

PMC-EF2a

(20102)

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



RECIPIENT:National Center for Manufacturing Sciences

STATE: MI

PROJECT TITLE : Innovation Realization: Building and Supporting an Advanced Contract Manufacturing Cluster in Southeast Michigan

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
JAC2102AM	DE-EE0006030	GFO-0006030-001	GO6030

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.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the National Center for Manufacturing Sciences (NCMS) to fund the development and deployment of Advanced Modeling and Simulation (AM&S) online tools to validate cost-effective, high-strength materials technologies and to identify energy-efficient manufacturing processes. Funding would also be used for research and development activities to analyze automated composite manufacturing processes and lightweight carbon fiber materials. Online access to both training materials and AM&S tools would be available to allow technical information to be disseminated to small and medium-sized manufacturers.

This DOE award is part of a multi-agency Federal Funding Opportunity partnership titled the Advanced Manufacturing Jobs and Innovation Accelerator Challenge (Advanced Manufacturing Jobs Accelerator). This NEPA Determination is for the DOE award.

The development and deployment of online tools for advanced modeling and simulation would take place over three budget periods. NCMS would develop a technical requirements roadmap for the online tools. NCMS would collaborate with software vendors, software integration partners and end-users to identify and document key requirements for the tools. Each budget period, a new "version" would be developed based on gathered information, feedback, issues, and opportunities to improve the online environment.

Research and development laboratory activities to analyze automated composite manufacturing processes and lightweight carbon fiber materials would occur at two General Electric (GE) advanced manufacturing research and development facilities; GE Advanced Manufacturing and Software Technology Center, 1 Village Center Drive, Van Buren Twp., Michigan, 48111 and GE Aviation Belleville, 41965 Ecorse Rd, Van Buren Twp., Michigan, 48111.

GE completed a R&D questionnaire addressing the protocols in place for laboratory safety, risk management, chemical handling and hazardous/non-hazardous waste disposal at both of its research and development facilities. GE has an established Environmental, Health and Safety (EHS) program and complies with standard environmental and safety procedures and frameworks. All handling and disposal of gases, chemicals, effluents and hazardous wastes comply with all appropriate regulations. All standard safety equipment is in place at the facilities. The facilities operate under all applicable permits. GMOs would not be used during this project.

Based on review of the project information and the above analysis, DOE has determined the proposed development

