

PMC-EF2a

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



(20402)

RECIPIENT: Technology 2020

STATE: TN

**PROJECT TITLE :** AMP! Advanced Manufacturing and Prototyping Center of East Tennessee

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
JAC2012AM	DE-EE0006032	GFO-0006032-002	GO6032

**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:

**B5.1 Actions to conserve energy or water** (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

**Rational for determination:**

The U.S. Department of Energy (DOE) provided funding to Technology 2020 to promote the growth of advanced manufacturing throughout a twenty-county region in eastern Tennessee. Through this project, Technology 2020 would create a network/consortium of regional manufacturing firms and manufacturing resources including technical experts at the DOE Oak Ridge National Laboratory's (ORNL) Manufacturing Demonstration Facility. The Technology 2020 consortium, called the AMP! Consortium (Advanced Manufacturing and Prototype), would allow manufacturers to collaborate on advancing commercialization of advanced and additive manufacturing processes and technologies with technical experts and develop a regional advanced manufacturing workforce.

Funding for this project would be used for project management and information gathering, analysis and dissemination activities associated with the marketing, development and management of the AMP! Consortium. Funding would also be used to implement a "Co-lab" concept for advanced manufacturing research and development (R&D) by establishing two Co-lab locations for regional manufacturers to co-locate with technical experts to execute approximately 15 advanced manufacturing R&D projects. One "Co-lab" location would be located at the ORNL Manufacturing Demonstration Facility in Oak Ridge, Tennessee. The second "Co-lab" location would be a Technology 2020 incubator facility located at the Oak Ridge Entrepreneurial Center, 1010 Commerce Park Drive, Oak Ridge, Tennessee.

A previous NEPA determination for this award (GFO-0006032-001; CX A9, A11 and B5.1) on 12/20/2012, categorically excluded actions that involve: activities associated with the marketing, development and management of this project and the AMP! Consortium; information gathering and analysis activities at the Technology 2020 "Co-lab" facility that do not involve work in a laboratory and/or facility modifications; and advanced manufacturing R&D

activities at the ORNL MDC "Co-lab" facility.

Under the previous NEPA determination for this award, activities associated with advanced manufacturing R&D projects, beyond the approved information gathering and analysis activities, and/or facility modifications at the Technology 2020 "Co-lab" facility did not receive a categorical exclusion and were prohibited from receiving project funding until further information defining these actions were supplied to the DOE.

Tech 2020 has subsequently supplied the DOE with additional information regarding the "Co-lab" facility within the Oak Ridge Entrepreneurial Center and the proposed advanced manufacturing R&D projects and actions at this facility. The "Co-lab" facility currently serves as a facility for light manufacturing and process/product development. All proposed R&D projects would be component and/or process focused and would involve testing and analysis activities that would comprise of evaluation, form, fit, function, cost, and quality of products for incorporation into existing manufacturing processes or products. Activities would not include "laboratory" type activities; chemical, gases and hazardous materials would not be used. The Technology 2020 "Co-lab" facility within the Oak Ridge Entrepreneurial Center is equipped with the proper equipment and safety features to support the proposed activities. Modifications to facility would not occur to facilitate proposed activities.

Based on review of the project information and the above analysis, DOE has determined the proposed activities focus on development of energy-efficient manufacturing practices and products, would occur in an existing facility appropriate for these types of activities and would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed activities are consistent with actions contained in DOE categorical exclusion B5.1 "Actions to conserve energy," and are 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 :

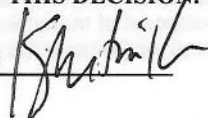
This determination lifts all NEPA conditions on all activities under all tasks in the approved SOPO.

EF2a prepared by Obadiah Broughton, 4/5/2013

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

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

 Electronically Signed By: Kristin Kerwin  
NEPA Compliance Officer



Date: 4/8/2013

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