



**U.S. Department of Energy
Office of Legacy Management
Categorical Exclusion Determination Form**



Program or Field Office: Office of Legacy Management

Project Title and I.D. No.: Conduct a Study on Effects of Soil-Forming Processes at the Shirley Basin South, Wyoming, Disposal Site (LM 22-17)

Location: Shirley Basin South, Wyoming

Proposed Action or Project Description:

The U.S. Department of Energy proposes to conduct a joint study with the U.S. Nuclear Regulatory Commission on the performance of the engineered soil cover at the Shirley Basin South disposal site. This proposed study involves excavation of the cover material itself and of undisturbed portions of the nearby source of the cover material to study the soil formation process at this location. Excavations would extend through the cell cover system to the bottom of the radon barrier. No tailings or contaminated material would be moved at any of the locations. All excavations would be restored at the conclusion of the project. This study supports a larger effort to evaluate the long-term performance of engineered soil covers at LM managed sites nationwide.

This Categorical Exclusion Evaluation (LM 22-17) evaluates the potential impacts of the pedogenesis study. Environmental considerations include air emissions/air quality; noise; solid waste generation; chemical storage on site; regulated quantities of petroleum used or stored on site; wetlands impacted; cultural/archaeological resources present; radioactive materials/soils; and surface (ground) disturbance. Disclosed environmental effects were found to be minor. Best management practices would be applied to further minimize potential negative environmental effects.

Categorical Exclusion(s) Applied:

- B3.1 Site characterization and environmental monitoring
- B3.8 Outdoor terrestrial ecological and environmental research

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of 10 CFR Part 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 under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

JChavez

Joyce E. Chavez
2017.08.17 12:59:10 -06'00'

NEPA Compliance Officer:

Date Determined: