PMC-EF2a

(2/06/02)

U.S. DEPARTMENT OF ENERGY
EERE PROJECT MANAGEMENT CENTER
NEPA DETERMINATION

RECIPIENT: University of Utah **STATE:** ID

PROJECT TITLE : Enhanced Geothermal Systems – Concept Testing and Development at the Raft River Geothermal Field, Idaho

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-08GO98008	DE-EE0000215	GFO-0000215-003	EE215

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

CX, EA, EIS APPENDIX AND NUMBER:

Description:

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.

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.)

Rational for determination:

There has been no change in the overall scope of the project since the most recent NEPA determination applied to all remaining project tasks including stimulation of EGS target well RRG-9. However, the University of Utah (U of U) is now proposing to add the drilling of two Microearthquake (MEQ) observation wells to Task 1.3.2.

This NEPA determination is specific to Task 1.3.2.

U of U proposes to drill two MEQ observation wells, allowing installation of a downhole geophone to more closely monitor seismic activity. These two wells would be located on private land/minerals owned by US Geothermal in the vicinity of RRG-9 geothermal well. These wells would be drilled to an approximate depth of 1,000 feet, and would be completed with 10 5/8" casing to a depth of 250 feet and 7" casing to total depth. A downhole geophone would then be installed to monitor seismic activity before, during, and after well stimulation activities.

According to data gathered by DOE, there are no expected adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project. Both wells are located in areas with existing dirt roads providing access to the well sites. The U.S. Fish and Wildlife Service lists two endangered species in Cassia county, Idaho. Both species are snails that are found in the mainstream Snake River and associated tributary stream habitats. Neither species is known to be present at the Raft River Geothermal Field.

All requirements outlined in previous NEPA determination still apply.

Funding associated with this determination:

DOE: $500,000; U of U cost share: $50,000
Total: $550,000

Funding related to previous NEPA determinations:
DOE Share: $7,391,766; U of U Cost Share: $2,823,221
Total: $10,214,987

DOE has determined that the proposed action will not have a significant impact to human health and/or the environment. This project comprises information gathering, site characterization and environmental monitoring; therefore CX A9 and B3.1 apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

All requirements outlined in previous NEPA determination still apply.

EF2A by Christopher Carusona II

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 1/10/2012
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

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

Field Office Manager's Signature: _____ Date: _____
Field Office Manager