



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

16-ESQ-0035

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 HEXONE STORAGE AND TREATMENT FACILITY, RESOURCE CONSERVATION AND RECOVERY ACT SITE ID: WA7890008967, NUCLEAR WASTE PROGRAM COMPLIANCE INDEX NUMBER: 15.539

This is responding to your letter dated December 1, 2015, (15-NWP-204) regarding the Hexone Storage and Treatment Facility 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 the RL and CHPRC response to the Washington State Department of Ecology's (Ecology) compliance report.

The actions requested in your letter have been completed as further described in the enclosures. Responses to the concerns identified in the inspection report are also provided. One of the concerns identified in the compliance report is in regards to the annual ignitable/reactive inspection. Since the tanks have been filled with grout, it is the position of RL and CHPRC that the tanks no longer pose an ignitability hazard and would not require the annual ignitable/reactive inspection required by the regulations. This position is further supported by the determination in a February 3, 2011, letter from Ecology that the Hexone tanks and ancillary equipment can be disposed of as hazardous debris. Ecology's concurrence that the annual ignitable/reactive inspections can be discontinued is hereby requested.

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 interim status dangerous waste management units that no longer receive waste, but will be closed on a schedule determined by the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones. Under the current tentative agreement, the Hexone Storage and Treatment Facility would be closed by September 30, 2020, under Milestone M-037-10. The tanks have been stabilized with grout and many interim status 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.

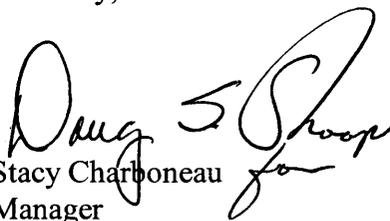
Ms. J. A. Hedges
16-ESQ-0035

-2-

FEB 08 2016

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
4. Ecology Letter dated May 21, 2002

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, TS-2-2
Ecology Environmental Portal Hanford
Ecology NWP Library
Environmental Portal, LMSI
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-204, DATED DECEMBER 1, 2015

Consisting of 4 pages including this coversheet

DOE/CHPRC RESPONSE TO WASHINGTON STATE DEPARTMENT OF ECOLOGY
LETTER 15-NWP-204, 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 (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 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 Hexone Storage and Treatment 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.)

Action Requested by Ecology: RL and CHPRC 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.

Action Requested by Ecology: Within 30 days upon receipt of this compliance report, RL and CHPRC must note in their operating record the date and the description of the deficiency with WAC 173-303-380(1)(e) 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 Hexone Storage and Treatment System on December 17, 2015, noting the missing page from data sheet 1 of the November 12, 2014, annual inspection. A copy of the notice to the operating record was provided to Ecology on December 29, 2015. (See Enclosure 2.)

Concerns

Ecology Concern 1: According to CPSM-PRO-OP-50685, involvement of the Fire Protection Engineer is optional during annual inspections. The following is stated under Sections 1.3, Section 2.4, and Section 3.2. Fire Protection Engineer (FPE) will be invited to accompany the surveillance whenever he is available.

The FPE will be invited to accompany each surveillance but is not required to be present. The FPE will also review surveillance observations to verify that: (1) General combustible loading conditions are within allowable limitations and consistent with analyzed accidents: and (2) Egress requirements are maintained for allowed surveillance pathways.

Considering the U.S. Environmental Protection Agency (EPA) waste code D001 is listed in the Part A Form for the Hexone Facility, a requirement to complete an ignitable and reactive inspection, at least annually, in accordance with the Washington State Dangerous Waste Regulations Chapter 173-303-395 WAC should be performed. According to WAC 173-303-395, "This inspection must be performed in the presence of a professional person who is familiar with the International Fire Code, or in the presence of the local, state, or federal fire marshal."

RL/CHPRC Response: Although D001 is listed in the Part A form, the Hexone tanks were stabilized with grout in 2002 to reduce flammability concerns. It is unlikely that the Hexone tanks are storing ignitable or reactive waste. RL/CHPRC hereby request concurrence that annual ignitable/reactive waste inspections are no longer required for the Hexone Storage and Treatment Facility.

