PMC-EF2a

(2.04.02)

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

RECIPIENT: City of Greensboro **STATE:** NC

PROJECT TITLE: 3. Hydroelectric turbine at Water Treatment Plant ARRA-EECBG Strategy-Only

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000013	DE-EE0000767.002		0

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:

DOE funding will be used to install a reverse pump type hydroelectric turbine at the Mitchell Water Treatment Plant. A feasibility study has already been completed for the installation of this equipment. The turbine will generate electricity from the excess head that is currently burned at the plant with one butterfly control valve on each of the incoming raw water lines. The turbine will be installed in an existing water line, no new water lines and associated trenching will be required. The project would be located entirely within the water treatment plant boundaries on previously disturbed land. The water treatment plant is located on the outskirts of downtown Greensboro in a mixed commercial and residential area.

The proposed site of the reverse pump hydro installation is located adjacent to the 1 million gallon clearwell within the wastewater treatment plant boundaries. No rivers, streams, wetlands, or green fields/ wooded areas will be affected, although the proposed location is currently maintained landscaped grass. The total area necessary for installation is 0.04 acres, and requires approximately 150 cubic yards of excavation. The equipment will be housed in a concrete building, thereby limiting any noise impacts that may result within an already industrialized area. The total building footprint is 16 ft x 16 ft.

Prior to the expenditure of Federal funds to implement any of the above-mentioned activities, the City of Greensboro has the affirmative responsibility to ensure that it has a waste management plan addressing waste generated by their proposed actions. The plan will describe the plan to dispose of any sanitary or hazardous waste, e.g. construction and demolition debris, old light bulbs, lead ballasts, piping, roofing materials, discarded equipment, debris, asbestos, etc. generated as a result of the proposed project. The recipient must ensure that it will comply with all federal, state and local regulations for waste disposal. The City of Greensboro also has the affirmative responsibility to secure the following permits prior to implementation of the proposed action: a State Erosion Control permit (if greater than 1.0 acre is disturbed), Public Water Supply Authorization to Construct and a FERC conduit exemption.

This activity is categorically excluded under NEPA under 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 :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 3/31/10

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