

PMC-EF2a

(2.04.02)

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



RECIPIENT: KY Dept. for Energy Development and Independence

STATE: KY

PROJECT TITLE : EECBG Program: Small Cities and Counties Initiative (subgrant): Pendleton County Geothermal

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013	DE-EE0000730.005	GFO-0000730-006	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:

Pendleton County 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 Pendleton County Courthouse. The ground source heat pump system will be a vertical, closed loop system with a capacity of 22 tons. There will be 18 boreholes needed, drilled to a depth of 300 feet and covering 3,500 square feet. The state certified and licensed driller will follow IGSHPA 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. Drilling spoils are the only expected waste from the project and will be re-used on-site when possible or taken to the appropriate landfill. Silt fencing will be installed along the roadway during well field installation.

The geothermal well field portion of the installation will occur in an area where a building was recently demolished and all rubble in the subsurface fill was removed. The proposed project location is in downtown Falmouth surrounded by light commercial and residential areas. 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 Categoricaly Excluded B5.1 "actions to conserve energy," from further NEPA review.

NEPA PROVISION

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:

11/1/10