

PMC-EF2a

(20402)

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


RECIPIENT: Oklahoma Dept of Career and Technology Education (Career Tech)

STATE: OK

PROJECT TITLE : OKLAHOMA SEP ARRA - OK Career Tech

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000133	GFO-0000133-040	EE133

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 Oklahoma, Department of Career and Technology Education (Career Tech) proposes to use SEP funds (\$999,204 + \$687,250 in match funds) to install ground source heat pumps. These pumps will be installed at Caddo-Kiowa Fort Cobb, OK building 400, 1000, 900 & 1100; as well as at the Great Plains Frederick, OK main building, and NETC Pryor, OK Administration Building.

Building 400 - 26 tons

A vertical closed loop system will be installed to meet the heating and cooling needs of building 400. 26 bore holes will be drilled in the vicinity next to the building which is currently grass covered. This area will be leveled and re-sod as needed upon completion of the project. Powers drilling will be the contractor for the drilling of the bore holes. They are licensed by the State of Oklahoma with a drilling/pump contractor license.

Building 1000 - 34 tons

A vertical closed loop system will be installed to meet the heating and cooling needs of building 1000. 34 bore holes will be drilled in the vicinity next the building. This area is currently a grass covered yard and upon completion will be returned as so. Powers drilling will be the contractor for the drilling of the bore holes. They are licensed by the State of Oklahoma with a drilling/pump contractor license.

Building 900 - 25 tons

A vertical closed loop system will be installed to meet the heating and cooling needs of building 900. 25 bore holes will be drilled in the vicinity next the building. This area is currently a grass covered yard and upon completion will be returned as so. Powers drilling will be the contractor for the drilling of the bore holes. They are licensed by the State of Oklahoma with a drilling/pump contractor license.

Building 1100 - 5 tons

A vertical closed loop system will be installed to meet the heating and cooling needs of building 1100. 5 bore holes will be drilled in the vicinity next the building. This area is currently a grass covered yard and upon completion will be returned as so. Powers drilling will be the contractor for the drilling of the bore holes. They are licensed by the State of Oklahoma with a drilling/pump contractor license.

Great Plains Technology Center- 74 tons

A vertical closed loop system will be installed to meet the heating and cooling needs of Great Plains Technology Center. 62 bore holes will be drilled in the vicinity next to the building. This area is currently grass covered and upon completion of the project will be returned to such condition. Wittenberg Consultants/MEP Associated will be installing

the system and are licensed in the State of Oklahoma.

NETC – 100 tons

A vertical closed loop system will be installed to meet the heating and cooling needs of the Northeast Technology Center, Pryor campus. 90 bore holes will be drilled in the area directly behind the administration building. This area is comprised of a maintained grass lawn and will be returned to such upon project completion. The installations will be completed by HSA Engineering Consulting Services, which is a licensed contractor in the State of Oklahoma.

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 15-20% propylene glycol and water mixture. All loops will be pressure tested before and after installation.

Areas of karst topography and related federally listed species in Oklahoma have been identified and the proposed projects will not occur in proximity to those resources; therefore there will not be any adverse effects to those resources as a result of the proposed ground source heat pump projects.

As required by the OK SEO, installation of ground source heat pumps cannot commence at any proposed OCP installation site until the State Historical Preservation Office (SHPO) approval has been received. OMPA must submit information about all prospective GHP installation sites to the Oklahoma State Energy Office (SEO) for review by SHPO. Under a Programmatic Agreement with SHPO, OK SEO can approve sites with buildings that are less than 45 yrs old. For buildings 45yrs or older, SEO must submit details to SHPO for review.

After a thorough review of the information submitted for the proposed projects, it has been determined that the actions involved will not have a significant impact to human health and /or the environment. The proposed projects will result in a reduction in the use of conventional fossil fuels; therefore it is hereby Categorical 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 :

Eugene Brown 6/15/2011

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:

- ☐ 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: _____