

PMC-EF2a

(2.04.02)

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

**RECIPIENT:**Pontiac High School**STATE:** IL

PROJECT
TITLE : Pontiac High School Geothermal

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	EE0000119	GFO-10-605	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 \$280,000 in Recovery Act funds to the Town of Pontiac to install a ground source heat pump system that will serve the heating and cooling needs for the Pontiac High School. Pontiac High School is a 137,000 square foot facility located at 1100 E Indiana Ave., Pontiac, IL.

The ground source heat pump system will be a 280-ton vertical, closed loop system. The installation will require 200 boreholes impacting 30,000 square feet. The school will use a state certified and licensed driller who is to follow IGSHA 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. The excavation is likely to generate unusable soil, which will be collected and properly disposed. The ground surface will be re-landscaped with reseeded grass surface. Permits required to complete the proposed project include:

- Livingston County Permit
- Regional Office of Education Permit
- Illinois Department of Public Health Permit
- State/Local EPA Review & Permit

The proposed site is surrounded by a fully developed, residential area bordered by actively farmed agricultural land. The geothermal well field portion of the installation will occur in a mowed, grassy area directly adjacent to the existing buildings. The proposed geothermal well field location has been used as the school's playground since 1963. There are no records of environmental hazards (i.e. chemical contaminants and/or brown-soil) at the site. The existing field is used for football and baseball practices. Chemical fertilizers and pesticides are routinely used on the land. The contractor is to ensure that no State Listed ground squirrels are living in the area before the start of construction and to take mitigative action under the auspices of the Illinois Natural Resource Department should any be found.

A test bore was drilled in the proposed site; no underground water was found. There are no water wells within 200 feet of the geothermal loop field. Given that the site and surrounding vicinity is developed, DOE does not expect that the project will have significant adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources.

In view of the information provided by the State and recipient, DOE has been determined that the work outlined will not have a significant impact to human health and/or the environment and is consistent with activities identified in Categorically Excluded 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:

Insert the following language in the award:

You are required to:

ensure that the Town of Pontiac is 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 sub-recipient must contact the State Historic Preservation Officer.

obtain the necessary permits regarding all actions involved with the proposed project.

Note to Specialist :

According to the project officer, funding for this project is \$280,000. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

NEPA Compliance Officer

Date: 8/26/10

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: _____