PMC-EF2a

(2.06.02)

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

RECIPIENT: Executive Office of the State of Arizona **STATE:** AZ

PROJECT TITLE : Recovery Act: State Geological Survey Contributions to the National Geothermal Data System_ID

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002850	GFO-0002850-ID1	GO2850

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.
B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

DOE and cost share funding would be applied to expanding and enhancing the National Geothermal Data System (NGDS) by creating a national, sustainable, distributed, interoperable network of state geological survey-based data providers that will develop, collect, serve, and maintain geothermal-relevant data that operates as an integral compliant component of NGDS. Arizona Geological Survey (AZGS) would bring data from the State Geological Surveys into the NGDS, by digitizing at-risk legacy, geothermal-relevant data (paper records, samples, etc), publishing existing digital data using standard NGDS data services, and through limited collection of new data in areas lacking critical information.

All tasks within the SOPO were categorically excluded under CX A9 by GFO-10-085 on April 16, 2010 because they all concerned the gathering, analysis, and dissemination of data via reports, publications, and the development of computer software and wed-based programming. However, subsequent to that NEPA determination, additional funding was added into the award which provided the opportunity for various state geological surveys (acting as subcontractors to this award) to expand the scope of Subtask 2.4 to include collection of new data by field work, drilling of investigation wells, etc. States which expand Subtask 2.4 to include any of these activities will require additional NEPA analysis of Subtask 2.4 because field activities fall outside of the CX A9 from the original determination. All other tasks and subtasks (with the exception of Subtask 2.4) remain covered by the original NEPA

determination (GFO-10-085). The original SOPO has been modified to distinguish between the states participating in the expansion of Subtask 2.4 to facilitate the multiple NEPA reviews that will be necessary for this award. This NEPA determination is specific to the project proposed by the Idaho Geological Survey (IGS).

Subtask 2.4 (K) – Collection of New Data – Idaho
This task involves the drilling, logging, and sampling of new temperature gradient (TG) wells in the state of Idaho. IGS would drill up to 5 new TG wells using a truck-mounted rotary drilling rig with coring capability in southeast Idaho on Bureau of Land Management (BLM) managed land. Each well would be drilled to a total depth of between 500 and 1000 feet, depending upon subsurface geology/conditions. Each well would be approximately 6 inches in diameter. The proposed drilling and completion procedures have been designed and approved in accordance with Idaho Water Resources Board (IDWR) rules IDAPA 37, Title 3, Chapter 4 following extensive consultation with IDWR. All wells would be abandoned by removing to one foot below ground of any surface casing (if installed) and backfilling with cement grout from the bottom of the well up using a tremmie pipe or other similar emplacement technique. Rock samples (chips and core) collected during drilling would be analyzed at the University of Utah (another project subrecipient) for thermal conductivity. If collected, water samples would be analyzed at a commercial lab or at Idaho State University's analytical laboratory facilities.

All drill locations have been sited on BLM managed land within the Pocatello Field Office. IGS submitted a Notice of Intent (NOI) to the Pocatello Field Office to Conduct Geothermal Resource Exploration Operations on October 21, 2011. A revision of the NOI was submitted to the BLM on April 12, 2012. In compliance with the National Environmental Policy Act (NEPA), BLM conducted a review of the NOI through a Categorical Exclusion (DOI-BLM-ID-I020-2012-0017-CX). As part of the review for the CX, BLM completed tribal, cultural, biological, and public review of the project. No extraordinary circumstances that would preclude the issuance of a CX were found during the review, and the BLM approved the NOI on July 9, 2012. After review of all project documentation, DOE is in agreement with the finding of the BLM that no extraordinary circumstances are present that would preclude the issuance of a CX for the project activities.

Standard Drilling Conditions of Approval (COA) for NOI Cases were required by the BLM as well as COA's identified during review of the Categorical Exclusion. Please see pages 5 through 7 of the uploaded document in the PMC labeled "BLM_Final CX_2012-06-11.pdf" for details of the specific COA's.

Funding associated with this subtask: $457,663 (DOE); Cost Share $0

Based upon the information provided, the expanded Subtask 2.4 (K) is composed of site characterization and environmental monitoring; laboratory operations; therefore the DOE has categorized this into Categorical Exclusions B3.1 and B3.6.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Insert the following language in the award:

You are required to:
IGS and their contractors must follow all Conditions of Approval as outlined on pages 5 through 7 of the uploaded document in the PMC labeled "BLM_Final CX_2012-06-11.pdf"

Note to Specialist :

EF2a prepared by Casey Strickland

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 7/26/2012
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required