

DATE: October 5, 2016
TO: Dave Emme, Administrator
FROM: Christine Andres, Chief, Bureau of Federal Facilities
SUBJECT: Quarterly Reports: July 1, 2016 to September 30, 2016

FEDERAL FACILITY AGREEMENT AND CONSENT ORDER

(FFACO) QUARTERLY REPORTS

Industrial Sites Activity

At the end of September 2016, 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.

Soils Activity Sites

At the end of June 2016, there were 118 CASs (out of a total of 144) that have been closed, with 26 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 National Nuclear Security Administration/Nevada Field Office (NNSA/NFO) personnel related to CAU closures. Meetings were also held with personnel from the BFF's environmental support contract, Stoller Newport News Nuclear (SN3). Staff traveled to Falls Church, VA to attend a special joint meeting with United States Air Force (USAF) personnel about corrective action alternatives for a plutonium dispersion site on the Tonopah Test Range. BFF staff developed tasking documents for SN3 and participated in comment integration meetings with SN3 personnel.

Document Reviews:

CAU 411 – Double Tracks Plutonium Dispersion (Nellis) – BFF staff requested and received from NFO a figure missing from the Draft Closure Report (CR) which exhibited FIDLER data collected in 2012 and 2016. Later in the quarter, BFF staff reviewed and approved the Final CR. Approval was provisional pending: 1) receipt from NFO of documentation demonstrating USAF concurrence with clean closure terms without further corrective action and, 2) a Record of Technical Change (ROTC) to the CR to include a certificate of disposal from the Area 5 disposal facility of low-level radioactive wastes generated at CAU 411.

CAU 412 – Clean Slate I – staff reviewed the Draft CR; the review generated comments which are to be addressed by NFO in the Final CR.

CAU 414 – Clean Slate III – staff reviewed the Draft Corrective Action Investigation Plan (CAIP) and submitted comments to be addressed in the final document.

CAU 541 -- Small Boy – staff reviewed and approved the Final Corrective Action Decision Document/Closure Report (CADD/CR) after all NDEP comments on the Draft CADD/CR were addressed and approved the final document.

SN3 Contract – Task requests were prepared and issued. Invoices were reviewed and approved.

Meetings:

CAU 412 – Clean Slate I – BFF and SN3 staff met with NFO contractor staff (Navarro) to resolve comments on the Final CR; technical issues arose concerning the calibration status of a key piece of field measurement equipment (FIDLER) used for terrestrial radiation surveys at FFACO Soils Activity Sites, including Clean Slate I.

CAU 413 – Clean Slate II – Staff traveled to Defense Health Headquarters (DHHQ) in Falls Church, VA to attend a joint DOE/NDEP/USAF meeting on August 24th to establish Corrective Action Alternatives for CAU 413: Clean Slate II on the Tonopah Test Range, Nye County, Nevada. BFF Chief participated via teleconference.

CAU 414 – Clean Slate III – Staff met with SN3 to review and integrate comments on the Draft CAIP. BFF and SN3 staff, along with with NFO and contractor staff, attended a comment resolution meeting at NNSA/NFO to discuss NDEP comments submitted on the Draft CAIP.

Document Preparation:

BFF staff prepared two new tasking letters for SN3 for independent document review and participation in comment integration and comment response meetings: 1) Draft CAIP for CAU 414: Clean Slate III Plutonium Dispersion on the Tonopah Test Range, and 2) Draft CAIP for CAU 576: Miscellaneous Radiological Sites and Debris.

Staff reviewed and revised NFO-supplied meeting notes documenting the August 24th meeting at DHHQ in Falls Church, VA.

The BFF Chief and staff prepared and transmitted to NNSA/NFO a letter revising deadlines and timeframes for review of the Draft CAIP for CAU 576.

Underground Test Area (UGTA) Activity

There are five (5) UGTA CAUs, all of which are in various stages of active investigation or model evaluation.

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

Document Reviews and Letters:

CAU 97 – Yucca Flat – In preparation for moving to the Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) stage of the FFACO UGTA Strategy, BFF staff participated in: (1) a discussion with NNSA/NFO staff and contractors on the Yucca Flat Model Evaluation Plan; (2) a preemptive review of a draft Yucca Flat Model Evaluation Plan and provided comments to contractors; and (3) a review of an Expert Elicitation document and provided comments to the author (the CAU lead) as requested.

CAU 98 – Frenchman Flat – BFF staff received, reviewed and commented on the Frenchman Flat Closure Report, Rev. 1. A Record of Technical Change was received, reviewed and approved.

CAU 99 – Rainier Mesa/Shoshone Mountain (RM/SM) – BFF staff was provided with a GoldSim CD by the NNSA/NFO contractor, which included an example of a Rainier Mesa model application. BFF staff can now investigate and experiment with the application to aid in the technical review of modeling the CAU.

CAU 101/102 – Pahute Mesa – As time allowed, staff continued reviewing various approaches to modeling fractures and faults that may be used in modeling this CAU, as well as, documentation for an overall possible modeling approach for use on this CAU.

Presentations:

CAU 97 – Yucca Flat – BFF staff attended the Model Evaluation Well Drilling Presentation #1 for Yucca Flat presented by the NNSA/NFO contractors. As this was a milestone, a Notice of Completion was issued.

CAU 99 – Rainier Mesa/Shoshone Mountain (RM/SM) – BFF staff attended the Phase I Data Completion Presentation #1 for Rainier Mesa/Shoshone Mountain presented by the NNSA/NFO contractors. As this was a milestone, a Notice of Completion was issued.

CAU 101/102 – Pahute Mesa – BFF staff attended the Phase II Data Completion Presentation #2 for Pahute Mesa presented by the NNSA/NFO contractors. As this was a milestone, a Notice of Completion was issued.

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 Corrective Action Decision Document/Corrective Acton Plan 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 two (2) of the active CAUs:

Document Reviews:

CAU 443 – Central Nevada Test Area (CNTA), Subsurface – A request to modify the Fluid Management Strategy was reviewed and approved.

Conference Calls/Meetings:

BFF staff participated in one (1) conference call and one (1) in-person meeting at the NDEP Las Vegas office with the DOE/OLM project manager and contractor staff to discuss project progress and schedules for both sites.

Site Visits:

Well development at MV-5 at the PSA site was observed.

Miscellaneous:

The BFF supervisor attended the quarterly NNSA/NFO's Low-Level Waste Stakeholder's Forum in Las Vegas, NV. The supervisor and chief addressed updating the bureau's Performance Measures.

The chief attended the Division Staff Meeting in Carson City on July 18, August 15 and September 26, 2016. While in Carson City for the meetings, various other bureau business was conducted. The staff meeting on August 1 was participated in via conference call.

The bureau chief attended: (1) two (2) Nevada Site-Specific Board Meetings held in (NSSAB) Tonopah, NV and Las Vegas, NV; (2) the annual Groundwater Open House hosted by DOE in Amargosa, NV; and (3) the semi-annual SSAB chair and vice-chair's meeting held in Las Vegas, NV. Staff attended the EM SSAB site tour of the NNSS.

The Bureau is participating in a pilot program for establishing an e-Records system for the Agency. BFF staff attended two (2) meetings in Carson City this quarter to further the project.

Training

Staff participated in one GoldSim webinar, on time series.

Staff took the Records Management Training course.

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 July 1 through September 30, 2016, Quarterly Discharge Monitoring Report (QMR). 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 July 1 through September 30, 2016 and sent a letter stating it was compliant. However, BFF did notice another anomalous trend in the pH of the discharge water in the last quarter and requested NNSA/NFO personnel continue investigating possible causes for the changes in the trends.

Meetings:

BFF staff attended the quarterly Water Meetings held on July 21, 2016.

Site Visits:

NDEP staff conducted the annual inspection of the two Water Haulers on the NNSS as required by the Safe Drinking Water permits.

Spills

The NDEP reviewed and approved the corrective action presented in the National Nuclear Security Administration/Nevada Field Office (NNSA/NFO) interim report for Spill Report No. 16024-05.

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. Review panel meetings were held on July 6, 13, 20, 27; August 3, 10, 17, 24; and September 7, 14, 21, 28, 2016. 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. 10a. As applicable, BFF staff reviewed and provided comments on low-level radioactive waste and mixed waste profiles (for compliance with NNSSWAC, Rev. 10a) 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:

BFF staff completed radiological survey tasks under Contract #15-028 on August 11 and September 22, 2016 at the Area 5 Radiological Waste Management Site (RWMS) at the NNSS with SN3. Incoming waste shipments were observed, required documentation for random shipments was verified, real-time data for incoming waste packages and outgoing waste transportation vehicles were collected.

