B - TSD-Unit Specific Operating Record Information

Record Date: 12/14/2015Record Title: Note to the FileDocument No. (if applicable): DANGEROUS WASTE OPERATING RECORD FOR 241-CX TANK SYSTEM

TSD Unit:

**Note: if this cover sheet applies to more than one TSD-Unit please check all appropriate boxes.**

- Nonradioactive Dangerous Waste Landfill
- 216-B-3 main Pond
- 216-B-3-3 ditch
- 216-A-29 Ditch
- 216-A-36B Crib
- 216-A-37-1 Crib
- 216-B-63 Trench
- 216-S-10 Pond and Ditch
- 241-CX Tank System
- B Plant
- Central Waste Complex (CWC)
- Hexone Storage & Treatment Facility
- Integrated Disposal Facility (IDF)
- Liquid Effluent Retention Facility & 200 Area Effluent Treatment Facility (LERF/ETF)
- Low-Level Burial Grounds (Trenches 31-34-94)
- Low-Level Burial Grounds (Other Locations)
- PUREX Plant
- PUREX Storage Tunnels
- T-Plant Complex
- Waste Encapsulation and Storage Facility (WESF)
- Waste Receiving and Processing Facility (WRAP)
- 207-A South Retention Basin
- 400 Area Waste Management Unit
- 600 Area Purgewater Storage and Treatment Facility

Submitted By (print/sign/date): Brian J Dixon [Signature] 12/17/2015

- Electronic submittal: Submit Completed Appendix B and attached Operating Record information electronically to WSS Records Management.
- Hard Copy submittal: Submit Completed Appendix B and attached Operating Record information to DWF&RS Records, MSIN T1-41, using Site Form A-6005-152, *CHPRC Active Records Transmittal*.

## Note to the File

December 14, 2015

### DANGEROUS WASTE OPERATING RECORD FOR 241-CX TANK SYSTEM

Background. The 241-CX Tank System is located in the 200 East Area of the Hanford Site in the now demolished Strontium Semiworks Complex. The 241-CX Tank System consists of belowgrade tanks 241-CX-70, 241-CX-71, and 241-CX-72 and ancillary equipment (piping). No further additions to any tank of the 241 -CX Tank System occurred after initial waste receipt during the 1952 to 1958 timeframe. All three tanks have been isolated. Tank 241-CX-70 contains only waste residues and tanks 241-CX-71 and 241-CX-72 have been stabilized with grout. A Part A permit application has been filed for these tanks and a TPA milestone has been established for their closure.

WAC 173-303-320(2) states that the owner or operator of a TSD must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that help prevent, detect, or respond to hazards to the public health or the environment. In addition:

(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.

Inspections of the TSD unit are conducted as required by WAC 173-303-320. Due to the non-operational status of the unit, an annual inspection frequency was approved by Ecology in June 2003.<sup>1</sup> This Note to the File is to document that the 241-CX tank system inspection records completed prior to this date may have the following deficiencies as identified in Ecology's compliance inspection report transmitted via letter 15-NWP-205:

- The time of the inspection was missing.
- The date and nature of any repairs or remedial actions taken were not noted.

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<sup>1</sup> Letter from John B. Price, Ecology, to Joel Hebden, RL, dated June 10, 2003. EDMC Number 0059691

ENCLOSURE 3

DATA SHEET FOR INSPECTION OF 241-CX TANK SYSTEM

Consisting of 2 pages including this coversheet

## Data Sheet 1 – 241-CX Tank System

Personnel performing the surveillance are to circle the appropriate response for each item being checked. Items that are marked "NO" indicate that the criterion is not met. Provide a description of any "NO" responses or other comments of Data Sheet 9.

241-CX Tank System			
Ref: sub-section 4.1	CRITERIA MET?		
"Danger - No smoking" Signage secure and signs visible on each side of facility and legible.	YES	NO	NA
Signs reading "Danger – Unauthorized Personnel Keep Out" or equivalent language are posted and legible on the door to the Tank 72 building and on each side of the barrier around tanks 70 and 71."	YES	NO	NA
The major risk marking (radioactive /corrosive) is present on the Tank 72 building door and on or near the boundary chain for Tank 70 and Tank 71.	YES	NO	NA
Door to Tank 72 building is locked. Above-grade manhole riser lids or pipes that would provide access to tanks 70 and 71 are closed and vents if present are turned downward.	YES	NO	NA
<u>Barriers:</u> Steel T- Posts and chains around Tanks 70 and 71 are in place and functional.	YES	NO	NA
<u>Animal/Pest Intrusion:</u> There are no anthills, termite nests, animal burrows, bird nests, or other indication of animal intrusion.	YES	NO	NA
<u>Vegetation:</u> No evidence of tumbleweed accumulation.	YES	NO	NA
<u>Ground Subsidence:</u> No indications of ground subsidence, depressions, degradation, etc.	YES	NO	NA
<u>Housekeeping:</u> The area within the barriers are free of materials that don't belong there such as unlabeled or unidentified containers.	YES	NO	NA
<u>Occupational Hazards:</u> No obvious hazards such as trip/slip hazards or other unsafe conditions.	YES	NO	NA
There is no staining or other evidence of spills.	YES	NO	NA
<b>Print name, sign, and enter date and time below to document completion of surveillance.</b>			
<b>PERFORMED BY:</b>			
Print Name (Do Not initial)	Signature	Date	Time
<b>FWS REVIEW:</b>			
Print Name (Do Not initial)	Signature	Date	
<b>COMMENTS:</b> _____			