PMC-EF2a
(2.04.02)

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

RECIPIENT: WA Dept. of Commerce **STATE:** WA

PROJECT TITLE : Whole Energy Glycerin Refinery

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000052	EE-0000139	GFO-0000139-041	EE139

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:

B5.15 Small-scale renewable energy research and development and pilot projects	Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rational for determination:

The U.S. Department of Energy (DOE) provided funding to the Washington Department of Commerce (WDOC) under the DOE's American Recovery and Reinvestment Act of 2009 State Energy Program (SEP). WDOC selected Whole Energy Fuels Corporation (Whole Energy) to receive $500,000 in SEP funding to purchase and install a skid-mounted glycerin distillation system at an existing industrial facility (Total Project Cost: $1,025,000).

DOE made a previous NEPA determination (GFO-09-155-016; CX B5.1; signed 9.21.2012) for this project, but the project location changed.

The proposed site is located in an industrial area (2 Alder Lane, Mount Vernon, Washington 98273). The site is predominately gravel and adjacent to a rail line and Highway 5. The proposed project would include site preparation, storage, material handling, testing, and quality assurance around glycerin purification and energy recovery.

The glycerin distillation and recycling facility would reuse crude glycerin, a byproduct of biodiesel plants, and refine it into high quality glycerin. Next, the salts, partially reacted triglycerides, alkylated esters, methanol, and water would be separated. The system would not create a new product or chemical. Instead, it would recycle a byproduct mixture left over from the production of biodiesel and separate it into renewable commodities. The glycerin would be purified to a technical grade non-toxic substance. The methanol would be sold back to the biodiesel producers as recycled methanol. The distilled water would be used at the facility. The unreacted vegetable oil would be used as the feedstock to make a biofuel for energy recovery back into a low pressure Johnstone oil heater. The salts would be purified into an organic nutrient for feed and fertilizer.

The skid-mounted distillation system would be located on a new 20 feet X 45 feet concrete pad. Minimal grading would be required as the site is currently graveled. A steel building with similar dimensions would house the system. Utilities for the system would be connected to the existing facility. Minimal trenching would be required: 10 feet for sewer; 15 feet for water; 10 feet for natural gas; and 20 feet for electrical.

Crude glycerin would be delivered by both truck and railcar. One truck can deliver 6,000 gallons and one railcar can deliver 20,000 gallons. Per the recipient, 90 trucks and 25 railcars would be delivered to the facility per year. At full production, the facility expects 120 trucks and 215 railcars per year. For the refined products to be exported from the facility, the recipient estimates 1.5 trucks and 0.5 railcars per year. At full production, the facility expects to export 2 trucks and 4 railcars per year.

The proposed project location is not in a wetland or floodplain, nor are threatened and endangered species known to occur in the area. In a letter dated January 30,2012, the State Historic Preservation Officer (SHPO) determined No

Historic Properties Affected by the proposed project.

Based on this information, DOE has determined the work outlined is consistent with activities identified in categorical exclusion B5.15 (small-scale renewable energy research and development and pilot projects).

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Cristina Tyler 4.18.2012

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 4/20/2012
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