

#### **Department of Energy**

National Nuclear Security Administration Nevada Field Office P.O. Box 98518 Las Vegas, NV 89193-8518



## MAY 0 4 2016

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SUBMITTAL OF FINAL POST-CLOSURE INSPECTION LETTER REPORT FOR CORRECTIVE ACTION UNITS (CAUs) ON THE NEVADA NATIONAL SECURITY SITE (NNSS), MAY 2016

This letter serves as the post-closure inspection letter report for CAUs on the NNSS for Calendar Year 2015. Issues that were identified in the 2014 inspections were repaired in 2015.

#### **INDUSTRIAL SITES**

The following sites were closed in place with use restrictions (URs) under the Industrial Sites Activity:

#### CAU 5, Landfills

Eight Corrective Action Sites (CASs) require inspections every five years until 2036. The last required inspections were performed in 2011, the next required inspections will be performed in 2016.

As a best management practice (BMP) inspections were conducted at two CAU 5 CASs following a significant precipitation event. CAS 06-15-02 and CAS 06-15-03, which are collocated, were inspected on December 9, 2015. Erosion was present on the cover and will be repaired in 2016.

## CAU 37, Area 16 Camp Burn Pit

CAS 16-15-01 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

#### CAU 38, Area 19 Pahute Mesa Road Landfill

CAS 19-15-01 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

## CAU 39, Area 20 Pahute Lake Landfill

CAS 20-15-02 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

# CAU 40, Area 25 Cane Springs Landfill

CAS 25-15-03 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

As a BMP an inspection was conducted at CAS 25-15-03 following a significant precipitation event. The inspection was conducted November 30, 2015. Erosion was present on the cover and a monument had fallen. The monument and erosion will be repaired in 2016.

### CAU 41, Area 27 Landfill

CAS 27-15-01 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

#### CAU 42, Area 30 Landfill

CAS 30-15-01 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

# CAU 43, Area 3 BJY Disposal Site

CAS 03-08-01 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

This CAS was inspected on April 22, 2015 following road grading that had damaged the cover. A road had been graded across the cover, but waste was not exposed and the integrity of the cover was not compromised. Minor cosmetic repairs to the cover were completed later in 2015. Fencing and additional signs were installed per a request made by NDEP in 2016. The damage to the cover was reported to NDEP in a letter dated July 7, 2015. NDEP was notified that repairs were completed at the site in letters dated December 10, 2015 and March 7, 2016. NDEP determined that the matter was closed in a letter dated April 25, 2016.

#### CAU 44, Area 25 FOC Construction Landfills

CAS 25-16-02 and CAS 25-16-04 require inspections every five years until 2026. The last required inspections were performed in 2011, the next inspections will be performed in 2016.

As a BMP an inspection was conducted at CAS 25-16-02 following a significant precipitation event. The inspection was conducted November 30, 2015. Erosion was present on the cover and will be repaired in 2016.

As a BMP an inspection was conducted at CAS 25-16-04 following a significant precipitation event. No significant erosion was present related to the precipitation event, but subsidence holes and cracks were present on the cover. The cover will be repaired in 2016. No additional issues were identified.

### CAU 113, Area 25 R-MAD Facility

One CAS requires annual inspections. CAS 25-41-01 was inspected on November 24, 2015. One faded sign identified in 2014 was repaired in 2015. During the 2015 inspection, one UR sign was secured and three "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

#### CAU 115, Area 25 Test Cell A Facility

One CAS requires annual inspections. CAS 25-41-04 was inspected on November 24, 2015. Seven "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

### CAU 116, Area 25 Test Cell C Facility

One CAS requires annual inspections. CAS 25-41-05 was inspected on November 30, 2015. Six "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

## CAU 118, Area 27 Super Kukla Facility

One CAS requires annual inspections. CAS 27-41-01 was inspected on December 10, 2015. No issues were identified.

### CAU 127, Areas 25 and 26 Storage Tanks

Two CASs require annual inspections. CAS 25-01-07 was inspected on November 23, 2015. No issues were identified.

CAS 25-02-02 was inspected on November 30, 2015. No issues were identified.

### **CAU 137, Waste Disposal Sites**

Two CASs require annual inspections. CASs 12-08-01 and 12-23-07 are co-located and were inspected on October 28, 2015. During the 2014 inspection it was noted that the lock needed to be replaced. The lock was replaced in 2015. Six "WARNING" stickers were placed over faded text during the 2015 inspection. No additional issues were identified.

