

PMC-EF2a

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



(204.02)

RECIPIENT: University of North Carolina at Pembroke

STATE: NC

PROJECT TITLE : Development of an Economic and Efficient Biodiesel Production Process

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
N/A	DE-EE0003128	GFO-10-580	EE3128

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.

Rational for determination:

The University of North Carolina at Pembroke (UNCP) and North Carolina Agricultural and Technical State University (NCA&T) are proposing to use DOE funds to jointly carry out a research project aimed at developing an efficient process to produce biodiesel. In this project, the team will develop and test various types of heterogeneous catalysts which could replace the conventionally used soluble potassium hydroxide catalyst which must be separated and disposed of at the end of the process.

Funding from the U.S. Department of Energy (DOE) would be applied to the entire project, in which the research team will develop and validate a cost-effective protocol for biodiesel production from vegetable oils, and in the process produce research data to advance the scientific knowledge of biofuels production and use.

All laboratory work except two subtasks will take place in the Oxedine Science Building and in the Biotechnology Research facility on University of North Carolina at Pembroke's campus. UNCP has established laboratory and safety protocol, which will be followed when conducting the R&D tasks. The remaining R&D subtasks will take place in the Bioenergy Lab at the NC A&T campus. NC A&T has established laboratory and safety protocol and will follow the protocol when conducting the laboratory work.

All R&D activities will be completed under UNCP and NCA&T University standards. No Genetically Modified Organisms (GMO's) will be involved with the listed R&D activities.

This project comprises indoor bench-scale research projects and conventional laboratory operations therefore is categorically excluded from further NEPA review under CX A9, Information gathering and CX B3.6, Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations.

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: Kristin Kerwin Date: 8/26/2010
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