PMC-EF2a

(2.04.02)

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

RECIPIENT: Illinois Department of Commerce & Economic Opportunity **STATE:** IL

PROJECT TITLE : Joliet Junior College; Joliet Junior College Facilities Building

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052			EE119

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:

The State of Illinois will provide Joliet Junior College with $40,000 in Recovery Act funds to install a ground source heat pump system in a new 35,000 square foot Facilities Services building. Recovery Act funds are not being used in the construct of the building, which will be on the existing campus.

The ground source heat pump system will consist of 84 bore holes in a closed loop, vertical system. The capacity of the system will be 250 tons. Each of the 84 bore holes will be drilled to a depth of 500ft on 15ft spacing. The well field falls predominantly in an open field adjacent to existing parking areas; however, several wells will be constructed within a new parking area adjacent to the building. The area disturbed will be recultivated and landscaped.

The recipient states that the drilling will be performed by a state licensed/certified driller who will follow IGSHPA and NWGA guidelines and design standards for geothermal installations. The system design includes boreholes that will be grouted with a thermally enhanced bentonite grout to withstand cracking from temperature changes, the use of high density polyethylene pipe that is heat fused at the joints to minimize the risk of leaks, and the use of a non-toxic refrigerant consisting of a mixture of propylene glycol and potable water. The recipient states that erosion and sediment controls will be put in place and inspected during installation. The recipient has assured the State and DOE that all local, state and federal laws and ordinances will be followed. There are no known hydrological resources affected by the proposed activity. The well field falls within an existing disturbed portion of the college campus site. There are no floodplains or coastal zones in proximity to the proposed site location. Wildlife and wetlands will not be imacted by the construction or the operation of the system.

Based on the information provided by the State and recipient and in view of information presented above, it has been determined that the proposed project is not likely to have a significant impact to human health and/or environment. Therefore, this effort is categorically excluded under CX B5.1 "actions to conserve energy."

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

According to the project officer, funding for this project is $40,000. Unless there is a significant change in scope, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/20/10

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