#### CAU 139, Waste Disposal Sites

Two CASs require annual inspections. CAS 06-19-03 was inspected on December 8, 2015. Erosion was identified on the cover. Erosion repairs will be completed in 2016. No additional issues were identified.

CAS 09-23-01 was inspected on November 4, 2015. One UR sign was rehung during the inspection. No additional issues were identified.

### CAU 140, Waste Dumps, Burn Pits, and Storage Area

Two CASs require annual inspections. CAS 05-23-01 was inspected on December 9, 2015. No issues were identified.

CAS 23-17-01 was inspected December 10, 2015. Two faded signs identified in 2014 were repaired in 2015. One "WARNING" sticker was placed over faded text during the 2015 inspection. No additional issues were identified.

## CAU 143, Area 25 Contaminated Waste Dumps

Two CASs require annual inspections. CAS 25-23-03 was inspected on November 23, 2015. Two "WARNING" stickers were placed over faded text during the inspection. No additional issue were identified.

CAS 25-23-09 was inspected on November 30, 2015. Two fallen signs identified in 2014 were rehung in 2015. An additional UR sign was rehung during the 2015 inspection. No additional issues were identified.

### CAU 145, Wells and Storage Holes

One CAS requires annual inspections. CAS 03-25-01 was inspected on November 19, 2015. No issues were identified.

#### CAU 151, Septic Systems and Discharge Area

One CAS requires annual inspections. CAS 12-03-01 (Lagoon A) was inspected on October 15, 2015. Two UR signs were rehung and five "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

#### CAU 168, Area 25 and 26 Contaminated Materials and Waste Dumps

Three CASs require inspections every five years until 2036. The last required inspections were performed in 2011, the next inspections will be performed in 2016.

### **CAU 204, Storage Bunkers**

Three CASs require inspections. CAS 01-34-01 was inspected on December 10, 2015. No issues were identified.

CAS 02-34-01 was inspected on November 4, 2015. No issues were identified.

CAS 03-34-01 was inspected on November 18, 2015. No issues were identified.

### CAU 254, Area 25 R-MAD Decontamination Facility

One CAS requires annual inspections. CAS 25-23-06 was inspected on November 24, 2015. No issues were identified.

## CAU 262, Area 25 Septic Systems and UDP

Three CASs require annual inspections. CAS 25-02-06 was inspected on November 23, 2015. Erosion is present around the tank and one UR sign post is falling due to the erosion. Erosion and sign repair will be completed in 2016.

CAS 25-05-03 was inspected on November 30, 2015. Minor erosion not requiring repair was observed. No additional issues were identified.

CAS 25-05-08 was inspected on November 30, 2015. No issues were identified.

### CAU 309, Area 12 Muckpiles

Three CASs require annual inspections. CAS 12-06-09, 12-08-02, and 12-28-01 are co-located and were inspected on November 18, 2015. No issues were identified.

#### CAU 322, Areas 1 & 3 Release Sites and Injection Wells

CAS 03-20-05 requires an inspection every five years until 2036. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

#### CAU 333, U-3auS Disposal Site

CAS 03-16-01 requires an inspection every five years until 2036. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

#### CAU 357, Mud Pits and Waste Dump

One CAS requires annual inspections. CAS 25-15-01 was inspected on November 30, 2015. One monument had fallen and one UR sign had fallen. Two UR signs had faded text. Monuments and signs will be repaired in 2016.

#### CAU 364, Area 25 RMAD Landfill

CAS 25-15-02 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

# CAU 399, Area 18 Disposal Site

CAS 18-16-01 requires an inspection every five years until 2026. The last required inspection was performed in 2011, the next inspection will be performed in 2016.

## CAU 539, Areas 25 and 26 Railroad Tracks

One CAS requires annual inspections. CAS 25-99-21 was inspected on November 23, 24, and 30, 2015. Six UR signs were down. Signs will be replaced in 2016. In addition to the fallen signs erosion was identified at this CAS. The impact of the erosion is being evaluated to determine its significance.

#### CAU 542, Disposal Holes

Five CASs require annual inspections. CAS 03-20-07 was inspected on December 1, 2015. One faded sign identified in 2014 was repaired in 2015. No issues were identified during the 2015 inspection.

