

PMC-EF2a

(20102)

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



RECIPIENT: Montana DEQ

STATE: MT

PROJECT**TITLE :**

Bechard Loan

Funding Opportunity Announcement Number

DE-FOA-0000052

Procurement Instrument Number

DE-EE0000138

NEPA Control Number

GFO-09-413-002

CID Number

EE0

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 Montana Department of Environmental Quality is proposing to provide \$53,700 of SEP ARRA funds to Jonathan and Carolyn Bechard to install a ground source heat pump system, replace all windows, and add insulation at their residence located at 19256 Wildwood Ridge, Rollins, MT, approximately 1/8 mile from Flathead Lake.

DOE is aware that installation of the ground source heat pump is complete and a post-construction site visit was conducted by personnel from the DOE Golden Field Office on September 15, 2010 to assess potential environmental impacts from the project construction.

The vertical, open loop ground source heat pump system has a heating and cooling capacity of 8-tons. Two boreholes were drilled 60 feet apart from each other in the same aquifer to 220 feet. The drilling was performed by a Montana-licensed driller following IGSHP Association guidelines. The only waste materials associated with installation was packaging and pallets. All materials were disposed of properly by the installer.

The area of disturbance was less than one acre so no NPDES permit was needed. A naturally vegetated slope provided a buffer zone between the construction site and Flathead Lake. The area will be reseeded with Kentucky bluegrass for a residential lawn.

Post-construction, the project was reviewed by the Environmental Protection Agency, the US Fish and Wildlife Service, the Montana Department of Natural Resources, and the Montana Department of Environmental Quality. None of the agencies had concerns and no permits were required.

The project is not located in a wetland, a floodplain or a Controlled Groundwater Area. Per the EPA, the UIC program does not regulate single family homes.

After a thorough review of the submitted information and a post-construction site visit, it has been determined that the project did not have a significant impact to human health or the environment. The project will reduce fossil fuel energy consumption; therefore DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion 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 :

Prepared by Chris Paulsen.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 11/1/10
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

The Montana Department of Environmental Quality is proposing to provide 253,700 of SEP ARRA funds to Jonathan and Gentry Galtner to install a ground source heat pump system, replace 24 windows, and add insulation at their residence located at 12224 Wildwood Ridge, Polaris, MT approximately 1/2 mile from Fairhead Lake.

DOE is aware that installation of the ground source heat pump is complete and a post-construction site visit was conducted by personnel from the DOE Golden Field Office on September 15, 2010 to assess potential environmental impacts from the project construction.

The vertical loop ground source heat pump system has a heating and cooling capacity of 8-ton. Two boreholes were drilled 60 feet apart from each other in the same aquifer at 220 feet. The drilling was performed by a Montana licensed driller following ISMHP Association guidelines. The only waste materials associated with installation was casing and gravel. All materials were disposed of properly by the driller.

The area of disturbance was less than one acre so no NPDES permit was needed. A naturally vegetated slope provided a buffer zone between the construction site and Fairhead Lake. The area will be reseeded with Kentucky bluegrass for a residential lawn.

Post-construction, the project was reviewed by the Environmental Protection Agency, the US Fish and Wildlife Service, the Montana Department of Natural Resources, and the Montana Department of Environmental Quality. None of the agencies had comment and no permits were required.

The project is not located in a wetland, a floodplain or a Controlled Groundwater Area. Per the EPA the UIC program does not regulate single family homes.

After a thorough review of the submitted information, and a post-construction site visit, it has been determined that the project will have a significant impact to human health or the environment. The project will reduce fossil fuel energy consumption. Therefore DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion 22.1. Actions to conserve energy.