PMC-EF2a

(2,04,02)

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



RECIPIENT: Pittsburg State University

STATE: KS

PROJECT

TITLE:

EECBG EE-0000727 KCC: Pittsburgh State University Ground Source Heat Pump

Funding Opportunity Announcement Number DE-FOA 0000013

EE0000727

Procurement Instrument Number NEPA Control Number CID Number

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:

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:

Pittsburg State University is proposing to use EECBG ARRA funding to install ground source heat pump system on the university campus that will serve the heating and cooling needs for an academic building and a small chapel. The ground source heat pump system will be a vertical, closed loop system with a capacity of 60 tons. There will be 15 boreholes needed covering 3,375 square feet. The state certified and licensed driller will follow IGSHPA and NGWA regulations during installation. The system will use HDPE piping that is heat fused and all wells will be fully grouted with a thermally enhanced bentonite grout. The refrigerant used in the system will be a non-toxic, food grade propylene glycol and water mixture. Drilling spoils are the only expected waste from the project and will be re-used onsite when possible or taken to the appropriate landfill. The site will be re-seeded with grass of the same variety already existing on site.

The geothermal well field portion of the installation will be split into two small well fields with one adjacent to McPherson Hall and the other adjacent to Timmons Chapel. The areas next to the buildings are open, mowed grass lawns with some portions of the area being previously disturbed. The university is set in a light urban and residential area. The proposed project will occur in buildings that are not historic or in an historic district; therefore consultation with the SHPO is not required. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project.

After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

## NEPA PROVISION

Insert the following language in the award:

You are required to:

Prior to the expenditure of Federal funds to implement any of the above activities, Pittsburg State University has the affirmative responsibility to ensure they are in compliance with Sec. 106 of the National Historic Preservation Act (NHPA), consistent with DOE's 2009 letter of delegation of authority regarding the NHPA. If applicable, the subrecipient must contact the State Historic Preservation Officer.

The recipient is required to obtain the necessary permits regarding all actions involved with the proposed project.

	Note to Specialist:	
	None Given.	
	GNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.  PA Compliance Officer Signature:  NEPA Compliance Officer	Date: 9/7/10
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.	
BA	SED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:	
Fiel	d Office Manager's Signature:Field Office Manager	Date: