

## Allen, Pam, NMENV

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**From:** Biswell, David, NMENV  
**Sent:** Thursday, July 19, 2018 3:27 PM  
**To:** Allen, Pam, NMENV  
**Cc:** Maestas, Ricardo, NMENV  
**Subject:** FW: Scope of EPA LANL CC and MILCC3 Tier 1 Inspections 30 July to 2 Aug 2018  
**Attachments:** Scope of LANL CC and MILCC3 Tier 1 Aug 2018.pdf

-----Original Message-----

From: Maestas, Ricardo, NMENV  
Sent: Tuesday, June 26, 2018 9:03 AM  
To: Briley, Siona, NMENV <Siona.Briley@state.nm.us>; Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>  
Cc: Biswell, David, NMENV <David.Biswell@state.nm.us>; McLean, Megan, NMENV <Megan.McLean@state.nm.us>; Tellez, Hernesto, NMENV <Hernesto.Tellez@state.nm.us>  
Subject: FW: Scope of EPA LANL CC and MILCC3 Tier 1 Inspections 30 July to 2 Aug 2018

Fyi..

-----Original Message-----

From: Feltcorn, Ed [mailto:Feltcorn.Ed@epa.gov]  
Sent: Tuesday, June 26, 2018 8:26 AM  
To: Norma Castaneda <norma.castaneda@cbfo.doe.gov>; Cruickshank, Herbert (Herb) - FedNet <herb.cruickshank@cbfo.doe.gov>  
Cc: 'betsy.forinash@em.doe.gov' <betsy.forinash@em.doe.gov>; Alton Harris <Alton.Harris@em.doe.gov>; 'julia.shenk@em.doe.gov' <julia.shenk@em.doe.gov>; Princen, Kenneth - FedNet <kenneth.princen@cbfo.doe.gov>; Fesmire, Courtland <courtland.Fesmire@cbfo.doe.gov>; Site Documents - DOE (Site.documents@wipp.ws) <Site.documents@wipp.ws>; Stone, Nick <stone.nick@epa.gov>; Peake, Tom <Peake.Tom@epa.gov>; Schultheisz, Daniel <Schultheisz.Daniel@epa.gov>; Ellis, Jerry <Ellis.Jerry@epa.gov>; Diaz, Charlene <diaz.charlene@epa.gov>; Dennis Miehl (dennis.miehls@cbfo.doe.gov) <dennis.miehls@cbfo.doe.gov>; Martin Navarrete (martin.navarrete@cbfo.doe.gov) <martin.navarrete@cbfo.doe.gov>; Maestas, Ricardo, NMENV <Ricardo.Maestas@state.nm.us>; Patrick Kelly <pkelly@scainc.com>; Kira Darlow (kdarlow@scainc.com) <kdarlow@scainc.com>  
Subject: Scope of EPA LANL CC and MILCC3 Tier 1 Inspections 30 July to 2 Aug 2018

See attached scope.

Let us know if you need any assistance or information from us to make security more streamlined.

Note the Document delivery date is by 17 July. And the Scope call is on 25 July.

Ed is the lead for the Continued Compliance and Jerry Ellis is leading the MILCC3.

Thanks

Ed Feltcorn  
703 508 4084

Jerry Ellis  
202 900 8550



**Scope of EPA’s Continued Compliance Inspection of the Los Alamos National Laboratory  
Characterization Program for Contact-Handled Transuranic Waste**

**DOE Site:** Los Alamos National Laboratory (LANL)

**Organizations Notified:** Department of Energy – Carlsbad Field Office  
New Mexico Environment Department

**Inspection Dates:** July 30 – August 2, 2018

**Inspection Schedule:**

Monday 9:00 am	Kick-Off Meeting*
Monday 9:30 am – 4:00 pm	Conduct Inspection & Tier 1 Evaluation (see attached scope)
Tuesday 8:00 am – 4:00 pm	Conduct Inspection & Tier 1 Evaluation **
Wednesday 8:00 am – 4:00 pm	Conduct Inspection & Tier 1 Evaluation
Thursday 8:00 am – 1:00 pm	Conduct Inspection & Tier 1 Evaluation
Thursday 2:00 pm	Close-Out Meeting*

\* With CBFO National TRU Program staff, and LANL-CCP technical leads and management. The EPA Lead Inspector will conduct daily briefings for CBFO & LANL-CCP personnel on Tuesday, Wednesday and Thursday, as needed.

\*\*The AK portion of the inspection will begin on Tuesday.

