PMC-EF2a
(2.06.02)

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

RECIPIENT: Cloud County Community College **STATE:** KS

PROJECT TITLE : EECBG State of Kansas DE-EE0000727 Cloud County GSHP HVAC Renewable Energy Subgrant

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA 0000013	DE-EE0000727.002		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.

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

Rational for determination:

Cloud County Community College proposes to use funds for the installation of a 227 ton vertical closed loop ground source heat pump system to serve its 121,000 square foot main campus building. The project consists of 84 boreholes drilled vertically to a depth of 400 feet and spread across 26,400 square feet (0.61 acres). From the aerial photograph provided, the borefield is located directly adjacent to the building. Some of the landscaped trees will be relocated but no mature trees will be timbered for this project. The area of the proposed borefield has been previously disturbed during the original construction of the building.

The system will circulate potable water as a heat transfer medium. Bentonite thermally enhanced grout, will be used to entirely encase the boreholes. The system will consist of HDPE piping; the contractor will follow ASTM D 3261 standards for the fusion of the HDPE pipes. Once the borefield has been completed, the system will be pressure tested to IGSHPA standards before commissioning the system. The borefield installer is an IGSHPA Accredited Installer and all IGSHPA grouting guidelines will be adhered to during installation.

The recipient indicated that the Kansas Department of Health and Environment Well Drilling regulations will be strictly adhered to. To control erosion during construction, silt fences will be installed surrounding the borefield to handle any run-off of sediment. The project will also be in compliance with Kansas Stormwater requirements, all erosion control measures outlined within shall be adhered to including silt fences and proper disposal of all waste generated during construction. When construction is completed, the area will be restored to pre-construction levels and conditions including reseeded with native grass.

After a thorough review of the submitted information, it has been determined that the proposed project will not have a significant impact to human health or the environment. Therefore, all activities in the proposed project are categorically excluded under CX B5.1 "actions to conserve energy" and A9 "Information Gathering" from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

NEPA review conducted by John Jediny

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerr Date: 7/26/2010
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