



NEPA Categorical Exclusion Determination Form

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

Project Title: Inventory and verification and validation (V&V) work at Defense-Related Uranium Mines (DRUM) Program mines in the state of Arizona

Location: DRUM Program mines in the state of Arizona

Proposed Action or Project Description:

LM is proposing to conduct inventory, mapping, and soil and surface water sampling at abandoned uranium mines in the state of Arizona in accordance with the DRUM Program's approved work plan. Section 3151 of the National Defense Authorization Act for Fiscal Year 2013 mandates actions to verify and validate abandoned uranium mines associated with atomic energy defense activities of the United States. Activities include both inventory and verification and validation (V&V) visits. Inventory may be performed by state or federal agencies funded by LM.

Inventory and V&V visits: Full-sized vehicles, all-terrain vehicles (ATVs), or utility task vehicles (UTVs) would be used to travel to and from mine sites on existing and agency-approved roads. The mine sites and nearby areas would be explored on foot and without entering adits or other hazardous areas for mine-related features. Mine site features and conditions would be described and recorded with GPS. Identifying tags at mine features would be installed if necessary.

V&V-only visits: Gamma radiation measurements would be recorded using backpack-mounted instruments along transects within the mine disturbed area, in surrounding areas, at sediment sheds, and at background locations. ATVs or UTVs would be utilized to collect gamma radiation measurements on waste rock or disturbed areas at some large or very large mines. Vehicle use normally entails one vehicle pass along 100-foot transects throughout previously disturbed areas. Samples would be collected by hand from the upper 6 inches of soils in mine waste rock areas and background locations. Each composite sample would be less than 1 liter in volume, and the number of samples would depend on the individual mine. Surface water samples would be collected and preserved (i.e., with nitric or sulfuric acid) when surface water is present. Soil and water samples would be shipped to a certified laboratory for analysis and disposal. Sampling equipment would be decontaminated in the field and small quantities of radioactively contaminated solid waste would be managed if present. Samples of plant material would be collected for the DRUM herbarium, excluding listed species. Unmanned aerial vehicles would be used to supplement investigations at some locations. No aviation activities would commence until required Flight Safety Plans are approved by a certified DOE Aviation Manager and permission is received from LM to proceed with aviation activities. Any follow-on aviation activities would require new Flight Safety Plans approved by a certified DOE Aviation Manager.

Proposed activities are planned to be initiated and completed between September 2019 and March 2027. Activities would normally take place between March 1 and December 15, but year-round activities at some locations are possible. Work would be performed by the LM support contractor, and some inventory work would be performed by state or federal agencies with funding from LM.

Categorical Exclusion(s) Applied:

- B3.1 Site characterization and environmental monitoring
- B3.2 Aviation activities

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

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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**

Digitally signed by JOYCE CHAVEZ
Date: 2019.09.23 08:21:40 -06'00'