Scope of EPA's Tier 1 Change Evaluation at LANL-CCP:
Non Destructive Assay - Super High Efficiency Neutron Counter (SHENC) and the High Energy Real Time Radiography (HERTR) Unit

DOE Site: Los Alamos National Lab – Central Characterization Project (LANL–CCP)

Organizations Notified: Department of Energy – Carlsbad Field Office (CBFO)
New Mexico Environment Department (NMED)
Environmental Protection Agency (EPA) – Region 6

Evaluation Dates: August 16-17, 2011

Inspection Schedule: Tuesday 8:00 am – 8:30 am, Entrance Meeting*
Tuesday 8:30 am – 4:00 pm, Conduct Evaluations
Wednesday 8:00 am – Management Briefing, as needed*
Wednesday 8:30 am – 2:00 pm, Conduct Evaluations
Wednesday 3:30 pm – 4:00 pm, Close-Out Meeting*

* With LANL-CCP Management and technical leads

EPA Inspection Team: Edward Feltcorn, US EPA HQ (Lead)
Rajani Joglekar, US EPA HQ
Patrick Kelly, EPA Contractor (SC&A)
Dorothy Gill, EPA Contractor (SC&A)
Rose Gogliotti, EPA Contractor (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 SHENC Nondestructive Assay (NDA) system for characterizing CH TRU debris waste in standard waste boxes (SWBs). Simultaneously EPA will evaluate a new HERTR unit as a Tier 2 change.

Characterization Systems To Be Inspected:
On August 16-17, 2011, EPA will evaluate the SHENC and the new HERTR unit for use in the CH waste program under the inspection authority described in 40 CFR 194.8(b). The EPA evaluation includes personnel qualifications/training (by review of records and conducting interviews), operating procedures, and tests of equipment to determine regulatory compliance and assess the adequacy of the SHENC and HERTR systems.

CCP Governing Documents:
• CCP Transuranic Waste Certification Plan, CCP-PO-002, Revision 26
• CCP Transuranic Waste Characterization Quality Assurance Project Plan (QAPjP), CCP-PO-001, Revision 20
Additional Documents:
During the evaluation, EPA may require additional documents, such as a list of and/or specific examples of NDA or RTR Batch Data Reports (BDRs). EPA requests that these documents be provided prior to beginning the evaluation. The documents include the following:

- A list of SHENC BDRs for SWBs that have been promoted through project level review
- Written and visual records for all the RTR BDRs
- A list of qualified personnel (operators and subject matter experts) and qualification packages for all NDA and RTR qualified personnel (current List of Qualified Individuals or LOQI)
- A list of the items contained in the HERTR qualification container(s)
- A copy of the Acceptable Knowledge Summary Report (AKSR) for the waste stream(s) processed in the completed BDRs.
- A copy of the formal documents that present the technical basis and results of the SHENC calibration and calibration confirmation, and determination of the system's Total Measurement Uncertainty and Lower Limit of Detection

In addition, EPA requests to witness a demonstration of the evaluated processes by observing operation of the SHENC for assaying at least one SWB during the on-site evaluation. EPA may select a small sample of containers of each type assayed by the SHENC to be re-assayed for EPA replicate analysis.

Inspection Logistics:
A week before the evaluation, LANL-CCP must inform EPA of the location to be used for the following meetings:

- The EPA Evaluation Team will meet with the appropriate LANL-CCP management at 8:00 am on August 16, 2011 for an opening meeting
- The EPA Evaluation Team Leader will meet with the appropriate LANL-CCP management on August 17, 2011 at 8:00 am if deemed necessary
- A post-evaluation EPA briefing for the appropriate LANL-CCP management will be held August 17, 2011 at approximately 3:30 pm.

CBFO QA is welcome to provide observers for this EPA evaluation.