PMC-EF2n

(2.04.02)

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



RECIPIENT:North Dakota State University

PROJECT TITLE:

Center for Nanoscale Energy

Funding Opportunity Announcement Number

Procurement Instrument Number NEPA Control Number CID Number DE-FG36-08G088160

GFO-GO88160-001

STATE: ND

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.

Rational for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to North Dakota State University's Center for Nanoscale Energy. DOE funding would be used for research and development in four areas; 1) photovoltaic, 2) lithium ion batteries, 3) catalysis studies of the oxidative cleavage of unsaturated compounds found in plants and its application to fuel cells and 4) membrane development for osmosis water purification plants.

Previous NEPA determinations were made for this award (GFO-08-069 B3.6 7/29/2008, GFO-08-069a B3.6 1/14/2009, GFO-08-069b B3.6 2/23/2010, GFO-10-546 B3.6 7/26/2010) which included research and development work in photovoltaic and catalysts at North Dakota State University (NDSU), University of Toledo, and University of California Riverside. This NEPA determination applies to the addition of two research facilities and the expanded scope of work which includes research and development for lithium-ion batteries and reverses osmosis membrane development. This determination applies to new laboratory facilities on the NDSU campus including: the Research 1 and 2 Addition, Ladd Hall, Dunbar Hall, NDSU Electron Microscopy Laboratory, and the Batcheller Technology Center. All other laboratory facilities, including sub-recipient locations, have been previously reviewed and categorically excluded.

Primary laboratory work would take place at the Research 1 and Research 2 facility located at 1735 NDSU Research Park Dr., Fargo, ND and 1715 NDSU Research Park Dr., Fargo, ND. Additional laboratory work would be completed at the four above mentioned buildings on the NDSU campus. NDSU completed an R&D questionnaire addressing the protocols for laboratory and facility safety, risk management and waste disposal. The laboratories comply with standard safety procedures and all processes and procedures are monitored by Environmental Health and Safety (EHS) staff. NDSU has a Chemical Hygiene Plan in place which includes a Nanomaterial Safety policy. The laboratories have all applicable permits in place, and would not need additional permits for the proposed activities. All handling and disposal of gases, chemicals, wastes and liquid effluents comply with appropriate 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 environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusion B3.6 "small-scale research and development projects" and 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:

Contracting Officer prior to comm	he scope or objective of your project you are required to cal Assistance Award before proceeding. You must receive nencing with work beyond that currently approved.	ontact the Project Officer identified in notification of approval from the DOE
Note to Specialist:		
Kelly Daigle 6/20/2013		
SIGNATURE OF THIS MEMORAN NEPA Compliance Officer Signature:	NDUM CONSTITUTES A RECORD OF THIS DECIS	Date: 6/24/
TELL A Compliance officer organization	NEPA Compliance Officer	softmired at the information
FIELD OFFICE MANAGER DETE	RMINATION	
☐ Field Office Manager review requ	pired.	
		DE ACON.
NCO REQUESTS THE FIELD OFF	TCE MANAGER REVIEW FOR THE FOLLOWING	REASON:
	gorical exclusion but involves a high profile or controversi	al issue that warrants Field Office
Manager's attention.	. FIG	
Proposed action falls within an EA	A or EIS category and therefore requires Field Office Man	ager's review and determination.
BASED ON MY REVIEW I CONCU	JR WITH THE DETERMINATION OF THE NCO:	
Field Office Manager's Signature:		Date:
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