

PMC-ND

(1.08.09.13)

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

**RECIPIENT:**Automated Dynamics**STATE:** NY**PROJECT TITLE** Continuous Fiber Composite Electrofusion Couplers

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0001224	DE-EEE0007274	GFO-0007274-001	

**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 Automated Dynamics to develop an innovative high-pressure pipe joint called an electrofusion (EF) coupler. This EF coupler would be made from a reinforced thermoplastic material and would be expected to exceed the service requirements for hydrogen delivery while providing a high level of reliability and ease of installation through the use of high-strength plastic composite materials that are not subject to corrosion.

The proposed project activities include the design, development, fabrication and testing of several iterations of the EF coupler. Design, development and fabrication activities would be completed by Automated Dynamics at their industrial manufacturing facilities in Schenectady, NY. Testing of the EF coupler would be undertaken by the Savannah River National Laboratory (SRNL) in Aiken, SC. All research, development and testing activities would take place in existing facilities designed for this type of research; therefore, no new construction, modifications or new permits, additional licenses and/or authorizations would be necessary.

The proposed project would require the use of non-hazardous materials such as glass fiber reinforced polyethylene (PE) composite, PE coated copper wire, and pure PE in tape form. All non-hazardous waste would be disposed of through everyday practices along with non-hazardous industrial waste from other projects. No siting, construction or major expansion of waste storage, disposal, recovery, or treatment actions/facilities would be required. No health or safety hazards would be presented by this project. All work would be completed indoors and both Automated Dynamics and SRNL have established safety and quality programs in place to ensure all materials are handled appropriately. Any work proposed to be conducted at a DOE laboratory may be subject to additional NEPA review by the cognizant DOE NEPA Compliance Officer for the specific DOE laboratory prior to initiating such work. Further, any work conducted at a DOE laboratory must meet the laboratory's health and safety requirements.

Based on review of the project information and the above analysis, DOE has determined that the activities associated with the proposed project 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 exclusions 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.

Insert the following language in the award:

You are required to:

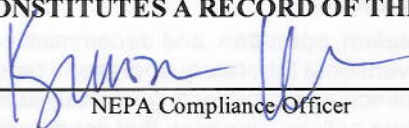
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Note to Specialist :

Fuel Cell Technologies Office  
This NEPA determination requires a tailored NEPA provision.  
Review completed by Rebecca McCord, 11/02/2015

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_



NEPA Compliance Officer

Date: \_\_\_\_\_

11/3/2015

**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: \_\_\_\_\_