

**NRC – DEQ – EPM Teleconference Notes**  
**November 13, 2019**

**Attendees:**

Ken Kalman  
Lifeng Guo  
Christine Pineda  
Ron Burrows  
Karen Pinkston

Paul Davis  
Mike Broderick

Bill Halliburton  
Jeff Lux

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

**Administrative Issues:**

Proposed Budget for 2020

EPM drafted a proposed budget for 2020 and was about to send it to the NRC and the DEQ when EPM was notified that a cultural resources survey must be conducted. This will enable the NRC to prepare an Environmental Assessment (EA), which is a prerequisite to issuing a license amendment redefining the licensed area. The scope of work is being defined and a cost estimate will be provided for both the performance of the work and radiation protection support.

***EPM will submit a proposed scope of work and budget for 2020 by November 27, 2019.***

Request for Supplemental Funding

The NRC has invoiced the Trust for \$794,307.00 in 2019. The approved budget for 2019 NRC fees is \$600,000. EPM anticipates receiving at least one more invoice (for the 4<sup>th</sup> quarter of 2019) before proposed funding is approved for calendar year 2020. The four invoices received to date averaged \$198,576.75.

Veolia Nuclear Solutions – Federal Services (VNSFS) has informed the Trust that work that was not included in the proposed scope of work for 2019 has resulted in the expenditure of significant funds. Most of the out-of-scope work was related to the need to address unexpected issues related to technetium-99. Because the preparation of requests for bids and bid evaluation is being deferred until late 2021, funding for that scope of work was used to cover most of those costs. However, VNSFS is going to submit a request for additional funding to cover the cost of out-of-scope work that will be billed before a proposed budget for 2020 is approved.

Although the cost of the cultural resources survey will be included in the proposed budget for 2020, funding approved for 2019 is not sufficient to cover the cost to perform the cultural resources survey prior to the approval of the 2020 budget. Not initiating the survey until the 2020 budget is approved will add four to five months to the schedule, so approval for the Trust to cover the cost of this work must be obtained to enable the work to be performed early in 2020.

***By November 27, 2019, EPM will submit to the NRC and the DEQ a request for approval to pay:***

- ***An additional \$400,000 for the 3<sup>rd</sup> quarter 2019 and 4<sup>th</sup> quarter 2019 invoices for NRC reimbursement.***
- ***The cost of out-of-scope work performed by VNSFS.***
- ***The cost of the cultural resources survey to be performed in the first quarter of 2020.***

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**Submittals**

Redefinition of the Licensed Area

A license amendment request (LAR) to redefine the licensed area has been drafted. EPM believes the LAR should address several license conditions related to currently released areas and to the onsite disposal cell. Mr. Kalman and Ms. Pineda met with the NRC Office of General Counsel (OGC) to discuss issues related to this LAR. The NRC decided to retain the reference to the 1995 Decommissioning Plan (DP) in the amended license, since it is the currently-approved DP. The NRC requested that the LAR include a map showing the proposed licensed area as it relates to the Subareas referenced in the 1995 DP. The LAR should also explain that the reason portions of Subareas that have been released should be licensed is that it was not known that groundwater exceeding the decommissioning criteria extended into some of the Subareas that had been released.

***EPM will finalize the LAR based on feedback from the NRC and submit it to the NRC and the DEQ by November 27, 2019.***

Cultural Resources Survey

The NRC sent EPM a letter from the Oklahoma Archeological Survey (OAS) in which the OAS informed the NRC that a cultural resources survey has never been performed for the property owned by the Trust. A cultural resources survey will be needed for the NRC to prepare an Environmental Assessment (EA) prior to issuing a license amendment to redefine the licensed area. The NRC requested that EPM provide a proposed scope of work for the survey to the NRC and the OAS so they can determine if the proposed survey will provide sufficient information to prepare the EA.

***EPM will submit a proposed scope of work for the cultural resources survey to the NRC, the DEQ, and the OAS by November 27, 2019.***

Report on Groundwater Flow Models

The groundwater flow models will be revised to evaluate the adequacy of contaminant capture under the following conditions:

- The alluvial aquifer will include layers of higher and or lower permeability,
- Ten-foot well screens will be installed at the proposed extraction well locations in the more permeable layer.

