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:

Cutters Grove, Anoka

**Funding Opportunity Announcement Number** 

Procurement Instrument Number DE-EE0003810 NEPA Control Number CID Number

GFO-0003810-CGA

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:

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.)

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.

## 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 350 ton, vertical, closed-loop ground source heat pump (GSHP) system at the existing Cutters Grove Apartment Complex.

Cutters Grove Apartment Complex is located at 2901 Cutters Grove Avenue, Anoka, Minnesota 55303. It is a 238 unit, apartment complex. It is located in an area with residential and commercial buildings. Cutters Grove has a residential complex to the northeast and south, a commercial complex to the east, wetlands to the northwest and a park space on the Mississippi to the west of the property. The construction could cause temporary 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 78,800 square feet (approximately 1.8 acres). The trenching would be performed in the parking lots and sodded grass areas around the complex. 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 2,400 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 Minnesota State Historic Preservation Office has reviewed the project and in a letter dated June 18, 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 does not identify any species in Anoka County, Minnesota. The proposed project is located adjacent to a 100-year floodplain and wetlands. The project is prohibited from placing any equipment, laydown, and performing any work in the adjacent floodplain and

wetland. Project work is required to 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 350 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" 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.

	ARONA ARONA		
NE	PA PROVISION		
	DOE has made a final NEPA determination for this award		
	OE-ESD003810 GFO-1003819-CGA		
	Insert the following language in the award:		
	e following determination:		
	Note to Specialist:		
	Diana Scott 7.23.2012		
	Diana Scott 7.23.2012		
	DOE Funds: \$1,543,024		
	Leveraged Funds: \$1,543,024		
	Total Project Cost: \$3,086,047		
SIC	GNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.		
	1/20 Mai 1/12		2/2/2/2
NE.	PA Compliance Officer Signature:	Date:	1/31/012
	NEPA Contentiance Officer		
FIE	ELD OFFICE MANAGER DETERMINATION		
	Field Office Manager review required		
NC	O REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASO	ON.	
IVC	O REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON	JN:	
	Proposed action fits within a categorical exclusion but involves a high profile or controversial issue	that warra	ants Field Office
	Manager's attention.	e ant to o	(GSHP) syntant
ч	Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's re-	view and	determination.
BA	SED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:		
Fiel	d Office Manager's Signature:	no melli ci	
1 101	Field Office Manager	Date: _	Hall anotherned
			time total erit