

100092

PMC-ND
(1.08.09.13)

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

**RECIPIENT:** The Regents of the University of Michigan**STATE:** MI

PROJECT TITLE : Reliable and large area organic solar cells on flexible foil substrates

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000990	DE-EE0006708	GFO-0006708-001	

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 the Regents of the University of Michigan to prove the commercial viability of organic photovoltaic cells (OPVs) by demonstrating reliable, large area and high efficiency organic cells based on small molecule materials systems.

University of Michigan seeks to develop and construct a roll-to-roll (R2R) fabrication/encapsulation system for multijunction, organic photovoltaic cells (OPVs), demonstrate the power conversion efficiency and long-term reliability of multijunction OPVs and fabricate multijunction OPVs using the previously developed R2R system. Fabrication and testing of OPVs would take place in a dedicated laboratory setting located at the University of Michigan, Ann Arbor, MI. This site is pre-existing and would require no additional licensing and/or permitting. No physical modifications to existing facilities would be required.

The proposed project would involve the use and handling of various hazardous materials including metal substrates and industrial solvents and would generate small amounts of toxic waste which would be handled, stored and disposed of through the University of Michigan Occupational Safety and Environmental Health (OSEH). No material quantities would exceed the reporting thresholds listed in 29 CFR 1910.1000 and 40 CFR 355. All such handling would occur in-lab with toxic waste handled, stored and disposed of through the University of Michigan OSEH department in accordance with federal, state, and local environmental regulations.

Based on review of the project information and the above analysis, DOE has determined the proposed project would not have a significant individual or cumulative impact to human health and/or the environment. DOE has determined the proposed project is consistent with actions outlined in DOE categorical exclusion A9 "Information gathering, analysis and dissemination" and B3.6 "Small-scale research and development, laboratory operations, and pilot projects" and is therefore 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.
Review completed by Rebecca McCord 08/05/2014.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

Electronically
Signed By: Lori Gray

NEPA Compliance Officer

Date: 8/5/2014

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: _____