PMC-EF2a

(2.04.02)

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

RECIPIENT: SUNY Morrisville State College **STATE:** NY

PROJECT TITLE : Controlled Environment Agriculture and Energy Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
FY09 CDP	DE-EE-0002615	GFO-10-538	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:

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).

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:

SUNY Morrisville State College proposes to use federal funds to research and develop a greenhouse facility with an associated heating plant to demonstrate renewable power generation, energy efficiency, hydroponics, and aquaculture for year round production of locally grown fish and vegetables/fruits. Through these efforts they will be able to evaluate the feasibility of farm raised fish and lettuce production in combined aquaponics system, evaluate the use of harvested algae as a protein feed stock, quantify inputs and outputs of a controlled environmental agriculture system, conduct a cost benefit analysis, and finally evaluate the benefit of combined heat and power system for greenhouse power and heating.

This project will involve construction of a heating plant to house a generator, gasifier, boilers, and organic material; design and installation of the heating system to include 2 fuel oil boilers, design and build organic biomass automated hopper, installation of a Modified Imbert automated gasification system, installation of a 55kW propane powered generator; Control system integration to include control of the heating system, control of the generator, control the automated hopper, gasification, and algae systems; design and build and operation of the algae photo bioreactor system, and final evaluations of the system and startup.

The applicant has submitted an R & D questionnaire that thoroughly addresses safety and chemical handling protocols. Furthermore, the questionnaire states that the construction of the new facility will occur on an existing parking lot area. With this information adverse effects to threatened and endangered species or historic and cultural resources are not expected.

This project includes conventional research and development and construction of a small scale facility therefore a CX B3.6 & B5.1

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 7/22/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 7/26/2010
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