

**DATE:** January 22, 2021  
**TO:** Greg Lovato, Administrator  
**FROM:** Christine Andres, Chief, Bureau of Federal Facilities  
**SUBJECT:** Quarterly Report: October 1, 2020 to December 31, 2020

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## **FEDERAL FACILITY AGREEMENT AND CONSENT ORDER**

### **(FFACO) QUARTERLY REPORT**

Due to the continuation of stay-at-home orders issued by the Governor of Nevada on March 15, 2020, because of the COVID-19 pandemic, both the Nevada Division of Environmental Protection (NDEP) and the Department of Energy's Nevada Offices continued mostly teleworking this reporting period. While the teleworking continued to impact in-person meetings and field visits/in-person inspections this quarter, a few select meetings were held in-person at the beginning of the quarter following all safety protocols. Teleworking did not however, impact submittal and review of documents, reports, letters, virtual meetings or teleconferences, as noted below.

#### **Industrial Sites Activity**

At the end of December, there were 1962 historical Corrective Action Sites (CASs) (out of 1970 total) that have been closed, with two CASs in Corrective Action Unit (CAU) 114 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 eight (8) Industrial Sites CASs are closed under the FFACO. However, during this quarter, planning by the EM NP continued for the needed remediation work on both of these CAUs, including submission of a Draft Streamlined Approach for Environmental Restoration (SAFER) Plan for CAU 572.

The NDEP's Bureau of Federal Facilities (BFF) staff continued post-closure monitoring activities through report reviews and Use-Restrictions reviews for a number of closed Industrial Sites on the NNSS, as well as the following activities:

#### **Document Reviews and Letters:**

**CAU 111 and Tribal Interaction** – BFF staff reviewed the quarterly revegetation effort status letter report. The TRC final report on the three-year pilot study for revegetation efforts of CAU 111 on the NNSS is due to NDEP late first quarter CY2021 or early second quarter CY2021.

**CAU 114** – The BFF reviewed and approved a *Request to Transfer Corrective Action Site (CAS) 25-33-05: Building 3901, Engine Transport System Maintenance Building from Corrective Action Unit (CAU) 572: Test Cell C Ancillary Building and Structures to CAU 114: Area 25 EMAD Facility.*

**CAU 572** - BFF staff received the *Draft Streamlined Approach for Environmental Restoration (SAFER) Plan for Corrective Action Unit (CAU) 572: Test Cell C Ancillary Building and*

*Structures, Nevada National Security Site (NNSS), Nevada, Revision 0, December 2020.* Review of the document and submittal of comments to the EM NP will occur in the following quarter.

Bureau staff also reviewed and approved a *Request to Promote Corrective Action Unit (CAU) 572: Test Cell C Ancillary Building and Structures Appendix II to Appendix III of the Federal Facility Agreement and Consent Order (FFACO).*

**CAU 577** – Staff reviewed and submitted comments to the EM NP on the *CAU 577 CADD/CAP August 2020 Revision 0* document following significant changes to earlier documents by the EM NP.

*Meetings and Presentations:*

**CAU 111 and Tribal Interaction** – BFF staff virtually attended the quarterly meeting with the Tribal Revegetation Committee (TRC).

**Soils Activity Sites**

At the end of December 2019, all Soil CASs, a total of 144, had been closed. All identified Soils Sites have been addressed under the FFACO.

**Underground Test Area (UGTA) Activity**

There are five (5) UGTA CAUs, all of which are either in the Corrective Action Investigation Stage or in long-term monitoring during the Closure Stage.

During this quarter, BFF staff participated in the process of document review, project evaluation, meetings and/or teleconferences for four (4) of the five (5) the CAUs in the following ways:

*Document Reviews and Letters:*

**CAU 97 – Yucca Flat / Climax Mine** – BFF Staff reviewed and approved the *Final Underground Test Area (UGTA) Closure Report for Corrective Action Unit 97: Yucca Flat/Climax Mine, Nevada National Security Site, Nevada, Revision 1, September 2020, and Record of Technical Change (DOE/EMNV—0021-ROTC 1), dated 10/01/2020* after all of BFF’s comments on the Draft document were satisfactorily addressed. A Notice of Completion was also issued for this milestone. A separate letter was also issued by the BFF approving the transfer of this CAU from Appendix III to Appendix IV of the FFACO, signaling the closure of the CAU and initiating long-term, post-closure monitoring.