CAS 03-20-09 was inspected on December 1, 2015. No issues were identified.

CAS 03-20-10 was inspected on December 1, 2015. No issues were identified.

CAS 03-20-11 was inspected on November 19, 2015. Two faded signs identified in 2014 were repaired in 2015. One "WARNING" sticker was placed over faded text during the 2015 inspection. No additional issues were identified.

CAS 06-20-03 was inspected on November 19, 2015. No issues were identified.

#### CAU 543, Liquid Disposal Units

One CAS requires annual inspections. CAS 15-01-03 was inspected on November 4, 2015. Two PCB signs were rehung during the inspection. No additional issues were identified.

## CAU 544, Cellars, Mud Pits, and Oil Spills

One CAS requires annual inspections. CAS 20-25-04 was inspected on October 8, 2015. Four faded signs identified in 2014 were repaired in 2015. Three "WARNING" stickers were placed over faded text during the 2015 inspection. No additional issues were identified.

### CAU 545, Dumps, Waste Disposal Sites, and Buried Radioactive Materials

Two CASs require annual inspections. CAS 03-08-03 was inspected on November 18, 2015. One faded sign is present, but it is within a Contamination Area so repairs are not recommended at this time. No issues were identified.

CAS 03-23-05 was inspected on November 18, 2015. No issues were identified.

# CAU 546, Injection Well and Surface Releases

One CAS requires annual inspections. CAS 09-20-01 was inspected on November 18, 2015. One sign was rehung during the inspection. No additional issues were identified.

### CAU 547, Miscellaneous Contaminated Waste Sites

Three CASs require annual inspections. In addition to the annual inspection, inspections are conducted at CAS 02-37-02, CAS 03-99-19, and 09-99-06 if precipitation occurs in excess of 1.0 inch (in.) in a 24 hour period.

CAS 02-37-02 received 0.61 in. of rain on August 1, 2015. A precipitation inspection was performed as a BMP on August 11, 2015. The annual inspection was also conducted at this time.

One UR sign was rehung, one UR sign was secured, and three "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified. CAS 02-37-02 received 1.15 in. of rain on October 4, 2015. A precipitation inspection was performed on October 5, 2015. No issues were identified. Between October 16 and 18, 2015, 2.57 in. of rain were recorded. A precipitation inspection was performed on October 19, 2015. Minor, shallow erosion not requiring repair was present on the cover. Additional erosion is present on the drainage controls berms. These items will be repaired as a BMP in 2016.

Between October 16 and 18, 2015, 1.70 in. of rain were recorded at CAS 03-99-19. A precipitation and annual inspection were performed on October 19, 2015. Animal burrows identified in 2014 were repaired in 2015. No issues were identified during the 2015 inspection.

CAS 09-99-06 received 0.98 in. of rain on August 1, 2015. A precipitation inspection was performed as a BMP on August 11, 2015. Five "WARNING" stickers were placed over faded text during the inspection. Three additional signs needed "WARNING" stickers but were not repaired during the inspection. Erosion damage was present on the cover. No additional issues were identified. CAS 09-99-06 received 1.23 in. of rain on October 4, 2015. A precipitation inspection was conducted on October 5, 2015. Previously identified erosion had increased. No additional issues were identified. CAS 09-99-06 received 3.14 in. of rain between October 16 and 18, 2015. A precipitation inspection was conducted on October 19, 2015. Previously identified erosion had increased. No additional issues were identified. During a site visit November 5, 2015, a formal inspection was not conducted, but it was noted that a rill on the cover met notification requirements, so NDEP notification was made on November 18, 2015. The annual inspection for CAS 09-99-06 was performed on November 19, 2015. "WARNING" text was placed on a total of seven signs, the three identified on August 11, 2015 and four additional signs. No additional issues were identified during that inspection. Required repairs to erosion on the cover were made on February 2, 2016. Additional repairs to the drainage control features at the site will be made as a BMP in 2016.

#### CAU 551, Area 12 Muckpiles

Four CASs require annual inspection. CASs 12-01-09, 12-06-05, 12-06-07, and 12-06-08 are co-located and were inspected on October 20, 2015. CAU 574, CAS 12-23-10 is also co-located with these CASs. Significant erosion is present on the diversion berm, but water is being diverted as intended and repairs are not required. No additional issues were identified.