**EPA Evaluation Team:** Mr. Ed Felcorn, EPA Lead Inspector (Continued Compliance)  
Mr. Jerry Ellis, EPA Inspector (Lead for concurrent Tier 1)  
Mr. Patrick Kelly, EPA Support Contractor (SC&A)  
Ms. Kira Darlow, EPA Support Contractor (SC&A)

**Continued Compliance Scope:**

EPA will conduct a continued compliance inspection of the Central Characterization Program’s (CCP’s) EPA-approved waste characterization activities at LANL, focusing on enhanced acceptable knowledge (AK), nondestructive assay (NDA), and Real Time Radiography/Visual Examination (RTR/VE). EPA will conduct this inspection in accordance with 40 CFR 194.8(b) to evaluate the adequacy, implementation, and effectiveness of the technical processes implemented by LANL-CCP for characterizing contact-handled (CH) transuranic (TRU) waste. The technical areas of the scope and the required documents are detailed below as are the elements that EPA must observe and/or inspect to successfully determine that the LANL TRU CH waste characterization program remains in compliance with EPA regulations.

**Acceptable Knowledge, CH, Documentation Requested by July 17:**

- A listing of CH containers characterized since March 1, 2017, with waste stream identification. For recent ORNL-CCP continued compliance inspections, CCP provided this information as a spreadsheet with the following column headings: CONTAINERID, WASTESTREAM, RTRBDRID, VEBDRID, NDABDRID. Providing the data in the same format for this request would be fine. The EPA will request additional AK records after receiving this list.
- Current AK Tracking Spreadsheet

**Nondestructive Assay, Documentation Requested by July 17:**

- Identify the current revision of the calibration documents for the HENC2, HENC3 and MILCC NDA systems for all NDA systems approved by EPA, including scale(s). These include each system's calibration of record, calibration confirmations, calibration verifications, determination of each system's Lower limit of detection and Total Measurement Uncertainty. EPA may request these documents.
- Listing of current revisions of the formal procedures for calibration, operation, calculation, and data validation for the HENC2, HENC3 and MILCC NDA systems.
- Provide the number of calibration verifications or other evidence of instrument performance for the HENC2, HENC3 and MILCC NDA systems since the last EPA inspection May 10, 2017. EPA will request a sample of these to evaluate during the inspection.
- Listing of container numbers that are available for EPA replicate analyses for the HENC2, HENC3 and MILCC NDA systems.
- Please explain the code used to correlate NDA BDRs with specific NDA systems.
- Listing of all active NDA personnel (operators, data validators, independent technical reviewers and expert analysts) including the List of Qualified Individuals (LOQI) for all NDA personnel.

Directly following submission of this scope, EPA will select several BDRs from each NDA system for review and will select specific containers for replicate analyses for one or more NDA systems. EPA will observe all operating NDA systems on site at LANL for this continued compliance inspection.

**Real-Time Radiography and Visual Examination, Initial Documentation Requested by May 17:**

To successfully determine LANL's continued compliance for RTR and VE, EPA must observe the RTR and VE processes for WIPP-bound TRU waste, i.e., the RTR and VE procedures, personnel, equipment and controls that EPA approved. Please be advised that EPA must observe these characterization processes with actual TRU waste, not merely the drums prepared for

training purposes. If LANL does not currently have any actual waste to process, the EPA assumes they will have CH TRU waste available to demonstrate RTR or VE characterization to EPA. Please indicate the operational status of the High Energy RTR unit for characterizing WIPP-bound TRU waste for the EPA's inspection.

EPA must observe the VE process at LANL to successfully determine LANL's continued compliance. We understand that LANL-CCP performs VE at two locations, TA-55 and the Chemical and Metallurgical Building (CMR). The EPA also understands that access to some of the VE locations may require a security clearance and will require advanced planning. The EPA Team Lead and VE Inspector have active DOE-Q clearances, if needed. The EPA will select one or more areas for observing the VE process at LANL depending on site logistics and the use of specific VE procedures. Please confirm which areas will be available for observation of VE during the EPA's inspection.

Upon receipt of the list of the completed RTR and VE BDRs, the EPA will select several BDRs from these lists for review. Copies of the selected, written BDRs are required for review prior to the onsite visit, as are the audio/visual (A/V) records. EPA will observe the VE and RTR operations for WIPP-bound TRU waste from multiple SCGs, if possible, and review the documents below prior to the on-site evaluation at LANL.

- RTR A/V records.
- LOQIs for all VE and/or RTR personnel with the generation dates encompassed by the selected RTR and VE BDRs.
- Copies of any NCRs for the selected RTR and VE BDRs.
- The last training and test drum examination for RTR operators identified in the selected RTR BDRs, including container inventory sheets, evaluation sheets and A/V recordings.
- Qualification packages for selected RTR and VE operators (to be identified following BDR review).
- Lists of NCRs generated for RTR and VE in the last year.