BFF staff reviewed a draft ROTC for the *Model Evaluation Report for Corrective Action Unit 97: Yucca Flat/Climax Mine, Nevada National Security Site, Nye County, Nevada* and provided comments to EM NP.

The EM NP also submitted the *Final Closure Monitoring Report for Corrective Action Unit (CAU) 97: Yucca Flat/Climax Mine, Underground Test Area (UGTA), Nevada National Security Site (NNSS), Nevada, Revision 0, December 2020.* Following review of the document, the BFF submitted comments to be addressed in Revision 1 of the document.

**CAU 99 – Rainier Mesa / Shoshone Mountain** – Staff reviewed and approved a *Request for Deadline Extension for Corrective Action Unit (CAU) 99: Rainier Mesa/Shoshone Mountain Calendar Year (CY) 2020 Postclosure Monitoring Report, Rev 0*.

The BFF issued a letter approving the transfer of this CAU from Appendix III to Appendix IV of the FFACO, closed in early 2020, initiating long-term, post-closure monitoring.

**CAU 101/102 – Pahute Mesa (PM)** – NDEP received and approved the *Request for Notice of Completion on Corrective Action Unit (CAU) 101: Central Pahute Mesa and CAU 102: Western Pahute Mesa Data Completion Presentation #6 Milestone* for the presentation held late last quarter.

NDEP received and reviewed the *Phase II Geochemical and Isotopic Evaluation of Groundwater Flow in the Pahute Mesa-Oasis Valley Flow System, Nevada, Revision 1, September 2020*. As the document addressed BFF's comments on Revision 0, an acknowledgement letter was sent to the EM NP.

Staff submitted comments on the *Underground Test Area (UGTA) Sampling Plan for Corrective Action Units (CAUs) 101 and 102: Central and Western Pahute Mesa, Nevada National Security Site (NNSS), Nevada, Revision 0, August 2020*. Revision 1 of the document was received in November 2020 and, as all BFF comments had been satisfactorily addressed, an acknowledgement letter was issued following receipt and review of Revision 1.

The BFF provided comments to the EM NP on the *Hydrologic Data for Groundwater Flow and Contaminant Transport Model of Corrective Action Units (CAUs) 101 and 102: Central and Western Pahute Mesa, Nye County, Nevada, Revision 0, September 2020*.

Meetings and Presentations:

**CAU 97 – Yucca Flat / Climax Mine** – BFF Staff participated in a comment resolution virtual meeting for the *Final Underground Test Area (UGTA) Closure Report for Corrective Action Unit 97: Yucca Flat/Climax Mine, Nevada National Security Site, Nevada, Revision 1, September 2020, and Record of Technical Change (DOE/EMNV–0021-ROTC 1), dated 10/01/2020*.

Several teleconferences were held between BFF and EM NP staff on the draft ROTC for the *Model Evaluation Report for Corrective Action Unit 97: Yucca Flat/Climax Mine, Nevada National Security Site, Nye County, Nevada* in order to address questions and comments.

**CAU 101/102 – Pahute Mesa (PM)** – Staff participated in a virtual presentation by DOE contactors on Gross Alpha and Uranium concentrations in groundwater under Pahute Mesa in relation to the Safe Drinking Water Act (SDWA) standards for these elements.

General:

**Fiscal Year (FY) 2020 + 1 Milestone Chart and Listing of Modifications to the Federal Facility Agreement and Consent Order (FFACO)** – The Bureau received this document and responded as required after a thorough review.

**Use Restrictions (URs)** – Staff continued to interact with EM NP and their contractors on needed modifications to current URs, including requesting additional information and reviewed documentation concerning downgrading or removing UR for several CAUs and approved the modifications.

**Calendar Year (CY) 2019 Underground Test Area (UGTA) Annual Sampling Report, Nevada National Security Site (NNSS), Nevada, Revision 1, October 2020** – Staff received and reviewed this document after providing comments on Revision 0. As all of BFF's comments were satisfactorily addressed, a letter was sent acknowledging that fact.

**Underground Test Area (UGTA) Calendar Year (CY) 2019 Quality Assurance Report, Nevada National Security Site (NNSS), Nevada, Revision 0, November 2020** – This report was received mid-way through this quarter. Comments will be submitted to the EM NP in early January 2021.

**File Management** – This quarter, staff have continued to organize, complete, scan for electronic storage, and document files for closed FFACO sites.

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 neared the Closure Stage this quarter.

