

PMC-EF2a

(2.04.02)

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



RECIPIENT: MI Department of Energy, Labor & Economic Growth

STATE: MI

PROJECT
TITLE :

Renewable Energy & Energy Efficiency Tech Demo - Cogeneration Consultants

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000166	GFO-09-148-022	GOO

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 State of Michigan will provide \$400,000 of Recovery Act funds to Cogeneration Consultants, Inc. to demonstrate a combined heat and power system that will utilize the waste heat emitted from the exhaust gas stream of a Nichols Herreshoff Sludge Incinerator located at the Warren Wastewater Treatment Plant. The project will be conducted within the boundaries of the Warren Wastewater Treatment Plant located at 32360 Warkop Avenue, Warren, MI 48093.

Recovery Act funds will be used to purchase four 125 KW Organic Rankine cycle generators. The operation of the generators is expected to produce net-zero emissions based on a fuel source and waste heat that would normally be released into the atmosphere. The Waste Heat Generator system will provide nearly 25% of the plant's electrical load.

The four generators will be placed adjacent to the incinerator building on a new 40x25 foot concrete pad. The site for the generators involves previously disturbed land that is located inside the property boundary of the wastewater treatment plant. Given the pad's location and nature of the site operations, the work is not expected to have adverse effects on threatened and endangered species, wetlands, floodplains, or cultural resources.

All of the electricity supplied by the generators will be used by the wastewater treatment plant. Cogeneration Consultants, Inc. is required to implement noise reduction measures that meet federal, state, and local ordinances. Applications have been submitted for operation permits.

Contracts awarded through Michigan's State Energy Office contain provisions that preclude project activities that:

1. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;
2. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators);
3. Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; or
4. Adversely affect environmentally sensitive resources. Environmentally sensitive resources include, but are not limited to:
 - i. Property (e.g., sites, buildings, structures, objects) of historic, archeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places;
 - ii. Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally- proposed or candidate species or their habitat, or state-listed endangered or threatened species or their habitat;
 - iii. Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains;
 - iv. Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries;

- v. Prime agricultural lands;
- vi. Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and
- vii. Tundra, coral reefs, or rain forests.

Based on the information provided by the State and recipient, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

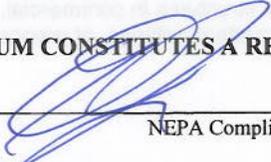
Insert the following language in the award:

You are required to:
Provide the DOE Project Officer with operation permits for the installed generators.

Note to Specialist :

According to the project officer, funding for this project is \$400,000. Absent a significant change in the scope of this effort, a change in funding will not affect my determination.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  _____
NEPA Compliance Officer

Date: 7/1/10

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: _____