

PMC-EF2a

(20402)

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



RECIPIENT: County of Montgomery

STATE: PA

PROJECT TITLE : Peter Wentz Geothermal

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE_EE0000013	DE-EE0000938	GFO-0000938-001	

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:

B5.19 Ground source heat pumps The installation, modification, operation, and removal of commercially available smallscale ground source heat pumps to support operations in single facilities (such as a school or community center) or contiguous facilities (such as an office complex) (1) only where (a) major associated activities (such as drilling and discharge) are regulated, and (b) appropriate leakage and contaminant control measures would be in place (including for cross-contamination between aquifers); (2) that would not have the potential to cause significant changes in subsurface temperature; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rational for determination:

The U.S. Department of Energy (DOE) provided funding to the County of Montgomery (County) under the DOE's American Recovery and Reinvestment Act of 2009 Energy Efficiency and Conservation Block Grant Program (EECBG). The County selected the Peter Wentz Farmstead (Farmstead or sub-recipient) to receive \$204,200.00 in EECBG funding.

This NEPA Review is for an individual project that was originally proposed under the County's signed Statement of Work for Expedited NEPA Review. However, a 10-ton Ground Source Heat Pump System (GSHP) was installed at the Farmstead prior to receiving an individual NEPA review (the Statement of Work's size limitation is 5.5 tons).

The County is requesting it be allowed to issue a rebate to the Farmstead for installation of the 10-ton GSHP system, which is located at Route 73, Worchester PA (project).

The sub-recipient installed a 10-ton GSHP in an open field on Farmstead property. The well field consists of five boreholes at drilled to a depth of 400 feet. Condenser water will be pumped through the well field for heat exchange via 1.5 horsepower inline pumps located in the basement of the building. Condenser water will then be pumped to two five ton heat pumps – one is located in the basement and one is located in the attic. The heat pump units are connected to the existing ductwork in the building. The well driller is licensed by the Pennsylvania Department of Conservation and Natural Resources, Bureau of Topographic & Geologic Survey, a member of the National Ground Water Association, and Certified for installation by the International Ground Source Heat Pump Association. The installation followed NGWA guidelines. A 30% propylene glycol solution was used in the system.

The Peter Wentz Farmstead was established in 1744 and is on the National Register of Historic Places. The recipient consulted with Pennsylvania's Bureau for Historic Preservation as required under Pennsylvania's Programmatic Agreement for Historic Preservation. During the consultation process, the SHPO recommended all ground disturbing activity be monitored by Mr. Rich Poole. Mr. Poole monitored all activities involving ground disturbance and any artifacts recovered are being cataloged and will become part of the Farmstead's collection.

Based on a review of the file and the above analysis, DOE has determined the increase in size is negligible. Therefore, DOE has determined the project did not significantly impact the human environment and it is categorically excluded from further NEPA review under CX B5.19 (ground source heat pumps).

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

DOE Funding - \$204,200.00
EF2a prepared by Melissa Rossiter

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Electronically Signed By: **Kristin Kerwin**
NEPA Compliance Officer

Date: 5/23/2012

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: _____