During this quarter, BFF staff participated in the process of document review and project evaluation with Office of Legacy Management (OLM) personnel for one (1) of the CAUs in the following ways:

Document Reviews and Letters:

**CAU 447 – Project Shoal Area (PSA)** – Staff received and reviewed the *Final Closure Report (CR) for the Project Shoal Area: Subsurface Corrective Action Unit (CAU) 447 Shoal, Nevada, Site*. Two additional comments were generated and submitted to OLM this quarter. These two comments were addressed in a resubmitted Final Document. As all comments were satisfactorily addressed, an approval letter was issued in October, along with the approval of the BFF for transferring this CAU from Appendix III to Appendix IV of the FFACO, signaling the closure of the CAU and initiating long-term, post-closure monitoring.

BFF staff submitted comments to the OLM on the *Draft 2019 Groundwater Monitoring Report, Project Shoal Area: Subsurface, Corrective Action Unit (CAU) 447 Shoal, July 2020*.

*A Request for a Deadline Extension for Project Shoal Area Subsurface Corrective Action Unit (CAU) 447, Shoal, Nevada, Site* was received, reviewed and approved.

**Fiscal Year (FY) 2020 + 1 Milestone Chart and Listing of Modifications to the Federal Facility Agreement and Consent Order (FFACO)** – The Bureau received this document and responded as required after a thorough review.

**Miscellaneous:**

The chief participated in monthly virtual NDEP Attorney General staff meetings, bi-weekly Division-Wide Chief's Staff Meetings and bi-weekly meetings with the Administrator via conference calls in October, November and December 2020.

During this quarter, the bureau chief also attended/participated virtually in: (1) the annual Nevada Site-Specific Board (NSSAB) orientation and one NSSAB Intergovernmental Meeting and one full NSSAB meeting; (2) numerous calls for NGA's FFTF and the State, Tribal, Government Working Group (STGWG); (3) the Low-Level Waste Stakeholder's Forum Quarterly Meeting; (4) bureau staff meetings; (5) the annual DOE Intergovernmental Meeting; (6) planning calls for the Annual Fall Combined Intergovernmental Working Group; (7) meetings and teleconferences to discuss the future of the FFACO in regard to long-term stewardship; and, (8) reviews of co-authored papers and presentations for the 2021 Waste Management Symposium.

**Training:**

Staff attended the NDEP Las Vegas Office annual safety meeting and NDEP Records Retention Training.

BFF staff has also completed the NNSS access badge trainings.

**Agreement in Principle (AIP) Functional Areas Summary – Grant #DE-NA0003295**

**1. On-Site Discharges**

**Water Pollution Control**

*Document Reviews and Site Inspections:*

**Water Pollution Control Permit GNEV93001** – The Nevada Division of Environmental Protection’s (NDEP) Bureau of Federal Facilities (BFF) staff reviewed the Third Quarter 2020 Discharge Monitoring Report (QMR) received from the National Nuclear Security Administration/Nevada Field Office (NNSA/NFO). BFF sent a letter to NNSA/NFO informing them that the monitoring report was in compliance with the limits set forth in the permit 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 2016.

Permit GNEV93001 expired on August 5, 2020. The permit is currently administratively continued. BFF staff has been in the process of updating and renewing the permit. In efforts to remain consistent with all other similar permits issued by the State of Nevada, BFF staff has had virtual meetings with NDEP’s Bureau of Water Pollution Control (BWPC) to ensure the groundwater discharge permit aligns with discharge permits issued by BWPC.

BFF staff has been in contact with NNSA/NFO staff to get updated permit information and to ask general questions on permitted activities. The permit is scheduled to go to public notice at the end of January 2021.

BFF staff visited the Nevada National Security Site (NNSS) on November 9, 2020 and conducted a walk-through of the permitted sites with NNSA/NFO contractors. During the socially distanced walk-through, BFF staff noted that the lagoon systems were in good condition. Staff also noted that there were many septic systems onsite. BFF staff is working with BWPC staff to address the various septic systems located onsite and maintain consistency throughout the State.

**Water Pollution Control Permit GNEV96021** – BFF staff reviewed the QMR for Third Quarter 2020 and sent a letter to NNSA/NFO stating that the monitoring report was in compliance with the limits set forth in the permit.

Permit GNEV96021 expired on September 21, 2018. The permit is currently administratively continued. Newly hired BFF staff has begun review of the renewal application and background information on the E-Tunnel activities to gain knowledge and history on the permit.

As current COVID-19 pandemic restrictions allow, BFF staff is planning a site visit in late February or March of 2021 to the E-Tunnel located on NNSS, to better understand the complexities of the permit.

**Spills**

No spills were reported this quarter.

## **Meetings**

A water meeting was held via teleconference on December 10, 2020. During the call, NNSA/NFO contractors updated the BFF on sewage lagoon operations. Area 23, Yucca Lake, and the DAF lagoons were found to be in good condition after a recent NNSA/NFO staff visual inspection. The Area 23 flow meter that was recently installed is in good working order. NNSS staff was still waiting on a new flow meter for the Yucca Lake lagoon system. The U1a new lagoon construction had not yet started. Lysimeters will be installed to measure the leakage rate of this new lagoon system. The monitoring requirements for the lysimeters will be included in the GNEV93001 permit.

### **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) meeting via teleconference during October, November, and December 2020. Review panel members discussed waste profile comments and waste-specific compliance issues for generator-submitted low-level and mixed low-level radioactive waste profiles, along with Pre-Treatment Notifications, 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.

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

NDEP staff participated virtually in an audit at the Y-12 National Security Complex in late October. In-person waste surveillances and audits did not occur this quarter due to COVID-19 restrictions.

#### *Waste Generators Violation Statuses:*

**CAU 577 – Area 5 Chromium-Contaminated Waste Disposal Cells** – This CAU was created in March 2019 to address the closure of five (5) cells at the Radioactive Waste Management Complex at the NNSS that had received trivalent chromium-bearing waste in the past from Nuclear Fuel Services, located in Erwin, TN.

On July 1, 2020, NNSA/NFO and EM NP personnel submitted a draft Corrective Action Decision Document/Corrective Action Plan for this CAU for Division of Environmental Protection, Bureau of Federal Facilities' (NDEP and/or BFF) staff's review and comment. BFF staff submitted

comments to the EM NP on July 30, 2020. This quarter, BFF staff reviewed and submitted comments to the EM NP on a *CAU 577 CADD/CAP August 2020 Revision 0* document following significant changes to earlier documents by the EM NP.

**Y-12 National Security Complex** – BFF and NDEP personnel continued to work on a waste issue originating at the Y-12 National Security Complex (Y-12), located in Oak Ridge. The NDEP was informed of a potential violation of RCRA Permit NEV HW0101 on July 3, 2019. Specific details of events that occurred between July 3, 2019 and September 30, 2020 are provided in the five previous quarterly reports. During this quarter, BFF staff continued to participate in weekly in-person and virtual sub-group negotiation meetings with NNSA/NFO and EM NP personnel and in a number of internal NDEP TEAMS meetings in order to reach resolution on a number of waste program improvements.

*Document Reviews:*

Staff reviewed: (1) CRPCD Technical Whitepaper; Disposition of Foreign Origin Americium; (2) Path Forward and Recommendations for Certain Low-Level Radioactive Waste Disposal Rulemakings (SECY-20-0098); and, (3) began review of the Draft Versatile Test Reactor Environmental Impact Statement (DOE/EIS-0542).

**5. Waste Management**

*Document Review / Letters Issued:*

Staff reviewed and/or approved: (1) NNSS Quarterly Hazardous Waste Volume Report and Fee: Third Quarter Calendar Year (CY) 2020; (2) Nevada National Security Site Area 5 Asbestos Waste Disposal Reports for the Third Quarter of CY 2020 for Permits HW0101 and SW532; (3) Quarterly Progress Reports for Revegetation at CAU 111: Area 5 WMD Retired Mixed Waste Pits; (4) Notification of Resumed Disposal Operations in Cell 19; (5) Completion Report for the RCRA Emergency Permit for Treatment of UXO in Area 18 on the NNSS; (6) Notification of Progress for Closure of Cell 18; (7) Waste Volume Report for the Area 3 Radioactive Waste Management Site and for the Area 5 Radioactive Waste Management Complex at the NNSS for Fiscal Year 2020.

**RCRA Permit NEV HW0101 Renewal Application** – BFF personnel reviewed and submitted comments on the RCRA Permit NEV HW0101 renewal application. Comments will be addressed and incorporated as needed in the revised permit application submitted to NDEP by the NNSA/NFO.

**Asbestos Containing Pipe** – BFF had been asked by the NNSA/NFO's M&O contractor if there were any concerns with using a Close Tolerance Pipe Slurrification technique when replacing asbestos cement pipe for the potable water systems on the NNSS. As BFF was not familiar with this technique, staff requested a meeting with the bureaus of Sustainable Materials Management and Safe Drinking Water to discuss any concerns and experiences with the proposed technique. Additional follow-up was conducted with the Bureau of Air Quality after it was learned that such work would be covered under NESHAP. As such, the Federal Register Notice pertaining to using



alternative work practices for ACP replacement was read and a meeting was set up for early next quarter to discuss particulars with the M&O.