Staff participated in one to two radioactive waste generator facility preparatory meetings and evaluations per month. Recent evaluations have taken place at the Argonne National Laboratory in Chicago, IL; Aberdeen Proving Ground in Aberdeen, MD; FLUOR contractor at the Idaho National Laboratory; Hill Air Force Base in Salt Lake City, UT; and, General Atomics in San Diego, CA.

Nuclear Fuel Services, Inc., Erwin, TN - This specific generator's, Nuclear Fuel Services, Inc., located in Erwin, TN, recent increased attention has continued. Staff took part in a number of conference calls and a facility visit in early August with DOE, DOE contractor and State of Tennessee personnel because a cargo container shipped to the NNSS contained hazardous liquids, a prohibited item under the NNSSWAC. The facility visit took place to observe/review corrective actions taken/pending and to better understand how the incident occurred. From August 23 to 24, BFF staff observed the unloading, labeling, radiological survey and reloading of drums into the NFS transportainer that had been shipped to the NNSS with improper waste characterization before it was returned to the NFS facility. Internal discussions are ongoing in regards to BFF's actions toward the NFO in respect to this incident. Information continues to be received from NFS and the incident remains open and ongoing. This generator's waste shipments to the NNSS were suspended by the NFO until all issues are resolved.

Meetings/Conferences:

Staff participated in the Annual RadWaste Summit held in Summerlin, NV. Separate meetings with DOE personnel also took place during this time.

Document Review:

SN3 Contract – Task requests were prepared and issued. Invoices were reviewed and approved.

5. Waste Management

Document Review:

Staff reviewed: (1) The Area 23 Semi-Annual Solid Waste Disposal Site (SWDS) Report for the NNSS for the period of January 1, 2016 through June 30; 2016; (2) NNSS Area 5 Asbestos

Waste Disposal Report: Second Quarter Calendar Year 2016; (3) Bimonthly Progress Report for Revegetation at CAU 111: Area 5 WMD Retired Mixed Waste Pits; (4) Repair Progress at CAUs Damaged by Precipitation in 2015; (5) Uniform Hazardous Waste Manifest; (6) 30% Design Review for Cell 25; (7) Geotechnical Report for Cell 25.

Finding of Alleged Violations (FOAV):

In March 2016, the NNSA/NFO agreed to a \$20,000.00 cash settlement, supplemented with an NDEP approved Supplemental Environmental Project (SEP), for RCRA violations related to ten (10) drums stored on a 90-day satellite accumulation area pad at the NNSS that self-ignited in June 2015. The \$20,000.00 cash settlement was paid in March 2016. The NNSA/NFO purchased a Thermo Scientific Gemini S as the SEP. The NNSS Fire Department Received Training by a certified vendor and conducted a demonstration of the Thermo Scientific Gemini S-1 capabilities for NDEP, NYE County Emergency Management and Air Force Personnel on September 21, 2016.

Meetings and Conference Calls:

NEV HW0101 Permit Modification – Several meetings and conference calls were held with DOE personnel to discuss the planned Class III permit modification request. NDEP staff reviewed the Geotechnical Report and attended the 30% Design Review. NDEP staff continued regulatory research and held a number of internal meetings for this permit modification.

Area 5 Groundwater/Sampling Plan – Discussions continue with NNSA/NFO personnel about a current sampling plan and well locations.

Site Inspections:

Annual Solid Waste Disposal Site (SWDS) Inspection – BFF staff conducted an inspection on July 7, 2016. No issues were found during the inspection.

RCRA Quarterly Post-Closure Monitoring (PCM) Inspections – BFF staff prepared for, and conducted, quarterly post-closure monitoring 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 Meeting held on July 21, 2016.

Fiscal Analysis:

Estimate of personnel resources used (FTE or hours)

The bureau of Federal Facilities is made up of a Bureau Chief, two supervisors, six technical staff and an administrative assistant. Currently, one supervisor and one sanitary engineer position are vacant. The AIP grant funds activities for each of these individuals. For the quarter, that represents approximately 4.5 FTEs based on a review of grant related activities.

Total expenditures for each task area

A total of approximately \$115,594 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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Training:

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