

FMC-EF2a

(2.04.02)

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



RECIPIENT: Arizona Geological Survey

STATE: AZ

PROJECT  
TITLE : USDOE NGDS II

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002850	GFO-0002850-WI1	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** 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:

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 Wisconsin Geological Survey (WGS).

Subtask 2.4 (A) – Collection of New Data – Wisconsin

WGS would drill and log 6 new temporary investigation (thermal gradient) wells to fill in data gaps in the geothermal coverage of the state. Each well is expected to be drilled to 1,000 feet with a 6-inch diameter borehole using air rotary drilling techniques. Prior to abandonment, lithologic/geologic and temperature data would be collected, and water samples may be taken when possible for geochemical analysis. All wells would be constructed and abandoned according to Wisconsin Department of Natural Resources (WDNR) NR812 standards for water well construction. Twelve sites were targeted with the expectation that two or three wells would be drilled each year over a two to three year period (6 wells total). There is an existing well located at one of the sites so if that site were chosen, drilling would not be necessary at that site. Site locations are listed below:

Ringle Forest, Marathon County, WI

Leather Camp Forest Project, Marathon County, WI

Mission Lake Park, Marathon County, WI

Quarry Project, Marathon County, WI

Arlington Agricultural Research Station Oconto County, WI (existing well)

Nicolet Forest Project, Oconto County, WI

\*Highway Pit, Clark County, WI

- \*Sportsman Lake, Clark County, WI
- \*Fort McCoy, Monroe County, WI
- \*Shomberg Park Project, Iron County, WI
- \*McMullen Park Project, Monroe County, WI
- \*Chequamegon Forest Gates Rd Project, Price County, WI

WDNR completed an Endangered Resources Review (ERR) for each of the twelve drilling locations to assess what, if any, endangered resources were present or likely to be present at the site to determine any avoidance or mitigation measures necessary to avoid impacts or make impacts unlikely to affect those resources. Of the twelve sites, six were found to require no actions that would need to be taken to comply with state and/or federal endangered species laws. The other six drill locations (denoted with an asterisk above) were found to require some type of action to comply. Those actions are specified in the ERR for each individual project and WGS will be required by DOE to follow those actions to comply with state and/or federal endangered species laws.

All drill sites are located in areas that have previously been disturbed, therefore impacts to cultural material is unlikely to occur. If during project activities WGS encounters any cultural material (i.e. historic or prehistoric), all activities should cease in the vicinity of the discovery immediately. WGS must inform the DOE Project Officer of the discovery and must contact an archaeologist to evaluate the discovery.

Based upon the information provided and the reviews completed, the expanded Subtask 2.4 for WGS is categorically excluded under 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:

Insert the following language in the award:

You are required to:

WGS must follow the actions specified in the ERR for each individual project to comply with state and/or federal endangered species laws.

If during project activities WGS encounters any cultural material (i.e. historic or prehistoric), all activities should cease in the vicinity of the discovery immediately. WGS must inform the DOE Project Officer of the discovery and must contact an archaeologist to evaluate the discovery.

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

Date: \_\_\_\_\_

8/3/11

**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: \_\_\_\_\_