

PMC-EF2a

(20+02)

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



RECIPIENT: AZ Geological Survey

STATE: WA

PROJECT**TITLE :**

AASG State Geological Survey Contributions to the NGDS_WA_DrillProject

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000109	DE-EE0002850	GFO-0002850-WA2	2850

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.

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 the project proposed by the Washington State Department of Natural Resources (DNR).

Subtask 2.4 (S) – Collection of New Data – Washington, Drilling

DNR has identified 10 potential exploratory temperature gradient borehole sites within southwestern Washington in Clark, Skamania, and Klickitat counties. Of the 10 proposed sites only five or fewer of the sites would be drilled. Six out of the 10 potential sites are located on DNR managed lands and of the four sites remaining, two are located within the Gifford Pinchot National Forest and two are located on Weyerhaeuser and Klickitat County Public Works lands.

The boreholes would be drilled to depths of approximately 700 feet below ground surface. Boreholes would be installed by a licensed driller using a standard truck-mounted drilling rig. Drilling of each borehole is anticipated to take approximately one week and no permanent structures would be built on site. 2-inch inner-diameter steel casing would be inserted into each borehole after drilling is complete. The casing would be sealed at the bottom, filled with potable water, and capped at the surface. The proposed boreholes are sited on previously disturbed lands and would require no excavation or grading. The work area at each drilling location would be approximately 40' x 40' and would be accessed by existing roads. DNR would re-visit the sites periodically over the course of the next year to collect temperature gradient data. After a year has passed and DNR has collected the data, the boreholes would be plugged and abandoned in accordance with State of Washington requirements.

A state lands archaeologist completed a database/literature review for all sites and field surveys for six of the eight sites not on National Forest lands. A field survey was determined not to be necessary for Site #7 (Box Canyon) and Site #10 (Tumtum) because one was located in a quarry area and the other was located within a recent timber sale area. The database/literature review for both sites showed no known cultural materials within the immediate vicinity of either site and no cultural materials were found at any of the sites that were field surveyed. DOE initiated consultation with the SHPO, Confederated Tribes and Bands of the Yakama Nation, Cowlitz Indian Tribe, and Squaxin Island Tribe for all of the sites not on National Forest lands (Sites #1 through #7 and Site #10). WA SHPO concurred with a determination of no historic properties affected for the project in a letter dated July 10, 2012. At this time, DOE has received no comments from the tribes. Gifford Pinchot National Forest has handled all consultation and permitting requirements for Site #8 – Wind River (Site #9 was dropped as a possible drill location).

Funding associated with this subtask: \$454,999 (DOE); Cost Share \$0

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

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:

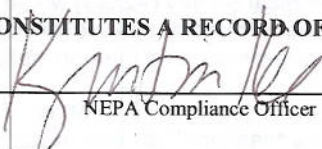
If during project activities DNR or their contractors encounter any cultural material (i.e. historic or prehistoric), all activities must cease in the immediate vicinity of the discovery. DNR must secure the area and an archaeologist should be contacted to evaluate the discovery. DNR must inform the DOE Project Officer, the Washington Department of Archaeology and Historic Preservation, and any concerned tribe's cultural staff and cultural committee of 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: _____

7/12/2012

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: _____