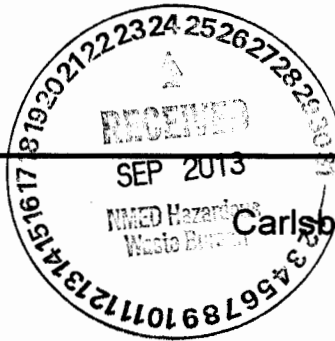




United States Government

Department of Energy

memorandum



Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: September 24, 2013
REPLY TO
ATTN OF: CBFO:OQA:MPN:MAG:13-2049:UFC 2300.00
SUBJECT: Transmittal of Surveillance Report S-13-24, ANL/CCP Loading and Transportation Activities
TO: Dale J. Dietzel, DOE-CH

The Carlsbad Field Office (CBFO) conducted Surveillance S-13-24, Argonne National Laboratory (ANL) Central Characterization Program (CCP) Loading and Transportation Activities for Shipping Remote-Handled Transuranic Waste Using Shielded Containers. The surveillance was conducted September 11-12, 2013, at the ANL in Chicago, Illinois.

The surveillance team evaluated ANL/CCP compliance with requirements in the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit, the *Contact-Handled Transuranic Waste Authorized Methods for Payload Control*, and the *CBFO Quality Assurance Program Document*. The team determined that the ANL/CCP is in compliance with all pertinent regulatory requirements for shipping the subject waste to the WIPP. As described in the attached report, no concerns were identified during the surveillance.

If you have any questions concerning this report, please contact me at (575) 234-7483.

Martin P. Navarrete
Senior Quality Assurance Specialist

Attachment

cc: w/attachment

- | | | | |
|--------------------------|-----|--------------------------|----|
| J. Franco, CBFO | *ED | S. Escareno-Soto, NWP/QA | ED |
| O. Vincent, CBFO | ED | T. Peake, EPA | ED |
| J.R. Stroble, CBFO | ED | L. Bender, EPA | ED |
| D. Miehl, CBFO | ED | E. Feltcorn, EPA | ED |
| M. Pinzel, CBFO | ED | R. Joglekar, EPA | ED |
| N. Castaneda, CBFO | ED | S. Ghose, EPA | ED |
| R. Purucker, DOE-CH | ED | R. Lee, EPA | ED |
| K. Joshi, DOE-CH | ED | J. Kieling, NMED | ED |
| F. Sharif, NWP | ED | T. Kiphuis, NMED | ED |
| T. Reynolds, NWP/CCP | ED | S. Holmes, NMED | ED |
| D.E. Gulbransen, NWP/CCP | ED | R. Maestas, NMED | ED |
| V. Cannon, NWP/CCP | ED | C. Smith, NMED | ED |
| A.J. Fisher, NWP/CCP | ED | J. Harvill, CTAC | ED |
| I. Joo, NWP/CCP | ED | R. Allen, CTAC | ED |
| M. Walker, NWP/CCP | ED | B.J. Verret, CTAC | ED |
| W. Ledford, NWP/CCP | ED | D. Harvill, CTAC | ED |
| J. Carter, NWP/CCP | ED | G. White, CTAC | ED |
| J. Hoff, NWP/QA | ED | Site Documents | ED |
| B. Allen, NWP/QA | ED | CBFO QA File | |
| S. PUNCHIOS, NWP/QA | ED | CBFO M&RC | |

*ED denotes electronic distribution



CBFO SURVEILLANCE REPORT

Surveillance Number: S-13-24 **Date of Surveillance:** September 11 – 12, 2013

Surveillance Title: Argonne National Laboratory Central Characterization Program Loading and Transportation Activities for Shipping Remote-Handled Transuranic Waste Using Shielded Containers

Organization: Argonne National Laboratory Central Characterization Program (ANL-CCP)

Surveillance Team:

Martin Navarrete	Carlsbad Field Office (CBFO) Quality Assurance (QA) Representative
B.J. Verret	Team Leader, CBFO Technical Assistance Contractor (CTAC)
Todd Sellmer	Technical Specialist, Nuclear Waste Partnership LLC (NWP)
James Rhoades	CBFO Representative

Surveillance Scope:

Surveillance S-13-24 evaluated the adequacy, implementation, and effectiveness of ANL-CCP technical and quality assurance programs, as applicable, to meet requirements in the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit, the *Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC)*, and the *CBFO Quality Assurance Program Document (QAPD)* for loading and transporting remote-handled transuranic (RH-TRU) mixed waste to the WIPP from ANL using shielded containers. The surveillance was conducted through direct observation of operations, interviews with operators and management personnel, and document/record reviews.

Activities Evaluated:

Transportation Elements:

- Characterization Data Review/Validation (including flammable gas analysis and gas generation testing)

No new or additional characterization activities have been performed on the shielded container waste. No flammable gas analysis or gas generation testing were performed.

- Database Entry, Controls, WIPP Waste Information System (WWIS) Interface

The audit team verified that the containers were entered into the Waste Data System (WDS) and that the WWIS was used to verify the waste was acceptable to build into payloads. The surveillance team determined this activity was performed in accordance with requirements.

- Transuranic Waste Content (TRUCON) Codes and Shipping Category Application

The surveillance team confirmed that the appropriate TRUCON codes have been added to the Acceptable Knowledge (AK) Summary, the Waste Stream Profile Form (WSPF), and the Summation of Aspects of AK Summary Report for waste

stream AERHDM. The TRUCON codes were verified to be consistent with the content of the RH and contact-handled (CH) TRUCON code manuals. In addition, applicable references were made to the use of shielded containers. This activity was determined to be acceptable.

- **Container and Payload Certification**

The WWIS/WDS was examined for the containers placed into the shielded container assemblies. Certification was verified through examination of emails and data provided to the Transportation Certification Official at ANL-CCP. Shipping package AES13001 was examined. The Payload Container Transportation Certification Documents included in the shipping package and the Payload Assembly Transportation Certification Documents provided objective evidence that the containers and payloads were certified for shipment.

The shipping package contains a Container Integrity Checklist, which is used to verify containers are suitable to be included in the shipment. The surveillance team observed container integrity inspections conducted by the ANL-CCP on September 11, 2013, and verified that all requirements were met.

- **Shipment Certification**

Shipment certification information was included in shipping package AES13001. This information consists of dose rates for the individual shielded containers, the loaded HalfPACT (both Internal Containment Vessel and Outer Containment Vessel) dose rates and leakage rates, and loaded shipment dose rates. Additionally, the Illinois Department of Transportation performed on-site weighing of the loaded shipment to confirm that the shipment weight was within specifications and regulated limits. Finally, the WDS Shipment Summary Report: Status "Shipment in Route to Destination" form is included in the shipping report. Shipment certification met all requirements and was determined by the surveillance team to be satisfactory.

- **U.S. Department of Transportation Documentation/Label Selection/Manifest Preparation**

Shipping report AES13001 contains Hazardous Waste Manifest 010995115JJK (completed and preliminary copies). Labels were examined on the loaded HalfPACTs and on the trailer prior to shipment and were found to be acceptable.

- **Transportation Tracking and Communication (TRANSCOM) System Interface**

The surveillance team verified that the shipment was released through contact with the Central Monitoring Room by the Transportation Certification Official. The team also verified that TRANSCOM was contacted immediately prior to the shipment leaving ANL. All requirements were met for TRANSCOM system interface.

- **Planning Waste-specific TRAMPAC Preparation and Control**

No waste-specific TRAMPAC preparation and control was needed for this shipment.

- **Long-Term Objective Data, Report, Conclusions**

The Long-term Objective Data, Report, Conclusions were not required.

- **Acceptable Knowledge and WSPF Updates and Corrections**

AK documentation was reviewed for ANL RH waste stream AERHDM to assure that appropriate and applicable references were made addressing the use of the shielded container for transportation and emplacement of a portion of the RH waste stream. The documents reviewed included the AK Summary Report, CCP-AK-ANLE-500, Rev. 11, and the WSPF and attachments, Rev. 1. During the review of the revision to the WSPF and attachments, the surveillance team examined an update to the waste stream estimated volumes, supported by AK Source documentation. All requirements were found to have been satisfactorily addressed.

- **Other Areas Identified by the Surveillance Team**

The surveillance team examined spare parts and found them to be properly labeled and stored.

General Quality Assurance Program Elements:

- **Personnel Qualification and Training**

Training and qualification of CCP Waste Transportation Operators and the Transportation Certification Official were verified to be complete and current.

- **Nonconformances**

There have been no nonconformances generated in regard to shielded container activities.

- **Records**

The surveillance team verified that the records transmittal process for submittal of the completed and validated shipping package AES13001 to CCP Records in Carlsbad, NM, is performed in accordance with CCP procedures. These activities were deemed to be satisfactory.

- **Identification and Control of Items**

The only items controlled are spare parts, which are supplied by NWP to the Mobile Loading Unit. Spare parts were examined and found to be properly labeled and stored.

- **Documents/Records Control (notebooks/logbooks)**

Documents completed by the ANL-CCP loading team are reviewed for accuracy and completeness and included in shipping package AES13001. The shipping package is subject to review and validation by the ANL-CCP supervisor and the Transportation Certification Official, and is submitted to the CCP Records custodian upon completion, review and validation, as required.

- **Software Version Installation (as applicable)**

The most recent version of the WWIS/WDS was verified to be in use for this shipment.

- Measuring and Test Equipment

Material and Testing Equipment certifications were verified to be current, and certification and control of certified items for recall to ensure calibration intervals are not exceeded were verified to be satisfactory.

Technical Elements:

- WIPP Waste Information System/Waste Data System

The surveillance team verified that the proper information regarding shipment AES13001 had been entered into the WWIS/WDS and that the information was complete and accurate.

- Waste Certification (e.g., WSPF)

During the surveillance, WSPFs were reviewed. Information which was provided in the Characterization Information Summary and Summation of Aspects of AK Summary Report were found to be consistent with the latest revision of CCP-TP-002. Changes to the Resource Conservation and Recovery Act Waste Analysis Plan were adequately addressed. All requirements for content and form of WSPFs have been satisfactorily addressed. The WSPF was verified to have been updated, and was found to be accurate and complete.

Surveillance Results:

The surveillance team evaluated adequacy, implementation, and effectiveness of the ANL-CCP shielded container shipping process. No concerns were identified.

The surveillance team concluded that the ANL-CCP activities and records evaluated provided adequate evidence of satisfactory implementation of the requirements in the Waste Isolation Pilot Plant Hazardous Waste Facility Permit, the CH-TRAMPAC, and the QAPD for loading and transporting RH-TRU mixed waste to the WIPP from ANL using shielded containers. ANL-CCP implementation of regulatory and contractual requirements was found to be acceptable, satisfactory, and effective.

Surveillance Team Leader:

B. J. Verret
B.J. Verret, CTAC

Date: 9-24-13

CBFO QA Director Approval:

Marta Navarrete

Date: 9-24-13