DATE: April 24, 2018

TO: Greg Lovato, Administrator

FROM: Christine Andres, Chief, Bureau of Federal Facilities

SUBJECT: Quarterly Report: January 1, 2018 to March 31, 2018

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**FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO) QUARTERLY REPORTS**

**Industrial Sites Activity**

At the end of March 2018, there were 1958 Corrective Action Sites (CASs) (out of 1970 total) that have been closed, with two CASs in Corrective Action Unit (CAU) 114 and four CASs in CAU 575, all in various stages of active investigation, and six CASs in CAU 572 held for future work. National Nuclear Security Administration/Nevada Field Office (NNSA/NFO) and/or the Department of Energy’s (DOE) Environmental Management (EM) Nevada Program (NP) federal funding will dictate when these twelve (12) remaining Industrial Sites CASs are closed under the FFACO. Meanwhile, post-closure monitoring activities (report reviews, meetings and site visits) continued for a number of closed Industrial Sites on the Nevada National Security Site (NNSS).

**Soils Activity Sites**

At the end of March 2018, there were 135 CASs (out of a total of 144) that have been closed, with nine (9) CASs in various stages of active investigation.

During the past quarter, the Nevada Division of Environmental Protection’s Bureau of Federal Facilities (NDEP and/or BFF) staff reviewed FFACO documents and related correspondence, participated in project evaluations, and attended comment and technical issue resolution meetings with the EM NP personnel with the aim of closing the remaining nine (9) CASs, which comprise four (4) Soils CAUs.

**Document Reviews:**

**CAU 412 – Clean Slate I** – BFF received and reviewed the Final Addendum to the Closure Report (CR). Staff asked for clarification on contradictory language used in the Final Addendum and a November 13, 2017 US Air Force memorandum to the EM NP regarding use restrictions.

**CAU 414 – Clean Slate III** – An approval letter for The Final Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) was issued.

**Soils Quality Assurance Plan, Rev. 1 (Soils QAP)** – As the Soils Activity is nearing its completion, NDEP initiated a top to bottom assessment of the EM NP QA program. NDEP divided this assessment into two parts. The first part consisted of evaluating the current regulations, orders
and environmental requirements under which the EM NP has operated QA at the NNSS. NDEP submitted a letter requesting clarification concerning compliance with specific parts of the regulations, orders, and policies EM NP follows for Quality Management. The second part consisted of reviewing, comparing and assessing final FFACO documents and cited references for quality compliance. NDEP will submit results of the second part of the review to EM NP in the near future.

Meetings and Site Visits:

CAU 413 – Clean Slate II – Remedial actions continued at the site this quarter and staff traveled to the TTR to observe and monitor the progress of radiological soil removal and packaging operations being conducted as part of the clean-closure alternative selected for this CAU. Along with EM NP personnel, staff observed dust control measures associated with radiologically-contaminated soil excavation, staging, and packaging. According to the Clean Slate II Remediation Activity report for week ending March 16, 2018, submitted to BFF, the DOE contractor has completed excavation of four of the surface soil contamination areas, with soil bagging still required at the buried debris zone. At the time of our site visit, only the buried debris zone (concrete and metal) remained for excavation and soil removal. Staff inspected soil removal progress including an in-progress geophysical survey, quality control for waste package integrity, soil staging areas, contamination control operations, and dust control measures. Staff also met with the on-site health physicist about precautions said to be taken to protect workers, the on-site air monitoring system and how potential radiological dose from airborne particles is assessed, and swipe sampling used to monitor surficial contamination on waste packages staged for off-site transportation and disposal. Staff were also shown at least one package that was found not to be acceptable for waste shipment due to flaws in the outer bagging material and discussed corrective actions in regards to this waste package.

Underground Test Area (UGTA) Activity

There are five (5) UGTA CAUs, all of which are in various stages of active investigation, CADD/CAP (model evaluation) or long-term monitoring during the Closure Stage.

During this quarter, BFF staff participated in the process of document review, project evaluation, meetings and/or site visits for three (3) of the CAUs in the following ways:

Document Reviews and Letters:

CAU 97 – Yucca Flat – BFF staff reviewed, and issued approval letters for Fluid Management Strategy letters for Water Well C-1 and UGTA well ER-6-1. Staff serving on the preemptive review (PER) reviewed the Flow and Transport report and the CADD/CAP in preparation for a PER on the model evaluation targets of $^{137}\text{Cs}$ and $^{90}\text{Sr}$ mobility.

CAU 98 – Frenchman Flat – Staff received and reviewed the Final Post-Closure Monitoring Report, Revision 1, for Calendar Year 2016 late last quarter. This submission was not a FFACO milestone but receipt was acknowledged in this quarter. Staff also provided input on a Record of Technical Change for the Closure Report.

CAU 99 – Rainier Mesa/Shoshone Mountain (RM/SM) – BFF staff reviewed and provided comments on Section 3.1.2.7 Re-write and Appendix I of the Flow and Transport report in early
January. BFF then received the Flow and Transport Model Report via the SharePoint website and notified the EM NP that the Report was found to be acceptable to begin the External Peer Review for CAU 99 on January 30, 2018. However, NDEP stated that before February 12, 2018, NDEP had to receive from EM NP the Final CAU 99 Flow and Transport Model Report Document accompanied by a letter formally requesting NDEP’s approval of the Flow and Transport Model Report Document. The report and letter were received on January 29, 2018. On February 12, 2018, BFF issued an approval letter for the Final CAU 99 Final Flow and Transport Model Report, Revision 1.

**Underground Test Area (UGTA) Quality Assurance Plan** - A signed Record of Technical Change was submitted for the Final UGTA Quality Assurance Plan, Revision 2, June 2015.

**Underground Test Area (UGTA) Calendar Year (CY) 2016 Annual Sampling Analysis Report** - The UGTA Calendar Year (CY) 2016 Annual Sampling Analysis Report, Revision 0 was submitted and acknowledged as a supplemental report.

**Meetings and Presentations:**

**CAU 97 – Yucca Flat** – BFF staff attended a presentation on the model evaluation targets of $^{137}\text{Cs}$ and $^{90}\text{Sr}$ mobility and a meeting to discuss ways to quantify the uncertainty in the elevation of the LCA. Staff also participated in follow-up conference calls and provided comments when necessary.

**CAU 99 – Rainier Mesa/Shoshone Mountain (RM/SM)** – Staff participated in a comment resolution meeting and follow-up conversations with EM NP staff and contractors for the Flow and Transport report. BFF staff attended the external Peer Review presentation and a follow-up meeting to answer questions from the Peer Review Panel.

**Nevada Off-Sites**

There are four (4) Nevada Off-Sites CAUs, two (2) Surface CAUs (CAU 416 and 417) and two (2) Subsurface CAUs (CAU 443 and 447). CAU 416 has been clean-closed. CAU 417 is in Post-Closure Monitoring. CAU 443 is in the Closure Stage. CAU 447 is in the CADD/CAP Stage and is undergoing further site evaluation.

During this quarter, BFF staff participated in the process of document review, project evaluation, conference calls and/or meetings for all three (3) of the active CAUs:

**Document Reviews and Letters:**

**CAU 417 – Central Nevada Test Area Surface** – BFF staff received, reviewed and approved the Final Postclosure Inspection and Monitoring Report for this CAU from the Department of Energy/Office of Legacy Management (OLM).

**CAU 443 – Central Nevada Test Area Subsurface** – Staff reviewed and approved the Final 2016 Postclosure Groundwater Monitoring and Inspection Report for this CAU from OLM.

**CAU 447 – Project Shoal Subsurface** – BFF staff provided input to OLM on the draft outline for the Shoal CADD/CAP Addendum.
Meetings and Presentations:

BFF staff participated in two conference calls with OLM this quarter to receive project updates and participate in planning for upcoming site activities.

