

PMC-EF2a

(20402)

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



RECIPIENT: South Dakota State University

STATE: SD

PROJECT TITLE : Sustainable Biomass Production on Marginal Lands using a Novel Legume/Grass Mixture

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	GO88073	GFO-09-046n	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.
- B3.6** 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).

Rational for determination:

South Dakota State University proposes to use federal funds to develop a system to produce biomass with little or no nitrogen fertilizer application. They will do this by planting nitrogen fixing legumes along side of the perennial grasses.

This project will include evaluating kura clover root exudates composition and its effect on nodulation & project management and reporting.

This project will take place in greenhouses or in growth chambers. After harvest and analysis, waste from transgenic plant material will be treated as biological waste (autoclaved and disposed) and non-transgenic plant materials will be disposed of in the Plant science department plant waste compost. Any seed material (transgenic or not) to be disposed will be autoclaved before disposal.

This project will take place indoors in a research laboratory in existing facilities, and will involve natural actions to conserve energy through small scale agriculture conservation; therefore a CX B5.1 & 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 5/26/2010

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Date:

6/28/2010