

PMC-ND

(1.08.09.13)

U.S. DEPARTMENT OF ENERGY

OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

NEPA DETERMINATION



RECIPIENT: Mercurius Biofuels

STATE: WA

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

Funding Opportunity Announcement Number

Procurement Instrument Number

NEPA Control Number

CID Number

DE-EE0006244

GFO-0006244-003

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 focus on laboratory scale work that would use corn stover and other low-cost, non-food cellulosic feedstock. Through a thermo-chemical process, lignocellulosic biomass would be converted into non-sugar intermediates, ethyl levulinate / furfural, which could then be further processed into qualified jet and diesel fuels and bio-based chemical products

This phase of the proposed project, Budget Period (BP)-1B, is designed to confirm conversion yields and processing techniques. As a result, it would not produce large quantities of biofuel or biochemical, nor would it require large quantities of feedstock. It is anticipated that 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 the following locations: the Purdue Laboratory of Renewable Resources Engineering in West Lafayette, IN and the University of Maine which includes the Jenness Hall in Orono, ME and the Forest Bioproducts Research Institute in Old Town, ME. All hazardous waste would be collected at each site and picked up, processed and properly 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.

There are previous NEPA determinations (GFO-0006244-001 CX A9 8/27/2013 and GFO-0006244-002 CX A9 and B3.6 on 7/31/14)) for BP 1A activities. This NEPA review is limited to those tasks in BP 1B. Information necessary for the completion of a NEPA review for BP 2 activities would be finalized and defined upon completion of BP 1A and 1B. When these details are better defined, all tasks in BP 2 will be subject to additional NEPA review prior to the authorization of federal funds for those tasks.

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.

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 Period 2 activities

This restriction does not preclude you from:

Budget Period 1A and 1B 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 Diana Heyder 5/21/15.

This NEPA Determination requires a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Electronically
Signed By:

Kristin Kerwin

NEPA Compliance Officer

Date: 5/29/2015

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: