

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

**Waste Management**

- Waste disposal volumes will be updated at the end of the second quarter.
- A Low-Level Waste (LLW) shipment en route to the NNSS from Nuclear Fuels Services (Tennessee) did not follow an approved route and traveled through the Las Vegas Valley on February 13. The Nevada Site Office (NSO) issued a Corrective Action Request (CAR) regarding this Waste Acceptance Criteria violation. The generator is not allowed to ship LLW to the NNSS until the CAR is closed.
- Investigation continues into the 17 waste shipments from Los Alamos National Laboratory (LANL) with contaminated trailer beds in excess of Department of Energy release limits. No radioactive contamination was found on any packages and no containers were found to be leaking. The most recent draft Corrective Action Plan (CAP) was submitted to the NSO February 22 and is currently in review. The generator has suspended all further waste shipments until a CAP has been approved by the NSO and implemented.
- The NSO's Radioactive Waste Acceptance Program (RWAP) conducted a MLLW verification surveillance of the PermaFix Northwest in Washington and an impromptu surveillance of Advanced Mixed Waste Treatment Plant in Idaho. There were no findings or observations.
- RWAP's January 30 impromptu surveillance at the Oak Ridge National Laboratory in Tennessee resulted in three reporting observations. Generators must respond to the NSO regarding observations within 30 days.
- Two impromptu surveillances will be conducted in the month of March.

**Underground Test Area (UGTA)**

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

Additional analyses on the flow and transport model continues.

***CAU 98, Frenchman Flat***

The current plan for Frenchman Flat calls for drilling two model evaluation wells (ER-5-5 and ER-11-2) with the main hole construction starting in the July 2012 timeframe. In February, comment resolution was completed on the Frenchman Flat Model Evaluation Drilling Criteria draft document, and construction of the conductor hole (the very first hole drilled at a well site to accommodate the conductor casing) at the ER-11-2 site was completed.

***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. 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. Well development, testing and sampling of the ER-EC-12 well is expected to be completed in April.

## **Industrial Sites**

### ***Corrective Action Unit (CAU) 111, Area 5 Waste Management Disposal Retired Mixed Waste Pits***

The final Closure Report (CR) for CAU 111 was submitted to the State of Nevada Division of Environmental Protection (NDEP) on February 9. The CR details the actions taken for closure of the site. Closure activities included construction of an engineered evapotranspiration cover, installation of use restriction signs and monuments, and establishing vegetation on the cover. NDEP's response is expected in March; if approved, the CAU will be considered to be closed in place, with post-closure monitoring requirements.

### ***CAU 539, Areas 25 and 26 Railroad Tracks***

CAU 539 consists of two Corrective Action Sites (CASs) on the Nevada National Security Site (NNSS). The CASs are railroad tracks in Areas 25 and 26 of the NNSS. CAU 539 was closed under the FFAO in July 2011. In March, one drum of mixed waste lead soil remaining from CAU 539 closure activities will be transported off site for treatment.

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

Closure activities continue at CAU 547. 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 February, closure work at Player included construction of benches to the piping on the York crater slope, placing of soil over the exposed piping, concrete pad construction, and placement of casings over the assemblies. In March, Player closure activities will continue, including cover construction on the York crater slope, filling the casings with cement, and final welding of the casing openings. Closure activities at Player are expected to be completed in April.

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

CAU 548 consists of 20 housekeeping sites, including drums, waste piles, and batteries. Closure field work associated with CAU 548 is complete. Remaining mixed waste associated with CAU 548 was transported to an offsite treatment facility in February and is expected to be shipped back to the NNSS and disposed at Area 5 in April.

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

CAU 562 consists of 13 CASs, including items such as septic tanks, drains, and outfalls. In February, hazardous waste was transported off site for disposal. Closure activities at CAU 562 are expected to be completed in March.

### ***CAU 566, EMAD Compound***

CAU 566, the Engine Maintenance, Assembly, and Disassembly (EMAD) Compound, consists of a single CAU comprising the compound surrounding the EMAD building. CAU 566 was closed under the FFAO in August 2011. In February, one box of mixed waste lead soil and shot remaining from CAU

566 closure activities was transported off site for treatment. The waste is expected to be shipped back to the NNSS and disposed at Area 5 in April.

