PMC-EF2a
(2.06.02)

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

RECIPIENT: Forrest County **STATE:** MS

PROJECT TITLE: Forrest County Geothermal Energy Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-EE0000116	DE-EE0002969	GFO-10-291	GO2969

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:

The Forrest County Geothermal Energy project consists of replacing the existing air cooled chiller with geothermal water to water chillers for energy savings at the Forrest County Multi Purpose Center. There are three Tasks for the proposed project. Information gathered during Phase 1 will be used to review the environmental impact of Phase 2 – Construction, and Phase 3; therefore this determination will only apply to Phase 1.
Phase 1 of the proposed project will consist of the following subtasks:
1.1 Feasibility study
1.2 Mechanical system schematic design
1.3 Drilling of two test wells for item 1.4
1.4 Geothermal design testing, thermal response testing, calibrations, information gathering
1.5 Build model calibration (interface with Task 3.2)
1.6 Heating and cooling system calibration
1.7 Design document development
1.8 Mechanical system detail design
1.9 Well field design
1.10 Contract specifications
1.11 Permitting
1.12 Bids selection of contractors
1.13 Construction administration
1.14 Commissioning
1.15 Prepare as-built and close-out documentation
The Prohibited Actions Include:
Phase 2: Construction
Demolition of the existing equipment will have to take place since the Forrest County Multi Purpose Building is an existing structure with HVAC equipment already installed. New and efficient geothermal equipment will be installed, and building controls will be upgraded to work with the geothermal equipment. 400 tons of water to water heat exchangers will be installed to replace the air cooled chillers currently in use. 325 geothermal wells will be drilled to house the closed loop piping. Two small pumps will be installed for water circulation. Items include, but are not limited to:
2.1 Demolition of existing systems
2.2 Drilling well field
2.3 Installation of heat loops and piping
2.4 HVAC equipment installation
2.5 Installation of distribution piping, fittings, etc.
2.6 Commissioning

2.7 Government reporting
Construction services for the Forrest County Jail include the installation of 400 tons of rooftop geothermal units. An HVAC control system will be installed to efficiently supervise building heating and cooling needs. 325 geothermal wells will be drilled to house the closed loop piping. Two small pumps will be installed for water circulation. Items include, but are not limited to:
2.8 Drilling well field
2.9 Installation of heat loops and piping
2.10 HVAC equipment installation
2.11 Installation of distribution piping, fittings, etc.
2.12 Commissioning of new equipment
2.13 Government reporting

Subtask 1.3 describes the recipient's action of drilling two test wells, one at each of the proposed well field locations. The recipient has provided the DOE with a letter of assurance stating that NO test boreholes or otherwise, will be drilled in any known wetlands that are in proximity to the proposed site locations and all test boreholes will be on previously disturbed land.
All subtasks of the proposed project involve information gathering, document preparation and conceptual system design do not present any significant impact to human health and/or environment; therefore it is categorically excluded under CX A9 "information gathering" from further NEPA review. Subtask 1.3 includes the drilling of test boreholes which has been determined to have no significant impact to human health and/or the environment, therefore it is categorically excluded under CX B3.1 "site characterization and environmental monitoring" from further NEPA review.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:
Task 2 "Construction"

Any Demolition, Construction, and/or Installation related to the proposed project.

Each test borehole will be contiguous to the school and will be on previously disturbed land this test borehole cannot be drilled on or directly surrounding any Wetland, Floodplain, and/or Coastal area.

This restriction does not preclude you from:
Task 1 "Project Design"

All other actions which involve 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).

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/1/10
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION