

PMC-EF2a

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



(2.04.02)

RECIPIENT: California State University Long Beach Foundation

STATE: CA

PROJECT TITLE : Tracers and Tracer Interpretation: Verification of Geothermal Tracer Methods in Highly Constrained Field Experiments

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-09G099018	DE-EE0002767	GFO-10-216	GO2767

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:

This project is categorically excluded from further NEPA review for the following reasons:

- The majority of the tasks proposed in this project (Tasks 1, 2, 5, and 6) are related to information gathering/data analysis/document preparation/dissemination and geological/geophysical surveys. As such, they qualify for categorical exclusion under CX A9. Task 3 involves the drilling of 7.5 meter deep, 5 cm diameter holes on existing disturbance, and placing sensors in them (see Project Narrative.pdf, Figure 3); and Task 4 involves geophysical techniques (ground penetrating radar). Therefore categorical exclusion B 3.1 applies.
- All field research would be conducted at the established Altona Flat Rock in Northeastern New York State (Altona, NY), an experimental site where extensive tracer experiments have been conducted. The Altona Flat Rock Research Site was established in 1994 and is supported by an onsite trailer that houses room for laboratory work and equipment storage.
- Permits would be obtained, presumably from the State of New York for the use of non-hazardous tracers in the experiments.
- This site has an existing array of 5 shallow wells in an X pattern, 10 meters on a side. All wells intersect a horizontal bedding-plane fracture approximately 8 meters below the surface. Flow and behavior of the tracers will be measured in this highly constrained, natural environment. To further constrain the test, tracer tests are coupled with periodic hydraulic tests that examine the exchange of fluid between primary flow paths and secondary "stagnant" water in the fractures.

Boreholes would be drilled using a portable drill rig will drill 8-12, these would be 2 in diameter boreholes from the surface to 7.5 m depth. Hot water would be circulated through the fracture heat exchange and would be monitored using temperature probes.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____


NEPA Compliance Officer

Date: _____

3/30/10

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: _____

(Faint, mirrored text from the reverse side of the page, likely bleed-through from another document. The text is largely illegible but appears to contain technical details related to a project review.)