PMC-EF2a

(2.04.02)

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

RECIPIENT: Mulberry Grove Community Unit 1 **STATE:** IL

PROJECT TITLE : Mulberry Grove Geo-Thermal installation

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
de/foa/0000052	EE0000119		0

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 $75,000 in Recovery Act funds to install a ground source heat pump at the Mulberry Grove school. The proposed ground source heat pump system will be a 75-ton closed loop, vertical system. The system will require 36 bore holes drilled to a depth of 460 feet. The bore field is to be located in a grassy area adjacent to the school's baseball fields. The recipient has verified that a state licensed and/or certified driller following IGSHPA installation guidelines and NGWA recommendations will be used to complete the work. The boreholes will be cased in a thermally enhanced bentonite grout designed to withstand cracking from temperature changes. The system will employ high density polyethylene pipe that is heat fused at the joints to minimize the risk of leaks. The refrigerant is a non-toxic mixture of potable water and propylene glycol. The work will require construction of a two foot wide, 200 foot long trench from the bore field. Upon completion of the well field installation, the site will be regraded to the original condition and seeded.

There are no floodplains or coastal zones in proximity to the proposed site location. The proposed project is located 0.22 miles away from the nearest wetland. A review of the area hydrology has determined that surface drainage consists of a storm drainage ditch, which does not feed into potable water supplies. There are no subsurface aquifers in the area of the geothermal field.

In view of the information provided by the State and recipient and based on information provided above, the proposed project is consistent with the provisions identified in Categorical Exclusion 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 information provided by the project officer, funding for this project is $75,000. 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: 4/28/10
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