PMC-EF2a

(2.06.02)

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

RECIPIENT: Montana State University **STATE:** MT

PROJECT TITLE : Montana BioDiesel Initiative

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0003136	GFO-0003136-002	EE3136

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).

B3.8 Outdoor ecological and other environmental research (including siting, construction, and operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis) in a small area (generally less than five acres) that would not result in any permanent change to the ecosystem.

Rational for determination:

DOE proposes to provide funding to Montana State University (MSU) to perform multiple research tasks to identify and study naturally-occurring organisms and utilize genetically-modified organisms (GMOs) to promote the use of hot, CO2 – laden, fossil fuel combustion gases as an input to photosynthetic lipid production. This work would be conducted as bench-scale research at laboratories operated by MSU, and outdoor sampling at two microbe prospecting sites near Sheridan, WY and Soap Lake in Grant County, WA.

Outdoor sampling would occur in thermal areas in Montana, Wyoming (Yellowstone National Park), and Washington. The sample size would be between 25-50mL per site. Sampling permits would not currently be required for public lands in Montana and Wyoming. MSU has the necessary permit in place to sample in Yellowstone National Park (permit # YELL-2010-SCI-5480). In addition samples would be collected from Soap Lake in Washington, and in the vicinity of Sheridan, Wyoming. No permits are necessary to collect water samples in Soap Lake, a meromictic (non-circulating) lake in north-central Washington.

Laboratory Operations are supervised by MSU Safety and Risk Management staff who ensure adherence to university policies, and state and federal regulatory requirements for safe use of chemicals, organisms, and proper waste disposal. MSU possesses RCRA ID No. MTd065569048 and Industrial Wastewater Discharge Permit No. BOZ006. No regulated air emissions would occur as a result of this research.

Two GMOs would be used during this investigation: Synnechococcus, sp. PCC 7002 and an sta7 isoamylase mutant of Chlamydomonas reinhartdii . Both organisms are CDC-determined Bio-Hazard Safety Level 1, indicating that they are not pathogenic to humans or plants. Transportation, handling, storage, and disposal of GMOs would follow standard microbiological practices as described in the CDC publication "Biosafety in Microbiological and Biomedical Laboratories" 5th Edition.

This project comprises laboratory scale research and development tasks as well as limited outdoor research activities. As such, CX B3.6 and B3.8 apply.

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 :

John A. DuWaldt 10.05.2011

DOE Funding: $ 500,000
Cost Share Funding: $ 125,000
Total Funding: $ 625,000

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 10/12/2011
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