PMC-EF2a

(2/06/02)

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



**RECIPIENT:**Arizona Geological Survey

STATE: IN

PROJECT TITLE:

State Geological Survey Contributions to the National Geothermal Data System

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number

DE-EE0002850

GFO-0002850-IN1

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 largescale 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 truckor 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.

## 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 web-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 Indiana Geological Survey (IGS).

Subtask 2.4 (D) - Collection of New Data - Indiana

This task involves collection and analysis of thermal gradient, thermal conductivity, and volumetric moisture content data collected at 6 sites near the two largest population centers in Indiana (Indianapolis and Fort Wayne). All sites would be located in previously disturbed areas (agricultural lands, a park lawn, and a parking lot area) with existing access routes to each site. The collection of data would involve excavating a small trench (approximately 6-feet deep, 6-feet wide, and 8-feet long) that would be used to collect soil samples and install soil moisture and temperature sensors. The trench would be backfilled and a 4x4 inch wood post would be installed to mount meteorological sensors

and a datalogger.	
Budget for this task: DOE \$69,975 Cost Share \$0	
Based upon the information provided, the expanded Subtask 2.4 for IGS is categorical characterization and environmental monitoring."	ally excluded under CX B3.1 "Site
NEPA PROVISION  DOE has made a final NEPA determination for this award	
Insert the following language in the award:	
If you intend to make changes to the scope or objective of your project you are require identified in Block 11 of the Notice of Financial Assistance Award before proceeding. Y approval from the DOE Contracting Officer prior to commencing with work beyond that	ou must receive notification of
Note to Specialist:	
EF2a prepared by Casey Strickland	
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION NEPA Compliance Officer Signature:  NEPA Compliance Officer Signature:  NEPA Compliance Officer  FIELD OFFICE MANAGER DETERMINATION  Field Office Manager review required  NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING RECORD Proposed action fits within a categorical exclusion but involves a high profile or controversial in the second of	Date: 2/10/20/2
Manager's attention.  □ Proposed action falls within an EA or EIS category and therefore requires Field Office Manage	
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:	
Field Office Manager's Signature:	Date:
Field Office Manager	