

## Internal Memorandum

**DATE:** July 14, 2014  
**TO:** Colleen Cripps, Administrator  
**FROM:** Christine Andres, Chief, Bureau of Federal Facilities  
**SUBJECT:** Quarterly Report: April 1, 2014 to June 30, 2014

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### **FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (FFACO) QUARTERLY REPORT**

#### **AGREEMENT IN PRINCIPLE (AIP) QUARTERLY REPORT**

#### **FFACO Functional Areas Discussion**

##### **Industrial Sites**

As of the end of June 2014, there are 1958 Corrective Action Sites (CASs) (out of 1966 total) that have been closed, with two (2) in various stages of active investigation and six held for future work. The remaining eight (8) CASs are in two (2) Corrective Action Units (CAUs).

##### **Soils Activity Sites**

At the end of June 2014, there are 90 CASs (out of a total of 134) that have been closed, with 42 in various stages of active investigation and two (2) held for future work.

During this quarter, BFF staff participated in the process of document review, project evaluation, and site inspection for five (5) CAUs:

##### *Document Review:*

**CAU 541 – *Small Boy*** - Requested clarification of the Nevada Field Office (NFO) supplied meeting notes about posting of the radiological ‘anomalous’ area as a potential Radiological Management Area (RMA).

**CAU 550 – *Smokey Site*** - Reviewed the State of Nevada State Historic Preservation Office’s formal notice that the Smoky Site is eligible for listing on the National Register of Historic Places.

**CAU 571 – Area 9 Plutonium** – Revised the NFO-supplied meeting notes to reflect NDEP stipulations associated with acceptance of a ‘blanket’ closure alternative for multiple CASs at this CAU.

**CAU 573 – Alpha Contaminated Sites** – provided written comments on Draft Corrective Action Investigation Plan (CAIP). NDEP approved the final CAIP when all draft document comments were satisfactorily addressed.

**Post-Closure Strategy for the Nevada National Security Site (NNSS), Nevada Test and Training Range (NTTR) and Tonopah Test Range (TTR)** – Prepared draft review comments and a letter.

Meetings:

**CAU 567** – Discussed Site Conceptual Model updates and changes, which were based on discovery of additional radiological contamination sources.

**CAU 571 – Area 9 Plutonium** – Discussed Corrective Action Alternatives.

**CAU 573 – Alpha Contaminated Sites** – Discussed Data Quality Objectives.

**Quarterly Soil Activity Meeting** – An overview of the Soils Sites Air Monitoring program was given. The program was presented by Desert Research Institute and focused on instrumentation, monitoring, and factors important for potential air transport of radionuclides from soils.

Document Preparation:

**Request for Proposal** - Prepared draft scope of work for RFP to procure technical services to support NDEP oversight of radiologically contaminated soil sites under the Soils Activity FFACO framework.

**Underground Testing Area (UGTA)**

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, and site inspection for the five (5) CAUs:

Document Review:

**CAU 97 – Yucca Flat** – Corrected pages to the Flow and Transport Document; Record of Technical Change (ROTC) 1 for the Final Phase I Flow and Transport Model Document, Revision 1; and, ROTC-2 for the Final Corrective Action Investigation Plan (CAIP) Revision. All were reviewed and approved.

**CAU 98 – Frenchman Flat** – Various Pre-emptive Review documents; Well Re-Survey Report submission.

**CAU 99 – Rainier Mesa / Shoshone Mountain** – Pre-emptive review member began review of a USGS chapter on RM/SM conceptual models.

**FFACO Document** – Several internal reviews and discussions of changes to Section 3.0 of Appendix VI.

**FFACO Fiscal Year 2014-2016 Planned Milestones and Due Dates** – Received, reviewed and approved this quarter. Four (4) milestone changes were also requested and approved this quarter for UGTA CAUs 98 (two changes) and 99 (two changes).

**Background Reading** – Three papers concerning the use of modeling as a tool in understanding the flow and transport of systems; “MODFLOW-USG Version 1: An Unstructured Grid Version of MODFLOW for Simulating Groundwater Flow and Tightly Coupled Processes Using a Control Volume Finite-Difference Formulation”; and, USGS Chapter 45 of Section A, Groundwater, Book 6 Modeling Techniques, 2013.

Meetings:

**CAU 97 – Yucca Flat** – Five-day Flow & Transport Model External Peer Review was attended by three (3) staff.

**CAU 98 – Frenchman Flat** – Two (2) Pre-emptive Review meetings were attended by a staff member and UGTA staff participated in a meeting with DOE and their contactors for an overview and discussion of an upcoming Frenchman Flat Model Evaluation briefing and Report. The Model Evaluation Well Data Evaluation Milestone Presentation was then attended this quarter and a Notice of Completion sent.

**CAU 99 – Rainier Mesa / Shoshone Mountain** – Pre-emptive review member participated in a meeting on the Draft USGA chapter on conceptual models.

**CAU 101/102 – Pahute Mesa** – Pre-emptive review member attended a presentation by the DOE contractor and USGS personnel concerning a new USGS version of MODFLOW being considered for use in the Pahute Mesa CAU Phase II modeling.

Conference Calls:

**FFACO Document** – With DOE personnel regarding language changes needed to Section 3.0 of Appendix VI of the FFACO in light of model evaluation requirements.

Site Visits:

**CAU 98 – Frenchman Flat** – Various sampling activities were observed at four (4) different wells during four (4) different site visits in June.

**CAU 101/102 – Pahute Mesa** – Various aquifer testing activities were observed during three (3) different site visits in April and two (2) in May.

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. CAUs 443 and 447 are in the Corrective Action Decision Document/Corrective Action Plan Stage and are undergoing further site evaluation.

During this quarter, BFF staff participated in the process of document review, project evaluation, and site inspection for the two (2) Subsurface CAUs:

Document Review:

**CAU 443 – Central Nevada Test Area** – Draft 2013 Groundwater Monitoring Report. Comments were sent along with a Notice of Completion for this Milestone. The Final report was submitted and approved. Also received Well Completion Report for MV-6. This is a Supplemental Document and its receipt was acknowledged in early July.

**CAU 447 – Project Shoal Area** – 2014 Sampling Plan was received and approved. Path Forward: 2014 Short-Term Data Acquisition Plan for Project Shoal Area was also received and reviewed. Approval letter sent early July after draft document comments were satisfactorily addressed.

**FFACO Fiscal Year 2014-2016 Planned Milestones and Due Dates** – Received, reviewed and approved this quarter.

**Conference Call Meeting Minutes** – Minutes are drafted by OLM-DOE and reviewed and approved by NDEP.

Conference Calls:

**CAUs 443 and 447** – Conference calls were held in May and June with Department of Energy – Office of Legacy Management (DOE-OLM) personnel and their contractor to discuss the sites' statuses.

Site Visits:

**CAU 443 – Central Nevada Test Area** – An inspection of the site was conducted in late June.

**CAU 447 – Project Shoal Area** – A site inspection was conducted to observe DOE-OLM data collection, well pumping and sampling activities.

Miscellaneous

The Bureau Chief attended the Division Staff Meeting in Carson City on May 5 and 19 and June 16.

The DCNR Director, NDEP Administrator, BFF Chief and Supervisor took part in a legislative tour of the NNSS on April 21.

The Bureau Chief spoke with DCNR's PIO regarding the BFF and its activities.

The Administrator and Chief met with the Chair and Vice-Chair of the Nevada Site-Specific Advisory Board (NSSAB) to brief them on issues the Working Group is addressing.

The Chief attended a NSSAB meeting in Pahrump.

A Bureau Staff Meeting was held in May.

The Bureau Chief and ESIII attended the National Governor's Association Federal Facilities Task Force meeting in June.

The DCNR Director, NDEP Administrator, Deputy Administrator and BFF Chief attended a Tabletop Planning Exercise to be put on by DOE for first and emergency responders around the NNSS.

In June, the Chief and Supervisor briefed the Deputy Administrator and PIOs on the BFF.

The Chief and Supervisor conducted interviews for the ES IV position in late June.

**Training**

All bureau personnel took required Office Safety training in May.

Staff took their required 8-hour OSHA HAZWOPER Refresher.

## **Agreement in Principle (AIP) Functional Areas Summary**

### **Functional Area Discussion**

#### **1. On-Site Discharges**

##### **Water Pollution Control**

###### *Document Review:*

**Water Pollution Control Permit GNEV 93001** – The January 1 through March 31, 2013 Quarterly Discharge Monitoring Report for the quarter was reviewed. Letter stating it was compliant sent.

The Nevada National Security Site's Septic Tank Management Plan was reviewed. While this document is not required under the Federal or State regulations, it does demonstrate the Nevada Field Office's (NFO) commitment to working with NDEP in the protection of the environment. An acknowledgment letter was sent.

The NFO submitted a request to re-activate the Area 6, Device Assembly Facility Sewage Lagoons. The NDEP responded in a letter stating the requirements to re-activate sewage lagoons on standby as stated in the Permit. NDEP staff conducted an inspection, concluding the lagoon met the performance requirements, and approved the re-activation of the sewage lagoons in a letter.

**Water Pollution Control Permit NEV 96021** – The E-tunnel Waste Water Disposal System Quarterly Discharge Monitoring Report for the Permit was reviewed and found to be compliant. A letter was sent.

As a part of the NFO's Maintenance and Operation's program, NFO's contractor repaired erosional damage to two of the E-Tunnel retention ponds that occurred during two storms in July 2013. On April 22, 2014, NDEP staff inspected the repairs and found them to be satisfactory.

###### *Meetings:*

Quarterly Water Meeting was held on May 14, 2014 with NFO personnel and their contractors.

###### *Site Visits:*

One site visit took place this quarter at the E-Tunnel retention ponds.

## 2. Ground Water Monitoring

No activity this quarter.

## 3. Air Quality Monitoring

### Document Review:

**Regulations Development** – Discussions continued with the Bureau of Air Pollution Control (BAPC) regarding updating the non-attainment provisions within Nevada’s State Implementation Plan for the purpose of preparing for the potential of having portions of the State of Nevada designated as “non-attainment.” Research efforts continue for the purpose of developing draft language of those potential changes to the regulations. These changes may impact future permitting requests for federal facilities.

