

PMC-EF2a

(2010)

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



RECIPIENT: Pueblo of Jemez

STATE: NM

PROJECT TITLE : Validation of Innovative Exploration Technologies

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	EE0002841	GFO-0002841-004	0

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** 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:
- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- 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.

Rational for determination:

DOE is proposing to provide federal funding to Pueblo of Jemez (Jemez) to develop and demonstrate geothermal resource on the Pueblo of Jemez Reservation.

This NEPA determination applies to Task 4.1 (Phase II) and Tasks 5 and 6 (Phase III) only. DOE has completed NEPA determinations for Tasks 1 – 3 (Phase I and II) and will complete additional NEPA review of Phase II Task 4.2 when sufficient information is available and after the go/no go decision. The tasks covered by this NEPA determination are described below.

Task 4.1 (Phase II) Drill Exploration Well – Based on the information gathered in previous phases and tasks, Jemez would drill the first exploration well and conduct logging runs and analysis.

Task 5 (Phase III) Well and Reservoir Testing – Jemez would conduct detailed well testing including an innovative tracer test and a test of flowing electrical conductivity (FEC), to determine the fracture surface area, heat content and heat transfer, flow rates, and chemistry of the geothermal fluids encountered by the exploration wells.

Task 6 (Phase III) Project Management and Reporting

A Class III Cultural Resource Survey (completed June 28, 2010) and a Biological Assessment (completed June 17, 2010) for the Seismic and Magneto-Telluric Survey Sites (Task 2) and geothermal wells indicates no effect to threatened or endangered species, floodplains, wetlands or significant cultural resources. Cultural resources are marked and identified which would be avoided by routing the lines and geothermal wells around the cultural sites.

A go/no-go decision would be made after testing the first exploration well (Task 4.1) and prior to drilling the second well (Task 4.2). This go/no-go decision would be based on data analysis from the first well including geothermal reservoir temperature, geochemical analyses of well-fluids, and permeability.

Task 4.2 is prohibited at this time and subject to additional NEPA review by DOE.

DOE has reviewed the applicable data and determined there is no adverse effect to wetlands, floodplains, biological, or cultural resources as a result of Task 4.1, 5 and/or 6. Tasks 4.1, 5 and 6 comprise developing a geothermal resource using various techniques while collecting well data and construction of exploratory geothermal well to demonstrate potential energy conservation and project management and reporting. CX A9, B3.1 and B5.1 apply.

Funding related to this NEPA determination:

- Task 4.1 – DOE \$1.6 million; no cost share
- Task 5 – Well and Reservoir Testing; DOE \$250,000; no cost share
- Task 6 – Project Management and Reporting; DOE \$30,000; no cost share \$0

Funding conditioned pending further NEPA review:

- Task 4.2 – DOE \$2.4 million; no cost share

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/NSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Task 4.2

This restriction does not preclude you from:

Taks previously CXed by DOE and tasks 4.1, 5, and 6.

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 :

This EF2A was written by Christopher Carusona II

This project involves tasks which are unallowable prior to further environmental analysis. NEPA requests that this project be placed on ASAP Approval.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:


NEPA Compliance Officer

Date:

9/20/2011

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:

Field Office Manager

Date:
