PMC-ND
(1.08.09.13)

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION

RECIPIENT: Tulane University **STATE:** LA

PROJECT TITLE : Development and Implementation of an Automatic Continuous Online Monitoring and Control Platform for Polymerization Reactions to Sharply Boost Energy and Resource Efficiency in Polymer Manufacturing

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000560	DE-EE0005776	GFO-0005776-001	GO5776

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:

B3.6 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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Tulane University to develop Automatic Continuous Online Monitoring of Polymerization reactions (ACOMP) and integrate it with modeling and feedback control to create an ACOMP Interface that will increase energy and resource efficiency in advanced manufacturing of polymers applicable to automotive, aerospace, oil recovery, agriculture, paints, resins, adhesives, pharmaceuticals and therapeutic proteins, optics, electronics, lightweight building materials, etc .

Tulane University proposes to design, develop, assemble and test ACOMP at their dedicated University lab facilities in New Orleans, LA. Activities would include installation of laboratory polymerization reactor with control interface (CI) and walk-in fume hood. Assembly and commissioning of a small-scale ACOMP would also be completed here. ACOMP/CI would be programmed and then tested. Parallel prototype development will occur at APMT, Inc. also in New Orleans, LA. The focus at this facility would be hardware and software improvement as well as prototyping and hardware assembly. Additionally, computer-based activities such as computer modeling, simulation and programming will occur at Louisiana State University in Baton Rouge, LA. The only modifications to existing indoor lab facilities would be the installation of the fume hood and the reactor to be housed within, therefore no new permits, licenses or authorizations would be required to perform project activities.

The proposed project would involve the use and handling of various hazardous materials, including acrylamide and potentially organic solvents. All handling would occur in the laboratory facilities and would adhere to University guidelines in compliance with all federal, state, and local environmental regulations. Additionally, the University has a dedicated Tulane University Office of Environmental Health and Safety Organization, which is responsible for managing employee training, proper protective equipment, engineering controls, monitoring and internal assessments.

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

Advanced Manufacturing
This NEPA determination does not require a tailored NEPA provision.
Review completed by Rebecca McCord, 11/25/2014

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 12/1/2014
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