The groundwater flow models will be run with extraction rates at the nominal and both alternative pumping scenarios. Particles will be placed at the edges of the plume in the more permeable layer. 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. If some of the particles placed at the edges of the plumes are not captured under all pumping scenarios, the report will state that well screens at certain locations will be screened across the entire saturated thickness of the alluvial aquifer. This submittal will include an updated Appendix M for the DP.

***This report/proposed appendix is anticipated to be submitted by November 27, 2019.***

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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 submittal is anticipated to be submitted by December 20, 2019.***

Report on Tc-99 Groundwater Assessment

The data has been received reviewed. Groundwater samples collected from one monitor well required re-analysis. This submittal will present:

- The data obtained from groundwater sampling and analysis.
- The estimated initial and maximum concentration of Tc-99 in the influent to the groundwater treatment system.
- Based on literature values for the distribution coefficient for Tc-99, calculated rates of the decline of Tc-99 concentrations in the different remediation areas.

This submittal will not include proposed revisions to the DP but will identify revisions that need to be made.

***This report is anticipated to be submitted by December 31, 2019. Since the teleconference call, Burns & McDonnell has advised me that they will target December 31 for submittal, but due to the upcoming holidays, this is an aggressive schedule. Because this is not a critical path activity, EPM proposes to change the date to submit these revisions to the end of January 2020.***

Revisions to 60% Design Drawings for Water Treatment

Revised 60% design drawings are being prepared as a revision to Appendix K. Changes from the 60% design drawings provided in the 2018 DP will be shown. Specifications and notes included for issuing request for bids will be removed from these design drawings.

***These revisions are anticipated to be submitted by December 31, 2019. Since the teleconference, VNSFS has notified EPM that few of their subcontract resources will be available through most of December. Because this is not a critical path activity, EPM proposes to change the date to submit these revisions to the end of February 2020.***

Report on Vertical Profiling and Monitor Well Abandonment

Both vertical profiling field work and monitor well abandonment are scheduled to begin December 15, 2019 and to conclude by December 23, 2019. The current schedule for ongoing work through the approval of the DP assumed that this work would not be completed until late January 2020. Because this activity was a critical path activity, completing this work in

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December (weather permitting) could compress the schedule by as much as a month. A report on this effort will:

- Summarize the work performed.
- Present the data obtained.
- Present the conclusions of the groundwater flow modeling.
- Provide the specifications for the locations and screened intervals of the extraction wells.

The report may include revisions of those 60% design drawings which showed extraction well locations and extraction well construction specifications.

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

Revisions to 60% Design Drawings for Groundwater Extraction

Proposed revisions to the 60% design drawings will be submitted as a revision to Appendix J. Changes from the 60% design provided in the 2018 DP will be shown. Specifications and notes included for issuing request for bids will be removed from these design drawings.

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

**Ongoing/Planned Work**

Vertical Profiling

As stated above, both vertical profiling field work and monitor well abandonment are scheduled to begin on December 15, 2019 and be completed by December 23, 2019.

Annual Environmental Monitoring

The data has been received and been through quality review. Re-analysis of samples collected from Monitor Well 02W32 was required; that data has been received and been through quality review.

***EPM will submit the tabulated data to the NRC and the DEQ before November 27, 2019.***

Tc-99 Groundwater Assessment

The data has been received and been through quality review. Re-analysis of samples collected from Monitor Well 02W32 was required; that data has been received and been through quality review.

***EPM will submit the tabulated data to the NRC and the DEQ before November 27, 2019.***

Burial Area #1 Oxidation-Reduction Evaluation

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

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*EPM will submit the tabulated data to the NRC and the DEQ before November 27, 2019. The report has been assigned a lower priority than the numerous reports described above. EPM anticipates submitting this report to the NRC and the DEQ prior to the end of February 2020.*

**Next Meeting**

The next teleconference will be conducted December 11, 2019.