PMC-EF2a

(2.04.02)

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

RECIPIENT: SD Energy Office **STATE:** SD

PROJECT TITLE : Technical analysis for geothermal system

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000145	GFO-09-152-007	0

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 South Dakota State Energy Office will provide $45,000 in Recovery Act funds to the South Dakota Department of Correction for a study to evaluate the feasibility of installing a ground source heat pump system at a minimum security prison.

The site is a former manufacturing facility, now being converted to house minimum-security corrections inmates (i.e. work release, community transitions parole, community service). It is anticipated that the geothermal heat pump will be closed loop, vertical bore type. The wells will be located in the southwest corner of the site, adjacent to a rail yard and another manufacturing facility. The area currently consists of a gravel lot formerly used for product storage, and a portion of a man-made depression that will be re-graded to proper drainage. Entire site has been previously disturbed – no undisturbed surfaces will be impacted.

The feasibility study will consist of the following activities:
Activity 1 - Geothermal testing consisting of two test wells, soil conductivity analysis and associated hydrology and geologic information acquired from the test wells and site survey;
Activity 2 - Conceptual Design and engineering of a geothermal well field to support the program and physical plant requirements of the 420 bed residential facility.
Activity 3 - Energy analysis to document the prospective benefits, considering energy and economics, and including a comparison of the energy used by the proposed HVAC system and that used by the baseline systems outlined in ASHRAE 90.1

In view of the information provided from the State, the work identified is classified as Categorical Exclusion A9 and 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:

Advise the State of South Dakota and Department of Energy should federal funds be sought for the construction of a ground source heat pump at the facility. Such activity will require a separate NEPA review.

Note to Specialist :

According to the Project Officer, funding for this project is $45,000. The scope of this effort is not to expand beyond the activities described above. More specifically, the State Department of Corrections should not proceed with installation of the ground source heat pumps using federal funds. Should the project stay within the scope identified above, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 7/8/10

NEPA Compliance Officer

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: _____ Date: _____

Field Office Manager