



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

July 2, 2019

Mr. Gary L. Ward
Vice Chancellor for Operations and Chief
Operating Officer
The Curators of the University of Missouri
180 General Services Building
900E Stadium Boulevard
Columbia, MO 65221

SUBJECT: REQUEST FOR THE NRC TO STOP REVIEW OF DECOMMISSIONING PLAN
AND REQUEST FOR ALTERNATE DISPOSAL OF RADIOACTIVE WASTE FOR
PICKARD HALL, NRC LICENSE NO. 24-00513-32

Dear Mr. Ward:

In a letter dated November 26, 2018 (ML18332A395), the University of Missouri (the University) requested that the NRC stop its review of a previously submitted decommissioning plan (DP) and a request for alternate disposal of radioactive waste for Pickard Hall, which is contaminated with radium and thorium from chemical separation activities conducted in the early 1900's. The University requested this action pending the completion of its determination of the fate of Pickard Hall, after which the University would re-submit a decommissioning plan and alternate disposal request within 12 months.

Currently, the NRC has an open license amendment request in the form of a DP (ML15106A640) submitted in a letter dated March 26, 2015, and the alternate disposal request (ML18156A125) submitted in a letter dated May 30, 2018. Prior to your letter dated November 26, 2018, the NRC had been begun its review of the DP and issued requests for additional information (RAIs) regarding the DP and the alternate disposal request. Based on your November 26, 2018, request, we consider this to be a request of withdrawal of the actions and we will cancel these in our tracking system. We also now consider all RAIs to be no longer applicable and no further action will be taken on those RAIs.

On June 14, my staff and I spoke with you and members of your staff by telephone to clarify your most recent request and to provide our perspective. Since late 2009, when the University first notified the NRC of its intent to decommission Pickard Hall (ML093270544, ML093560017), the NRC has conducted a number of inspections, held a public meeting, and reviewed a number of documents submitted by the University related to the decommissioning of the building. As we stated during the telephone conference, the determination whether to remove and ship for disposal existing radioactive contamination while preserving the building or to demolish the building and ship the contaminated material for disposal is yours to make not the NRC's. At this time, we continue to have reasonable assurance of adequate protection of public health and safety and protection of the environment by your current controls over public access to the building and maintenance of appropriate environmental conditions in the building. However, a significant future delay in the decommissioning of the building could increase the possibility of a release of radioactive material to members of the public and the environment, which would not

be acceptable. As stated earlier, we understand that the University will re-submit a DP and an alternate disposal request with 12 months. Before we can review and approve or disapprove your request, we need additional information. Below in this letter, I have provided some of the regulatory requirements and guidance that apply to your request.

Title 10 of the Code of Federal Regulations (10 CFR) 30.36(g)(2) states that “The Commission may approve an alternate schedule for submittal of a decommissioning plan required pursuant to paragraph (d) of this section [30.36] if the Commission determines that the alternate schedule is necessary to the effective conduct of decommissioning operations and present no undue risk from radiation to the public health and safety and is otherwise in the public interest.”

10 CFR 30.36(i) states “The Commission may approve a request for an alternative schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Commission determines that the alternative is warranted by consideration of the following: (1) Whether it is technically feasible to complete decommissioning within the allotted 24-month period; (2) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period; (3) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay; (4) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and (5) Other site-specific factors which the Commission may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, groundwater treatment activities, monitored natural groundwater restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.”

Guidance for meeting the above NRC decommissioning requirements can be found in NUREG-1757, “Consolidated Decommissioning Guidance,” which comprises 3 volumes. In particular, Chapter 5 of Volume 1 (Revision 2) of the NUREG-1757 provides a discussion on the decommissioning process, with page 5-4, in particular, providing a listing of the items that the NRC will consider before approving or disapproving requests for alternative schedules. Chapter 4 of Volume 2 (Revision 1) of the NUREG provides information on the types of surveys typically conducted during decommissioning, including guidance on characterization, survey, and determination of radiological criteria related to decommissioning. And finally, Chapter 2 of Volume 3 (Revision 1) of the NUREG provides an overview on timeliness in decommissioning and section 2.6, in particular, provides the criteria the NRC would use for reviewing requests for alternate schedules for the initiation of decommissioning (10 CFR 30.36(d)) and for the completion of decommissioning (10 CFR 30.36(h)). Our experience at other large decommissioning sites has shown that the decommissioning of Pickard Hall may require more than one round of characterization, remediation, and final status surveys. You should consider this possibility when developing your DP and related schedule(s).

Please be advised that NUREG-1757 does not represent additional requirements but rather recommended methods to show compliance with NRC regulations. The NRC staff will use the NUREG, and other guidance documents, in its review of documents you submit for the decommissioning of Pickard Hall. NUREG-1757 can be found on NRC’s Public website at <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1757/>.

Given the information above, the NRC is requesting you provide a response to this letter within 60 days of the date of this letter. Your response should address, at a minimum, the information discussed above on the regulatory requirements of 10 CFR 30.36 and the guidance in NUREG 1757 regarding alternate schedules for decommissioning. If the NRC does not receive a

response or an adequate response within that timeframe, the NRC may deny the November 26, 2018, request.

The letters and other correspondence referenced above are available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>.

Please contact Mr. Michael LaFranzo, Senior Health Physicist, of my staff if you have questions related to this letter. Mr. LaFranzo can be contacted at (630) 829-9865.

Sincerely,

/RA/

David L. Pelton, Director
Division of Nuclear Materials Safety
Region III

Docket No. 030-02278
License No. 24-00513-32
Mail Control No. 586692

G. Ward

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Letter to Gary Ward from David Pelton dated July 2, 2019.

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