



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

September 19, 2024

Dru Buntin, Director
State Department of Natural Resources
and State Historic Preservation Office
Missouri State Historic Preservation Office
P.O. Box 176
Jefferson City, MO 65102

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION INITIATION OF SECTION 106
CONSULTATION AND FINDING OF ADVERSE EFFECT PICKARD HALL
DECOMMISSIONING AND DEMOLITION BOONE COUNTY, MISSOURI
(DOCKET NUMBER: 030-04783)

Dear Dru Buntin:

The U.S. Nuclear Regulatory Commission (NRC) is considering a license amendment request pursuant to the Atomic Energy Act of 1954, as amended, and Title 10 of the *Code of Federal Regulations* Part 30, for Curators of the University of Missouri (MU) Pickard Hall decommissioning and demolition (Project) in Boone County, Missouri. If the NRC approves the license amendment request, the Project will be an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, and its implementing regulations, Title 36 of the *Code of Federal Regulations* (36 CFR) Part 800.

In the amendment request, MU proposes to remove radioactive material from Pickard Hall and demolish the building. Pickard Hall was constructed in 1892 as the Chemical Laboratory and has been renovated multiple times including major renovations in 1940, 1974, 1997, and 1999. From 1976 to 2013, Pickard Hall was home to the Art and Archaeology departments and museum. The building was named for John Pickard, the first Chair of the Department of Art History and Archaeology. From 1913 into the 1930s, Herman Schlundt, a physical chemist, studied radium refining in the building. Over the years, MU discovered lingering radiation and, in 2013, MU closed Pickard Hall. See Enclosure 1 for additional information on Pickard Hall history, architecture, and renovations as well as photographs and floor plans.

Demolition will be conducted primarily with a 100,000-pound class excavator with a 70–80-foot reach equipped with a rotating clam shell attachment. Due to limitations on the west side of the building, the demolition work will primarily be performed from the east side of the building. After demolition down to the first floor of the building and demolition debris is removed for disposal, basement demolition will begin. Soils surrounding the foundation will be sloped to expose foundation walls for safe demolition. Soils under the basement floor slab with high concentrations of radioactivity may be removed during demolition.

Like many other buildings at MU, Pickard Hall is serviced by the MU steam tunnel system. For Pickard Hall, this steam tunnel is located under the north/south sidewalk on the west side of the building. The feeder tunnel is perpendicular to the steam tunnel and connects the steam tunnel to Room 15 in the Pickard Hall Basement. The feeder tunnel interior dimensions are 3.2 feet (ft) wide by 15.5 ft long. Prior to the start of demolition, the steam tunnel will be physically isolated from the Pickard Hall feeder tunnel to allow demolition of the feeder tunnel without impacting steam tunnel operations.

To secure the project area, a temporary construction fence will be erected around Pickard Hall, extending past the sidewalks on the north and south sides of the building and the sidewalk on the west side of the building into the Quadrangle, and to Ninth Street on the east side of the building beyond the current parking lot. See Enclosure 2 for additional information on the proposed decommissioning and demolition activities.

The NRC staff define the area of potential effect (APE) as the Pickard Hall building footprint and the area around the building that will be fenced off as the work area (Enclosures 3 and 4). The APE is approximately 185 ft north-south by 200 ft east-west for a total of approximately 0.88 acres.

The NRC staff identified the following consulting parties who are receiving this initiation and finding of adverse effect: Missouri State Historic Preservation Office (SHPO); Apache Tribe of Oklahoma; Miami Tribe of Oklahoma; Osage Nation; Seneca-Cayuga Nation; and the Columbia Historic Preservation Commission.

Pursuant to 36 CFR § 800.4, the NRC staff conducted background research with the Missouri SHPO Archaeology Viewer, National Register of Historic Places database, and other online sources. A summary of the research findings is provided in Enclosure 5. As a result of the background research, the NRC staff propose a finding of Adverse Effect pursuant to 36 CFR § 800.5(d)(2).

The NRC staff is providing a finding of Adverse Effect pursuant to 36 CFR § 800.5(d)(2) and supporting documentation for your review and consideration. Please provide your concurrence or objection, **electronically**, to jean.trefethen@nrc.gov within 30 days of your receipt of this finding of effect. Unless provided objection and information for the NRC staff to reconsider the effect assessment, the NRC staff will proceed with consultation on a resolution on adverse effects pursuant to 36 CFR § 800.6.

Should you provide any information in your response that you would like withheld from public review, please clearly identify your response as sensitive. Please direct any questions you may have to environmental project manager Jean Trefethen at jean.trefethen@nrc.gov.

Sincerely,



Signed by Regan, Christopher
on 09/19/24

Christopher M. Regan, Director
Division of Rulemaking, Environmental,
and Financial Support,
Office of Nuclear Material Safety
and Safeguards

Docket No. 030-04783

Enclosures:

1. *University of Missouri Pickard Hall
Decommissioning Radiological Work Plan, May 20, 2023*
2. *University of Missouri Pickard Hall
Decommissioning Demolition Plan, May 20, 2023*
3. APE Topographic Map
4. APE Aerial Imagery
5. Confidential Enclosure – Background Research
and Effects Assessment

cc:

MOSection106@dnr.mo.gov

D. Buntin

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