PMC-EF2a

(2.04/02)

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



RECIPIENT: Minnesota Municipal Power Agency

STATE: MN

PROJECT TITLE:

Franklyn Center: North St. Paul

Funding Opportunity Announcement Number Not Assigned

DE-EE0003810

Procurement Instrument Number NEPA Control Number CID Number GFO-0003810-NSP

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:

**B5.19 Ground** source heat pumps

The installation, modification, operation, and removal of commercially available smallscale ground source heat pumps to support operations in single facilities (such as a school or community center) or contiguous facilities (such as an office complex) (1) only where (a) major associated activities (such as drilling and discharge) are regulated, and (b) appropriate leakage and contaminant control measures would be in place (including for cross-contamination between aquifers); (2) that would not have the potential to cause significant changes in subsurface temperature; and (3) would be located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

A9 Information gathering. analysis, and dissemination

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

**B2.1 Workplace** enhancements

Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilating/air conditioning and its instrumentation, and noise reduction).

## Rational for determination:

The U.S. Department of Energy (DOE) provided funding to Minnesota Municipal Power Agency under the American Recovery and Reinvestment Act of 2009 Competitive Energy Efficiency and Conservation Block Grant (EECBG). Minnesota Municipal Power Agency proposes to install a 55 ton, vertical, closed-loop ground source heat pump (GSHP) system at the existing 20,500 square foot Franklyn Center.

The Franklyn Center is located at 2497 7th Ave. East, North Saint Paul, Minnesota 55109. It is located in a commercialized area with office buildings, community service buildings and directly behind Franklyn Center is Franklyn Park Apartment building. Franklyn Center has parking lots located on the east and west sides of the building, 7th Avenue to the south of the building and Seppala Blvd to the north of the building. The construction could cause disturbance to traffic patterns in the area, and the noise level would increase from the temporary drilling activity. These are considered to be minor disruptions and would not have a significant impact on human health and environment.

The total area of disturbance for the well field would be 12,400 square feet (approximately 1/3 of an acre). The trenching would be performed in the two parking lots adjacent to the building. All trenching required for the supply and return lines running from the well field to the geothermal heat exchange equipment and between the wells themselves would be backfilled and would meet State of Minnesota mandated specifications for site and soil restoration. Approximately 410 cubic yards of soil would be excavated, including the horizontal trenching required to connect the well field to the building mechanical system. Erosion control and storm water management plans would be implemented at the proposed site. The site would be restored to its previous grade and condition following the installation.

The GSHP would utilize a 25% or higher ratio of food-grade propylene glycol to water as an anti-freeze solution. Installation of the wells would follow Minnesota Department of Health rules/procedures and International Ground Source Heat Pump Association (IGSHPA) installation standards. The drilling contractor is IGSHPA certified. The well field would be connect to a single manifold and enter through the building's mechanical room. Core water pumps would be installed in the mechanical room and would be connected to 12 heat pump units that would replace the existing 12 roof top units.

The Minnesota State Historic Preservation Office has reviewed the project and in a letter dated April 11, 2012, concluded that "no properties listed in or eligible for the National Register of Historic Places will be affected by this project." The U.S. Fish and Wildlife Service Endangered Species Program website identified two endangered species of clam within Ramsey County. DOE has determined that these species would not be affected because the project would occur on previously disturbed property and would not be located near a marine habitat. Project work would occur on previously disturbed ground that is not within either a floodplain or wetland area.

Based on review of the project information and the above analysis, DOE has determined the installation of the proposed 55 ton GSHP would not have a significant impact to human health and/or environment. DOE has determined the proposed project is consistent with the actions contained in A9 "Information gathering, analysis, and dissemination", B2.1 "Workplace enhancements" and B5.19 "Ground source heat pumps", and is categorically excluded from further NEPA review.

Any further projects will require a separate NEPA determination review.

NEPA PROVISION	
DOE has made a final NEPA determination for this award	
Insert the following language in the award:	
Note to Specialist :	
Diana Scott 5.15.2012	
DOE Funds: \$175,000 Leveraged Funds: \$174,000 Total Project Cost: \$349,000	
NEPA Compliance Officer Signature:	RECORD OF THIS DECISION.  Date:
FIELD OFFICE MANAGER DETERMINATION	
☐ Field Office Manager review required	
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW	W FOR THE FOLLOWING REASON:
Manager's attention.	es a high profile or controversial issue that warrants Field Office
☐ Proposed action falls within an EA or EIS category and theref	Fore requires Field Office Manager's review and determination.
BASED ON MY REVIEW I CONCUR WITH THE DETERM	INATION OF THE NCO:
Field Office Manager's Signature:	Date:
Field Office	e Manager