PMC-EF2a

(20602)

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

RECIPIENT: Vermont Sustainable Jobs Fund **STATE:** VT

PROJECT TITLE : Vermont Biofuels Initiative: Nava BioEnergy

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-FG36-08GO88182	GFO-GO88182-032	GO88182

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.

Rational for determination:

DOE is proposing to provide federal funding to the Vermont Sustainable Jobs Fund, sub-recipient Nava Bio-energy, to cover a portion of the heating and electric installations for a new facility that has not been constructed. In addition, Nava Bio-Energy proposes to purchase additional biodiesel processing equipment for the new facility.

Nava Bio-Energy is a small business located in Brookfield, Vermont (44.073457 Latitude, -72.612548 Longitude). In 2008, Nava Bio-Energy built a small, biodiesel production facility to process vegetable oils into biofuel. Because this facility is in a residential area, the location is both inadequate to grow business and there is limited room to store the oil and fuel. Currently, this facility has a capacity of 400 gallons per day. Nava Bio-Energy proposes to construct a new 30 foot x 40 foot facility in an area suitable for future growth. The new facility would produce the same amount of fuel, for the first 2 to 3 years, until new contracts are secured with surrounding local farms. The proposed new facility would not be constructed with DOE funds.

DOE funds would be used for building upgrades to include electrical and heating installations at the proposed new facility. In addition, Nava Bio-Energy would purchase and install oil processing equipment to improve the separation of the biodiesel and glycerin and a methanol recovery unit to improve fuel quality, which would lower the environmental footprint and reduce expenses. Because this location would be suited for storage, all liquids would be identified with appropriate hazard placards. Methanol would be stored in a separate fireproof storage area. In order to ensure containment, Nava Bio-energy would include a concrete curb in their building design that would hold up to 110% of the aggregate volume of all oil and fuel stored on the premises.

The proposed new facility would be located at 1544 Route 107, Royalton, Vermont 05068. The proposed site is in a "mixed use area" between a Small Equipment Repair Shop and Central Vermont Power Company Electrical Maintenance Center. Currently, this lot is vacant. An access road would be constructed connecting the proposed site, which is 350 feet north of Route 107. Vegetation is primarily overgrown weeds. Tree removal is not anticipated. The sub-recipient has indicated that there is one, twenty year old maple tree located between the road and the proposed site that may need to be removed. Ground disturbance during construction would be no more than 1,200 square-feet. At this time, no building, equipment or electrical trenching and conduits exist.

Visual Effects - The highest point on the building would be the 20 foot roof ridge. The proposed project would not have visual impacts because the building would be surrounded by trees on the border of the property and would be 350 feet from the nearest road.

Noise and Traffic Effects- Due to the small size of the business and the use of quiet, energy efficient and one-third horsepower pumps, equipment noise would be minimal. The five pumps in the process chain would not be on at the

same time. A maximum of three, one-ton pick-up trucks per day would deliver and transport oil and fuel. The proposed site is located at the confluence of VT Route 107 and Highway 89, two heavily traveled roads. An addition of three trucks per day on these highways would not have an adverse impact on the surrounding community.

Wetlands and Floodplains – After review of the USFWS wetland mapper, DOE has determined the proposed site is not in a wetland. According to FEMA flood map 50027C0179E, the proposed site is not located in a floodplain.

Threatened and Endangered Species – According to the USFWS, listed threatened and endangered species in Windsor County include Jesup's milk-vtech (Astragalus robbinsii var. jesupi) and the Northeastern bulrush (Scirpus ancistrochaetus). The proposed project would not adversely impact the Jesup's milk vtech because its habitat is limited to the banks of the Columbia River. Similarly, the Northeastern bulrush would not be affected because it grows in wetlands and areas with standing water, which are not present at the proposed site.

Cultural Resources – The proposed site location is not in a historic district. Impacts to cultural resources are not anticipated.

Air Emissions – Nava Bio-energy is in the process of obtaining their Vermont Act 250 permit, which is the State's environmental and land use application. Act 250 requires they pass a State air quality review. Nava Bio-energy would use a methanol recovery system, which captures one-hundred percent of the residual methanol in the glycerine and finished biodiesel.

Wastewater – The proposed project would use a dry finish system to clean the biofuel, which means the fuel passes through multiple filtration columns as the final step. This process would not produce industrial effluents. Only wash water from the lavatory would leave the building.

The proposed project would improve processing technology, refine the process chain, and maximize production in order to lower production costs and profitability of biodiesel production in Central Vermont. Based on this information, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1 (actions to conserve energy).

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 :

Cristina Tyler 9.19.2011

DOE Funds: $45,000
Cost Share: $55,791
Total Project Cost: $100,791

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 9/19/2011
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 :