

PMC-EF2a

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



(2.04.02)

RECIPIENT: South Dakota State University

STATE: SD

PROJECT TITLE : Biofuel Feedstock Crops in Sub-Irrigated Lowlands

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

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, in collaboration with EcoSun Prairie Systems, Inc., proposes to use federal funds to provide information needed to produce a sustained source of lignocellulosic biomass on lands marginal for crop production while maintaining or improving environmental quality through field research.

This project will include prairie cordgrass establishment methods, production of cordgrass across various hydrologic gradients, evaluation of harvest methods, integration of lowland studies with previous awarded upland studies. This project will take place in various plots across the 650 acre EcoSun Prairie Farm (44 01' 44.11" N; 96 50' 52.15" W). These will include previously drained shallow wetlands and the lower, wetter portions of upland former crop land scheduled to be converted to biofuel feedstock crops. At present, there are some 30 wetland basins and a mile or more of field margins to select from for this study. Currently the land is being used for mixed farming of row crops, pasture, and hay. Sites for experiments will be drawn randomly from the categories of land available at the farm. The biomass samples collected for experimental evaluation will be placed into long term storage, and the remainder of the biomass will be returned to the project site to naturally decompose.

This project will include activities taken to conserve energy; therefore CX B5.1 and B3.8 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 6-29-2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

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