#### CAU 552, Area 12 Muckpile and Ponds

One CAS requires annual inspections. CAS 12-23-05 was inspected on October 28, 2015. No issues were identified.

### CAU 560, Septic Systems

Two CASs require annual inspections. CASs 06-05-03 and 06-05-04 are co-located and were inspected on December 9, 2015. No issues were identified.

## CAU 561, Waste Disposal Areas

One CAS requires annual inspections. CAS 02-08-02 was inspected on November 4, 2015. No issues were identified.

## CAU 566, EMAD Compound

One CAS requires annual inspections. CAS 25-99-20 was inspected on November 23, 2015. The north gate is stuck in the open position and requires repair. No additional issues were identified. The gate will be repaired in 2016.

The following Industrial Sites CAUs no longer require inspections:

CAU 165, Area 25 and 26 Dry Well and Washdown Areas

CAU 261, Area 25 Test Cell A Leachfield System

CAU 528, Polychlorinated Biphenyls Contamination

CAU 529, Area 25 Contaminated Materials

CAU 554, Area 23 Release Site

#### SOILS

The following sites were closed in place with URs under the Soils Activity:

# CAU 105, Area 2 Yucca Flat Atmospheric Test Sites

Four CASs require annual inspections. CASs 02-23-04, 02-23-08, and 02-23-09 are co-located and were inspected on November 4, 2015. No issues were identified.

CAS 02-23-05 was inspected on November 4, 2015. No issues were identified.

# CAU 107, Low Impact Soil Sites

Two CASs require annual inspections. CAS 03-23-29 was inspected on November 19, 2015. Two "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

CAS 18-23-02 was inspected on December 3, 2015. Three "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified during the inspection.

#### CAU 365, Baneberry Contamination Area

One CAS requires annual inspections. CAS 08-23-02 was inspected on November 19, 2015. No issues were identified.

# CAU 366, Area 11 Plutonium Valley Dispersion Sites

Five CASs require annual inspections. CASs 11-08-01, 11-08-02, 11-23-02, 11-23-03, and 11-23-04 are co-located and were inspected on December 1, 2015. Erosion on the covers at CASs 11-08-01 and 11-08-02 that was identified in 2014 were repaired in 2015. During the 2015 inspection a fallen monument at CAS 11-08-01 was identified. No additional issues were identified. The monument will be repaired in 2016.

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

Three CASs require annual inspections. CAS 10-45-01 was inspected November 10, 2015. Fifteen "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

CAS 10-45-02 was inspected November 10, 2015. Five "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

CAS 10-45-03 was inspected November 10, 2015. Two "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

#### CAU 370, T-4 Atmospheric Test Site

One CAS requires annual inspections. CAS 04-23-01 was inspected December 8, 2015. During the 2014 inspections three UR signs were down and the fence required repair. Two of these UR signs were rehung during the 2015 inspection. The third fallen sign identified in the 2014 inspection was rehung and the fence was repaired on December 9, 2015. During the 2015 inspection four additional UR signs and one RMA sign had fallen and four UR signs were loose. All of these signs were rehung or secured during the inspection. No additional issues were identified.

## CAU 371, Johnnie Boy Crater and Pin Stripe

Two CASs require annual inspections. CAS 11-23-05 was inspected on October 27, 2015. No issues were identified.

CAS 18-45-01 was inspected on October 8, 2015. No issues were identified.

## CAU 372, Area 20 Cabriolet/Palanquin Unit Craters

Four CASs require annual inspections. CAS 18-45-02 was inspected on October 21, 2015. One fallen sign and four faded signs identified in 2014 were repaired in 2015. No issues were identified during the 2015 inspection.

CAS 18-45-03 was inspected on October 8, 2015. Four faded signs identified in 2014 were repaired in 2015. Six "WARNING' stickers were placed over faded text during the 2015 inspection. No additional issues were identified.

CAS 20-23-01 was inspected on September 30, 2015. Twenty-one "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

CAS 20-45-01 was inspected on October 6, 2015. Twelve "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

#### CAU 374, Area 20 Schooner Unit Crater

Two CASs require annual inspections. CAS 18-23-01 was inspected on July 23, 2015. No issues were identified.

CAS 20-45-03 was inspected on September 30, 2015. No issues were identified.

