memorandum

DATE: MAY 3 1 2011
REPLY TO ATTN OF: CBFO:OQA:DSM:MAG:11-0582:UFC 2300.00
SUBJECT: Surveillance Report S-11-20 of the SNL/CCP Visual Examination, Headspace Gas Sampling, and Dose-to-Curie Survey Processes

TO: James W. Todd, DOE-SNL


The surveillance team concluded that the SNL/CCP technical and quality assurance programs for the remote-handled waste processes evaluated were adequate, satisfactorily implemented, and effective.

If you have any questions, please contact me at (575) 234-7491.

Attachment

cc: w/attachment
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CBFO SURVEILLANCE REPORT

Surveillance Number: S-11-20 Date of Surveillance: May 16, 2011

Surveillance Title: Sandia National Laboratories Central Characterization Project (SNL/CCP) Visual Examination, Headspace Gas Sampling, and Dose-to-Curie Survey Processes

Organization Surveilled: SNL/CCP

Surveillance Team:

Paul C. Gomez Surveillance Team Leader, CBFO Technical Assistance Contractor (CTAC)
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Surveillance Scope:

The scope of the surveillance was to observe and evaluate the visual examination (VE), headspace gas sampling (HSGS), and dose-to-curie (DTC) survey processes being used at the SNL/CCP in support of characterization of remote-handled (RH) Summary Category Group S5000 debris waste containers to be shipped to the Waste Isolation Pilot Plant (WIPP).

Surveillance Purpose:

This surveillance was intended to provide assurance that SNL/CCP VE, HSGS, and DTC operations were adequate, satisfactorily implemented, and effective. The surveillance team focused on evaluation of VE and HSGS processes, sample collection, sample custody, sample preparation, and sampling procedures, as well as DTC survey evaluation and recording.

Activities Evaluated:

Visual Examination – The surveillance team observed the SNL/CCP VE characterization process conducted in the SNL Auxiliary Hot Cell Facility, Building 6597, Technical Area V, in Albuquerque, New Mexico. The surveillance team interviewed VE operators, including the VE Expert, and observed the implementation of Procedure CCP-TP-500, Rev. 11, CCP Remote-Handled Waste Visual Examination, to evaluate the effectiveness of the SNL/CCP VE characterization process for RH waste.

SNL/CCP uses the two-operator method when performing VE characterization. Two qualified operators visually examine the waste and place it into 30-gallon containers that are subsequently loaded into 55-gallon drums. The surveillance team observed the VE process for parent container C980387 from waste stream SNL-HCF-S5400-RH. VE operator interactions and data entry into the Visual Examination Data Form were performed in compliance with Procedure CCP-TP-500.
The audit team examined RH VE Batch Data Reports RHSNLVE100001, RHSNLVE110001, and RHSNLVE110003 to verify implementation and compliance with the requirements for documenting VE activities, as stipulated in CCP-TP-500. The surveillance team also verified that data entries into the VE operations logbook (CCP-SN-RH-VE-002) were satisfactorily recorded.

VE operations at SNL for RH S5000 debris waste were determined to be adequate, satisfactorily implemented, and effective.

**Headspace Gas Sampling** – The surveillance team observed RH debris waste HSGS operations at the SNL Reactor Maintenance Building on May 16, 2011. Collection of a field blank, duplicate samples, and drum samples for containers SNLNM007010, SNLNM007021, SNLNM007023, and SNLNM007024 were taken in SUMMA® canisters and were verified to be compliant. The field reference standard was examined and determined to be compliant. Drum age criteria were verified for all drums sampled. The surveillance team observed sample handling from collection through application of tamper-indicating devices with clam-shells and custody seals. The chain-of-custody (COC) form was examined and found to be complete through the operations observed.

SNL/CCP HSGS operations for RH S5000 debris waste were determined to be adequate, satisfactorily implemented, and effective.

**DTC Survey** – Observation of the DTC surveys was conducted and sampling activities within the SNL Pulse Reactor Auxiliary Hot Cell Facility, Building 6597, Technical Area V, were observed to verify proper dose collections from container SNLNM007010 per procedure CCP-TP-504, Rev. 11, CCP Dose-to-Curie Survey Procedure for Remote-Handled Transuranic Waste. Activities were found to be performed in accordance with requirements. Written records, including objective evidence reviewed (Attachment 1 – Measurement Control Report, and Attachment 2 – Container Data Sheet of CCP-TP-504), were found to be satisfactory. No concerns were found associated with this DTC survey activity.

SNL/CCP DTC survey operations for RH S5000 debris waste were determined to be adequate, satisfactorily implemented, and effective.

**Quality Assurance** – Various elements of the CCP Quality Assurance (QA) Program were reviewed to ensure compliance with the Carlsbad Field Office (CBFO) Quality Assurance Program Document (QAPD). Review of CCP QA Program implementation, including the verification of QA requirements for personnel training, identification and reporting of nonconforming conditions, document and procedure control, records management, and data management (the use of notebooks) were found to be in compliance with upper-tier requirements.

No issues were identified with training, reporting of nonconforming items, records management, control of procedures, and data management of notebooks. CCP had assigned a Vendor Project Manager (VPM) for SNL to review the logs. All QA protocols were followed and no issues were identified for VE, HSGS, or DTC survey.
Control of Logbooks – The SNL RH waste program requires the use of logbooks to record daily activities and other pertinent activities that control the VE, DTC and HSGS processes. The SNL/CCP RH program specifies CCP-PO-005, *CCP Conduct of Operations*, for control of CCP activities at the site. This procedure identifies the responsibilities of the VPM, including those related to review of CCP logbooks (i.e., a weekly review of logbooks to ensure correct recording of project data). No issues were identified with the control of logbooks during the surveillance.

Overall, the surveillance team determined Quality Assurance activities to be adequate, satisfactorily implemented, and effective.

**Governing Documents/Requirements:**

Evaluation of overall program adequacy and effectiveness of SNL/CCP documents was based on the current revisions of the following documents:

- DOE/CBFO-94-1012, *CBFO Quality Assurance Program Document* (QAPD)
- NM489013088-TSDF, Waste Isolation Pilot Plant Hazardous Waste Facility Permit, the New Mexico Environment Department
- CCP-TP-500, *CCP Remote-Handled Waste Visual Examination*
- CCP-QP-002, *CCP Training and Qualification Plan*
- CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*
- CCP-QP-008, *CCP Records Management*
- CCP-QP-016, *CCP Control of Measuring and Testing Equipment*

**Surveillance Results:**

The results of the surveillance indicate that the SNL/CCP activities related to VE, HSGS, and DTC operations are adequate, satisfactorily implemented, and effective.

**Corrective Actions:**

None.

**Observations:**

None.

**Corrected During the Surveillance:**

None.
Recommendations:

None.

Surveillance Team Leader: [Signature]  Date: 5/31/11
Paul C. Gomez, CTAC

CBFO QA Director Approval: [Signature]  Date: 5/31/11