PMC-EF2a
(20602)

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

RECIPIENT: North Carolina Central University **STATE:** NC

PROJECT TITLE : Production and Characterization of Novel Photovoltaic Materials - A Minority University Research Associates Program at North Carolina Central University

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000089	DE-EE0004003	GFO-0004003-001	EE4003

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).

A9 Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.

Rational for determination:

DOE is proposing to provide federal funding to North Carolina Central University (NCCU) to improve student education in renewable energy technology and to strengthen the existing photovoltaic research infrastructure at the NCCU physics department. The NCCU would support student training and research in the characterization and production of photovoltaic materials. The laboratory work would take place at laboratories in rooms 1149 and 1169 of the Mary Townes Science Center on the campus of North Carolina Central University in St. Durham, North Carolina. The project would be divided into 8 tasks:

Task 1.0) Production of small quantum dots by high fluence pulsed laser deposition
Task 2.0) Production of continuous compositional spreads of large ternary and quaternary quantum dots and nanowires
Task 3.0) Production of doped quantum dots and nanowires
Task 4.0) Characterization of quantum dots and nanowires
Task 5.0) Theoretical Modeling of Quantum Dots
Task 6.0) Student Education and Training
Task 7.0) Collaboration with other DOE MURA recipients
Task 8.0) Project Management and Reporting

According to NCCU, there would be no generation of air emissions associated with this proposal; no permits are needed for this proposal; all toxic waste and effluent is disposed of properly via third party contractor; a Safety Operating and Chemical Hygiene Plans (also in compliance with OSHA and industry standards) are in place. This project comprises laboratory operations and actions to promote research and development of solar technology; therefore this project is categorized as CX A9 and B3.6.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

This EF2A was written by Christopher Carusona

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 8/11/2011
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