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(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT:Mercurius Biofuels LLC

STATE: IN

PROJECT TITLE : Renewable Acid-hydrolysis Condensation Hydrotreating (REACH) Pilot Plant

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000739	DE-EE0006244	GFO-0006244-002	GO6244

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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Mercurius Biofuels LLC to develop a conversion process and pilot plant that converts biomass feedstock to drop-in hydrocarbon liquid fuels.

There was a previous NEPA determination (GFO-0006244-001 CX A9 8/27/2013) that involved Budget Period (BP) 1A activities such as data collection and analysis, project site visits, and meetings to validate existing equipment, project sites and data. This NEPA determination applies to BP 1A project activities that would involve bench-scale laboratory research and analysis only. BPs 1B and 2 are not being considered at this time and will require additional NEPA review.

The proposed project would produce small (tens of kilograms) quantities of 5-(chloromethyl)furfural (CMF)(bio-fuel) from corn stover; produce small (tens of kilograms) quantities of biomass conversion condensation products; optimize biomass conversion processes at a sufficient scale to provide assurance and input for subsequent pilot plant design and construction steps; and confirm acceptable yields of chemical intermediates. Less than 10kg of biomass would be processed, and less than 30kg of chemical intermediates, solvents, and chemical wastes and other products would be produced in this budget period. The project work would occur at three locations: the Purdue LORRE Lab located at 500 Central Dr., West Lafayette, IN 47907, Michigan State University Bioeconomics Institute located at 242 Howard Ave, Holland, Michigan 49424, and Battelle located at 505 King Ave, Columbus, OH 4320. All hazardous waste would be collected in the laboratory and picked up, processed and properly disposed of by each lab. All waste would be disposed of according to federal, state, and local regulations. No modifications to existing facilities or construction of new facilities would occur and no new or modified permits would be required.

Based on review of the project information and the above analysis, DOE has determined the research and development 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 actions contained in DOE categorical exclusions A9 "information gathering, analysis and dissemination," 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 conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

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Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:

Budget Periods 1B and 2 activities

This restriction does not preclude you from:

Budget Period 1A activities

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist :

Review completed by Logan Sholar 07/31/2014.

This NEPA Determination requires a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Kristin Kerwin
NEPA Compliance Officer

Date: 7/31/2014

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:

Field Office Manager

Date: _____