

PMC-ND
(1.08.09.13)

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



RECIPIENT:Syracuse University

STATE: NY

PROJECT TITLE : Advanced Manufacturing for Thermal and Environmental Control Systems: Achieving National Energy Goals

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
JAC2012AM	DE-EE0006031	GFO-0006031-002	GO6031

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 Syracuse University to fund research and development (R&D) projects that would develop next-generation Thermal and Environmental Controls Systems (TECS) through innovations in materials, product design, and manufacturing processes. Funding would be used to select and fund multiple R&D projects over two Budget Periods. This DOE award is part of the multi-agency Federal Funding Opportunity partnership 2012 Advanced Manufacturing Jobs and Innovation Accelerator Challenge. Two projects were selected for Budget Period 1 (BP-1) and three projects have been selected for Budget Period 2 (BP-2). A previous NEPA Determination (GFO-0006031-001) was completed for the two projects selected in BP-1 on December 10, 2012. This NEPA Determination is for the three projects selected for BP-2 and the project management and reporting activities associated with the award.

Budget Period 2 projects (see uploaded SOPO for details of each project):

Project #3: Flame assisted Fuel cell Furnace for micro Combined Heating and Power (FFF- μ CHP)

Project #4: The Beeka Valve

Project #5: A Novel Integration of Smart Sensing Systems with Environmental System Modeling for Sustainable and Healthy Buildings

These three seed projects would develop manufacturing processes that reduce energy intensity and improve production as well as demonstrate technologies that use less energy throughout their lifecycles. All project work is small scale and would take place in existing laboratories, manufacturing, and research facilities. Anticipated activities would not generate the need for new permits or the need to modify existing permits. All hazardous materials would be managed in accordance with federal, state, and local environmental regulations. Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary if new health and safety risks are identified. All solid waste generated by the projects would be disposed of appropriately and would comply with all required standards for disposal of solid wastes.

Based on review of the project information and the above analysis, DOE has determined the proposed research and development, project management, and reporting activities in BP-2 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 exclusions A9 "information gathering, analysis and dissemination," and B3.6 "small-scale research and development, laboratory operations and pilot projects," 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:

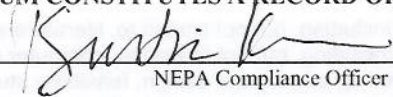
If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

This NEPA Determination does not require a tailored NEPA provision.

Casey Strickland 06/11/14

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 6/11/2014
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