



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 14, 2019

Ms. Angelita Denny, Site Manager
U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION STAFF REVIEW OF "DRAFT
SEEP MONITORING EVALUATION REPORT, MEXICAN HAT, UTAH,
UMTRCA TITLE I DISPOSAL SITE." (EPID-L-2019-DG2-0004)

Dear Ms. Denny:

I am writing in response to the U.S. Department of Energy (DOE) report entitled "Draft Seep Monitoring Evaluation Report Mexican Hat, Utah, UMTRCA Title I Disposal Site" dated December 2018 (Agencywide Documents Access and Management System (ADAMS) Package Accession Number ML19010A182). The Nuclear Regulatory Commission (NRC) staff has reviewed the draft report and has the following comments:

1. The report recommends discontinuing the annual visual monitoring of Seep 261, but does not provide a rationale for excluding the seep from the visual monitoring program. Seep 261 will be observed if Seep 248 exhibits increased flow or if other conditions in Gypsum Creek are observed. Suggest that the report provide the DOE's rationale for discontinuing the annual visual monitoring at Seep 261. In addition, if DOE intends to discontinue visual monitoring of Seep 261, the Long-term Surveillance Plan (LTSP) for the Mexican Hat site will need to be updated to reflect the new monitoring program (Section 3.7.2 of the LTSP).
2. DOE performed sampling of Seep 248 in 2015 and 2016 at the request of the Navajo Nation. It is not clear from the report why sampling was not conducted in 2017, as the seep was visited at least once in 2017 and again in 2018. Note that Figure 9 seems to indicate that samples were collected and analyzed in 2017 but the results are not included in the discussion or in the Appendix B results. However, this apparent inconsistency may be due to the resolution of the graph in Figure 9.
3. The visual observation dates in Table 1 do not appear to be consistent with the seep sampling dates discussed in the report. For example, the Appendix B tables indicate that samples were collected at Seep 248 in September 2015, March and October 2016, while Table 1 indicates that the visual observations were performed in April 2015 and March 2016. Suggest that DOE verify that the observation and sample collection events were performed as indicated in the report.
4. On the bottom of page 11, the report includes the statements, "An upward hydraulic gradient in the lower unit also impedes the downward migration of contaminated groundwater perched in the upper unit from entering the uncontaminated lower Halgaito unit." and "The Halgaito Trail Formation that lies directly beneath the Halgaito Formation is effectively hydrologically isolated from contamination in the upper Halgaito unit." It is

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suggested that the references for these statements be included in the report, as the technical bases for the statements are not included in the report.

5. Information on Seep 265 is missing from Table 11. Suggest that DOE determine why the information is missing and include the information if it is available.

If you have any questions concerning the NRC staff's review of the report, please contact me at 301-415-6749 or by email at Dominick.Orlando@nrc.gov.

Sincerely,

//RA//

Dominick A. Orlando, Senior Project Manager
Uranium Recovery and Materials
Decommissioning Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety and Safeguards

Docket Number: WM00063

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DATE February 14, 2019

R. Evans, RIV T. Pruitt, RIV

ADAMS Accession No.: ML19035A042

***via email**

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