Cimarron Monthly Status Teleconference Notes
November 21, 2022

Attendees:

NRC - HQ	DEQ	EPM
James Smith	Paul Davis	Jeff Lux
Isaac Johnston	Anna Fernow	Bill Halliburton
Marla Morales	Jon Reid	
Christine Pineda	Mike Broderick	
	Pam Dizikes	

Red font indicates action items resulting from the discussion.

Administrative Issues

Scope of Work and Budget for 2023

EPM will submit a proposed scope of work and budget for 2023 to the NRC and the DEQ. The scope of work and estimated cost is for the period January 1, 2023, through March 2024, so that work can progress in 2024 until the budget for 2024 is approved. This proposed scope of work and budget will be revised based on agency comments, and upon approval by both agencies, will be sent to the list of recipients listed in Section 5.2.2 of the *Environmental Response Trust (Cimarron)* executed in 2011.

The NRC and the DEQ will review and provide comments on or approve the proposed scope of work and budget.

Licensing Issues

Letter on Divested Properties

On July 25, 2022, EPM submitted a letter to the NRC addressing three issues identified by the NRC staff related to divested property:

1. The need for radiological surveys of subsurface material brought to the surface
2. The need to maintain "isolation and control"
3. The need to include divested property in the dose assessment performed prior to license termination

The NRC agreed that the licensee has no further obligation to survey subsurface material or maintain isolation or control of those divested properties. The NRC already has the data needed to evaluate the residual dose for those properties so no further work by the licensee will be required.

The NRC will check to see if they have already communicated this information via email.

Decommissioning Issues

Facility Decommissioning Plan – Rev 3

All files have been uploaded to ADAMS. The following table presents a list of all the files which constitute the decommissioning plan with their accession numbers.

File	Accession Number
2022-11-07 EPM - Letter of Submittal	ML22284A145
D-Plan Rev 3 – Text	ML22284A150
D-Plan Rev 3 - Figures - Sections 1-5	ML22285A091
D-Plan Rev 3 - Figures - Sections 6-10	ML22285A100
D-Plan Rev 3 – Tables	ML22285A109
D-Plan Rev 3 - Appendix A - Geotechnical Investigation Report	ML22285A135
D-Plan Rev 3 - Appendix B - SWP3 and General Permit - 1 of 2	ML22285A139
D-Plan Rev 3 - Appendix B - SWP3 and General Permit - 2 of 2	ML22307A296
D-Plan Rev 3 - Appendix C - Ecological Resources	ML22285A151
D-Plan Rev 3 - Appendix D - Noise Level Report	ML22285A153
D-Plan Rev 3 - Appendix E - Historical and Cultural Resources	ML22285A165
D-Plan Rev 3 - Appendix F - Visual and Scenic Resources	ML22285A166
D-Plan Rev 3 - Appendix G - Floodplain Development	ML22285A169
D-Plan Rev 3 - Appendix H - Exemption from U-235 Possession Limit	ML22285A189
D-Plan Rev 3 - Appendices I-1 & I-2 - Remediation Infrastructure Design	ML22285A208
D-Plan Rev 3 - Appendices I-3 & I-4 - Remediation Infrastructure Design	ML22285A210
D-Plan Rev 3 - Appendices I-5 & I-6 - Remediation Infrastructure Design	ML22307A307
D-Plan Rev 3 - Appendix J - Water Treatment Design	ML22299A119
D-Plan Rev 3 - Appendix K - Basis of Design Text & Attachments 1-4	ML22308A076
D-Plan Rev 3 - Appendix K - Basis of Design Attachments 5 - 15	ML22286A225
D-Plan Rev 3 - Appendix L - Groundwater Flow Model Report	ML22308A183
D-Plan Rev 3 - Appendix M - Radiation Protection Plan	ML22286A230
D-Plan Rev 3 - Appendix N - Criticality & Uranium Loading Calculations	ML22286A244
D-Plan Rev 3 - Appendix O - Quality Assurance Program Plan	ML22307A316
D-Plan Rev 3 - Appendix P - Financial Certification Statement	ML22286A247

All of these files have been assigned a package number of ML22287A079. EPM asked for a time frame within which the NRC may complete the acceptance review of the decommissioning plan.

The NRC hopes to complete the acceptance review of the decommissioning plan by March 2023.

The DEQ asked if all these files have been uploaded to vcpsubmittals.

EPM will check to see if all decommissioning plan files have been submitted to vcpsubmittals.

Need for an Alternate Schedule

In a letter dated May 18, 2022, the NRC stated, "… NRC's longstanding practice is to have an alternate schedule request for completion of decommission activities include a determination that the schedule is in the public's best interest. For example, one may argue that it is in the public's best interest to excavate the contaminated transition material with offsite disposal which could be accomplished within the 2-year timeframe. Staff will issue an RAI if a request does not address the public's interest."

EPM explained that excavation of contaminated transition material cannot be accomplished within the 2-year time frame. In addition, EPM believes that the proposed decommissioning plan addresses the public interest to the NRC during a June 29, 2022, teleconference (ML22201A523). EPM requested that the NRC provide written correspondence concurring with that position or explain why it is deficient. The NRC has not responded to this request.

This will be addressed in the acceptance review of the DP.

Uranium Daughters in Groundwater

The NRC's acceptance review of *Facility Decommissioning Plan – Rev 2* (the DP) resulted in a request for information issued on August 11, 2021. The potential presence of short-lived daughters as potential constituents in groundwater appears to be of concern to the NRC. The NRC stated that they had not been included in the intake assessment for groundwater or resin processing, or accounted for in the survey plan in Section 15 of the DP.

The potential presence of the short-lived daughters of uranium was addressed in a letter dated June 24, 2022. In that letter EPM concluded that the short-lived daughters are not present in the groundwater. Short-lived daughters are expected to be present at detectable concentrations only in the ion exchange resin as they are generated during the several months during which resin accumulates uranium.

Nevertheless, the DP assumed that the short-lived daughters ***will be*** present in the same activity concentration as the parent nuclide in the effluent evaluation presented in Table 8-7, "Evaluation of Discharge Concentrations with 10 CFR 20.2001 Effluent Limits". The DP assumed that the short-lived daughters are all captured in the ion exchange resin in the Appendix A, "Potential Intake Calculation" of the Radiation Protection Plan, Appendix M to the DP.

EPM believes that the short-lived daughters will only be present at detectable concentrations at any point in the processing system if the resin captures those short-lived daughters as they "grow in" during the several months the resin accumulates uranium. Even then, only the Th-231 could

grow into equilibrium with the parent U-235, because the half-life of the first daughter of U-238, Th-234, will only attain a fraction of the activity of its parent.

The NRC has not provided any response to or feedback on the June 24, 2022, letter. EPM needs to know if the NRC agrees with the conclusions stated above.

This will be addressed in the acceptance review of the DP.

Evaluation of BA1 Extraction Trench

Groundwater Extraction Trench GETR-BA1-01 was constructed using an organic slurry to maintain an open trench during construction. Although approximately 40,000 gallons of groundwater was pumped from this trench after the slurry was broken, not all the organic compounds were removed from the trench. It appears that the presence of residual organic compounds resulted in the creation of reducing conditions in the groundwater in the area surrounding the extraction trench.

Monitor Wells TF-08, TR-09, and TR-10 were installed in Groundwater Extraction Trench GETR-BA1-01. While collecting groundwater samples for the 4th quarter 2022 redox sampling event, the sampling crew noted that the groundwater from all three of these monitor wells had a yellow discoloration and odor. The groundwater from TR-09 also contained some pale white filmy material that may have been some type of biological growth.

When GETR-BA1-01 was constructed, no one thought it would be seven or more years before groundwater extraction would have flushed the trench many times over. The extremely long time-frame causes EPM some concern that some type of biological growth may impact the future performance of the trench. EPM has included the evaluation of the data obtained from the extraction trench to evaluate its condition as well as the collection of samples from the trench in the proposed scope of work and budget for 2023.

The NRC and the DEQ will address this in the response to the proposed scope of work and budget for 2023.

Abandonment of Five Monitor Wells near the Cimarron River

EPM submitted a letter proposing to abandon Monitor Wells T-99, T-100, 1371, 1372, and 1373. The NRC noted that the heading on one of the tables did not include Monitor Well 1373. These monitor wells are located far beyond the extent of groundwater exceeding the NRC Criterion when delineating the extent of groundwater exceeding drinking water criteria. The deposition and reconfiguration of the land that occurs when the Cimarron River floods justifies the removal of these wells, as they provide no meaningful information relative to the remediation of groundwater to achieve license termination.

The NRC and the DEQ will address this in the response to the proposed scope of work and budget for 2023.

Abandonment of Process Building Area Monitor Wells (on Kalidy Property)

The concentration of uranium in groundwater in the 24-acre property purchased by Kalidy, Inc. (Kalidy) has fallen below the drinking water standard. The concentration of nitrate has declined to less than the State Criterion for nitrate in this area. The concentration of fluoride has always been below the drinking water standard in this area. EPM believes that no remediation of groundwater needs to be performed in this area and that the three monitor wells remaining on that property should be abandoned.

EPM will submit a letter providing tabulated analytical data for the monitor wells in the impacted area and will propose to abandon these three monitor wells. The NRC and the DEQ will address this in the response to the proposed scope of work and budget for 2023.

Next Monthly Status Teleconference

The next Cimarron monthly project status teleconference will not be conducted in January, because many of the NRC reviewers will not be available to begin the acceptance review in December.

EPM will contact the NRC and the DEQ late in January to determine when the next teleconference should be scheduled. EPM will then send an agenda approximately two weeks in advance of the meeting.