

PMC-EF2a

(20102)

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



RECIPIENT: Utah State University

STATE: ID

PROJECT TITLE : The Snake River Geothermal Drilling Project – Innovative Approaches to Geothermal Exploration

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002848	GFO-10-446	GO2848

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:

- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.1** Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) 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. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

Utah State University (USU) proposes to use DOE and cost share funding to develop and demonstrate geothermal resource in the Snake River Plain near Twin Falls, Idaho. In Phase I (Field and Geophysical Studies), USU would characterize the initial state of the reservoir, obtain the baseline data required to develop, and characterize the geothermal resource. At this time, the DOE is not evaluating Phase II (Drill 3 Slim-hole Exploratory Wells) or Phase III (Data-Collection, Analysis, and Reporting) in this NEPA determination due to lack of biological and cultural surveys including the final site selection for the third well. This review is specific to Phase I only.

PHASE 1 – Field and Geophysical Studies**Task 1 – Permitting and Environmental Review**

USU would find all Federal, State, and local permitting requirements and comply with permitting and environmental provisions of each.

Task 2 – Field studies and data compilation

Field studies would comprise compilation of existing published and unpublished geologic mapping in the region, surficial mapping of geologic units in the target areas and compilation of lithologic logs from existing water wells, geothermal wells, and wildcat gas wells. The data would be used to construct 3-D fence models of the stratigraphy to interpret geophysical surveys

Task 3 – Potential field studies across the Snake River Plain for regional geophysical framework

Conduct a field study of the Snake River Plain to provide the geophysical framework within the surrounding plain, and aid in site planning for an international drilling effort of geothermal resources. The work would entail the compilation, re-reduction, and editing of existing gravity and magnetic data, the collection of several hundred new gravity data, the collection of rock property data, 2-D potential field modeling along selected transects, regional geophysical mapping of structures, and an attempt to model the geology.

Task 4 – Seismic reflection imaging

USU would acquire a series of 2-D p-wave seismic profiles across two potential drill sites area to understand the tectonic and geologic framework of the geothermal resource. P-wave data surveys would be acquired using a high-frequency IVI minivib vibroseis source and trailer-mounted seismic source, each capable of generating signals to >300 Hz and to depths that exceed one km.

Task 5 – Report – Compilation, Analysis, and Recommendations

All data from Tasks 1 through 3 would be compiled and analyzed and an analysis and recommendation report would be prepared.

The DOE has not evaluated PHASE II and PHASE III in this NEPA determination. Condition of Approval: Allowable: Phase I (Tasks 1 through 5); Prohibited: Phase II, and III. This proposal comprises site characterization and information gathering of a geothermal resource; therefore this project is categorized as CX A9, and B3.1.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

This restriction does not preclude you from:

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

EF2A written by Christopher Carusona. NEPA recommends that this project be put on ASAP approval.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kimberly Pen Date: 6/17/2010
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