PMC-EF2a
(2/1/03)

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

RECIPIENT: City of Baltimore **STATE:** MD

PROJECT TITLE : EECBG - GHG Scrubbing System

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0000738	GFO-0000738-002	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:

A11 Technical advice and planning assistance to international, national, state, and local organizations.

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.

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

The City of Baltimore is proposing to use $250,000 of its EECBG award funds to install a flue gas scrubber system for the existing, 3.3 megawatt, methane-powered electrical generator located at Baltimore's Back River Waste Water Treatment Plant. The funds will be spent on laboratory equipment, personnel, and the structure. The scrubbing system will be primarily located in a portable trailer. The exhaust gas from the existing generator, CO and CO2, will be channeled through bioreactors containing algae. The flue gas will be tapped and diverted off of an existing exhaust line. Once the exhaust gas is purged through the system, the output will be algae and oxygen. A waste stream plan will be in place to ensure proper disposal of spent algae. The algae being used in the bioreactors is indigenous to the Back River and is not genetically modified. The two, 14ft tall x 2ft diameter bioreactors will be enclosed in a simple pole barn structure directly adjacent to the powerhouse. Excavation of the site will not be necessary and there will be no ground disturbance. All aspects of the proposed project will occur within the WWTP facility boundaries. Adverse visual effects are not expected from the proposed project as the project's equipment is such a minimal addition to the existing infrastructure at the WWTP and the WWTP facility is surrounded by wooded areas. There is no noise associated with the proposed project.

The proposed project is consistent with activities outlined in A9, A11, B3.6, and B5.1 "actions to conserve energy"; therefore, it is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a completed by Logan Sholar

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/11/11
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