PMC-EF2a

(2.04.02)

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

RECIPIENT: General Motors LLC **STATE:** MI

PROJECT TITLE : Investigation of Micro-andMacro-scale Transport Processes for Improved Fuel Cell Performance

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS36-08GO98009	EE0000470	GFO-10-353	EE470

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 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

General Motors proposes to use federal funds to investigate and synthesize application of new fuel cell measurement techniques. These techniques will include transport phenomena at the macro and micro scale to include key mass, ionic, electronic and heat transfer parameters.

This project will include in-plane fuel cell transport performance and through-plane transport in membrane, electrodes, and associated interfaces through establishing a baseline for the materials and measurement and modeling of auto-competitive materials assessments. Also involved are, micro-scale through-plane transport in gas diffusion layer, micro-porous layer and associated interfaced; Micro scale investigation of transport channels, manifolds and associated interfaces, and comprehensive testing and modeling based on macro and micro scale studies, and project management.

This project will take place in existing laboratory grounds of General Motors, Rochester Institute of Technology, and Penn State University. An R & D questionnaire has been completed by the applicant which thoroughly addresses the chemical and safety handling protocols.

This project comprises of information gathering and conventional research and development studies in existing facilities; therefore a CX B3.6 applies.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/13/10
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