

PMC-ND
(1.08.09.13)

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



RECIPIENT: PPG Industries, Inc. DBA: Fiber Glass Division

STATE: NC

PROJECT TITLE : Achieving Hydrogen Storage Goals through High-Strength Fiber Glass

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000827	DE-EE0006626	GFO-0006626-001	

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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to PPG Industries, Inc. to demonstrate a Type IV composite overwrapped pressure vessel (COPV) reinforced exclusively with glass fiber to address goals for onboard hydrogen storage for Light-Duty Fuel Cell Vehicles. DOE funding would be used to target a specified fiber cost, a specified composite contribution to system cost, and a specified volumetric capacity while minimizing increases in tank mass compared to carbon fiber vessels.

The proposed project would produce novel glass fibers in a pilot production facility at PPG Industries Shelby Fiber Glass Manufacturing/S&T Center located at 940 Washburn Switch Road, Shelby, NC 28150. Development, optimization, and testing of novel glass fibers, sizing chemistries, and composite resins would occur at PPG Industries Glass Business & Discovery Center located at 400 Guys Run Road, Cheswick, PA 15024. Fabrication of novel fibers into designed storage vessels and rupture testing would occur at the Hexagon Lincoln facilities located at 5117 NW 40th Street, Lincoln, NE 68524. Fiber testing and analysis, testing of composite samples for stress rupture characteristics and developing performance and cost models would take place at Pacific Northwest National Laboratory, 902 Battelle Boulevard, Richland, WA 99354. The facilities listed above currently perform work that is similar to the activities proposed in this award, therefore, no new construction, facilities modifications, or permits would be required to conduct the proposed project tasks. Existing EH&S policies, procedures, and training for each facility would be followed while conducting the proposed work. No hazardous waste or toxic emissions are expected as a result of the proposed project. Each facility has its own waste disposal processes in place and the proposed project activities would not result in modifications to those processes.

Based on review of the project information and the above analysis, DOE has determined the research, development and testing activities 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, data analysis and computer modeling," 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 :

Review completed by Logan Sholar on 07/1/14.

This NEPA Determination does not require a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Signed By: Kristin Kerwin
NEPA Compliance Officer

Date: 7/2/2014

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: _____

Field Office Manager

Date: _____