PMC-EF2a

(2.04.02)

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

RECIPIENT: University of Memphis **STATE:** TN

PROJECT TITLE : Biofuel Micro-Refineries for Local Sustainability ...

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
N/A	DE-EE0003121	GFO-0003121-001	EE3121

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 (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.

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).

B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

Rational for determination:

The University of Memphis, in collaboration with Mid-South Community College proposes to use federal funds to design, fabricate, and bring online a biofuel micro-refinery within existing infrastructure.

This project will consist of laboratory research aimed at enhancing existing BEST (Biofuel Energy Sustainable Technologies) micro refinery at the University of Memphis located in room 115 of the Engineering Sciences building. This will consist of analyzing and enhancing pretreatments of feedstock, post reaction processing, and process flow. The Mid-South Community College will construct a micro-refinery within an existing structure on campus. Money from this project will go toward funding the equipments and installation. This will include a biomass gasification unit, diesel generator, & Fischer-Tropsch synthesis unit.

This R & D project will include a feed rate of 50 to 100 kg/hr to create 2200 to 4400 cubic feet/hr of syngas flow.

The applicant has submitted an R & D Questionnaire which thoroughly addresses the chemical and safety handling protocols at each university where this project will take place.

This project is comprised of information gathering, bench scale research, and on site characterization to include the installation of equipment; therefore DOE has recognized that this project qualifies for the categorical exclusions of A9, B3.1 & B3.6.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 4/13/2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/17/2011
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