### Meetings:

**Nevada Test and Training Range (NTTR)** – A meeting was held to discuss the draft Class II permit. As a result, NTTR asked to revise their application and submit revisions to the BAPC. Revisions have not yet been received by NDEP.

### Site Visits:

Visits were made to the NTTR and Nellis Air Force Base.

## 4. Low Level and Mixed Low Level Waste Oversight

### Document Preparation:

**Screening Checklist** – Established internal NDEP checklist for reviewing and screening radioactive waste profiles submitted by NFO.

**Request for Proposal** – Prepared draft scope of work for RFP of radiological subject matter expertise.

### Meetings:

Met with NFO to discuss use of waste profile screening checklist in reviewing future waste streams.

Met with NFO and contractors to discuss waste specific issues as they pertain to waste characterization and Performance Assessment modeling input parameters.

Conference Calls:

Staff participated in weekly Waste Acceptance Review Panel (WARP) meetings via teleconference; meetings were held on April 2, 9, 16, 23, 30; May 7, 14, 21, 28; and June 4, 11, 18, 25, 2014. 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 NNSSWAC, Rev. 10. As applicable, NDEP staff reviewed and provided comments on low-level radioactive waste and mixed waste profiles (for compliance with NNSSWAC, Rev. 10) submitted by ALL currently-approved LLW and MLLW generators.

Site Visits:

Participated in a radioactive waste generator audit conducted at Los Alamos National Laboratory, New Mexico; findings of the audit included a corrective action request pertaining to radiological waste characterization.

**5. Waste Management**

**RCRA Part B Permit Program Activities**

Site Visits:

**Active Landfills** – Site inspections in **Areas 5, 6, 9, and 23** were conducted and completed in conjunction with the Annual Compliance Evaluation Inspection (CEI). All landfills were in compliance with appropriate permits and permit modifications during three (3) site visits.

**Solid Waste Disposal Site Reports** – During the previous quarter, NDEP reviewed and accepted the Semiannual SWDS Report for the Area 23 landfill (Permit SW 13 097 04) by letter dated January 22, 2014, and the Annual Reports for the Area 6 landfill (Permit SW 13 097 02) and the Area 9 landfill (Permit 13 097 03) by letter dated January 22, 2014. Review of the new Area 5 Asbestiform Landfill (Permit 532) was conducted during the CEI. The landfill was found to be in good condition.

**RCRA Part B Historic Sites** – CAUs 90, 91, 92, 110, 111, and 112 require regularly scheduled inspections. NFO and NDEP personnel visited all of the RCRA Part B Historic sites in six site visits, except CAU 91, during the quarter. All sights were in good condition with minor maintenance needs on two CAUs noted below for NFO correction:

**CAU 110 – Area 3 U-3ax/bl Subsidence Crater** – The site has a vegetative cover and was in generally good condition. Prior areas of subsidence showed no signs of further subsidence except that one, sizable hole (1'x1.5'x1.5' deep) was seen on the most easterly portion of the site. There has been subsidence visible here in the past. The hole is to be filled in and compacted by the DOE contractor.

**CAU 111 – Area 5 WMD Retired Waste Pits** – The site was visited several times during the quarter as the first attempts at seeding and irrigating did not produce good growth results. A June 18, 2014 visit demonstrated some new growth on the cover being irrigated. Irrigation will continue as rainfall is below average. Some cracks and subsidence areas exist on the west cover and will be corrected.

**6. Major Program Proposals**

There was no activity in this category during the 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 the quarter.

**9. Sampling**

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

**10. Safe Drinking Water**

*Document Review:*

NFO's Annual Public Water Systems Report was found compliant with the reporting requirements of the Nevada Administrative Code 455A.6669, paragraph 2(c)(3).

NDEP staff conducted a Sanitary Water Survey on May 14 and 15, 2014 in accordance with the SDWA. There were no deficiencies noted.

*Meetings:*

Quarterly Water Meeting was held on May 14, 2014 with NFO personnel and their contractors.

*Site Visits:*

Two site visits took place as part of the Sanitary Water Survey.

## **Fiscal Analysis**

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

The Bureau of Federal Facilities is made up of a Bureau Chief, two supervisors, seven technical staff and an administrative assistant. The AIP grant funds activities for each of these individuals. For the quarter, that represents approximately 4.5 FTE based on a review of grant related activities.

### *Total expenditures for each task area*

Information is being developed for the quarter.

### *Comparison of estimate to budgeted expenses*

Information is being developed for the quarter.

## **Miscellaneous**

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In June, the Chief and Supervisor briefed the Deputy Administrator and PIOs on the BFF.

The Chief and Supervisor conducted interviews for the ES IV position in late June.

**Training**

All bureau personnel took required Office Safety training in May.

Staff completed required NEATS information security awareness training.

Staff completed on-line Annual DOE Security Briefing.

Staff took their required 8-hour OSHA HAZWOPER Refresher.

Staff member completed 24-hour New Miner Safety Training