### **Tier I Evaluation Scope**

In addition to the continued compliance inspection, EPA will perform Tier 1 change evaluation for the MILCC3 located in TA-55. The T1 evaluation and the continued compliance inspection will be conducted concurrently. The scope of that evaluation is attached to this scope.

### **Pre-Evaluation Conference Call:**

A conference call between EPA, CBFO and LANL staff will be held on Wednesday July 25, 2018, at 1:00 PM eastern time, to review the scope of EPA's continued compliance inspection and the concurrent T1 evaluation of the MILCC3 NDA system. During this call EPA will identify additional document needs, clarify any remaining issues and ensure that all logistical aspects have been addressed and are understood by all parties. The telephone number for the call is 1-202-991-0477, and the participant code is 7841090#.

**Logistics:**

- A pre-evaluation conference/Kick-Off Meeting will be held Monday, July 30, 2018 at 8:00 am at a location designated by LANL.
- A post-evaluation EPA briefing/Close-Out Meeting will be held Thursday, August 2, 2018, at 2:00 pm for this Tier 1 evaluation and the concurrent continued compliance inspection at a location designated by LANL.

CBFO QA is welcome to send observers to this inspection.

**Scope of EPA's Tier 1 Change Evaluation at LANL-CCP:  
Non-Destructive Assay – Mobile ISOCS Large Container Counter 3 (MILCC3)**

- DOE Site:** Los Alamos National Laboratory – Central Characterization Program (LANL-CCP)
- Organizations Notified:** Department of Energy – Carlsbad Field Office (CBFO)  
New Mexico Environment Department (NMED)  
Environmental Protection Agency (EPA) – Region 6
- Evaluation Dates:** July 30-August 2, 2018 (concurrent with the LANL CC Inspection)
- Evaluation Schedule:** See LANL CC Inspection schedule
- EPA Inspection Team:** Jerry Ellis, US EPA HQ (Lead Evaluator)  
Edward Felts, US EPA HQ  
Patrick Kelly, EPA Contractor, Technical Lead (SC&A)

**Evaluation Scope:**

EPA will conduct a Tier 1 evaluation in accordance with 40 CFR 194.8(b) to evaluate the adequacy, implementation, and effectiveness of technical processes implemented by LANL-CCP for using the MILCC3 Nondestructive Assay (NDA) system located at Technical Area-55 (TA-55) for characterizing containerized CH TRU wastes.

**Characterization System To Be Evaluated:**

On July 30-August 2, 2018, the EPA will evaluate the MILCC3 proposed for use under LANL CCP's CH waste characterization program under the inspection authority described in 40 CFR 194.8(b). The EPA evaluation includes observation of the system's operation, (by review of records and conducting interviews to evaluate personnel qualifications/training, operating procedures, and LANL-CCP performance tests of equipment to determine regulatory compliance and assess the technical adequacy of the MILCC3.

**Additional Documents:**

EPA requests that the documents listed below be provided prior to beginning the evaluation:

- A list of MILCC3 Batch Data Reports (BDRs) that have been promoted through project level review or that have been generated to demonstrate the MILCC3 NDA process
- A list of qualified personnel (operators and subject matter experts) and training/qualification packages for all NDA personnel who supports the MILCC3 (current List of Qualified Individuals or LOQI)
- Current revision of the formal CCP operating procedures for calibrating and operating the MILCC3, and conducting review and validation of MILCC3 data

- A copy of the formal documents that present the technical basis and results of the MILCC3 calibration, calibration confirmation, determination of the system's Total Measurement Uncertainty and Lower Limit of Detection, and any other performance tests that support the MILCC3 use to assay CH TRU wastes.
- A copy of the formal calibration/characterization of the MILCC3 gamma detector(s) performed at manufacturer's factory or any location other than at LANL.

In addition, the EPA requests to witness a demonstration of the MILCC3 assaying at least one container during the on-site evaluation. The EPA may select a small sample of each type of previously-assayed containers to be re-assayed for replicate analysis and evaluation.

**Evaluation Logistics:**

See Scope of LANL CC Inspection for details. The EPA requests that CBFO or LANL-CCP facilitate unfettered access to all areas and information required to conduct this evaluation on site at LANL. EPA also requests information regarding any required personnel protective equipment for the inspection team. Ed Felcorn (EPA Inspector) and Patrick Kelly (Contractor Technical Lead) both have active security clearances, if needed.

CBFO QA is welcome to provide observers for this EPA evaluation