Conference Calls:

**Calls with EM NP and/or NNSA/NFO Staff** – BFF personnel participated in conference calls regarding characterization and disposition of classified material/classified Waste at the NNS.

**EPA Region 9** – BFF personnel discussed potential resolutions to the April 10, 2020 EPA Region 9 Notice of Violation issued by EPA to the NNSA/NFO in response to the Y-12 incident. BFF personnel have scheduled additional meetings with EPA Region 9 for January 2021.

Training:

**Waste Profile Training** – Senior BFF personnel conducted internal training for new BFF personnel on waste profile review, the NNSWAC, NDEP issued permits and applicable federal and state regulations.

**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 NNS 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**

Document Reviews and Site Inspections

BFF was copied on the following Bureau of Safe Drinking Water (BSDW) reports submitted by NNSA/NFO contractors:

- Third Quarter Disinfection Report for PWS NV0000360
- October 2020 Potable Water Truck Coliform Results for PWS NV0000360
- November 2020 Potable Water Truck Coliform Results for PWS NV0000360
- December 2020 Potable Water Truck Coliform Results for PWS NV0000360

BFF reviewed the reports referenced above and had no comments. The drinking water wells for PWS NV0004098 and NV0004099 are out of service due to pump failure and pipe rehabilitation. When the wells are back in operation, monitoring and reporting will continue for those permits.

BFF staff worked with BSDW staff to ensure responses on various document submittals by NNSA/NFO were consistent between bureaus.

The sanitary sewer survey has been postponed until further notice due to COVID-19. The BSDW, BFF, and NNSA/NFO will work together to see if a virtual sanitary sewer survey inspection can be conducted.

### Spills

No spills were reported.

### Meetings

A water meeting was held via teleconference on December 10, 2020. BFF received updates on various water projects. The Mercury Campus waterlines third segment is operational, but the completion report is pending. The Area 6 batch plant supply line is installed but is not in service. There are no plans to bring this line into service until 2021.

## **Fiscal Analysis:**

### *Estimate of personnel resources used (FTE or hours)*

The bureau of Federal Facilities is made up of a Bureau Chief, one supervisor, one subject matter expert, three 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 \$88,000 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:**

As the current AIP is set to expire on June 30, 2021, review of the current AIP was conducted and comments submitted to the EM NP for consideration on needed updates.

This quarter, staff have continued to organize, complete, scan for electronic storage, and document files for Permits SW-532, NEV HW0101 and Radioactive Waste Acceptance Program.

Throughout the quarter, BFF staff has continued to read technical documents and regulations associated with newly assigned job duties in the area of waste management. Readings included the Agreement-in-Principle (AIP), the NNSSWAC, RCRA, Safe Drinking Water Act standards for Gross Alpha and Uranium, the solid waste permit applications and permits, a few select waste profiles, the Toxic Substances Control Act, NRS 445A Water Controls, the E-Tunnel Permit, the NNSS O&M for On-Site Disposal Systems, and NNSS EIS-0426.

The chief participated in monthly virtual NDEP Attorney General staff meetings, bi-weekly Division-Wide Chief's Staff Meetings and bi-weekly meetings with the Administrator via conference calls in October, November and December 2020.

During this quarter, the bureau chief also attended/participated virtually in: (1) the annual Nevada Site-Specific Board (NSSAB) orientation and one (1) NSSAB Intergovernmental Meeting and one (1) full NSSAB meeting; (2) numerous calls for NGA's FFTF and the State, Tribal, Government Working Group (STGWG); (3) the Low-Level Waste Stakeholder's Forum Quarterly Meeting; (4) bureau staff meetings; (5) the annual DOE Intergovernmental Meeting; (6) planning calls for the Annual Fall Combined Intergovernmental Working Group; (7) meetings and teleconferences to discuss the future of the FFACO in regard to long-term stewardship; (8) a quarterly meeting with NNSA/NFO's M&O contractor; and, (9) reviews of co-authored papers and presentations for the 2021 Waste Management Symposium.

**Training:**

Staff attended the NDEP Las Vegas Office annual safety meeting and NDEP Records Retention Training.

BFF staff has also completed the NNSS access badge trainings.

BFF staff has attended weekly virtual Permit Writer Training sessions conducted by the BWPC Permits Branch.,