

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

Waste Management

- The total low-level/mixed low-level waste disposal volume through the end of the Fiscal Year 2012 second quarter is 399,817 cubic feet.
- A Low-Level Waste (LLW) shipment en route to the Nevada National Security Site (NNSS) from Nuclear Fuels Services (Tennessee) did not follow an approved route and traveled through the Las Vegas Valley on February 13. The generator forwarded updated driver instructions to the Nevada Site Office (NSO) for review and approval. These were approved and the Corrective Action Request was closed. The generator is authorized to resume shipments to the NNSS.
- 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. The Corrective Action Plan (CAP) submitted to the NSO February 22 has been approved. Once LANL implements the CAP, the NSO is scheduled to conduct verification surveillance the week of April 16 to verify LANL implementation of the CAP. Upon completion of the surveillance, LANL will be permitted to resume shipments to the NNSS.
- The NSO's Radioactive Waste Acceptance Program (RWAP) conducted two surveys in April. One survey was of Nuclear Fuel Services in Tennessee, which resulted in one minor observation. The other survey was at Lawrence Livermore National Laboratory in California, which resulted in three minor observations. The observations in these surveys did not impact the generators' Waste Acceptance Criteria programs. Generators must respond to the NSO within 30 days of receiving the surveillance report.
- The NSO conducted a verification survey in Idaho for a mixed low-level waste that will be sent to the NNSS for disposal.
- In April, the NSO will conduct two verification surveys including an audit of Portsmouth, Ohio, and a survey of LANL.

Underground Test Area (UGTA)

Corrective Action Unit (CAU) 97, Yucca Flat

Additional analyses on the flow and transport model continue.

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.

CAU 99, Rainier Mesa/Shoshone Mountain

Flow and transport modeling analyses and evaluation continues.

CAUs 101/102, Pahute Mesa

In March, well development and testing activities at Well ER-EC-12 were completed. 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. In April, well development, testing and sampling of Well ER-EC-13 is expected to commence, and sampling initiated at Well UE-20n #1.

Industrial Sites

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

The final Closure Report (CR) for CAU 111 and the 92-Acre Area was approved by the State of Nevada Division of Environmental Protection (NDEP) in February. 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. With NDEP's approval, the CAU is now considered to be closed in place with post-closure monitoring requirements. The first quarterly post-closure inspection was conducted in March, with no issues observed.

CAU 114, Areas 25 Engine Maintenance Assembly and Disassembly (EMAD) Facility

Revision 1 of the final Streamlined Approach for Environmental Restoration (SAFER) Plan for CAU 114 was submitted to NDEP and approved in July 2010. SAFER activities will include site preparation (e.g., utility clearances, radiological surveys), sample collection of potential source material, removal and disposal of potential source material or closure in place. Planning activities began in March. Site setup activities, radiological surveys, tapping and draining of piping will begin in April.

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 March, closure work continued at Player including 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 final compaction of the soil cover on the York crater slope, final welding on the York casing, and installation of fence, Jersey barriers, monuments, use restriction signs, and radiological postings. In April, installation of the fence, the final topographic laser survey, and demobilization will be completed.

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 Corrective Action Sites, including items such as septic tanks, drains, and outfalls. In March, verification sample results indicated that additional excavation of polychlorinated

biphenyl (PCB)-contaminated soil was required. Additional soil was removed and disposed, and additional verification samples were collected. The samples were below action levels, and the excavation was backfilled. Closure activities at CAU 562 are expected to be completed in April when the excavations in Area 2 are backfilled.

CAU 566, EMAD Compound

CAU 566, the EMAD Compound, consists of a single CAU comprising the compound surrounding the EMAD building. CAU 566 was closed under the FFACO in August 2011. In February, one box of mixed waste lead soil and lead 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 repairs 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 six 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 March, the quarterly inspections at CAUs 92, 110, and 112 and the semiannual inspection at CAU 91 were conducted; the first quarterly inspection was performed at CAU 111. In April, sign repairs at CAUs 92 and 110 identified during the inspections will be completed. The next quarterly/semi-annual inspections will be completed in June.

Soils

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

CAU 104 comprises 15 CASs related to historical nuclear testing. Field investigation activities to determine the nature and extent of contamination continued at CAU 104. CAU 104 comprises 15 CASs. In March, soil sampling and other investigation and demobilization activities were completed. The preliminary sample results are expected in April.

CAU 105, Area 2 Yucca Flat Atmospheric Test Sites

CAU 105 comprises five CASs related to historical nuclear testing. Development of the Data Quality Objectives (DQOs) for CAU 105 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 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 March, additional investigation activities of two metal pieces located within the contamination area were performed. In April, additional samples will be collected and the development of corrective action alternatives will continue.

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 March, waste management activities associated with the CAU were completed.

CAU 541, Small Boy

CAU 541 comprises two CASs related to historical nuclear testing. In March, preliminary investigation activities were conducted at CAU 541.

CAU 550, Smoky Contamination Area

CAU 550 comprises 19 CASs related to historical nuclear testing. In March, cultural resource surveys at CAU 550 were conducted and will continue in April.

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 approved by NDEP in February. The CAIP outlines the plan to characterize the nine sites comprising the CAU. With NDEP's approval, the corrective action investigation of CAU 569 will begin in April.

CAU 571, Area 9 Yucca Flat Plutonium Dispersion Sites

CAU 571 comprises five CASs related to historical nuclear testing. Preliminary investigations at CAU 571 will begin in April.

CAU 574, Neptune

CAU 574 comprises two CASs related to historical nuclear testing. 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

- Environmental Management kiosk – Paseo Verde Library, Henderson
- Publications:
 - Environmental Management (EM) News Flash: *Nevada National Security Site Kiosk Makes Pahrump Debut*
 - New student-oriented Environmental Management brochure
- Outreach:
 - Delivered Environmental Management kiosk to Pahrump Community Library in Pahrump
 - Overview of Environmental Management and Environmental Protection presentations at West Career and Technical Academy (March 21)
 - Groundwater activity at Lomie Heard Elementary School Career Day (March 29)
 - Distributed 250 Operation Clean Desert activity books at Lomie Heard Elementary School Career Day
- Support:
 - NSSAB Full Board meeting (March 21)