PMC-EF2a
(2.06.02)

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

RECIPIENT: Missouri DNR, Division of Energy **STATE:** MO

PROJECT TITLE : Retroactive Review - Energize Missouri Homes- 5 Projects: Carlson; Whitworth; Peasel; Pfaff; McMullen

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000052	EE0000131	GFO-0000131-024	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, 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:

This NEPA determination applies to two of the five Energize Missouri Homes subawards. Both projects were completed prior to NEPA and/or National Historic Preservation Act (NHPA) review.

DOE is proposing to provide $18,000 in SEP ARRA funding to the Missouri Department of Natural Resources – Division of Energy (DNR-DE), sub-recipients Whitworth and McMullen, for the installation of energy saving windows and a ground source heat pump (GSHP) system. As of March 30, 2011, the projects are complete.

The Floyd Whitworth Home (06-65616-0037) is located at 213 Fairview Road, Sparta, MO 65753-9255. The project included the replacement and installation of 18 double-pane, low-e argon vinyl windows, a 95% efficient furnace and a more efficient 3-ton AC unit. The recipient completed work prior to NHPA review.

The Whitworth home was constructed in the 1930's. Previous alterations, including the addition of exterior brick wainscoting, have resulted in a house with the appearance of a 1960's ranch-style, rather than the original bungalow that was typical of the 1930's. The project is not located in an Historic District. The remodels on this building have significantly diminished the historic integrity of the house. Therefore, DOE has determined no adverse effect on historic properties.

The Kevin McMullen Home (04-64015-0087) is located at 3110 S Bradford Lane, Blue Springs, MO 64015-7342. This project included the installation of a 5.8-ton, vertical closed-loop GSHP system for a 4,200 square-foot residence built in 1992. On May 6, 2011, this project received a SHPO determination of "no historic properties affected."

The system consists of six boreholes, six inches in diameter and 250 feet in depth. The holes were drilled and grouted with bentonite and spaced 25 feet apart. Total land disturbance was 1,500 square-feet. Loops made of HDPE pipes were inserted into the boreholes. Manifolds connect the loops to the heat pumps. The state certified and licensed driller followed IGSHPA and NGWA regulations during installation. The system used HDPE piping that is heat fused and all wells were fully grouted with a thermally enhanced bentonite grout. The refrigerant used in the system is a non-toxic, food grade 20% propylene glycol and water mixture. The system has a pressure monitor shutdown system in case of a leak. All waste was disposed of in accordance with state and federal regulations. Spoils from the drilling were spread over the residence's yard. Upon completion, the yard was graded and seeded.

The soil profiles at the residence are a mixture of clay, shale and limestone. The project site is not located in a wetland or floodplain. The proposed system does not impact groundwater. The nearest groundwater table is within 400 feet of the surface. Areas containing karst topography and related federally listed species in Missouri have been identified, and the project does not occur in proximity to these resources.

Based on this information, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1 (actions to conserve energy) and that providing federal funds for this completed project would not constitute a major federal action resulting in significant environmental impacts.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:
The Carlson Home, the Peasel Home and the Pfaff Home.
This restriction does not preclude you from:
The Whitworth Home and the McMullen Home.
If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Cristina Tyler 10.13.2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 10/13/11
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager