PMC-EF2a
(2.04.02)

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

RECIPIENT: Stevens Institute of Technology **STATE:** NJ

PROJECT TITLE : Pt-based Bi-metallic Monolith Catalysts for Partial Upgrading of Microalgae Oil

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000686	DE-EE0006063	GFO-0006063-001	EE6063

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:

A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Stevens Institute of Technology (Stevens) to develop cost effective technologies for the conversion of microalgae to algal oil suitable for insertion into the hydrotreatment unit of a petroleum refinery to produce green diesel. DOE funding would be used for research and development activities in a four stage process. Funding would be applied to the chemical and physical characterization of pre-refined algal oil, the extraction, fractionation and purification of algal oil, the evaluation of a monolith reactor and the conversion of microalgae to partially upgraded algal oil.

The project would be completed at the existing Stevens research laboratories located in the Chemical Engineering Building on the Stevens campus located at 9th Street, Hoboken, New Jersey. Additional work would be conducted in existing facilities at SRS Energy (now Valicor Renewables) located at 7400 Newman Blvd., Dexter, Michigan and at Columbia University (Columbia) located at 220 S. W. Mudd Building, 500 West 120th Street, New York, New York.

Stevens, SRS Energy and Columbia have all completed an R&D questionnaire addressing the protocols for laboratory safety, risk management and waste disposal. The three laboratories comply with standard safety procedures and all processes and procedures are monitored by the Environmental Health and Safety Department (EHS). The laboratories have all applicable permits in place to conduct research. All handling and disposal of gases, chemicals, and liquid effluents would be executed by EHS personnel who comply with appropriate regulations of OSHA. Toxic waste would be collected in rigid sealed, labeled containers and stored in the toxic waste satellite accumulation area until the containers are collected and disposed of by a licensed toxic waste vendor.

Based on review of the project information and the above analysis, DOE has determined the research and development would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusion A9 "information gathering, analysis and dissemination" and B3.6 "small-scale research and development, laboratory operations and pilot projects" and 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:

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 :

Kelly Daigle 1/8/2013

DOE Share: $651,194
Cost Share: $168,046
Total Project Cost: $819,240

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 1/8/13
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