March 11, 2013

Jose Franco, Manager
Carlsbad Field Office
Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221-3100

M. Farok Sharif, Project Manager
Nuclear Waste Partnership LLC
P.O. Box 2078
Carlsbad, New Mexico 88221-5608

RE: NMED APPROVAL OF FINAL AUDIT REPORT, IDAHO NATIONAL LABORATORY/CENTRAL CHARACTERIZATION PROJECT AUDIT A-12-13
WASTE ISOLATION PILOT PLANT
EPA I.D. NUMBER NM4890139088

Dear Messrs. Franco and Sharif:

On January 25, 2013, The New Mexico Environment Department (NMED) received the Final Audit Report of the Idaho National Laboratory/Central Characterization Project (INL/CCP) Audit Number A-12-13 (Audit Report), from the Department of Energy’s Carlsbad Field Office (CBFO). CBFO and Nuclear Waste Partnership, LLC (the Permittees) were required to submit this Audit Report under the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit as specified in Permit Section 2.3.2.3. The intended scope of this final audit was to ensure the adequacy, implementation, and effectiveness of the INL/CCP waste characterization processes of contact handled (CH) Summary Category Groups (SCGs) S3000 homogeneous solids, S4000 soils/gravel, and S5000 debris wastes, as well as remote handled (RH) S3000 homogeneous solids and S5000 debris wastes.

The Audit Report consisted of the following items:

- A narrative report (hardcopy and electronic)
Copies of relevant Permit Attachment C6 checklists (hardcopy and electronic)

Final INL/CCP standard operating procedures for characterization of the waste category listed above (hardcopy and electronic)

Objective evidence examined during the audit:

- General information
- Acceptable Knowledge (AK)
- Headspace Gas Sampling (HSG)
- Solids Sampling (SS)
- Real-time Radiography (RTR)
- Visual Examination (VE)

NMED representatives observed the audit on June 11-14, 2012. NMED has examined the Audit Report for evidence of compliance with the requirements of Permit Sections 2.3.2 (Audit and Surveillance Program) and 2.3.1 (Waste Analysis Plan [WAP]). The audit report indicates that there were two Conditions Adverse to Quality (CAQ) resulting in Corrective Action Reports (CARs); four CAQs resulting in conditions requiring only remedial actions referred to as Corrected During the Audit (CDAs); two Observations (conditions that, if not controlled, could result in conditions adverse to quality); and three Recommendations (suggestions that are directed toward identifying opportunities for improvement and enhancing methods of implementing requirements). These are listed below.

- CBFO CAR 12-026: The audit identified multiple instances of inattention to detail during transportation evaluations. Examples are provided below.
  - CH waste operators were working on TRUPACTs following DOE/WIPP 02-3184, CH Packaging Operations Manual, Rev. 11, requirements for installing Outer Containment Vessel (OCV) O-rings per section 2.10, and Inner Containment Vessel (ICV) O-rings per section 2.12. Two operators installed OCV lower O-ring, then the OCV upper O-ring, followed immediately by installation of the IVC lower O-ring, then the IVC upper O-ring. One operator then signed off on the OVC/IVC installation steps on Attachment 1 at one time, followed by the second operator signing all the verification entries on all OVC/IVC O-ring installation steps on Attachment 1. Procedure requires the installation of O-rings one at a time in sequence, followed by verification. Operators did not complete each step before continuing.

Note: The NOTE on page 45 of DOE/WIPP 02-3184 allows steps to be performed in any order in these sections, but sign-offs for those steps, as well as the verification sign-offs, must come as each step is complete, as required within each separate installation step (e.g., steps 2.10.10, 2.10.11, 2.12.9, and 2.12.10).
- While reviewing the contents of the TRUPACT Maintenance cabinet, it was noted that the bag for the spare part 2077-180-06 did not have a description on the bag or on the label. The bag contained seven washers and had only the part number and purchase order hand written on it.

- The inspection on the Outer Container Assembly (OCA) lid for the HalfPACT unit 501 has been performed and signed off when the audit team arrived at the TRUPACT loading facility. The unit had been loaded and was considered to leave the docks. The audit team discovered that the OCA lift pocket tube (1 of 3), which surrounds the lifting attachment, was cracked all the way through.

The audit team immediately advised the Transportation Certification Official (TCO) of the discovery. The TCO confirmed the broken part and verified that inspection of the part had been completed and signed off. The part was replaced following the approved maintenance work instruction.

- CBFO CAR 12-027: The audit team identified multiple documentation errors and deviations from procedures that indicate a condition of overall CCP inattention to detail during characterization and certification activities. Examples are provided below.

