

PMC-EF2a

(20102)

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



RECIPIENT: University of Illinois

STATE: IL

PROJECT TITLE : Novel Contact Materials for Improved Performance CdTe Solar Cells

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000492	DE-EE0005405	GFO-0005405-001	GO5405

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:

B3.6 Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

Rational for determination:

The University of Illinois is proposing to use DOE funding to conduct research and development activities on CdTe solar cells in order to increase their overall performance and stability and allow further improvements in the device efficiency with little additional cost or complexity in the manufacturing process.

All research, prototype fabrication and testing would occur in a laboratory environment within facilities in all three Universities. A R&D facility questionnaire has been submitted for each site. The facilities all comply with standard laboratory safety procedures and labs are inspected by university staff and safety personnel. The safety protocols are monitored by the University's Environmental Health and Safety Offices.

Each University has permits in place that are administered by their City's Department of Safety and Health to handle all research conducted on campus. Liquid effluents consisting of solvents, acids, bases, chemical reagents, and other liquid wastes would be disposed through the campus Department of Safety and Health and is disposed through licensed contractors, as appropriate to the waste involved.

DOE has determined that impacts to the natural and human environments are expected to be negligible and that this project is consistent with actions covered under DOE CX B3.6 (bench-scale research projects and conventional laboratory operations) and therefore 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.

Note to Specialist :

Review completed by Laura Margason 10.28.2011

Total award= \$1,192,250 (DOE \$1,192,250 100%, recipient 0%)

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: *[Signature]*
NEPA Compliance Officer

Date: 11/1/2011

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: _____

DOE has determined that impacts to the natural and human environment are expected to be negligible and that this project is consistent with actions reviewed under DOE EIS-3 (batch-scale research projects and conventional laboratory operations) and therefore is categorically excluded from further NEPA review.

All research, prototype fabrication and testing would occur in a laboratory environment within facilities in all three Universities. A RAD facility questionnaire has been submitted for each site. The facilities all comply with standard laboratory safety protocols and have been inspected by university staff and safety personnel. The safety protocols are monitored by the University's Environmental Health and Safety Office.

Each University has permits in place that are administered by their City's Department of Safety and Health to handle all research conducted on campus. Liquid effluents consisting of solvent, acids, bases, chemical reagents, and other liquid wastes would be disposed through the campus Department of Safety and Health and is disposed through licensed contractors, as appropriate to the waste involved.

DOE has made a final NEPA determination for this 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 Federal Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing work beyond that currently approved.

Review completed by Laura Hargison 10/28/2011

Total award - \$1,102,200 (DOE \$1,102,200 (recipient 0%))