PMC-EF2a
(2.06.02)

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

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

PROJECT TITLE: Prairieview Ogden CCSD 197; Prairieview Ogden CCSD Geothermal Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000119	GFO-10-462	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 Illinois Dept. of Commerce and Economic Opportunity will provide $53,000 in Recovery Act funds to Prairieview-Ogden CCSD #197 to cover the costs associated with the installation of a ground source heat pump (GSHP) system at its South Elementary School. The school and project site is located at 304 N. Market, Ogden, IL.

Installation of the GSHP system was completed by the beginning of the fall 2009 semester. DOE performed a site visit on June 17, 2010 to inspect the project and to determine whether any significant environmental impacts occurred during project construction.

The GSHP system is a vertical, closed loop system with a heating and cooling capacity of 53 tons. The system required 48 boreholes drilled to a depth of 200 feet. The drilling was performed by an Illinois-licensed drilling company and the field contractor was required to follow the IGSHP Association guidelines. The boreholes were grouted with a thermally enhanced bentonite grout designed to withstand cracking from the changes in temperature between the ground and the heat exchange pipe. The system uses high density polyethylene pipe that is heat fused at the joints to minimize the risk of leaks and a non-toxic refrigerant that is a mixture of propylene glycol and potable water. No specific permits were required other than standard local building permits. No waste for disposal was generated as all cuttings from drilling were re-used on site. During construction, silt fences and other erosion control methods were used to minimize erosion.

The site location for the geothermal well field was a grass play area to the east of the school building. The concrete play area on the east of the building was trenched to gain access to the boiler room. The grass and concrete areas have been restored to their original condition. The area surrounding the site location is residential to the south and west and agricultural cropland to the north and east. Interstate 74 is located north of the school. In view of the project location, no impact to threatened and endangered species was likely. There are no wetlands, floodplains or coastal zones in proximity to the GSHP project.

After a thorough review of the submitted information and a site visit, it has been determined that the GSHP project has not had a significant impact to human health and/or environment. Based on the information obtained, the work outlined is consistent with activities identified in Categorical Exclusion B5.1.

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 $53,000. Considering that the project is complete and the State will be paying in arrears, DOE funding based on submitted invoices may be warranted.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 6/25/10

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