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

The Non-RCRA Post-Closure Monitoring Sites include 119 CASs in 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 and sign replacements were required at a total of 37 sites. Required repairs include re-hanging or replacing signs, tightening fencing, and replacing posts. These repairs began in January and will continue through approximately June.

#### ***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 previous quarterly/semi-annual inspections were completed in December. The inspections indicated that maintenance (such as vegetation removal and sign replacement) was required. In February, vegetation removal and sign repair at CAUs 92 and 112 were conducted. All maintenance and repairs identified during the December inspections have been completed. The next quarterly/semi-annual inspections will be completed in March.

### **Soils**

#### ***Corrective Action Unit (CAU) 104, Area 7 Yucca Flat Atmospheric Test Sites***

Field investigation activities to determine the nature and extent of contamination continued at CAU 104. CAU 104 comprises 15 CASs. In February, soil sampling and other investigation activities continued.

#### ***CAU 105, Area 2 Yucca Flat Atmospheric Test Sites***

CAU 105 comprises five CASs related to historical nuclear testing. Data Quality Objectives (DQOs) for CAU 105 are being developed. The DQO process is a seven-step approach to plan investigation activities ensuring the data collected will provide sufficient information to recommend corrective actions for CAU 105. The DQOs will be included in the Corrective Action Investigation Plan (CAIP) for CAU 105.

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

CAU 366 comprises six CASs related to historical nuclear testing. In February, the analytical and field data were reviewed. Development of corrective action alternatives began and will continue in March.

#### ***CAU 367, Area 10 Sedan, Ess and Uncle Unit Craters***

CAU 367 comprises four CASs related to historical nuclear testing. CAU 367 was closed under the FFACO in July 2011. In February, one drum of mixed waste batteries and soils remaining from CAU 367 closure activities was transported off site for treatment. The waste is expected to be shipped back to the NNSS and disposed at Area 5 in April.

#### ***CAU 375, Area 30 Buggy Unit Craters***

CAU 375 comprises three CASs related to historical nuclear testing. CAU 375 was closed under the FFACO in September 2011. In February, one macroencapsulation box of mixed waste remaining from CAU 375 closure activities was transported off site for treatment. The waste is expected to be shipped back to the NNSS and disposed at Area 5 in April.

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

CAU 465 comprises four CASs related to historical nuclear testing. In February, grouting of the open boreholes associated with the CAU was completed.

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

CAU 550 comprises 19 CASs related to historical nuclear testing. The development of the Data Quality Objectives (DQOs) was completed in February. The DQO process is a seven-step approach to plan investigation activities ensuring the data collected will provide sufficient information to recommend corrective actions for CAU 550. The DQOs will be included in the CAIP for CAU 550. Development of the CAIP began in February. Also in February, cultural resource surveys at CAU 550 were initiated and will continue in March.

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

CAU 569 comprises nine CASs related to historical nuclear testing. The final CAIP for CAU 569 was submitted to NDEP on February 15. The CAIP outlines the plan to characterize the nine sites comprising the CAU. NDEP's response is expected in March. If approved, the corrective action investigation of CAU 569 will begin.

#### ***CAU 570, Area 9 Yucca Flat Atmospheric Test Sites***

CAU 570 comprises six CASs related to historical nuclear testing. The development of the DQOs for CAU 570 continues. The DQO process is a seven-step approach to plan investigation activities ensuring the data collected will provide sufficient information to recommend corrective actions for CAU 570. The DQOs will be included in the CAIP for CAU 570. Radiological walkover surveys of the CAU were conducted in February. The preliminary field investigation will be completed in March.

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

CAU 574 comprises two CASs related to historical nuclear testing. Data analysis and development of the Closure Report continues. 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: *EM News ... Your Way!*
  - Environmental Management (EM) News Flash: *Nevada National Security Site... on the Web and in Your Community*
- Outreach:
  - Delivered Environmental Management kiosk to Paseo Verde Library in Henderson
  - Distributed 146 Operation Clean Desert activity books and computer games

- Support:
  - NSSAB Full Board meeting (February 15)
  - 2012 Waste Management Symposia (February 25-29)