Ecology Concern 2: All 17 buildings listed on the November 12, 2014, surveillance Data Sheet 1 were documented as being inspected with the initials "DSO" and date "11-12-14." It is unclear if the "Housekeeping" deficiency pertained to the 276-S-141 or 276-S-142 tanks or one of the other fifteen buildings listed on the Data Sheet 1. Completing a separate Data Sheet 1 for the Hexone Facility would clarify if deficiencies are related to the Hexone Facility or the other REDOX Complex buildings.

RL/CHPRC Response: RL/CHPRC agree with Ecology's recommendation and have developed a separate data sheet for the Hexone Storage and Treatment Facility. See response to compliance issue number 1.

Ecology Concern 3: The missing second page of the Data Sheet 1 used for the November 12, 2014, annual inspection was not located. The training program should be reevaluated for any personnel who perform the job duty to ensure that records are managed and maintained as required by WAC 173-303-320(2)(d).

RL/CHPRC Response: A separate data sheet for the Hexone Storage and Treatment Facility has been developed and will simplify recordkeeping for this facility. Personnel responsible for completing inspections of the Hexone Storage and Treatment Facility and for maintaining records will be briefed in the use of the new data sheet.

Ecology Concern 4: Although the housekeeping deficiency noted on the Data Sheet 3 associated with the November 12, 2014, annual inspection of the Hexone Facility appears to be related to another building within the REDOX Facility, the date and nature of any repairs or remedial actions taken should be documented. The Data Sheet 3 has a space for actions taken, which filled out properly would close out any concerns regarding the deficiency observed. If the deficiency relates to the Hexone Facility, RL, and CHPRC would be required to document the date and nature of any repairs or remedial actions taken, in accordance with WAC 173-303-320(2)(d).

RL/CHPRC Response: As noted for Concern 2, a separate data sheet for the Hexone facility will address this concern.

Ecology Concern 5: From review of the records provided to me, there appears to be no inspection schedule for the 40 CFR Part 265 Subpart J-Tank Systems for the Hexone Facility. Additionally, no other inspection frequency was record other than the annual facility inspection completed as required in the Hexone Facility Technical Procedure, CPSM-PRO-OP-50685. Documentation regarding the reasons for not scheduling other tank inspections should be included in the facility operating record and made available upon request.

RL/CHPRC Response: A letter from Ecology to RL dated May 21, 2002, (Administrative Record EDMC Number 0057164) grants RL's request for an annual inspection schedule for the Hexone Storage and Treatment Facility. This frequency was based on the completion of actions including grouting of the Hexone tanks in response to an Ecology inspection that was performed in April 25, 2000. A copy of the letter is provided with this response as Enclosure 4.

ENCLOSURE 2

RECEIPT OF REGULATORY REQUESTED DOCUMENTS
NOTE TO THE FILE FOR THE HEXONE STORAGE AND TREATMENT FACILITY
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-204, "DANGEROUS WASTE COMPLIANCE INSPECTION ON JUNE 30, 2015 AT THE HANFORD SITE HEXONE STORAGE AND TREATMENT FACILITY, RESOURCES CONSERVATION AND RECOVERY ACT (RCRA) SITE ID: WA7890008967, NWP: 15.539, 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: 15.539

Requested Information:

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

Note: The Ecology Letter 15-NWP-204 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-204 from Ms. Edward Holbrook, Ecology to Ms. Stacy Charboneau, Manager, USDOE-RL, Dangerous Waste Compliance Inspection on June 30, 2015 for the Hanford Site Hexane Storage and Treatment Facility, Resource Conservation and Recovery Act (RCRA) Site ID: ,WA7890008967, Nuclear Waste Program (NWP) Compliance Index No. 15.539," Alleged Ecology Violation Compliance Issue Item 1 requires of submittal to the Hexone Storage and Treatment Facility 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:

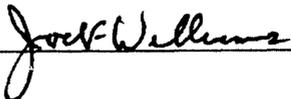
(PRINT): Edward Holbrook/Ecology

SIGNATURE:  _____

DATE: 12/29/15

CHPRC REPRESENTATIVE NAME AND TITLE:

(PRINT): Joel Williams Jr/CHPRC

SIGNATURE:  _____

DATE: 12-29-2015

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: 12/14/2015

Record Title: Note to the file
DANGEROUS WASTE OPERATING RECORD FOR HEXONE
STORAGE AND TREATMENT FACILITY

Document No. (if applicable): _____

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 BAD 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 HEXONE STORAGE AND TREATMENT FACILITY

Background. The Hexone Storage and Treatment Facility (HSTF) consists of two below-grade single-shell carbon-steel tanks (276-S-141 and 276-S-142). The HSTF was used from 1951 through 1967 to store reagent-grade methyl isobutyl ketone (hexone) for makeup as solvent for the REDOX Plant. After 1967, the HSTF contained distilled hexone that had been used in the REDOX Plant. The organics in the tanks were removed by distillation in 1992 and the tanks were interim stabilized with grout in 2002. 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.

WAC 173-303-380(1) requires records and results of inspections required by WAC 173-303-320(2)(d) be recorded in the operating record.

Inspections of the TSD unit are conducted annually in conjunction with the annual surveillance of the REDOX facility's Surveillance and Maintenance Plan. This Note to the File is to document that the HSTF inspection records completed prior to this date were lacking the time of inspection as identified in Ecology's compliance inspection report transmitted via letter 15-NWP-204. Additionally the second page of data sheet 1 from the November 12, 2014 annual inspection was missing.

ENCLOSURE 3

DATA SHEET FOR INSPECTION OF HEXONE STORAGE AND TREATMENT FACILITY

Consisting of 2 pages including this coversheet

Data Sheet 2 – Hexone Storage and Treatment Tanks

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.

Hexone Storage and Treatment Tanks			
Refer to 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 each side of the enclosure fence.	YES	NO	NA
The major risk marking (radioactive/flammable) is present on the enclosure fence.	YES	NO	NA
<u>Barriers</u> : Perimeter fencing intact, in good shape with no signs of need of repair?	YES	NO	NA
<u>Animal/Pest Intrusion</u> : No animal intrusion, anthills, termite nests, animal burrows, bird nests, etc.	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>Occupational Hazards</u> : No obvious hazards such as trip/slip hazards or other unsafe conditions.	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
There is no staining or other evidence of spills.	YES	NO	NA
Print name, sign, and enter date and time below to document completion of surveillance.			
PERFORMED BY:			
Print Name (Do Not initial)	Signature	Date	Time
FWS REVIEW:			
Print Name (Do Not initial)	Signature	Date	
COMMENTS: _____			

ENCLOSURE 4

ECOLOGY LETTER DATED MAY 21, 2002
AR EDMC NUMBER 0057164

Consisting of 3 pages including this coversheet



0057164

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

May 21, 2002

Mr. Peter Knollmeyer
U. S. Department of Energy
P. O. Box 550; MSIN: A5-11
Richland, Washington 99352

Mr. Michael C. Hughes
Bechtel Hanford Incorporated
2250 George Washington Way; MSIN: H0-09
Richland, Washington 99352

RECEIVED
MAY 22 2002
EDMC

Dear Messrs. Knollmeyer and Hughes:

Re: Completion of Compliance Actions at the Hexone Storage and Treatment Facility.

On April 25, 2000, the Washington State Department of Ecology (Ecology) conducted an inspection of the Hexone Storage and Treatment Facility (HSTF). On May 26, 2000, Ecology issued a letter to the U. S. Department of Energy (USDOE) documenting findings from the April 25, 2000 inspection and actions required to remedy them. On March 22, 2002, the USDOE issued a letter reporting completion of the actions which satisfied the findings reported in Ecology's May 26, 2000 letter. The USDOE has since requested that self-inspections of the HSTF be conducted annually.

Ecology herein grants the USDOE's request for an annual inspection schedule for the HSTF and considers the inspection of the HSTF closed.

If you have any questions regarding this letter, please contact me at (509) 736-3031.

Messrs. Knollmeyer and Hughes
May 21, 2002
Page 2

Sincerely,

Bob Wilson

Bob Wilson, Compliance Inspector
Nuclear Waste Program

BW:nc

cc: Julie Atwood, BHI
Craig Cameron, EPA
Ken Niles, OOE
Administrative Record: HSTF