



NEPA Categorical Exclusion Determination Form

Program or Field Office: U.S. Department of Energy (DOE) Office of Legacy Management (LM)

Project Title: Applied Studies and Technology, Tracer Testing at Riverton, Wyoming, Processing Site

Location: Riverton, WY, site

Proposed Action or Project Description:

U.S. Department of Energy (DOE) Office of Legacy Management (LM) is proposing to conduct coring and well installation using a Geoprobe followed by several methods of tracer testing to investigate subsurface geochemistry and hydrology at the Riverton, Wyoming, Processing Site. Testing would occur at two different testing locations—one within and one outside the DOE boundary. The results would contribute to improved estimates of natural flushing rates and process understanding. Proposed work would include (1) investigating the release and transport of uranium from the saturated and vadose zones in the study areas, (2) testing the effects of increased alkalinity on uranium mobility in the subsurface, (3) providing quantitative field data for estimating reactive-transport modeling input parameters, (4) comparing transport processes and parameters derived from column testing with field-scale data, and (5) providing data to confirm the current site conceptual model and revise, if necessary.

Approximately 27–30 wells would be installed between the two testing locations, coring several of the holes to obtain soil for analysis. Borehole dilution testing and aquifer testing, natural gradient tracer testing, and infiltration tracer testing would occur. Once the project is complete, all wells would be abandoned in place. Fieldwork and testing activities would occur from May 2020 through September 2021. All proposed work would be conducted by Legacy Management Support staff, graduate students and their advisor from the University of Wisconsin at Milwaukee, and Los Alamos National Laboratory staff. In accordance with the National Historic Preservation Act, Section 106 process, LM reviewed the proposed undertaking in consultation with the Wyoming State Historic Preservation Officer (SHPO), Arapahoe Tribal Historic Preservation Officer (THPO), and Northern Shoshone THPO. LM determined that there would be no adverse effect to historic property. LM submitted this determination in writing to the SHPO and the THPOs on February 25, 2020. The Wyoming SHPO concurred with this determination in writing on March 3, 2020. No responses were received from either THPO within 30 days.

Categorical Exclusion(s) Applied:

- B1.3 Routine Maintenance
- B3.1 Site Characterization and Environmental Monitoring

For the complete DOE National Environmental Policy Act (NEPA) regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of Title 10 *Code of Federal Regulations* Section 1021 (10 CFR 1021).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D

To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized by the LM Director per DOE Policy 451.1), I have determined that the proposed action fits within the specified classes of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer Signature and
Determination Date

Tracy A. Ribeiro

Digitally signed by Tracy A. Ribeiro
Date: 2020.06.11 15:12:37 -06'00'