

PMC-EF2a

(201002)

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



**RECIPIENT:** Missouri Department of Natural Resources - Division of Energy

**STATE:** MO

**PROJECT TITLE :** ARRA Energized Missouri School Loan project at Rockhurst University

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-000052	EE0000131	GFO-0000131-042	EE131

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 or water** (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide \$1,126,000 in State Energy Program (SEP) funding to the Missouri Department of Natural Resources, Division of Energy, who is proposing to fund the ARRA Energized Missouri School Loan project through their sub-grantee, Rockhurst University.

The proposed funding to Rockhurst University would be used for lighting upgrades, building envelope upgrades, HVAC upgrades and steam traps. All activities excluding HVAC upgrades have been previously categorically excluded from further NEPA review.

The proposed project would replace an existing HVAC single pass air system with a more efficient HVAC system using chillers, a cooler tower, exhaust fans and a heat recovery unit. The proposed HVAC system would serve the Louis B. McGee Hall building, built in 1967, and the Richardson Science Building, built in 1996, at Rockhurst University, 1100 Rockhurst Road, Kansas City, MO 64110. Both buildings are located in the southeast quadrant of Troost Ave and East 53rd St.

The total tonnage for the proposed system would be 315 tons. The system would include two chiller units, one cooling tower, two chilled water primary pumps, two chilled water secondary pumps and two condenser water pumps. The new chillers and cooling tower would be installed at an existing service area between the two buildings on previously disturbed land. The chiller would be installed on an existing elevated, fenced-in concrete pad that currently houses condensing fans for the existing HVAC system. The cooling tower would be installed adjacent to the chiller platform in an area that is currently asphalt. It would be mounted on 3 ft. wide by 3 ft. wide by 3 ft. deep concrete piers. Approximately 180 ft. of trenching would be dug at a depth of 4 ft. to connect the chillers and cooling tower to the two

buildings. The trenching would hold electrical wiring and insulated piping containing water and propylene glycol. The piping would be a closed loop system. All ground disturbances would be in previously disturbed areas between the two buildings. There would be no window or structural disturbance to either building.

The HVAC modifications would produce a waste stream that includes refrigerants and metal and would be contained and recycled according to EPA rules and procedures. All other waste associated with the proposed project would be disposed of in accordance with applicable local, state and federal law.

The proposed project would not have adverse effects on threatened and endangered species, wetlands, floodplains, or cultural resources, as these resources are not known to occur at the proposed sites. SHPO provided a determination on 8/14/2012 of no adverse effect to historic properties.

Based on review of project information and the above analysis, DOE has determined that the installation of the proposed HVAC system would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed HVAC system is consistent with the actions contained in DOE categorical exclusion CX B5.1 "actions to conserve energy," and is categorically excluded from further NEPA review.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Kelly Daigle 8.6.2012

DOE Funding: \$1,126,000

Any further projects will require a separate NEPA determination review.

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

NEPA Compliance Officer Signature:   
NEPA Compliance Officer

Date: 9/11/2012

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