PMC-EF2a

(2,04,02)

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



RECIPIENT: Indiana Lieutenant Governor's Office Office of Energy Development

STATE: IN

PROJECT

EECBG Program: Non-entitlement Communities Energy Efficiency Activities (subgrant) City of Knox

TITLE: Open Loop Ground Source Heat Pump Project

Funding Opportunity Announcement Number

**Procurement Instrument Number** DE-EE0000725.003

NEPA Control Number CID Number

GFO-0000725-004

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 City of Knox is proposing to use EECBG ARRA funding to install a ground source heat pump system that will serve the heating and cooling needs for the Knox City Hall building. The ground source heat pump system will be an open loop system with a capacity of 20 tons. There will be 1 borehole installed within 10 feet of the existing building. A water recycle line will be routed inside the structure to the north end of the building. Returning water will enter an existing rain water runoff that interfaces with the city storm drain that is onsite. The drain is not associated with sewer system. The state certified and licensed driller will follow IGSHPA and NGWA regulations during installation. The borehole will be constructed with a screen at the bottom of the well, with suction so that sand stays below. The well will be properly grouted according to Indiana water well regulations. Old HVAC equipment will be taken to be recycled. Existing refrigerant will be reclaimed and sent to an authorized recycle center. The City of Knox will provide an HVAC inspection upon completion of the proposed project. The water well will be registered with the State of Indiana. The recipient has received approval from the City of Knox Waste Water Treatment Plant to discharge ground water into the storm drain, DOE communicated with the head of the Water Rights & Use Section at Indiana DNR - Division of Water and concurs with their assessment that the proposed wells will not have a significant impact on ground water resources.

The proposed water well will be installed in a concrete area directly adjacent to the building. The area will be re-paved after drilling. The proposed project location is in downtown Knox surrounded by areas of developed commercial and residential property. The recipient has consulted with SHPO and received a determination of no effects to historic properties. There are not expected to be any adverse effects to threatened and endangered species, wetlands, floodplains, or cultural resources as a result of the proposed project as these resources do not exist at the project site.

After a thorough review of the information submitted for the proposed project, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed project will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorically Excluded B5.1 "actions to conserve energy," from further NEPA review.

## NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist:	
EF-2a completed by Logan Sholar	
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.  NEPA Compliance Officer Signature:  NEPA Compliance Officer	Date:
FIELD OFFICE MANAGER DETERMINATION	
☐ Field Office Manager review required	
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON	N: Carlo world L. (A.L. (22-yalow)
<ul> <li>□ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue the Manager's attention.</li> <li>□ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review</li> </ul>	
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:	
ricid Office Manager's Digitature.	Date:
Field Office Manager	