

**Environmental Management's (EM)  
Monthly Report to the Nevada Site Specific Advisory Board  
January 2012**

**Waste Management**

- As of the end of the first quarter of Fiscal Year 2012, the Nevada National Security Site has received 189,132 ft<sup>3</sup> of low-level waste in 252 shipments and 5,377 ft<sup>3</sup> of mixed low-level waste in 17 shipments. These numbers are preliminary pending audit (conducted approximately six months later).
- The investigation into the October 2011 shipment from Batelle Energy Alliance (BEA) containing several wooden boxes with leaking absorbent material is complete. The corrective actions have been implemented, the Corrective Action Request closed, and BEA has been approved to resume shipments.
- Investigation into the 17 waste shipments from Los Alamos National Laboratory (LANL) with contaminated trailer beds in excess of Department of Energy release limits continues. No radioactive contamination was found on any packages and no containers were found to be leaking. The third draft Corrective Action Plan (CAP) was submitted to the Nevada Site Office (NSO) in early December but rejected due to numerous comments, including failure to identify a root cause. The generator has suspended all further waste shipments until a CAP has been approved by the NSO and implemented.
- There were no surveillances or audits during the month of December.

**Underground Test Area (UGTA)**

***Corrective Action Unit (CAU) 97, Yucca Flat***

Additional analyses on the flow and transport model continues.

***CAU 98, Frenchman Flat***

In January, comment resolution will be completed following review of the Frenchman Flat Model Evaluation Drilling Criteria draft document. The installation of the conductor hole (the very first hole drilled at a well site to accommodate the conductor casing) at the ER-5-5 site will be completed. The current plan for Frenchman Flat calls for drilling two model evaluation wells with the main hole construction starting in the July 2012 timeframe.

***CAU 99, Rainier Mesa/Shoshone Mountain***

Flow and transport modeling analyses and evaluation continues.

***CAUs 101/102, Pahute Mesa***

Well development and testing of Well ER-EC-12 and development of the hydrostratigraphic framework model continues in January. Also in January, installation of the conductor hole at the ER-20-11 site will be completed. Current plans for Pahute Mesa call for two additional Phase II investigation wells (ER-EC-14 and ER-20-11) to be drilled in the September/October 2012 time frame.

## **Industrial Sites**

### ***CAU 547, Miscellaneous Contaminated Waste Sites***

Closure activities continued at CAU 547 in December. CAU 547 consists of radioactively-contaminated gas sampling assemblies at three different historic testing locations: Mullet, Tejon/Bernalillo, and Player. Closure work consists of closure in place by capping expansion joints with grouted metal casings and installing soil covers over exposed piping. The Mullet and Tejon/Bernalillo site work is complete. In December, welding the lid on the casing over the Tejon sample vault and waste disposal from Tejon/Bernalillo was performed. In January, closure work will begin at Player.

### ***CAU 548, Areas 9, 10, 18, 19, and 20 Housekeeping Sites***

In December, Phase III closure activities were performed at CAU 548. CAU 548 consists of 20 housekeeping category Corrective Action Sites (CASs), including items such as drums and spills. Closure activities included excavation of stained soil, debris removal, and characterization and verification sample collection. Additional remediation was required at the Area 9 stained soil area; stained soil was removed and packaged. Waste characterization results confirm that the waste is mixed waste containing chromium and plutonium. In January, the mixed and low-level waste associated with CAU 548 will be transported to Area 5 for disposal.

### ***CAU 562, Waste Systems***

CAU 562 consists of 13 CASs, including items such as septic tanks, drains, and outfalls. In December, closure activities continued, including collecting waste characterization samples, the excavation and disposal of a septic tank and French drain, debris removal and disposal, excavation and disposal of soil, and collection of verification samples. Closure activities at CAU 562 will continue in January.

### ***Non-Resource Conservation Recovery Act (RCRA) Post Closure Monitoring Sites***

The Non-RCRA Post-Closure Monitoring Sites are 59 CAUs where post-closure monitoring and maintenance is required in accordance with the closure requirements. Post-closure monitoring at these sites is required annually and is conducted in October, November, and December. Inspections were completed in December.

### ***RCRA Post-Closure Monitoring Sites***

The RCRA Post-Closure Monitoring Sites are five CAUs where post-closure monitoring and maintenance is required in accordance with the RCRA Permit and closure requirements. Post-closure monitoring at these CAUs is required either quarterly or semi-annually. The quarterly/semi-annual inspections were completed in December. The inspections indicated that maintenance (backfilling of animal burrows, vegetation removal; and sign replacement) is required; the repairs will be performed within 60 days.

## **Soils**

### ***CAU 104, Area 7 Yucca Flat Atmospheric Test Sites***

Field investigation activities to determine the nature and extent of contamination continued at CAU 104 in December. CAU 104 comprises 15 CASs. Field investigation of these sites will consist of soil sampling and thermoluminescent dosimeter (TLD) measurements and will continue in January.

### ***CAU 366, Area 11 Plutonium Valley Dispersion Sites***

Field investigation activities at CAU 366 were completed in December and consisted of soil sampling and TLD measurements to determine the nature and extent of contamination. CAU 366 comprises six CASs related to historical nuclear testing. In January, analytical results are expected.

### ***CAU 465, Hydronuclear***

In December, initial sampling and radiological surveys at CAU 465 were completed at the four CASs comprising the CAU. Analytical results are expected in early January.

### ***CAU 550, Smoky Contamination Area***

In December, the development of the Data Quality Objectives (DQOs) continued. The DQO process is a seven-step approach to plan investigation activities. The DQOs ensure that the data collected will provide sufficient information to recommend corrective actions for CAU 550. The DQOs will be included in the Corrective Action Investigation Plan (CAIP) for CAU 550, which is an enforceable milestone under the Federal Facility Agreement and Consent Order (FFACO). CAU 550 comprises 19 CASs.

### ***CAU 569, Area 3 Yucca Flat Atmospheric Test Sites***

Development of the CAIP for CAU 569 continued in December. The CAIP is an enforceable milestone under the FFACO and outlines the plan to characterize the nine sites comprising the CAU. CAIP development will continue in January and is due to the State of Nevada Division of Environmental Protection (NDEP) by March.

### ***CAU 574, Neptune***

CAU 574 comprises two CASs. In December, data analysis continued on TLDs retrieved from CAU 574 to measure external dose, and development of the Closure Report continued. In January, data analysis and development of the Closure Report will continue. The Closure Report is due to NDEP in May.

## **Public Involvement:**

- Ongoing exhibits:
  - *Operation Clean Desert* – Nevada Public Reading Room, Las Vegas
  - *Groundwater at the Nevada National Security Site* poster – Amargosa Valley Library, Goldfield Library, and Central Nevada Museum
- Publications:
  - Environmental Management (EM) News Flash: *NSO Explores Closure Options for Historic Nuclear Testing Location*
  - Environmental Management (EM) News Flash: *More Recycling Means Less Waste for the Complex*