

PMC-EF2a

(2.04.02)

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

**RECIPIENT:** Auburn University at Montgomery**STATE:** AL

**PROJECT TITLE :** Farm Deployable Microbial Bioreactor for Fuel Ethanol Production

**Funding Opportunity Announcement Number**  
CDP

**Procurement Instrument Number**  
DE-EE0003132

**NEPA Control Number**  
GFO-10-631

**CID Number**  
EE3132

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).
- 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.

**Rational for determination:**

Auburn University at Montgomery, AL proposes to use federal funding for phase 1 of their project to develop a farm scale ethanol production microbial bioreactor system. The bioreactor will utilize inedible plant fiber and farm waste for the production of ethanol fuel. All aspects of phase 1 of this project will take place within the laboratories on the campus of Auburn University at Montgomery.

This project will include selection of microorganisms for conversion of inedible plant fiber and farm wastes to sugars for bio-ethanol production, selection of microorganisms that can convert xylose and other hemicelluloses sugars to ethanol, evaluation of simultaneous conversion of plant fiber to sugars and fermentation to ethanol, construction of laboratory scale bioreactor system for conversion of plant fiber to sugars and fermentation to ethanol, and project management and reporting.

This project comprises of conventional laboratory activities on the campus of Auburn University at Montgomery, AL. The applicant has submitted an R & D Questionnaire which thoroughly addresses chemical and safety handling protocols.

This project will consist of research and development, information gathering, and reporting; therefore a CX A9 & B3.6 will apply.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 9/27/2010

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_

NEPA Compliance Officer

Date: \_\_\_\_\_

9/29/10

**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: \_\_\_\_\_