- Nondestructive Examination (NDE) Batch INRTR5119951 objective evidence indicates that the Site Project Manager (SPM) validation was initially completed without inclusion of a Nonconformance Report (NCR) that was associated with container SNL/NM006398R in the batch. NCR-INL-2041-11 was initiated by an SPM on 5/13/11 against SNL/NM006398R. The NCR was dispositioned on 5/16/11. Corrections dictated by the NCR were recorded in the Batch Data Report (BDR) and the Independent Technical Reviewer (ITR) checklist on 5/16/11. A second SPM signed the validation checklist on 5/19/11 with question 6, which asks if there were NCRs associated with the batch, answered as “no.” A third SPM changed the answer to question 6 on 6/9/11.

- In the NDE Batch INRTR5110085 objective evidence, the radiographer indicated in the “Container Inventory and Comments” section that drum ND1081R contained metal-framed High-Efficiency Particulate Air (HEPA) filters. Section 4, Packaging Materials and Waste Materials report, did not indicate the presence of any metal material. In this instance, an item that was identified in the description was not included as an estimated material parameter weight.

- A container number was incorrectly recorded in the Batch Narrative on BDR INRTR110094 for container 10046232. The container was recorded as 1004632 on 8/22/11. On 8/23/11, the ITR reviewed the BDR and recorded “Yes” on the ITR checklist question 10, “Is all data recorded clearly, legibly, and accurately?”
- The ITR reviewed BDR INLRHRTR11006 and on 8/8/11 recorded “NA” to ITR checklist question 8, “Are all changes made to original data lined out, initialed, and dated?” and question 9, “Were data changes made by the individual who originally collected the data or individual authorized to change the data?” A change was made in the comment section on the RTR Data Sheet for container NRFTRUSPC074-1 on 8/2/11.

- The ITR reviewed BDR INLRHRTR12002 and on 3/1/12 recorded “Yes” to ITR checklist question 7, “is all data correctly recorded clearly, legibly, and accurately?” The BDR number was not correctly recorded on the RTR Data Sheet for container ANLE33G on 2/28/12. The BDR number was corrected on 3/7/12.

- CDA 1: A CAQ was identified regarding a maintenance record being sent to the Packaging Engineer in Carlsbad immediately after completion of the maintenance. The maintenance record was sent to the Packaging Maintenance Engineer and information was provided to the audit team for verification. The RH maintenance log showed no maintenance was required for the current year; however, the outer lid guide pin was bent, requiring maintenance to be performed on the cast being loaded. The maintenance record was provided to the Packaging Maintenance Engineer and information was provided to the auditors for verification prior to the end of the audit.

- CDA 2: The CAQ addressed the need to document the addition of approximately 250 containers to waste stream ID-RF-S3114. These containers were appropriately added to the AK Attachment 8 container list, but the add-container memo was not prepared. During the audit, the CAQ was addressed with the memo completed and added to the AK record for this waste stream prior to the end of the audit.

- CDA 3: AK Attachment 5, Hazardous Constituents, for waste stream IN-ID-BTO-030 is inconsistent with the information in the AK Summary for this waste stream. Acetone, n-butanol, and methanol should be listed on Attachment 5 as expected. In addition, the hazardous constituents expected in this waste stream that are potentially flammable Volatile Organic Compounds (VOCs) should be listed in the appropriate section of Attachment 5. AK Attachment 15, the CCP TRU Waste Correlation and Surrogate Summary Form for waste stream IN-ID-BTO-030, indicates that the radioisotopic analysis of waste stream BT-T001 will be used to characterize waste stream ID-IN-BTO-030. This is no longer the plan and that sentence should be removed from this attachment. The sentence was removed and the amended attachment resubmitted to records prior to the end of the audit.

- CDA 4: During the review of an RTR operator qualification card, the audit team identified an incomplete entry for the identification of a training container. CCP training
personnel entered the training container identification number and the audit team was able to verify corrections prior to the end of the audit.

- Observation 1: VE operators completing BDR INLRHVE11003 did not follow step 4.1.2, sections F, G, and H of CCP-TP-500. BDR INLRHVE11003, Containers FF-45A, B, and C were signed by VE operator 1 on 8/8/11 and by operator 2 on 6/28/11. INL/CCP chose to continue with the original operator. Also, on Attachment 1 for containers FF-45A and FF-45B, the wrong procedure is referenced. The procedure should be CPP-TP-500, but is listed as CPP-TP-500. INL/CCP should clarify its procedures to allow continued use of the original operator after a period of time has lapsed.

