PMC-EF2a
(20602)

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

RECIPIENT: Cold Spring Harbor Laboratory **STATE:** NY

PROJECT TITLE : Long Island Biofuels Alliance

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
FY10 CDP	DE-EE0003298	GFO-10-488	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).

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.

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:

Cold Spring Harbor Laboratory (CSHL) is requesting Department of Energy (DOE) funding to enable collaborative research at CSHL, Brookhaven National Laboratory (BNL), and the State University of New York (SUNY) at Stony Brook to develop biofuel alternatives from aquatic plants. The primary objective of the project would involve research into genetic engineering applications on duckweed which would maximize oil production and biomass formation through genome sequencing and genetic, biochemical, and physiological studies.

Genetically Modified Organisms (GMOs) will be used in this research. The proposed research task falls into the following USDA/ CSREES categorical exclusion: "Research conducted within any laboratory, greenhouse, or other contained facility where research practices and safeguards prevent environmental impacts".

Through the Laboratories' implementation of the OSHA mandated Chemical Hygiene Plan and other programs, along with safety committee interactions, all research is reviewed to identify, eliminate, and control any potential hazards. The Environmental Health and Safety (EH&S) Department in conjunction with the Principal Investigator ensure compliance with all safety protocols.

The laboratory in which the proposed research will take place is equipped with all required and appropriate safety equipment and measures necessary for the performance of the intended tasks. If any toxic or hazardous wastes are produced in conjunction with the proposed research they will be handled, stored, and disposed of according to the CSHL hazardous waste disposal program.

All research connected to this project will be conducted in 3 separate labs which are the Cold Spring Harbor Laboratory in their Delbruck lab, Brookhaven National Laboratory, and the Life Science building on Stony Brook University's campus. All three labs have safety protocols in place and they will be applied to this research. GMOs will be used in this project at all 3 lab locations. Cold Spring Harbor laboratory states that all GMOs used in this project fall under CSREES Categorical Exclusions 7 CRF 3407.6 (a) (2) (i) and that all GMOs will be handled in accordance with protocols that minimize the possibility of the GMOs being distributed outside the lab. No toxic waste or air pollutants will be generated as a result of this project.

No outdoor R&D activities are planned. Lemna will be propagated under laboratory conditions only. The purpose is to learn what genes in lemna could be used to manipulate plant metabolism in ways that would lead to increased oil production. This will be accomplished by survey sequencing of target genes in many different genetic strains of lemna, and by metabolic profiling in these same strains. Genetic engineering of lemna will be performed in this project. Lemna is not a microorganism and is therefore exempt from TSCA.

All genetically engineered lines of duckweed used in this project will be cultivated under controlled conditions in incubators in laboratories. There are no environmental releases planned for these laboratory strains; therefore, the proposed project is not regulated by APHIS.

This project is comprised of indoor research and development activities with established safety and health protocols in place; also data gathering and analysis; therefore Categorical Exclusions B3.6, A9 apply. Further, the DOE deems this Project does not pose a significant impact to the human or natural environment; therefore Categorically Exclusion B5.1 applies; "Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency".

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Douglas Eichler, 9-2-10

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kindin Kerr Date: 9/7/2010

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