PMC-EF2a

(2.04.02)

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

RECIPIENT: MI Department of Energy, Labor & Economic Growth **STATE:** MI

PROJECT TITLE : SEP ARRA - Michigan State University - BioEnergy

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	DE-EE0000166	GFO-0000166-039	GO0

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:

The State of Michigan via Michigan State University is proposing to use SEP ARRA funding to produce a component of biodiesel fuel. The proposed project will consist of the planting, growing, and harvesting of oriental mustard, canola and switchgrass at demonstration plots across the state. The species that will be used for the project are not on the prohibited or restricted plant lists in Michigan. The canola that will be used will be an herbicide-resistant seed. Oil from the harvest of seeds will be extracted at an existing, permitted facility and incorporated into an existing biodiesel fuel production process. Biodiesel created from the proposed project will be sold to selected buyers.

There will be four, 25 acre plots of either canola or oriental mustard planted at four existing farms. The proposed crop sites at the farms are currently farmed with corn, soybean or wheat crops. There will be three, 3 acre plots of canola and oriental mustard planted within the property boundaries at three, existing airports. The proposed crop sites at the airports will be non-cropped land outside the fence used for buffers for noise and runway clearance. There will be two, .5 acre plots of canola and switchgrass planted at vacant, urban lots. The proposed crop sites at urban lots will be non-cropped reclaimed parking lot areas. There will be four, 2 acre plots of oriental mustard and switchgrass planted in highway right of ways. The proposed crop sites in the right of ways will be non-cropped land in the median, at rest stops or in between on/off ramps.

Activity related to the proposed project is comprised of the following: Site prep (1 day), planting (1 day), spraying and fertilizing (1 day), site visits/take pictures/document growth (4 days), harvest (2 days), site cleanup/restoration (1 day) for an estimated total of 9 days per site per year. The site will be naturally irrigated with rain water. Permits are required to gain access to the airport and right of way properties, but not necessary to apply herbicides. Herbicides will be applied by a licensed commercial applicator. A Chevy 2500 pickup pulling a 26 foot tandem trailer will be used to haul equipment to and from each site for each activity. The project is budgeted for 20,000 miles total or an average of 1818 miles per site. The farm sites should yield about 1000 bushels or 1 grain truck at each of the four sites. This crop will be hauled to the Kellogg Biological Station for temporary storage. This will generate approximately another 350 miles worth of truck traffic. There is already truck traffic associated with maintenance and farming for the majority of the proposed sites, therefore, the increase in truck traffic as a result of the proposed project will be negligible.

Switchgrass harvested from right of way plots will be delivered to the Genesee Power Plant to generate electricity. This will be a small amount (less than 1 truckload or approximately 6 tons of dry matter). Oilseeds from all demonstration plots will be harvested and crushed and the oil will be used to make biodiesel via the portable biodiesel production unit. This will be accomplished using equipment purchased from this grant. Biodiesel will be stored in the Kellogg Biological Station storage tanks and burned in the diesel pickup truck and tractor used in this project.

The proposed project is consistent with activities outlined in B5.1 "actions to conserve energy"; therefore, it is categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a completed by Logan Sholar

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/4/11

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