- Observation 2: Attachment 1 of CCP-TP-006 does not provide a field to record the waste streams listed in CCP-TP-INL-001, yet SPMs and ITRs are required to verify that the correct waste streams are listed on the VE Data Form. SCGs are listed instead of appropriate waste streams. The audit team verified there were only three waste streams and they were identified as SCGs. INL/CCP should clarify the VE Data Form to allow SCGs rather than waste stream numbers to ensure a CAQ does not occur.

- Recommendation 1: Training qualification card documentation that is submitted to NMED and for public access ids marked: Private Information; Authorized Personnel Only; Controlled Disposal is Required. The audit team recommends that CCP evaluate their Personal identity information (Pii) process to determine if these training qualification cards should be made public.

- Recommendation 2: During the evaluation of training qualification card documentation that is submitted to NMED and also for public access, the audit team noted that documents have been copied on a color copier and the “ORIGINAL” stamp is in color (either red or blue). It was difficult to determine if these documents are originals or copies of the original. The audit team recommends that these documents be scanned into the records center in black and white.

- Recommendation 3: The audit team examined the AK record for five distinct waste streams representing the five CH and RH SCGs. In reviewing the AK Summaries for these waste streams, the auditors identified language that could be modified/supplemented to provide clarification to the documents. These changes were discussed and agreed upon and will become part of the freeze files for each respective AK Summary. The audit team recommends that INL/CCP incorporate the freeze files into next revisions of the respective AK Summaries.

Attached are NMED’s general comments based upon review of the Audit Report. These are provided to guide future audit report preparation and to assist the Permittees in understanding NMED’s concerns.
NMED concludes that this Audit Report demonstrates that INL/CCP has implemented the applicable characterization requirements of the WAP. Therefore, NMED approves the Permittee’s Final Audit Report for INL/CCP Audit A-12-13 for certification CH SCGs S3000 homogeneous solids waste, S4000 soils/gravel waste, and S5000 debris waste, as well as RH SCGs S3000 homogeneous waste and S5000 debris waste and amends Audit Report A-11-14 issued by NMED on December 22, 2011 to include the waste forms and processes evaluated by this recertification audit.

This Audit Report approval is of the broad programmatic implementation of waste characterization requirements at INL/CCP, and does not constitute approval of individual waste characterization procedures, nor condone inappropriate applications of those procedures. This approval does not relieve the Permittees of their obligation to comply with the requirements of the permit or other applicable laws and regulations.

If you have any questions regarding this matter, please contact Trais Kliphuis at (505) 476-6051.

Sincerely,

[Signature]
John E. Kieling
Chief
Hazardous Waste Bureau

cc: Thomas Skibitski, Acting Director, NMED RPD
Trais Kliphuis, NMED HWB
Steve Holmes, NMED HWB
Ricardo Maestas, NMED HWB
Thomas Kesterson, NMED DOEOB
Julia Marple, NMED, DOEOB
Toni Hardey, IDEQ
Susan Burke, IDEQ INL Oversight
Laurie King, EPA Region 6
Tom Peake, EPA ORIA
Connie Walker, Trinity Engineering
File: Red WIPP '13
NMED COMMENTS ON THE
IDAHO NATIONAL LABORATORY /CENTRAL CHARACTERIZATION PROJECT
(INL/CCP) AUDIT A-12-13

NMED’s review indicated that the body of the Audit Report and the C6 checklists generally appear to address the applicable elements. NMED provides the following comments for the Permittees consideration:

1. In the Final Audit Report Section 5.4.4 Real-time Radiography, 3) states, “The RTR operator recorded an incorrect BDR number on the RTR Data Sheet for container ANLE33G…” NMED would like to clarify for the record that an incorrect Batch Data Report (BDR) number was also recorded for containers ANLE29A, ANLE29B, ANLE29C, ANLE29F, and ANLE33B all of which are in BDR INLRHRTR12002.

2. In Question 145a of the C6 Checklist, N/A was put into the Location, Adequate Y/N, Item Reviewed, and the second Adequate Y/N columns. There should be an explanation in the Comment column stating that this audit was not a LANL audit.

3. The following Sections: 5.4.8 Nondestructive Assay, 5.4.9 Dose-to-Curie, 5.4.10 Flammable Gas Analysis, 5.4.11 Gas Generation Testing Program, 5.4.12 Leak Testing, 5.4.13 Container Management, and 5.4.14 TRUPACT-II Operations/Transportation, all do not pertain the Hazardous Waste Facility Permit or the C6 Checklist and should not be included in future final audit reports.

4. CBFO CAR 12-026 and CDA 1 are also not Permit related.

5. NMED will review the status of Observations 1 and 2 during the next INL/CCP recertification audit.