



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

**FINDING OF NO SIGNIFICANT IMPACT FOR THE FINAL ENVIRONMENTAL
ASSESSMENT FOR THE EVAPORATION POND AT THE SHIPROCK, NEW
MEXICO, DISPOSAL SITE (DOE/EA-2195)**

U.S. Department of Energy, Office of Legacy Management

ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) Office of Legacy Management (LM) has prepared the *Environmental Assessment for the Evaporation Pond at the Shiprock, New Mexico, Disposal Site* (DOE/EA-2195) (referred to as the EA), which analyzed the potential impacts of the Proposed Action. The Proposed Action is to dismantle and dispose of the existing evaporation pond at an offsite licensed waste facility by highway and rail transport.

The Final EA evaluated various alternatives that would identify a path forward regarding the future of the 11-acre evaporation pond, including sediment, liner, underlying soil, and associated infrastructure. In keeping with its mission, LM must ensure site conditions are protective of human health and the environment, and eliminate the potential for incidental soil or groundwater contamination due to continued degradation or failure of the evaporation pond liner.

LM evaluated three alternatives: a No Action Alternative as required by DOE's National Environmental Policy Act (NEPA) regulations (Title 10 *Code of Federal Regulations* Section 1021 [10 CFR 1021], "National Environmental Policy Act Implementing Procedures") and in accordance with Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14[c]); Alternative 2, "Full Decommissioning and Disposal of the Existing Evaporation Pond at an Off-Site Licensed Waste Facility by Highway Transport"; and Alternative 3, "Full Decommissioning and Disposal of the Existing Evaporation Pond at an Off-Site Licensed Waste Facility by Highway/Rail Transport." Alternative 3 is the Preferred Alternative; it would meet the purpose and need for the Proposed Action and would also be protective of human health and the environment.

Based on the analysis in the Final EA, DOE determined that the Preferred Alternative would not constitute a major Federal action significantly affecting the quality of human health and the environment within the meaning of NEPA. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required, and DOE is issuing this Finding of No Significant Impact (FONSI).

PROPOSED ACTION: The Proposed Action involves dismantling the evaporation pond, including removing and disposing of an estimated 20,000 cubic yards (cu yds) of waste. This volume of material includes any water, pond sediment, pond liners, associated infrastructure, and up to approximately 12 inches (in) of subsurface soil. LM would transport waste to the selected disposal site using a combination of haul trucks and gondola railcars.

ALTERNATIVES EVALUATED: DOE evaluated three alternatives. The No Action Alternative was evaluated as Alternative 1 to provide a baseline for comparison with Alternative 2 and Alternative 3, which is the Preferred Alternative.

Alternative 2 involves dismantling the evaporation pond, including removing and disposing of an estimated 20,000 cu yds of waste. This volume of material includes any water, pond sediment, pond liners, associated infrastructure, and up to approximately 12 in of subsurface soil. Waste would be transported to the selected disposal site by highway transport using haul trucks.

Alternative 3, the Preferred Alternative, involves removing the evaporation pond in the same manner outlined in Alternative 2, except under this alternative, LM would transport waste to the selected disposal site using a combination of haul trucks and gondola railcars.

For the evaluated action alternatives, DOE identified the Waste Control Specialists Facility in Andrews County, Texas, or *EnergySolutions*' Clive Disposal Facility located in Grantsville, Utah, for the disposal of waste generated during decommissioning activities.

In addition to the three alternatives evaluated in the Final EA, DOE also considered other alternatives that were eliminated from further analysis: (1) cap the evaporation pond in place, (2) on-site disposal, (3) leave the existing pond in place and replace the pond liner, and (4) waste disposal at the Grand Junction Disposal Site. DOE determined capping the pond in place and on-site disposal would create a new disposal cell, and LM lacks authority to create new Uranium Mill Tailings Radiation Control Act disposal sites. Due to harsh weather conditions at Shiprock (i.e., high summer temperatures, severe winter temperatures, and high winds), a replacement liner would not be expected to last more than 20 years once installed and would eventually degrade. The Grand Junction Disposal Site was eliminated from further consideration due to water restrictions and disposal issues with the evaporation pond liner material and because the proposed travel route would transport waste through heavily populated wildlife corridors.

ENVIRONMENTAL CONSEQUENCES: The affected environment for the following resources at the Shiprock site were evaluated for potential impacts from Alternatives 1 (the No Action Alternative), 2, and 3 (the Preferred Alternative):

- Air Quality
- Biological and Natural Resources
- Socioeconomics and Environmental Justice
- Geology and Soils
- Land Use and Recreation
- Noise and Vibration
- Solid Waste and Waste Management
- Visual Resources
- Human Health and Safety
- Traffic and Transportation
- Water Resources

Overall, Alternative 1 (the No Action Alternative) would result in long-term adverse impacts to geology, soils, and water resources because the evaporation pond would remain in place and contaminated groundwater from the floodplain would continue to be pumped into the pond, continuing to degrade the liner, ultimately resulting in a secondary source of uranium and other hazardous substances due to chemical partitioning of dissolved compounds between the infiltrating water and soils underlying the pond. However, a long-term beneficial impact to biological and natural resources could result from implementation of Alternative 1 because late-successional vegetation would provide marginal wildlife habitat and would result in no additional environmental impacts. Regardless, the evaporation pond liner would continue to degrade, ultimately leading to dissolved contaminants coming into direct contact with the land surface and underlying soils.

