PMC-EF2a

(2.04.02)

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

RECIPIENT: Hi-Q Geophysical Inc **STATE:** NV

PROJECT TITLE : Phase 3 - Seismic Fracture Characterization Methodologies for Enhanced Geothermal Systems

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-08GO98008	DE-FG36-08GO18191	GFO-GO18191-003	GO18191

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:

Hi-Q is proposing to develop surface seismic and Vertical Seismic Profile (VSP) methods and adapt them to the unique conditions encountered in Enhanced Geothermal Systems (EGS).

Phase I (all tasks) and Task 11 of this project was previously approved by GFO-09-040 on January 8, 2009 with a CX A9. Phase I consisted of collection and assessment of existing data provided for the target EGS. This was followed by a large modeling effort to design an acquisition plan. Phase II (all tasks) and Task 10 of this project were previously approved by GFO-09-040-001 on August 18, 2010 with a CX A9 and B3.1. Phase II consisted of seismic surveys, gravity surveys, and a near offset VSP. This NEPA determination is specific to Phase III (Tasks 7 through 9) activities.

Phase III (Tasks 7 through 9) of the program would consist of the acquisition, processing, and interpretation of extensive multi offset VSP, surface multi-component reflection surveys with large areal coverage, and final interpretation of results.

A Notice of Intent (NOI) for the seismic survey (Task 8) was submitted to the Bureau of Land Management (BLM) on January 26, 2011 and subsequently approved on February 8, 2011. A Geothermal Sundry Notice was submitted to the BLM for the multi-offset VSP work (Task 7) on April 14, 2011 and subsequently approved on April 22, 2011. There are no special concerns with any of the work associated with Phase III.

Based upon the information provided, Phase III (Tasks 7 through 9) is categorically excluded under CX A9 "Information gathering/data analysis/document preparation/dissemination" and CX B3.1 "Site characterization/environmental monitoring."

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a prepared by Casey Strickland

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/26/2011
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