



Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
APR 26 2017



Ms. Mary McDaniel, Manager
Quality and Contractor Assurance
Nuclear Waste Partnership LLC
P.O. Box 2078
Carlsbad, NM 88221-2078

Subject: Issuance of Report for Surveillance S-17-34, Transportation Authorization
Surveillance for the LANL/CCP TRU Waste Stored at WCS

Dear Ms. McDaniel:

The Carlsbad Field Office (CBFO) conducted Surveillance S-17-34, Transportation Authorization Surveillance for the Los Alamos National Laboratory (LANL) Central Characterization Program (CCP) Transuranic (TRU) Waste Stored at Waste Control Specialists (WCS), April 24 – 26, 2017. The surveillance report is enclosed. The surveillance was conducted to verify that all of the requirements of CCP-TP-201, Revision 0, *Verification of Shipping Criteria and Emplacement Criteria*, have been implemented, specifically for waste stream LA-MHD01.001.

The surveillance team concluded that the applicable requirements of DOE/CBFO-94-1012, *Quality Assurance Program Document*, DOE/WIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant*, DOE/WIPP 07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis*, CCP-TP-201, *Verification of Shipping Criteria and Emplacement Criteria*, and related quality assurance and technical implementing procedures specific to LA-MHD01.001 waste containers stored at WCS identified in this report have been met. At this time, all necessary requirements for the completion of CCP-TP-201 Attachment 1 have been met except for the requirement for receipt of CBFO written approval to ship the waste stream or sub-population. After the written approval from CBFO to ship the specific LA-MHD01.001 containers stored at WCS is received, CCP-TP-201 Attachment 1 – Site Project Manager Previously Certified Waste Shipping Criteria Review Checklist can be completed, releasing the specific LA-MHD01.001 waste to be shipped from WCS to the Waste Isolation Pilot Plant. Based on the container certification dates reviewed, the containers meet the requirements of the Documented Safety Analysis (DSA) Chapter 18.8 for being previously certified waste prior to the DSA Revision 5b.

If you have any questions concerning the surveillance, please contact me at (575) 234-7476.

Sincerely,

Michael R. Brown, Director
CBFO, Office of Quality Assurance

Enclosure



Ms. Mary McDaniel

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cc: w/enclosure

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W. Mackie, CBFO	ED
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M. Stapleton, CBFO	ED
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M. Ramirez, NWP	ED
R. Reeves, NWP	ED
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J. Harvill, NWP	ED
A.J. Fisher, NWP	ED
B. Pace, NWP	ED
C. Soaterna, NWP	ED
D. Wade, NWP	ED
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*ED denotes electronic distribution

CBFO SURVEILLANCE REPORT

Surveillance Number: S-17-34 **Date of Surveillance:** April 24 – 26, 2017

Surveillance Title: Transportation Authorization Surveillance for the Los Alamos National Laboratory Central Characterization Program Transuranic Waste Stored at Waste Control Specialists (WCS)

Organization: National TRU Program (NTP), Carlsbad Field Office (CBFO) Nuclear Waste Partnership (NWP) Central Characterization Program (CCP)

Surveillance Team:¹

Michael Brown	Quality Assurance Director, CBFO Office of Quality Assurance
Jim Vernon	Surveillance Team Leader, CBFO Technical Assistance Contractor (CTAC) NQA-1, Lead Auditor
Dick Blauvelt	Team Member, Technical Specialist, CTAC – Acceptable Knowledge
Randy Fitzgerald	Team Member, Technical Specialist, CTAC – Acceptable Knowledge
Ricardo Chavez	Team Member, CTAC – Quality Assurance NQA-1 Auditor

Surveillance Scope:

In accordance with DOE/WIPP 07-3372, Revision 5b, *Waste Isolation Pilot Plant Documented Safety Analysis (WIPP DSA)*, section 18.1, an independent assessment was conducted by CBFO Quality Assurance. This independent assessment is a smaller assessment of a specific activity; therefore, Surveillance S-17-34 was conducted.

The surveillance team evaluated Los Alamos National Laboratory Central Characterization Program (LANL/CCP) preparations to ship waste from LANL/CCP Waste Stream LA-MHD01.001 (Summary Category Group S5000) for compliance to the WIPP DSA, section 18.8, and DOE/WIPP-02-3122, Revision 8, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant (WAC)*, Appendix H (H.5) and I. This activity is performed to evaluate shipment readiness of specific waste containers stored at WCS in the Container Storage Building for compliance with upper-tier requirements.

¹ All of the team members and technical specialists were selected on the basis of meeting the technical qualifications and knowledge of the item and/or process being assessed.

The individual containers at WCS that are subject to Surveillance S-17-34 are as follows:

Container Number	Container Type Code*	Current Location	Waste Stream ID	Certification Date
LA00000068009	2	WCS	LA-MHD01.001	1/28/2014
LA00000068227	2	WCS	LA-MHD01.001	3/4/2014
LA00000068263	2	WCS	LA-MHD01.001	3/25/2014
LA00000068266	2	WCS	LA-MHD01.001	3/17/2014
LA00000068267	2	WCS	LA-MHD01.001	2/24/2014
LA00000068270	2	WCS	LA-MHD01.001	3/17/2014
LA00000068271	2	WCS	LA-MHD01.001	2/24/2014
LA00000068763	2	WCS	LA-MHD01.001	1/16/2014

* Container Type Code 2 is a Direct Load Standard Waste Box

Surveillance Results:

Implementation of CCP-TP-201, *Verification of Shipping Criteria and Emplacement Criteria*, Revision 0, assures compliance to the requirements set forth in the WIPP DSA and the WAC for resuming shipments of currently certified waste. Attachment 1 – SPM Previously Certified Waste Shipping Criteria Review Checklist, when completed, is submitted by the CCP Site Project Manager (SPM) to CCP Records and a copy is provided to the Waste Data System (WDS) Data Administrator (DA). The CCP-TP-201 process ensures the WDS/DA that all of the WIPP DSA section 18.8 requirements for releasing waste to be shipped from generator sites are complete. The team evaluated each item in the CCP-TP-201 Attachment 1 (cited verbatim in italics below) by obtaining and reviewing relevant objective evidence.

Activities Evaluated:

CCP-TP-201

During CBFO Audit A-17-21 of the Oak Ridge National Laboratory Central Characterization Program (ORNL/CCP), CCP-TP-201, *Verification of Shipping Criteria and Emplacement Criteria*, Revision 0, was evaluated for adequacy and found to be adequate. The audit team determined that only qualified personnel will perform work to the procedure, the SPM verifies the Previously Certified Waste Shipping Criteria Review, and generates the Attachment 1 – SPM Previously Certified Waste Shipping Criteria Review Checklist. After the Attachment 1 is completed, per the procedure it is submitted to CCP Records and the SPM provides a copy to the WDS DA.

During Surveillance S-17-34, a completed CCP-TP-201 Attachment 1 – SPM Previously Certified Waste Shipping Criteria Review Checklist for waste stream LA-MHD01.001 was not presented to the surveillance team; however, the surveillance team reviewed the necessary process to complete the Attachment 1.

1. *Has a CCEM been submitted to CBFO in accordance with CCP-TP-200 for this waste stream or sub-population?*

Completed

Objective Evidence:

The surveillance team reviewed the Chemical Compatibility Evaluation Memorandum (CCEM) for the waste stream LA-MHD01.001, source document CCE06. The CCEM was generated in accordance with CCP-TP-005, Revision 28, *CCP Acceptable Knowledge Documentation*. The surveillance team also reviewed the CCP-TP-200, Revision 1, Attachment 1 – SPM Chemical Compatibility Evaluation Review Checklist and Attachment 2 - SPM Acceptable Knowledge Assessment Review Checklist for LA-MHD01.001.

2. *Has a BOK memorandum been submitted to CBFO in accordance with CCP-TP-005 for this waste stream or sub-population?*

Completed

Objective Evidence:

The surveillance team reviewed the original and the amended Basis of Knowledge (BOK) memorandum for waste stream LA-MHD01.001. The BOK memorandum was generated in accordance with CCP-TP-005, Revision 29, *CCP Acceptable Knowledge Documentation*.

3. *Has CBFO CCEM written concurrence for this waste stream or sub-population been received?*

Completed

Objective Evidence:

The surveillance team received the amended CBFO approval of the CCE06 Chemical Compatibility Evaluation for Waste Stream LA-MHD01.001 to limit approval to a waste stream subpopulation at the Container Storage Building at WCS and rescinding waste stream, CBFO memorandum CBFO:ONTP:JS:RMS:17-0630:UFC 5900.00.

4. *Has a CBFO BOK written concurrence for this waste stream or sub-population been received?*

Completed

Objective Evidence:

The surveillance team reviewed the approval of the Basis of Knowledge Criteria Evaluation for LA-MHD01.001 Waste Handling Building Containers and Surface-Stored (Type 1) Container at Waste Control Specialists, Department of Energy memorandum CBFO:ONTP:JS:RMS:17-0631:UFC 5900.00. The surveillance team also reviewed the Carlsbad Field Office Basis of Knowledge Review Board Charter, Revision 0, CBFO:OOM:KL:GS:17-0013:UFC 1100.00.

5. *Has a CBFO Waste Stream Profile Form (WSPF) written approval for this waste stream been received?*

Completed

Objective Evidence:

Revision 1 for waste stream LA-MHD01.001, CP:13:01218, was reviewed by the surveillance team. Revision 1 was approved on May 22, 2013.

6. *Has a CBFO TRUCON code approval for this waste stream been received?*

Completed

Objective Evidence:

The surveillance team reviewed DOE/WIPP 01-3194, *CH-TRU Waste Content Codes* (CH-TRUCON), Revision 53. In this revised document, a chemical compatibility evaluation was completed for the following CH-TRUCON code/waste stream combinations:

CH-TRUCON Code	Waste Stream(s)
LA 111/211	LA-MIN03-NC.001
LA 125/225	LA-MHD01.001 LA-MHD09.001

LA 127/227	LA-MIN03-NC.001
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7. *Has the WDS Data Administrator (DA) implemented additional checks in the WDS before containers can be used to populate payloads in the WDS; as verified through written correspondence.*

Completed

Objective Evidence:

Nuclear Waste Partnership (NWP) implemented additional checks in the WDS for each container before those containers can be used to populate payloads in WDS. See CBFO Surveillance S-17-32, *NWP Readiness to Remove Read Only Controls from WDS*, and Surveillance S-17-07, *Waste Data System*.

The surveillance team also reviewed the Acceptable Knowledge Assessment (AKA) for waste stream LA-MHD01.001 and Addendum 1 and confirmed that all the containers associated with this surveillance have been assigned to the AKA.

8. *Has CBFO written approval to ship the waste stream or sub-population been received?*

Completed

Objective Evidence:

At this time the CBFO written approval to ship the waste stream or sub-population for LA-MHD01.001 has not been received. The impact of not receiving the CBFO written approval to ship the waste stream or sub-population for LA-MHD01.001 is explained in the Surveillance Team Conclusions section of this report.

9. *Have all containers been verified to be part of a CBFO-approved waste stream?*

Completed

The surveillance team reviewed the approved Waste Stream Profile Form for waste stream LA-MHD01.001 and the proposed containers to be shipped from WCS to WIPP. All of the proposed containers to be shipped from WCS to WIPP are a part of a CBFO-approved waste stream. The surveillance team confirmed through container-specific characterization data that the eight containers associated with this surveillance are assigned to waste stream LA-MHD01.001 and were certified under an approved certification program (LANL/CCP).

10. *Have all requirements of WIPP DSA Section 18.8 been satisfied?*

Completed

The WIPP DSA section 18.8 criteria have been incorporated into CCP-TP-201, Attachment 1. This was evaluated during Audit A-17-21. When questions 1 – 9 of Attachment 1 are answered “yes” for the particular waste stream, all of the WIPP DSA section 18.8 criteria are considered met.

Corrective Actions:

Corrective Action Reports/Deficiencies Corrected During the Surveillance

No Corrective Action Reports/Deficiencies were produced as a result of this surveillance.

Observations

No Observations were produced as a result of this surveillance.


Recommendations

No Recommendations were offered as a result of this surveillance.

Surveillance Team Conclusions:

The surveillance team concluded that the applicable requirements of DOE/CBFO-94-1012, *Quality Assurance Program Document*, DOE/WIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant*, DOE/WIPP 07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis*,

CCP-TP-201, *Verification of Shipping Criteria and Emplacement Criteria*, and related quality assurance and technical implementing procedures specific to LA-MHD01.001 waste containers stored at WCS identified in this report have been met. At this time, all necessary requirements for the completion of CCP-TP-201 Attachment 1 have been met except for the requirement for receipt of CBFO written approval to ship the waste stream or sub-population. After the written approval from CBFO to ship the specific LA-MHD01.001 containers stored at WCS is received, CCP-TP-201 Attachment 1 – SPM Previously Certified Waste Shipping Criteria Review Checklist can be completed, releasing the specific LA-MHD01.001 waste to be shipped from WCS to the Waste Isolation Pilot Plant.

Surveillance Team Leader:  _____ Date: 4-26-17
Jim Vernon, CTAC

CBFO OQA Director Approval:  _____ Date: 4/26/2017
Michael R. Brown