

PMC-EF2a

(20402)

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



RECIPIENT: Colorado State University

STATE: CO

PROJECT TITLE : High Efficiency, Commercial Ready CdTe Solar Cells

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000492	DE-EE0005399	GFO-0005399-001	EE0

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:

DOE is proposing to provide federal funding to Colorado State University (CSU) to perform laboratory research on the current limitations of using CdTe solar cells for large-scale commercial production. An electron-reflector strategy would be designed to increase solar-cell voltage and fill-factor, and plasma techniques for increases in the current.

All work would be completed at two CSU campus laboratories (711 Oval Drive, Fort Collins, Colorado 80523). CSU has completed an R&D questionnaire addressing the protocols in place regarding laboratory safety, risk management, chemical handling and waste disposal. University safety and environmental protocols are monitored through periodic inspections by University Environmental Health & Safety (EHS) Office. Gas cylinders are secured to walls (no toxic gases), chemicals are stored in appropriate containers before use and small amounts of toxic material generated is stored and disposed of through standard University procedures. Per the recipient, less than five pounds of toxic substance would be requires and used in a sealed vacuum. All EHS guidelines will be followed.

Based on this information, DOE has determined the work outlined is consistent with activities identified in Categorical Exclusion B3.6 (indoor bench-scale research and conventional laboratory operations).

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 :

Cristina Tyler 10.27.2011

DOE Funding: \$1,500,000
Cost Share: \$375,000
Total Project Cost: \$1,875,000

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer 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: _____