

PMC-EF2a

(20402)

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



RECIPIENT: South Dakota State University

STATE: SD

PROJECT TITLE : Biofuel Crops in Eastern South Dakota: Establishment, Productivity, Biotic Impact, and Multiple Use Potential

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	GO88073	GFO-09-046s	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.
- 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:

South Dakota State University proposes to use federal funds plant monoculture plots of switchgrass and comparative plots of a commercial native plant mixture to develop establishment protocols for mixed biofuel-species crop stands and assess the biodiversity impacts of these plants through diverse planting recipes.

This project will include:

Phase 1

Task 1 Evaluate establishment rates in nurse crop residue

Task 2 Determine relative productivity

Task 3 Interseeding annual plants into perennial forages

Phase 2

Task 4 Survey, define, and assess potential insect pests

Task 5 Establish field use by small mammals

Task 6 Evaluate field values as anti-depredation food for deer

Task 7 Define biodiversity enhancement values

Task 8 Project Management and reporting

This project will take place on a 30 acre plowed field at the Oak Lake Field Station in Brookings, SD. The current land-use of this field is for management of white tail deer for depredation from local neighboring farms. Two thirds of this land is annually planted with commercial corn and 1 third fallowed each year. The only GMO varieties planted in this project will be standard commercial type available from local seed suppliers.

This project will take place outdoors in existing facilities, and will involve natural actions to conserve energy through small scale agriculture conservation; therefore a CX B5.1 and B3.8 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