

## **Environmental Restoration Monthly Report to the NSSAB June 2012**

### **Waste Management**

- The Corrective Action Request issued to the Kansas City Plant for shipping waste via an unapproved route in March 2012 has been completed and the generator, National Security Technologies, will resume shipment of waste to the Nevada National Security Site (NNSS).
- The Nevada Site Office's Radioactive Waste Acceptance Program conducted an audit of UCOR's (Tennessee) NNSS Waste Acceptance Criteria certification program. Inconsistencies in the application of uncertainty values for demonstrating compliance with criticality safety limits required by the NNSS Waste Acceptance Criteria were discovered and the Nevada Site Office issued a Corrective Action Request. The generator is unable to ship low-level waste to the NNSS until the Corrective Action Request is resolved.
- The Nevada Site Office will conduct three Radioactive Waste Acceptance Program impromptu surveys in the month of June.

### **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 time frame.

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

Flow and transport modeling analyses and evaluation continues.

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

In May, hot well (a well where the water is radioactively contaminated) sampling activities were completed at well UE-20n #1; ambient flow logging at well ER-EC-12 was conducted. In June, well development and testing of the ER-EC-13 well will begin, and pumping and sampling of well ER-20-6 #3 will be completed.

### **Industrial Sites**

#### ***CAU 114, Areas 25 Engine Maintenance Assembly and Disassembly Facility***

Activities under Revision 1 of the final Streamlined Approach for Environmental Restoration Plan for CAU 114 include site preparation (e.g., utility clearances, radiological surveys), sample collection of potential source material, and removal and disposal of potential source material or closure in place. In May, site setup and mobilization continued, as did radiological surveys, air monitoring, Hantavirus cleanup, and walkdowns. Identification, labeling, and documentation of the potentially radiologically impacted tap and drain locations were performed. Characterization work will continue in June.

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

In April, closure activities were completed at CAU 547. CAU 547 consists of radioactively contaminated gas sampling assemblies at *Mullet, Tejon/Bernalillo, and Player*. Work on the final Closure Report continues; it is due to the State of Nevada Division of Environmental Protection by January 31, 2013.

***CAU 566, Engine Maintenance Assembly and Disassembly Compound***

CAU 566 consists of a single CAU comprising the compound surrounding the Engine Maintenance Assembly and Disassembly building. CAU 566 was closed under the Federal Facility Agreement and Consent Order 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 was treated in April and is expected to be shipped back to the NNSS and disposed at Area 5 in June.

***CAU 572, Test Cell C Ancillary Building and Structures***

CAU 572 consists of a six Corrective Action Sites comprising facilities associated with the Test Cell C compound. In April, preliminary investigation work began at CAU 572 in preparation to develop a conceptual site model. The conceptual site model will drive the Corrective Action Investigation Plan for CAU 572. In June, preliminary investigation work will continue.

***Non- Resource Conservation Recovery Act Post-Closure Monitoring Sites***

The Non-Resource Conservation Recovery Act Post-Closure Monitoring Sites include 119 Corrective Action Sites in 59 CAUs where post-closure monitoring and maintenance is performed 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. Sign repairs at CAU 371 will be completed in June. The post-closure letter report documenting calendar year 2011 repairs and inspections will be submitted to the State of Nevada Division of Environmental Protection in May.

***Resource Conservation Recovery Act Post-Closure Monitoring Sites***

The Resource Conservation Recovery Act Post-Closure Monitoring Sites include six CAUs where post-closure monitoring and maintenance is performed in accordance with the Resource Conservation Recovery Act Permit and closure requirements. Post-closure monitoring at these CAUs is required either quarterly or semi-annually. The next quarterly/semi-annual inspections will be completed in June.

***Tonopah Test Range Post-Closure Sites***

These sites are located on the Tonopah Test Rangeland where post-closure monitoring and maintenance is performed in accordance with the closure requirements. Post-closure monitoring at these sites is required annually and was conducted in May. Maintenance, such as fence repairs and sign maintenance, was identified and will be completed.