Alternative 2 and Alternative 3 (the Preferred Alternative) would have short-term impacts on the following resource areas: air quality, biological and natural resources, geology and soils, noise and vibration, and water resources. However, impacts would be temporary in duration, would cease upon construction completion, and would be avoided by implementing best management practices (BMPs) to mitigate potential impacts. Implementing Alternative 2 or the Preferred Alternative would result in beneficial impacts to land use and recreation as well as visual resources because decommissioning the pond would result in an overall positive impact on the visual quality of the surrounding area. The nearby residents currently hold a strong negative opinion of the visual quality of their neighborhood due to the evaporation pond. Additionally, as a result of pond decommissioning, the future use of the land would be determined with the Navajo Nation, based on DOE mission needs and potential beneficial reuse for the community, resulting in an overall beneficial impact to the community.

The BMPs include (1) dust suppression techniques applied; (2) project controls to minimize and eradicate the establishment and spread of invasive (vegetative) species; (3) sedimentation and erosion controls (i.e., silt fencing, straw bales) to reduce runoff and soil erosion during construction activities and redirecting runoff from problem areas, backfilling excavations with clean soil, soil compaction, and other methods to control infiltration of precipitation to groundwater; (4) implementation and adherence to applicable Occupational Safety and Health Administration standards, traffic laws, signage, school zones, bus stops, speed limits, and pedestrian crossings; (5) implementation of traffic safety options in conjunction with appropriate Federal, state, and local recommendations; and (6) implementation and adherence to day-to-day health and safety programs.

The cumulative impacts from the Preferred Alternative are expected to be negligible.

PUBLIC REVIEW AND COMMENTS: The Draft EA was available for a 30-day public review and comment period from July 14 to August 13, 2023, as required by 10 CFR 1021.301(d). DOE considered all comments and responded to comments during public meetings and in the Final EA, as appropriate. Comments from the public review period did not result in any substantial changes to the EA.

CONSULTATIONS: On March 14, 2023, LM sent a letter initiating the National Historic Preservation Act of 1966 Section 106 consultation process to the Navajo Nation Heritage and Historic Preservation Department Historic Preservation Officer (also referred to as the THPO), which included LM's determination that there are no historic properties that would be affected by LM's decision regarding the evaporation pond and that project activities would avoid previously identified historic properties (see Appendix B of Final EA). The Navajo Nation THPO did not object to this finding within the previously agreed to 60 days of its receipt; therefore, LM's responsibilities under Section 106 are fulfilled (36 CFR 800.4d(1)(i)).

On June 26, 2023, LM met with representatives from U.S. Fish and Wildlife Service (USFWS) to discuss the Proposed Action and compliance with the Endangered Species Act (ESA). As recommended by USFWS, LM reopened consultation with the preparation and submittal of an amendment to the 2019 Programmatic Biological Assessment of Threatened and Endangered Species for the U.S. Department of Energy Office of Legacy Management Activities at Sites in the San Juan River Subbasin. The amendment was used to consult with USFWS in accordance with their Guidance for Completing Project Reviews Under the Endangered Species Act document dated April 12, 2023. USFWS responded with a letter dated September 18, 2023, concurring with LM that the Proposed Action was not likely to adversely affect threatened or endangered species or critical habitat (see Appendix D of the Final EA).

DOE also consulted with the Navajo Nation Environmental Protection Agency, the Diné Uranium Remediation Advisory Commission, and the Navajo Nation Department of Fish & Wildlife (NN DFW). On May 10, 2023, a letter was sent to the NN DFW on behalf of LM initiating consultation and requesting data on the occurrence or potential occurrence of species of concern in the project area and what planning for avoidance may be required (see Appendix C of Final EA). The NN DFW responded with a Biological Resources Compliance Form letter dated August 11, 2023 (see Appendix C of Final EA), indicating the proposed project would be classified as an NN DFW Categorical Exclusion and would be exempt from surveys and Biological Evaluations because the footprint would be located within pre-existing development. In addition, the letter indicated the proposed project would be in compliance with Tribal and federal laws protecting biological resources including the Navajo Endangered Species & Environmental Policy Codes, U.S. Endangered Species Act, Migratory Bird Treaty Act, Eagle Protection Act, and NEPA.

COOPERATING AGENCIES: LM invited the Navajo Nation Abandoned Mine Lands Reclamation / UMTRA Department to participate as a cooperating agency in development of this EA. The department is a cooperating agency due to its knowledge about the site and expertise in remediation. This approach is consistent with NEPA and other environmental compliance requirements as well as with the Cooperative Agreement between the Navajo Nation and DOE-LM.

PUBLIC AVAILABILITY AND CONTACT INFORMATION: This FONSI and Final EA are available at the following website: <https://www.energy.gov/nepa/doeea-2195-evaporation-pond-shiprock-new-mexico-disposal-site>.

For more information about this FONSI or Final EA:

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c/o LM Admin
2597 Legacy Way
Grand Junction, CO 81503
ShiprockEvaporationPond@lm.doe.gov

For more information about the DOE NEPA process, contact:

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DETERMINATION: Based on the information and analysis in the Final EA (appended to this FONSI), DOE has determined that the Proposed Action would not constitute a major Federal action significantly affecting the quality of human health or the environment in accordance with DOE's NEPA implementing procedures (10 CFR 1021), and the regulations issued by the CEQ for implementing NEPA (40 CFR 1508.27). Therefore, the preparation of an EIS is not required. DOE approves the *Environmental Assessment for the Evaporation Pond at the Shiprock, New Mexico, Disposal Site* (DOE/EA-2195) and is issuing this FONSI.

Issued in Westminster, Colorado, this 12th day of October 2023.

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Jay Glascock
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Office of Legacy Management
U.S. Department of Energy