

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
**NEPA DETERMINATION**

**RECIPIENT:** Walker River Paiute Tribe**STATE:** NV

**PROJECT TITLE:** Walker River Paiute Tribe: Geothermal Temperature Gradient Drilling

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
	DE-EE0009482	GFO-0009482-001	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

- A9 Information gathering, analysis, and dissemination** Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
- B3.1 Site characterization and environmental monitoring** Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.
- B5.3 Modification or abandonment of wells** Modification (but not expansion) or plugging and abandonment of wells, provided that site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers, and the actions are otherwise consistent with best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials. Such wells may include, but are not limited to, storage and injection wells for brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil. Covered modifications would not be part of site closure.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Nevada Office of Energy for financial assistance to the Walker River Paiute Tribe to deepen an existing temperature gradient well for geothermal exploration. The well is located on the Walker River Paiute Indian Reservation approximately 10 miles west of Schurz, Nevada. The DOE funds would deepen the existing 500 foot well to a maximum depth of 2,000 feet.

Site preparation activities would include clearing and grading the existing dirt road from Double Springs Road to the drill site. The drill pad would require cleaning/leveling and an approximate 20 by 20 foot mud sump would be excavated within the footprint of the drill pad. Drilling operations would cover approximately 4,000 square feet.

Drilling is anticipated to take between three to seven days, with operations occurring 24 hours a day. Drilling would extend the existing well to a target depth between 1500-2000 feet, with a truck-mounted drilling rig. A geologist would be on site to assess drill cuttings collected each 10-20 foot interval. The well would be logged using an ACR Nautilus

135 data logger or similar logger. Drilling data would be compiled, evaluated, and put into a project report for the recipient. Water used during drilling operations (approximately 400 – 800 gallons per day) would be hauled to the drill site from a yet to be determined source. Upon completion of the drilling efforts, the area would be cleared of all debris and the mud sump would be backfilled and leveled. An approximate 2-inch tube would be set in the well and, after a 30 day well temperature stabilization period, temperature logs would be acquired from the well for the foreseeable future.

The U.S. Fish and Wildlife Service Endangered Species Program website (iPaC) lists the Yellow-Billed Cuckoo as a threatened species and the Monarch Butterfly as a candidate species that may occur in the vicinity of the project site. The project site is located on a sparsely vegetated desert playa that doesn't have the preferred habitat of either species. Considering the location and lack of preferred habitat, DOE has determined that this project will have no effect on the special status species of concern.

Releases of hydrogen sulfide, carbon dioxide, and/or methane gas could occur during drilling so gas monitors would be used during drilling operations. To ensure well control, a blow-out preventer would be installed on the wellhead to control artesian flow, if encountered, and flow line temperatures would be monitored during drilling. The recipient and their partners would conduct operations in compliance with all applicable Federal, State, and County laws, ordinances, and regulations and the surface would be reclaimed to the satisfaction of the Walker River Paiute Tribe.

The Bureau of Indian Affairs issued a drilling permit and a categorical exclusion under their NEPA review for the proposed project on July 20, 2021.

## NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

If during project activities, any cultural material (i.e., historic or prehistoric) are discovered, the Recipient and/or its assignees must stop work immediately and inform the Walker River Paiute Tribe and the DOE Project Officer of the discovery so that an evaluation of the discovery can be completed prior to continuing work.

Notes:

Weatherization & Intergovernmental Programs Office - SEP  
This NEPA Determination does require a tailored NEPA provision.  
NEPA review completed by Diana Heyder, 8/23/21

## FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) 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 proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action 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.

The proposed action is categorically excluded from further NEPA review.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:



Signed By: Casey Strickland

Date: 8/24/2021

NEPA Compliance Officer

**FIELD OFFICE MANAGER DETERMINATION**

- Field Office Manager review not required
- Field Office Manager review required

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature:

Field Office Manager

Date: