



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

March 19, 2018

Mr. Mark Kautsky, Acting Team leader
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 THE U.S. DEPARTMENT OF ENERGY RESPONSES TO U.S. NUCLEAR REGULATORY COMMISSION STAFF COMMENTS ON ANNUAL PERFORMANCE REPORTS FOR THE SHIPROCK, NEW MEXICO, URANIUM MILL TAILINGS RADIATION CONTROL ACT DISPOSAL SITE (DOCKET WM-00058)

Dear Mr. Kautsky:

I am writing in response to your letter, dated May 31, 2017, providing the U.S. Department of Energy's (DOE's) responses to the U.S. Nuclear Regulatory Commission (NRC) staff's comments on the 2012-2016 annual performance reports for the Shiprock, New Mexico, Disposal Site (Agencywide Documents Access and Management System (ADAMS) Accession Number ML17156A683). The NRC staff has reviewed your responses and has one remaining comment:

In the third response in Attachment 1 and in the fifth response in Attachment 3, DOE stated that the pumping rate from most extraction wells has been declining. This is true if the baseline used are those years of initial pumping is before 2008. However, since 2008 the decline in the pumping rate for most of the extraction wells, except 1095 and 1092, appears to have leveled off. Also, Figure 5 from the "Annual Performance Report April 2015 Through March 2016 for the Shiprock, New Mexico, Site" dated October 2016 (ADAMS Accession Number ML16334A026) also appears to show a relatively consistent rate of groundwater volume being pumped from the terrace to the evaporation pond.

In addition, the NRC wanted to provide clarification to a DOE comment. Specifically, at the end of the second response in Attachment 2, DOE states, "It is not clear from NRC's comment whether the agency is requesting re-inclusion of the bulleted items, or if the comment only acknowledges the change in scope of the report." The purpose of the NRC comment was to document the change in scope of the annual performance report.

Finally, on October 28, 2014, the NRC staff commented on the DOE's request for concurrence on a proposal to reduce groundwater monitoring frequency at the Shiprock, site (ADAMS Accession Number ML14288A599). In response, DOE stated that they would respond to NRC's October 2014 letter in a separate submittal. Specifically, DOE stated that characterization efforts geared toward a greater understanding of groundwater flow and transport mechanisms on the terrace were ongoing and that the findings of these investigations would be presented in

future position papers. In addition, DOE stated that geochemical signatures of the terrace groundwater were being investigated to understand mill-related versus non mill-related groundwater. DOE further stated that the results from these data sets, together with knowledge that groundwater in the Mancos Shale occurs in discrete, discontinuous zones of limited extent, would be used to revise the groundwater compliance strategy to supplemental standards on the terrace. To date, we have not received this information. It would be useful if the DOE could provide the NRC staff with an estimated date that the information will be provided.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice" a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning the NRC comments please feel free to contact me at 301-415-6749 or at Dominick.Orlando@nrc.gov.

Sincerely,

/RA/

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

Docket No.: WM-00058
cc: Shiprock dist. List

M. Kautsky

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