PMC-EF2a
(2.06.02)

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

RECIPIENT: WL Gore and Associates **STATE:** MD

PROJECT TITLE : Manufacturing of Low Cost, Durable Membrane Electrode Assemblies for Rapid Conditioning

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-PS-07GO97012	GO18052	GFO-10-383	GO18052

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).

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

W.L. Gore and Associates proposes to use federal funding to evaluate the manufacturing process of Membrane Electrode Assemblies and determine low cost methods of manufacturing. The goal of this research is to reduce overall fuel cell cost while maintaining durability and performance.

This project will involve 2 phases.
In the phase 1 of the project, activities include the characterization of the existing commercial manufacturing process and product of membrane electrode assemblies, model development of membrane electrode assemblies, laboratory equipment procurement and qualification of equipment, project management and reporting.
In phase 2 of the project, activities will include baseline testing of current membrane electrode assemblies to understand interactions with different gas diffusion layer properties, review of existing technology literature, design of a new membrane electrode assembly process, product testing, design optimization & validation, stack validation, and project management and reporting.

This project has activities that will take place indoors within the confines of existing laboratory facilities at W.L. Gore, University of Delaware, and UTC Power. An environmental research and development questionnaire has been submitted by each facility which thoroughly addresses the chemical and safety handling protocols.

This project comprises of information gathering and conventional research and development studies in existing laboratory facilities; therefore a CX B3.6 & A9 will apply.

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