

PMC-EF2a

(2.04.02)

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



RECIPIENT:Dodge City USD

STATE: KS

**PROJECT TITLE :** EECBG Project DE-EE0000727 Dodge City Unified School Dist HVAC Retrofit w/GSH Upgrade

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA 0000013	DE-EE0000727.001		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.
- A9** Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

## Rational for determination:

Dodge City, KS is proposing to install a 100 ton Ground Source Heat Pump to service the local Northwest Elementary school. The system will be installed on the school's old playground. The site was analyzed using EPA's NEPAassist; there are no wetlands and floodplains present on the site.

The system will be closed looped and will circulate propylene glycol as a heat transfer medium. HDPE piping will be used and all piping will be fusion welded and pressure tested to IGSHPA standards for each borehole before it is commissioned. The boreholes will be 240 feet in depth and will be completed encased by thermal enhanced bentonite grout, mitigating the risk of ground water contamination from surface run-off.

The system will be in compliance with Kansas's Dept. of Health and Environment Water Well Drilling Regulations (Article 12 & 20). Dodge City has committed to DOE that the project will obtain all applicable well drilling and geothermal installation permits. These steps in mitigation and precaution are extremely important due to the fact that this geothermal system will be penetrating the High Plains aquifer otherwise known as the Ogallala aquifer. This aquifer services the majority of the mid-west and is depleted and depended on for drinking and irrigation purposes. The land disturbed during installation will be previously disturbed, but it will be restored to its original level and condition, with native seed. The project will also be in compliance with Kansas Stormwater requirements, all erosion control measures outlined within shall be adhered to including silt fences and proper disposal of all waste generated during construction. The Engineer responsible for the design of the system is IGSHPA accredited. The driller for the installation of the system has over 25 years experience with ground source heat pump installations.

DOE has determined that this project does not have a significant impact to human health and/or environment. This project is hereby Categoricaly Excluded under A9 "Information Gathering" and 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 :

NEPA review conducted by John Jediny

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: [Signature]  
NEPA Compliance Officer

Date: 5/13/10

**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: \_\_\_\_\_