

PMC-EF2a

(2.04.02)

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



RECIPIENT: IL Department of Commerce & Economic Opportunity

STATE: IL

PROJECT TITLE : Public Building Commission of Peoria; Geo-Exchange System for New Glen Oak School.

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE0000119	GFO-10-459	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 \$275,000 in Recovery Act funds to Peoria Public Schools to cover the costs associated with the ongoing installation of a ground source heat pump (GSHP) system at the New Glen Oak Birth through 8th Grade Learning Center in Peoria, Illinois. The project site is located at 809 E. Frye Ave., Peoria, IL 61603.

DOE performed a site visit on June 16, 2010 to inspect the project and to determine whether any significant environmental impacts occurred during project construction. The New Glen Oak Birth through 8th Grade Learning Center is in the final stages of construction and is expected to be complete by the beginning of the fall 2010 semester. Installation of the GSHP system, well field, and the interior components of the GSHP system are complete. Final landscaping of the affected grounds is yet to be completed.

The new ground source heat pump system is a vertical, closed loop system and has a heating and cooling capacity of 275 tons. The system required 110 boreholes drilled to a depth of 475 feet. The drilling was performed by an Illinois-licensed drilling company who was required to follow the IGSHF 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 in the system 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 was generated as all cuttings from drilling were re-used on site.

The site location for the geothermal well field is part of the 4-city-block property acquired for the new school. The property contains the old Glen Oak School, which will be demolished under current plans. Plans for the old Glen Oak School building are independent of the ARRA-funded GSHP project. The rest of the property formerly contained single-family dwellings that were acquired and demolished to make space for the new school. This acquisition and demolishing of the homes happened before the GSHP project was implemented and is independent of the Recovery Act-funded GSHP project. The area surrounding the site location is residential. In view of the location, no impacts to threatened and endangered species was likely. There are no wetlands, floodplains or coastal zones in proximity to the proposed site location.

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 conducted 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 \$275,000. As the work is complete and the State is paying in arrears, DOE funding based on invoices may be warranted.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____
NEPA Compliance Officer

Date: 6/25/10

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.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____
Field Office Manager

Date: _____