PMC-EF2a
(2.06.02)

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

RECIPIENT: SarTec Corporation **STATE:** MN

PROJECT TITLE : Use of Inedible Energy Crops for Production of Advanced Biofuels with the Mcgyan Process

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-000380	DE-EE0003127	GFO-0003127-001	EE3127

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:

B3.8 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.

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.

B3.6 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:

The Department of Energy is proposing to provide federal funding to the Sartec Corporation (SarTec) to facilitate the production and harvest of 2,500 acres of pennycress and camelina mustard seed plants and processing biofuel from oil pressed from plant seeds. Non-oil pressing residues would be used as fuel or feed. This renewable energy research would be conducted at farms selected by the principle investigator (PI). SarTec is headquartered at 617 Pierce Street, Anoka, Minnnesota 55303. A contractor, Ever Cat Fuels LLC (Ever Cat Fuels) of 100 Isanti Parkway NE, Isanti, MN 55040 would perform oil pressing and conversion to biofuel. The project would consist of 10 tasks:

1) Procure pennycress and camelina seeds for planting
2) Identify farmers to plant camelina and pennycress for a target of 2,500 acres
3) Educate the selected farmers on the Biomass Crop Assistance Program (BCAP)
4) Provide planting, growing and harvesting information to selected farmers planting camelina and/or pennycress
5) Provide pennycress and camelina seeds to farmers for planting, growing and harvesting the low-impact oil seeds
6) Identify, procure, and install oil presses capable of extracting the oil from the energy crop seeds
7) Provide the extracted, inedible oil to the commercial biodiesel facility to produce biodiesel from the pennycress and camelina oils
8) Optimize biodiesel production and test the resulting biodiesel using standard ASTM D6751 biodiesel fuel quality specification tests to ensure that the biodiesel is suitable for blending with petroleum diesel fuel
9) Life Cycle Analysis
10) Project Management and Reporting

Activities at the SarTec facility would include analytical testing, and project management and reporting. Ever Cat Fuels would provide oil pressing and fuel conversion at the Isanti, MN plant location. The SarTec Laboratory contains 2,000 square feet for analytical work subject to Minnesota/OSHA safety regulations. Standard safety equipment including fume hoods, eye wash stations, acid/base separation, and designated chemical storage areas would be used.

The Ever Cat facility is a commercial production plant constructed in 2009. Annual biodiesel production capacity would be 3 million gallon per year. Laboratory and production areas would be Minnesota/OSHA regulated and contain the necessary suite of safety plans and procedures. Chemical waste would be collected and sent to a licensed disposal company.

Pennycress and camelina mustards would be grown by a group of growers selected by the PI. Growers and acreages that would by farmed are yet to be determined. This NEPA determination only applies to the production and harvest of the proposed crops on existing and currently cultivated farm land. Further, the recipient is prohibited from planting and

growing crops on undisturbed, Conservation Reserve Program, or any land that is not currently in agricultural production without prior to additional DOE NEPA review. Harvested mustard seed would be collected and trucked to three regional oil press locations. The resulting oil would be trucked to Isanti, MN where Ever Cat Fuels would convert the oil to biodiesel fuel.

The Department of Energy has determined providing federal funding to the SarTec Corporation to conduct an experimental cultivation and conversion of non-edible mustard oil to biodiesel fuel would enable a renewable energy research project and would provide biofuel production education to the commercial farming community. As such CX B3.8/A9/B3.6 apply.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

This NEPA determination only applies to the production and harvest of the proposed crops on existing and currently cultivated farm land. Further, the recipient is prohibited from planting and growing crops on undisturbed, Conservation Reserve Program, or any land that is not currently in agricultural production without prior to additional DOE NEPA review.

John DuWaldt 10.03.2011

DOE: $500,000
Cost Share: $358,193
Total: $858,193

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 10/12/2011
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