

PMC-ND (1.08.09 13)

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



RECIPIENT: University of Hawaii / Hawaii Natural Energy Institute

PROJECT TITLE:

Wide Bandgap Chalcopyrite Photoelectrodes for Direct Solar Water Splitting

Funding Opportunity Announcement Number DE-FOA-0000826

Procurement Instrument Number

NEPA Control Number CID Number

DE-EE0006670 GFO-0006670-001

STATE: HI

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 Small-scale research and development. laboratory 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 operations, and pilot 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 University of Hawaii (UH) is proposing to use DOE funding to develop and study new semiconducting materials for photo-electro-chemical hydrogen production.

Project activities would involve analytical studies, standard laboratory research and laboratory level efficiency testing. UH would partner with the University of Nevada, Las Vegas; Stanford University; the Lawrence Livermore National Laboratory; and the National Renewable Energy Laboratory in order to accomplish project objectives. Work would take place in existing laboratory facilities at each location. For all work conducted at DOE laboratories, project activities may be subject to additional NEPA review by the cognizant NEPA Compliance Officer for the lab and will be required to meet the labs health and safety requirements.

Project work would involve the use and handling of various hazardous materials, including gas, solvents and acidic electrolytes. All such handling would occur in-lab, and UH and their partners involved in the project have dedicated hazardous material handling and disposal practices. UH and its partners would manage all hazardous materials in accordance with federal, state, and local environmental regulations; therefore project activities are not likely to pose a risk to the human environment.

DOE has determined that this project is consistent with actions covered under DOE CX B3.6 (small-scale research & development projects; 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:

This NEPA determination does not require a tailored NEPA provision. Review completed by Laura Margason 8-6-2014

U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Question... Page 2 of 2

SIGNATURE OF THIS MEMORANDUM	CONSTITUTES A RECORD OF THIS	DECISION.
NEPA Compliance Officer Signature:	NEPA Compliance Officer	Date: 8/6/2014
FIELD OFFICE MANAGER DETERMINA	ATION	DEMONSTRATE ON THE PROPERTY OF
☐ Field Office Manager review required		
NCO REQUESTS THE FIELD OFFICE M	ANAGER REVIEW FOR THE FOLLO	WING REASON:
Manager's attention.	exclusion but involves a high profile or constant category and therefore requires Field Office.	
BASED ON MY REVIEW I CONCUR WIT	TH THE DETERMINATION OF THE N	CO:
Field Office Manager's Signature:	Field Office Manager	Date: