

NRC – DEQ – EPM Teleconference Notes
October 16, 2019

Attendees:

Ken Kalman
Lifeng Guo
Christine Pineda

Paul Davis
Mike Broderick

Bill Halliburton
Jeff Lux

Note: Action items are shown in bold red italicized font.

Administrative Issues:

Licensing Tc-99

The NRC communicated its policy on the licensing of nuclides present as contaminants in licensed material in a letter dated April 22, 1997, stating, "... radiological contaminants need not be specifically listed as an authorized material on licenses, unless they occur in sufficient quantities to pose unique or significant radiation hazards to workers or the public."

EPM is evaluating the radiological impact of the potential accumulation of Tc-99 in filtered sediment, ion exchange resin, and bioreactor solids. An evaluation of risk to workers and members of the public will be submitted to the NRC and the DEQ.

Schedule

The NRC provided EPM a draft schedule for the issuance of a license amendment approving the decommissioning plan (the DP). The schedule assumed that detailed technical review of the DP would be on January 1, 2020. EPM submitted a schedule for work that must be completed to enable the NRC to initiate their detailed technical review. This extended the date to initiate detailed technical review to April 8, 2020. The NRC is revising their schedule based on the information provided by EPM.

The NRC will issue a letter with a revised schedule to EPM.

Budget

EPM issued scope-of-work documents describing work anticipated to be performed in 2020 to Burns & McDonnell Engineering Services, Enercon Services, and Veolia Nuclear Solutions-Federal Services (VNSFS). EPM should receive cost estimates and detailed scope of work proposals from each contractor by the end of the week.

EPM will submit a proposed scope of work and budget for 2020 early in November.

Submittals

Scope of Work, Cost Estimate, and Cost Allocation for Tc-99 Batch Treatability Testing

EPM submitted a proposal to perform treatability testing on September 12, 2019. The proposal included the estimated cost to perform this testing and the allocation of the costs between the Federal Account and the State Account. All but \$11,000 of the funding was approved in the 2019 budget, but \$11,000 needs to be re-allocated from Task 4 to Task 6. The NRC and the DEQ have both approved this proposal.

EPM will proceed with full definition of the scope of work for the tests and authorize VNSFS to proceed.

**NRC – DEQ – EPM Teleconference Notes
October 16, 2019**

Redefinition of the Licensed Area

A license amendment request (LAR) to redefine the licensed area is being drafted. EPM believes the LAR should address several license conditions related to already released areas and to the onsite disposal cell. Mr. Kalman wants to discuss these ancillary issues with their legal staff to determine if these should all be addressed in this LAR. EPM will not submit the LAR until feedback is received from the NRC.

EPM will revise the draft LAR based on feedback from the NRC and submit it to the NRC and the DEQ.

Report on Groundwater Flow Models

Based on the May 2017 report on the vertical distribution of uranium in alluvial material, the groundwater flow model will be revised to include a layer of higher (or lower) permeability in the alluvium, the use of 10-foot well screens in the more permeable layer, and the placement of particles at the edges of the plume in that more permeable layer. The groundwater flow model will be run with extraction rates at the nominal and both alternative pumping scenarios. If all scenarios result in the capture of all particles, well screens of not less than ten feet in length will be specified in accordance with the results of the vertical profiling yet to be conducted. This submittal will present the report on the groundwater flow models as a replacement for Appendix M in the DP.

This document is anticipated to be submitted by November 27, 2019.

Proposed Revisions to the DP and RPP Related to Radiation Protection

Discussions with Ron Burrows indicates that the NRC's February 28, 2019 request for supplemental information was not exhaustive, and there is much additional required per NUREG-1757. This submittal will be based on a detailed review of NUREG-1757 and will include proposed changes to the DP and the RPP, addressing all issues and including calculations and consideration of all relevant radionuclides. This submittal will include a cross-walk between NUREG-1757 and the proposed changes to facilitate review of the submittal.

This document is anticipated to be submitted by December 13, 2019.

Report on Tc-99 Groundwater Assessment

The data has been received and is undergoing quality review. The tabulated data will be submitted to the NRC and the DEQ once the quality review is complete and qualifiers are assigned (if any). This submittal will present the data obtained from groundwater sampling and analysis and re-calculate the estimated concentration of Tc-99 in the influent to the groundwater treatment system. This submittal may include proposed revisions to the DP should revision be warranted.

This report is anticipated to be submitted by December 31, 2019. The proposed budget for 2020 will include funding for additional sampling and analysis.

**NRC – DEQ – EPM Teleconference Notes
October 16, 2019**

Revisions to 60% Design Drawings for Water Treatment

90% design drawings will be submitted as a revision to Appendix K. Changes from the 60% design will be shown, and specifications included for bidding purposes will be redacted.

These revisions are anticipated to be submitted by December 31, 2019.

Report on Vertical Profiling

The construction of a semi-permanent all-weather access road is cost prohibitive; construction of the road was removed from the scope of work. Conducting direct push probes and collection of groundwater samples will begin in December at the earliest, and possibly not until January. A report will be prepared summarizing the work performed, presenting the data, and explain whether or not there is a need for more or re-located extraction wells.

This report is anticipated to be submitted by April 7, 2020.

Revisions to 60 Drawings for Groundwater Extraction

90% design drawings will be submitted as a revision to Appendix J. Changes from the 60% design will be shown, and specifications included for bidding purposes will be redacted.

These revisions are anticipated to be submitted by April 7, 2020.

Ongoing/Planned Work

Vertical Profiling

Contractors are being contacted in an effort to move the start date for vertical profiling forward. It appears all the contractors with hydraulic profile tool capabilities are booked through November. Although we are trying to secure a contractor in December, it is likely that we won't be able to do this work until January.

Annual Environmental Monitoring

The data has been received and is undergoing quality review. The tabulated data will be submitted to the NRC and the DEQ once the quality review is complete and qualifiers are assigned (if any).

EPM will submit the data to the NRC and the DEQ after quality review of the laboratory results has been completed.

Burial Area #1 Oxidation-Reduction Evaluation

The data has been received and is undergoing quality review. A report will present the data, describe the reduction and re-oxidation of the water-bearing zones in Burial Area #1, and will propose continued sampling if deemed appropriate. This report will be assigned a lower priority than the previously-mentioned submittals.

NRC – DEQ – EPM Teleconference Notes
October 16, 2019

EPM will submit a report on the evaluation as time permits. The proposed budget for 2020 will include funding for additional sampling and analysis.

Next Meeting

The next teleconference will be conducted November 13, 2019.