Miscellaneous:

The chief attended the Division Staff Meeting in Carson City on January 8 and February 27, 2018. While in Carson City for the meeting, various other bureau business was conducted, including an all-day planning meeting with the Administrator on February 28, 2018. The staff meetings on January 22, February 12 and March 5 were participated in via conference call by the Bureau Chief.

The bureau chief attended: (1) a tour of the NNSS with the Nevada High Level Waste Interim Committee; (2) a Nevada Site-Specific Advisory Board (NSSAB) leadership meeting with EM NP staff and upper management from NDEP; (3) a ECOS meeting in Denver, CO to work on the States/EPA/DOE Dialogue; (4) a Low-Level Waste Stakeholder’s meeting in Pahrump; (5) NSSAB meetings in Beatty and Las Vegas; (6) planning calls for an upcoming Nevada State Emergency Response Commission meeting; and (7) numerous planning calls for both NGA’s FFTF and Intergovernmental 2018 Meetings. A bureau staff meeting and transition meetings were also held in preparation for upcoming staff changes.

The Annual FFACO meeting was attended by the Bureau Chief and Bureau Supervisor. They also attended a budget briefing by EM NP personnel.

The Bureau is participating in a pilot program for establishing an e-Records system for the Agency. Staff completed verification of Documentum Files, preparing them for export to the Document Viewer website. Several Industrial and Soil Sites’ CAU files were verified and prepared for export over these three months.

Training:

Staff completed OSHA 8-hour training.
Agreement in Principle (AIP) Functional Areas Summary

1. On-Site Discharges

Water Pollution Control

Document Reviews:

**Water Pollution Control Permit GNEV 93001** – The Nevada Division of Environmental Protection’s Bureau of Federal Facilities (NDEP and/or BFF) staff reviewed the October 1 through December 31, 2017, Quarterly Discharge Monitoring Report (QMR) received from the National Nuclear Security Administration/Nevada Field Office (NNSA/NFO). With the temporary waiver from the use of the calculated flow limit for the DAF sewage lagoon system as a permit limit, granted by the BFF in the first quarter of SFY 16, the facilities at the Nevada National Security Site (NNSS) are in compliance with the current permit.

**Water Pollution Control Permit GNEV 96021** – BFF staff reviewed the QMR for October 1 through December 31, 2017, the Annual Summary E Tunnel Waste Water Disposal System, and the Well ER 12-1 Groundwater Sampling Summary Report for 2016 and 2017. NDEP sent two letters stating they were compliant. NDEP also received and reviewed the E Tunnel Waste Water Disposal System and Monitoring Well ER 12-1 Operations and Maintenance Plan. NDEP sent a letter noting it was compliant with terms and conditions set forth in the Permit.

Meetings:

BFF staff attended the quarterly Water Meeting held on February 1, 2018.

Spills

NNSA/NFO notified NDEP of a spill (#180321-01) in Area 5 on March 21, 2018. Through letter, NDEP requested NNSA/NFO provide a course of corrective action within 30 days.

2. Ground Water Monitoring

There was no activity in this category during this quarter.

3. Air Quality Monitoring

There was no activity in this category during this quarter.

4. Low Level and Mixed Low Level Waste Oversight

Conference Calls:

Staff participated in weekly Waste Acceptance Review Panel (WARP) meetings in person and/or via teleconference on January 3, 10, 17, 24, 31; February 7, 14, 21, 28; and March 7, 14, 21, and 28, 2017. Review panel members discussed waste profile comments and waste-specific compliance issues for generator-submitted low-level and mixed low-level radioactive waste profiles as they pertain to Nevada National Security Site Waste Acceptance Criteria (NSSWAC), Rev. 16-00, which became effective in February 2017. As applicable, BFF staff reviewed and provided comments on low-level radioactive waste and mixed waste profiles (for compliance with
NNSSWAC, Rev. 16-00) and reviewed all comment responses submitted by the currently-approved Low-Level Waste and Mixed Low-Level Waste generators.

