Soils Remediation Program

This Major Element of Scope includes performing soils studies to enhance knowledge of contaminant transport during post-closure monitoring.

Underground Test Area (UGTA) Activity

This Major Element of Scope includes defining hydrologic boundaries encompassing NNSS groundwater resources and surrounding areas by using existing data and new data collected through drilling, groundwater sampling, aquifer testing, and geophysical surveys. The scope also includes analysis and modeling to define controls that mitigate environmental risk and promote public health. The following descriptions apply to the UGTA:

- **Installation of evaluation and monitoring wells** – Conduct activities necessary for well installation including but not limited to: design, planning, well construction, geophysical logging, well completion, and completion report documentation.
- **Well development and testing of evaluation and monitoring wells** – Conduct activities necessary to perform well development, testing and sampling activities. This includes but is not limited to: planning; performing hydraulic testing and groundwater and geochemical sampling; sample analysis and reporting; site mobilization and demobilization; installation of downhole equipment; providing surface power connection and variable speed drive for submersible pumps; and inspection and maintenance of sumps and sump liners.
- **Characterization/evaluation sampling and monitoring** – Conduct activities necessary to perform sampling activities. This includes but is not limited to: planning; site mobilization and demobilization; installation of downhole equipment; providing surface power connection and variable speed drive for submersible pumps; inspection and maintenance of sumps and sump liners; performing groundwater and geochemical sampling; and sample analysis and reporting.
- **Characterization data analysis** – Conduct activities necessary to perform geology, hydrology, transport parameter, and source term analysis, evaluation and reporting in support of data input into the Flow and Transport Model.
- **Flow and transport model development** – Conduct activities necessary to perform flow and transport modeling analysis, evaluation and reporting, including risk assessment and external peer review.
- **Corrective Action Decision Document/Corrective Action Plan (CADD/CAP)** – Conduct activities necessary to complete a CADD/CAP which is a Federal Facility Agreement and Consent Order (FFACO) document that addresses the alternatives arising as a result of a corrective action investigation, the rationale for selection of a preferred alternative, and the plan for implementing the preferred corrective action alternative at a Corrective Action Unit (CAU). The CADD/CAP uses site knowledge gained through characterization and similar historical corrective actions to provide a plan for corrective action.
• **Model evaluation** – Conduct activities necessary to analyze, scale, and compare field data to model conceptualizations and simulation results in order to build confidence in the site conceptual model and transport model forecasts. Sufficient confidence must be developed in the forecasts so that the Nevada Division of Environmental Protection (NDEP) will accept use of the model in guiding the development of the long-term monitoring network and institutional controls for closure.

• **Closure Report** – Conduct activities necessary to complete a Closure Report which is an FFACO document that contains the long-term monitoring, modeling, and institutional control strategy for a CAU. The goal of the Closure Report is to establish a mutually agreed to plan by EM NV and NDEP for implementing the long-term monitoring phase and for handling uncertainty during that phase of the project.

• **Post-closure sampling and monitoring** – Conduct activities necessary to acquire and maintain the necessary equipment, supplies and expendable items necessary to maintain the monitoring network system at closed groundwater CAUs. The scope also allows for the maintenance of equipment and instrumentation to maintain calibration schedules and ensure an appropriate field capability with respect to instrumentation, essential equipment and supplies necessary for typical groundwater field efforts. This scope also includes long-term post-closure groundwater sampling and monitoring activities as well as inspection and documentation of the institutional controls (e.g., use restrictions, deed restrictions, physical barriers, processes, and procedures) established during the Closure Report.

**Central and Western Pahute Mesa CAUs**

Installation of evaluation wells, well development and testing of evaluation wells, characterization/evaluation sampling and monitoring, characterization data analysis, flow and transport model development, completion of the CADD/CAP document, model evaluation, and completion of the Closure Report.

**Yucca Flat CAU**

Evaluation sampling and monitoring, installation of monitoring wells, well development and testing of monitoring wells, completion of the Closure Report, and post-closure sampling and monitoring.

**Rainier Mesa CAU**

Installation of monitoring wells, well development and testing of monitoring wells, and post-closure sampling and monitoring.

**Frenchman Flat CAU**

Post-closure sampling and monitoring; maintain long-term monitoring including maintain monitoring network, network sampling, and maintenance.
Soil and Industrial Type Post-Closure Surveillance & Maintenance

Post-Closure Surveillance & Maintenance NNSS & TTR/NTTR Sites

Perform activities necessary for annual (or as required by the approved Closure Report) site inspections of Corrective Action Sites (CASs) at the NNSS and TTR/NTTR as identified in the FFACO Appendix IV Closed Corrective Action Sites. Inspection checklists will be completed during the inspections. Inspections will include a walk-down of the sites to identify any damaged or missing signs, damaged fencing or gates, any evidence of settling or cracking of covers, and/or evidence of intrusion into the use restricted areas, as applicable. Photographs will be taken to document any abnormal site conditions that may require a follow-up action. Follow-up action maintenance necessary as identified during the site inspections will be conducted. Annual post-closure surveillance and maintenance letter reports (following the FFACO approved template) for (1) RCRA sites on the NNSS, (2) non-RCRA sites on the NNSS, and (3) TTR/NTTR sites are submitted to EM NV.

Post-Closure Surveillance & Maintenance E-Tunnel

Perform activities necessary for maintaining compliance with Permit NEV 96021, E-Tunnel Waste Water Disposal System. The permit requires the water discharging from E-Tunnel in Area 12 be monitored monthly and sampled annually. The monthly monitoring includes flow rate, specific conductance, and pH, along with inspecting the perimeter and condition of the E-Tunnel Disposal System, which includes the piping and pond areas. The annual sampling includes tritium along with other parameters such as lead. A quarterly report is submitted to EM NV, along with an annual summary report. Every other year, the well at ER-12-1 (also included in Permit NEV 96021) is sampled.

Decontamination and Demolition (D&D)

Engine Maintenance Assembly and Disassembly Facility

Complete closure activities for the EMAD Facility specified in Revision 1 of the approved Streamlined Approach for Environmental Restoration (SAFER) Plan. Closure activities include activities such as characterization of potential source materials, removal of readily removable nonhazardous waste, and identification and abatement of asbestos. The end state for Building 3900 is anticipated to be demolition to slab and grading of the site to match existing contours. Activities also include transportation of low-level and mixed low-level waste to the Area 5 waste facility; asbestos abatement, as needed, for on-site disposal; and completion of a Closure Report, in accordance with the FFACO.

Test Cell “C” Ancillary Structures and Buildings

Complete a SAFER Plan, in accordance with the FFACO, demolition and grading of the site to match existing contours, transportation of low-level and mixed low-level waste to
the Area 5 waste facility, asbestos abatement, as needed, for on-site disposal, and completion of a Closure Report.

**Environmental Management Integration**

*Environmental Management Information System (EMIS) and FFACO support*

Perform day-to-day operations and maintenance of the EMIS and FFACO databases and user interfaces/web applications as well as integration of program and information technology needs to ensure database capability and data integrity.

*Public Involvement and Strategic Communication support*

Perform program outreach activities with focus on the Nevada Site Specific Advisory Board (NSSAB); general public; media; intergovernmental agencies; national, state, local, and tribal government entities; oversight and public interest groups; National Nuclear Security Administration (NNSA) and DOE headquarters; regulatory agencies; and the Nevada business community. Additionally, participate in and provide on-call support for the EM NV Emergency Response Organization (via the Emergency Operations Center and Joint Information Center) and crisis communications support, as needed.

*Classification support*

Perform integration activities with the NNSA/Nevada Field Office (NNSA/NFO), EMCBC and EM NV, as needed, for classification reviews and public release approval of documents and other media. This also includes maintaining files in accordance with governing requirements and providing direct support to the EMCBC Classification Officer.

*Closeout and Transfer*

Perform activities necessary to support EM NV with program closeout and transfer of agreements to Office of Legacy Management or NNSA, as appropriate.

**Radioactive Waste Acceptance Program (RWAP)**

*Waste Acceptance Coordination*

Coordinate RWAP activities between the generators, management and operation (M&O) contractor and NNSA/NFO, establish and implement a process to share lessons learned amongst the waste generator community, and coordinate and participate in an annual waste generator workshop.

*Waste Acceptance Facility Evaluations /Verifications*
Perform facility evaluations (FEs) and document results of the FEs for low-level waste/mixed low-level waste (LLW/MLLW) generator programs to support compliance with the NNSS Waste Acceptance Criteria (WAC) requirements, issue Corrective Action Requests, perform subsequent corrective action verification and/or impromptu surveillances, and perform and document the results of annual MLLW treatment verifications to ensure compliance with the RCRA Part B Permit at the generator facility.

**Waste Acceptance Review Panel (WARP)**

Provide technical support to the NNSA/NFO WARP including review and recommendation of approval and/or disapproval of waste profiles, review of generator documents and provide recommendations on related technical issues to NNSA/NFO, and review of Technical Basis Documents/Position Papers for acceptability. This element also includes coordination and facilitation of WARP activities and review meetings; assigning related support tasks to ensure that complete and thorough reviews are performed and documented; tracking open issues; reviewing root cause analyses, Corrective Action Plans and supporting documents supplied by generators in response to Corrective Action Requests; conducting an annual review of the NNSS WAC and preparing updates, as necessary. Coordinate and participate in an annual waste generator conference and provide programmatic technical support/assistance to waste generators as requested (NOT physical packaging or shipping support/assistance at the generator sites).

**Waste Acceptance Support**

Maintain the NNSS WAC and RWAP procedures, establish and implement a document control process, and perform informal, non-documented gap analyses for compliance with the NNSS WAC at the generators request.