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

Two CASs require annual inspections. CAS 25-23-22 was inspected on November 24, 2015. Seven "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

CAS 30-45-01 was inspected December 7, 2015. During the 2014 inspection two signs had faded "WARNING" text, one UR sign was down, and the fence required minor repair. During the 2015 inspection the faded "WARNING" text was replaced. The fallen sign and fencing requiring repair could not be found. Five additional "WARNING" stickers were placed over faded text during the inspection. No additional issues were identified.

#### CAU 465, Hydronuclear

Four CASs require annual inspections. CAS 00-23-01 was inspected December 10, 2015. No issues were identified.

CAS 00-23-02 was inspected December 10, 2015. Minor erosion was present at one of the disposal holes and at the landfill. Need for repair will be evaluated, and if necessary, conducted in 2016. No additional issues were identified.

CAS 00-23-03 was inspected December 10, 2015. No issues were identified.

CAS 06-99-01 was inspected December 10, 2015. One Underground Radioactive Material Area (URMA) sign was secured during the inspection. No additional issues were identified.

## CAU 550, Smoky Contamination Area

Four CASs require annual inspections. CASs 08-23-03, 08-23-06, 08-23-07, and 08-26-01 are co-located and were inspected on November 9, 2015. One UR sign was missing, it was replaced on December 9, 2015. No additional issues were identified.

#### CAU 567, Miscellaneous Soil Sites

One CAS requires annual inspections. CAS 01-23-03 was inspected on December 10, 2015. No issues were identified.

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

Three CASs require annual inspections. CASs 03-23-13 and 03-23-15 are co-located and were inspected on December 1, 2015. No issues were identified.

CAS 03-23-21 is in two geographically separate locations and was inspected on November 18 and December 1, 2015. No issues were identified at either location.

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

Two CASs require annual inspections. CAS 09-23-10 was inspected November 4, 2015. No issues were identified.

CAS 09-23-15 was inspected November 4, 2015. No issues were identified.

## CAU 571, Area 9 Yucca Flat Plutonium Dispersion Sites

Five CASs require annual inspections. CASs 09-23-03, 09-23-04, and 09-23-12 are co-located and were inspected November 9, 2015. One sign was secured during the inspection. No additional issues were identified.

CAS 09-23-13 was inspected on November 4, 2015. No issues were identified.

CAS 09-45-01 was inspected on November 9, 2015. Two signs were secured during the inspection. No additional issues were identified.

## CAU 574, Neptune

One CAS requires annual inspections. CAS 12-23-10 is co-located with CAU 551 and the inspections are reported on a single checklist. CAS 12-23-10 was inspected on October 20, 2015. No issues were identified.

#### **DEFENSE THREAT REDUCTION AGENCY**

The following sites were closed in place with URs by the Defense Threat Reduction Agency (DTRA). Results of these inspections are included in this report on behalf of DTRA.

#### CAU 383, Area 12 E-Tunnel Sites

Three CASs require annual inspections. CASs 12-06-06, 12-25-02, and 12-28-02 are co-located and were inspected on October 20, 2015. One "WARNING" sticker was placed over faded text. No additional issues were identified.

CAU 476, Area 12 T-Tunnel Muckpile and CAU 559, T-Tunnel Compressor/Blower Pad One CAS in CAU 476 and one CAS in CAU 559 require annual inspections. The sites are co-located and reported on a single inspection checklist. CASs 12-06-02 and 12-25-13 were inspected on October 28, 2015. No issues were identified.

## CAU 477, Area 12 N-Tunnel Muckpile

One CAS requires annual inspections. CAS 12-06-03 was inspected on October 15, 2015. No issues were identified.

### CAU 478, Area 12 T-Tunnel Ponds

One CAS requires annual inspections. CAS 12-23-01 was inspected on October 28, 2015. No issues were identified.

### CAU 482, Area 15 U15a/e Muckpiles and Ponds

Three CASs require annual inspections. The co-located CASs 15-06-01, 15-06-02, and 15-38-01 were inspected on November 4, 2015. No issues were identified.

Copies of completed inspection checklists are enclosed. Please direct comments and questions to Tiffany Lantow, of my staff, at (702) 295-7645.

/s/ Signature on file

Robert F. Boehlecke, Manager Environmental Management Operations

EMO:11800.CD

Enclosures: As stated

cc w/encl.:

Northern Nevada Public Reading Facility (1 electronic copy) Southern Nevada Public Reading Facility 2 electronic copies) Navarro Document Production (electronic copy to OSTI)

cc w/o encl.:

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