The annual 2018 Waste Generator Workshop was held in Las Vegas. The BFF Chief gave a presentation on Nevada’s Low-Level Waste Priorities.

**Site Visits/Radioactive Waste Generator Facility Evaluations:**

NDEP staff participated in the following radioactive waste generator facility preparatory meetings and surveillances/audits: Mission Support and Test Services (MSTS), Las Vegas, NV; Nuclear Fuel Services, Erwin, TN; Lawrence Livermore National Laboratory, Livermore, CA.

**Meetings/Conferences:**

One specific generator’s, Nuclear Fuel Services, Inc., (NFS) located in Erwin, TN, attention has continued. NDEP staff held a show cause meeting on November 8, 2017 with NFS, NNSA/NFO and EM NP personnel for violations regarding past shipments made to the NNSS, as stated in a Finding of Alleged Violation issued on October 26, 2017. As required, the NNSA/NFO submitted a written report of the explanation for how the incident occurred on January 11, 2018. This report was reviewed and discussed with NNSA/NFO personnel in numerous meetings. While also required to submit a DRAFT Corrective Action Plan (CAP) that was to include steps taken to prevent a recurrence of the alleged violation, including any appropriate revisions needed to the Waste Analysis Plan for Permit NEV HW0101, no later than March 30, 2018, a one week extension was requested by NNSA/NFO and granted by NDEP.

BFF staff attended a meeting with EM NP and contractor personnel to discuss the FY 2018 facility evaluation schedule for RWAP.

5. **Waste Management**

**Document Review:**

HW0101; (15) corrections to multiple reports in 2011 for Permit NEV HW 0101 EODU; and, (16) the NNSS 2017 Area 5 annual Groundwater monitoring report.

**Meetings and Conference Calls:**

**NEV HW0101 Cell 25** – NDEP staff participated in the weekly construction meeting.

**Solid Waste Disposal Site (SWDS) Permit** – Staff met with EM NP personnel to discuss needed updates to the current Solid Waste permits.

**RCRA Information Network Meeting (RIN)** – BFF participated in the monthly RIN meeting hosted by the U.S. Environmental Protection Agency (EPA). The RIN group consists of the various EPA regional offices and state environmental agencies.

**Site Inspections:**

**Permit NEV HW0101 Cell 25** – NDEP staff visited Cell 25, undergoing construction, two times in January 2018. NDEP personnel inspected materials and reviewed documentation during site visits. Construction of Cell 25 was completed in late January.

**RCRA Annual Post-Closure Monitoring (PCM)** – BFF staff prepared for, and conducted, annual PCM inspections for closed RCRA permitted sites on the NNSS.

6. **Major Program Proposals**

There was no activity in this category during this quarter.

7. **Historic Preservation**

Funding has been provided to the SHPO for historic reviews at DOE and/or the NNSS during the year.

8. **Environmental Monitoring Program and Report**

There was no activity in this category during this quarter.

9. **Sampling**

No sampling activities were conducted by the Bureau during this quarter.

10. **Safe Drinking Water**

    **Meetings:**

    BFF staff attended the quarterly Water Meetings held on February 1, 2018.
Fiscal Analysis:

Estimate of personnel resources used (FTE or hours)

The bureau of Federal Facilities is made up of a Bureau Chief, one supervisor, five technical staff and an administrative assistant. The AIP grant funds activities for each of these individuals. For the quarter, that represents approximately 3.5 FTEs based on a review of grant related activities.

Total expenditures for each task area

A total of approximately $124,700.00 was spent during this quarter for AIP work. This is the most current figure available at this time and includes personnel, operating, information services, DOE and DOE oversight and purchasing costs.

Comparison of estimate to budgeted expenses:

Expenses this quarter were within the legislatively-approved spending limits.

Miscellaneous:

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