

PMC-EF2a

(2.04.02)

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



RECIPIENT: Mississippi State University

STATE: MS

PROJECT TITLE : Seed Technologies to Secure Rapid and Complete Switchgrass Establishment

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	GO88073	GFO-09-046v	0

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:

- B5.1** Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.
- 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.
- B3.8** 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:

Mississippi State University proposes to use federal funds to evaluate and improve the stand establishment of switchgrass by addressing seed dormancy and weed management through seed treatments.

Part one of this project would involve determining mechanisms and physiology of seed dormancy through analyzing seed coats and the embryo, investigating seed conditioning methods to alter seed coat. Part two would involve herbicide application by soaking the seed and testing. Testing would involve planting in 4 locations and monitoring weed growth.

Phase 2 of this project would involve year 2 investigation of seed conditioning methods, investigating dormancy breaking compounds would be applied to seed coats resulting from previous year study, and a repeat of year 1 study part 2 – herbicide application by seed soaking.

This project would take place at the Sorenson research farm in Boone, IA; the Virginia Tech research facility in Monterey County, VA; Brookings, SD; and Mississippi State University. Seed coating activities would take place at Cornell University at the Cornell Seed Technology Labs.

This project would take place indoors and outdoors in existing facilities, and would involve information gathering and natural actions to conserve energy through small scale agriculture conservation; therefore a CX B5.1, B3.8 & A9 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 6/17/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Kristin Kerwin Date: 6/30/2010
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