## **Soils**

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

CAU 104 comprises 15 Corrective Action Sites (CASs) related to historical nuclear testing. Field investigation activities to determine the nature and extent of contamination were completed in March and the development of the Corrective Action Alternatives began in May. The Corrective Action Alternatives are the various alternatives for closure of a CAU. A Corrective Action Alternative will be selected and presented in the Corrective Action Decision Document. A Corrective Action Alternative meeting with the State of Nevada Division of Environmental Protection is scheduled for June with the Corrective Action Decision Document due by December 20, 2012.

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

CAU 105 comprises five CASs related to historical nuclear testing. The development of the Corrective Action Investigation Plan continued in May and is due to the State of Nevada Division of Environmental Protection by October 9, 2012.

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

CAU 366 comprises six CASs related to historical nuclear testing. In May, sample results were received and the development of Corrective Action Alternatives continued. A Corrective Action Alternative meeting is scheduled with the State of Nevada Division of Environmental Protection in June. The Corrective Action Decision Document continues to be developed and is due to the State of Nevada Division of Environmental Protection by November 16, 2012.

### ***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 Federal Facility Agreement and Consent Order 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 was treated in April and is expected to be shipped back to the NNSS and disposed at Area 5 in June.

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

CAU 375 comprises three CASs related to historical nuclear testing. CAU 375 was closed under the Federal Facility Agreement and Consent Order 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 was treated in April and is expected to be shipped back to the NNSS and disposed at Area 5 in June.

### ***CAUs 411, Double Tracks Plutonium Dispersion; and 412, Clean Slate I Plutonium Dispersion***

Preliminary investigations of CAUs 411 and 412 began in May, consisting of radiological surveys and soil sampling. The CAUs are located on the Nevada Test and Training Range. Preliminary investigation work will continue in June.

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

CAU 465 comprises four CASs related to historical nuclear testing. In May, the removal of lead-contaminated soil, chromium-contaminated concrete, and lead plates was completed. Investigation of a subsurface geophysical anomaly was performed. Closure activities are expected to be completed in June.

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

CAU 550 comprises 19 CASs related to historical nuclear testing. In May, the final Corrective Action Investigation Plan was submitted to the State of Nevada Division of Environmental Protection with a response expected in June.

***CAU 568, Area 3 Plutonium Dispersion Sites***

CAU 568 comprises six CASs related to historical nuclear testing. Preliminary investigations continue.

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

CAU 569 comprises nine CASs related to historical nuclear testing. Field investigation of these sites will consist of soil sampling and thermoluminescent dosimeter measurements. The corrective action investigation activities will begin in June.

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

CAU 570 comprises six CASs related to historical nuclear testing. Preparation of the Corrective Action Investigation Plan continued in May and is due to the State of Nevada Division of Environmental Protection by September 21, 2012.

***CAU 574, Neptune***

CAU 574 comprises two CASs related to historical nuclear testing. The final Closure Report was submitted to the State of Nevada Division of Environmental Protection in May and approved with no comments.

**Public Involvement:**

- Ongoing exhibits:
  - *Operation Clean Desert* – Nevada Site Office Public Reading Room, Las Vegas
  - *Groundwater at the Nevada National Security Site* poster – Amargosa Valley Library, Goldfield Library, and Central Nevada Museum
  - Environmental Management kiosks – Paseo Verde Library, Henderson and Pahrump Community Library, Pahrump
- Outreach:
  - Distributed 250 *Operation Clean Desert* activity books at St. Viator and Vanderburg Elementary Schools
- Support:
  - State of Nevada officials Nevada National Security Site tour (May 10-11)
  - Nevada Site Specific Advisory Board meeting (May 16)
  - Groundwater characterization demonstration at Vanderburg Elementary (May 31)