

PMC-EF2a

(2.04.02)

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



RECIPIENT: Mississippi State University

STATE: MI

PROJECT TITLE : Mississippi State University Sustainable Energy Research Center

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-FG36-06GO86025	GFO-GO86025-004	GO86025

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:

A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

The U.S. Department of Energy (DOE) provided federal funding to the Mississippi State University (MSU) Sustainable Energy Research Center (SERC) to perform renewable transportation fuel research and development (R&D) focused on bio-oil, bio-crude, microbial oil, hydrocarbons derived from synthesis gas, biomass combustion, and biomass feedstock. The research program involves MSU and a number of industrial and government partners working to develop bench and pilot scale biofuel production systems and their application. Research activities encompass the entire chain of feedstock production, composition analyses, and economics; to laboratory synthesis and testing of biofuels; and bench-scale and pilot plant testing and scale-up at SERC-affiliated facilities on and near the MSU campus in Starkville, MS 37962.

Pervious DOE NEPA determinations (CX B3.6, GFO-06-245, 9/26/2006; CX B3.6, GFO-06-245a, 1/7/2009; CX B3.6 & B5.1, GFO-06-245b, 9/17/2010; CX A9 & B3.6 & B5.15, GFO-GO86025-003, 11/23/2011) have been made for all activities associated with this project. This NEPA determination is for a location change for some previously reviewed laboratory bench-scale R&D activities.

MSU is proposing to partner with the University of Louisiana at Lafayette (ULL) and move bench-scale R&D activities associated with Task Q.1 "Develop a novel in-situ process for the depolymerization of lignocellulose" of the SOPO, from MSU laboratories to ULL laboratories. ULL would contribute to the preparation of conceptual designs for generation of bio-crude from specific industrial wastewaters, sludge/oleaginous consortiums, and/or solid residues, which would be used as carbon sources, as well as perform bench-scale R&D activities to produce bio-crude from liquefied lignocellulose using supercritical methanol. All activities would take place in ULL's Department of Chemical Engineering laboratories located on campus at 104 East University Circle, Lafayette, Louisiana.

ULL has completed an R&D Laboratory Questionnaire addressing the protocols for laboratory and facility safety, risk management and waste disposal. The laboratories comply with standard safety procedures and all processes and procedures are monitored by the Environmental Health and Safety staff. The laboratories and facilities have all necessary safety equipment and hoods for the proposed activities. All handling and disposal of gases, chemicals, wastes and liquid effluents comply with appropriate regulations.

Based on review of the project information and above analysis, DOE has determined the bench-scale laboratory R&D and analysis activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with the actions contained in DOE categorical

exclusions A9 "information gathering, analysis, and dissemination," and B3.6 "small-scale research and development, laboratory operations, and pilot projects," and 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:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Obadiah Broughton 6/20/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 6/24/2013
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