PMC-EF2a

(2.04.02)

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



RECIPIENT: Arizona Board of Regents, University of Arizona

STATE: AZ

PROJECT

Advance manufacture of second-surface, silvered glass reflectors for high performance, low-cost CSP

TITLE:

collector systems

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-0000595

DE-EE0005796

GFO-0005796-001

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:

DOE is proposing to provide federal funding to the Arizona Board of Regents, University of Arizona (UA) to conduct research and development activities that advance methods to manufacture self-supporting glass reflectors for concentrated solar power (CSP) systems.

The proposed project would include development of a prototype, laboratory testing and installation of the prototype during the last phase of the project. Because an installation site has not been finalized, this NEPA determination applies to laboratory testing only.

Laboratory work would be conducted at the UA's Steward Observatory Mirror Lab (SOML). SOML has completed an R&D questionnaire addressing the protocols for laboratory safety, risk management, chemical handling and waste disposal. The laboratory complies with standard laboratory safety procedures and all processes and procedures are monitored by a Safety Manager and health Safety Specialist. Externally, the lab is monitored by UA's Department of Risk Management Services and local OSHA representatives.

The university has all applicable permits in place to conduct research on campus including a Title V Air Quality Permit #2371 as issued by Pima County Department of Environmental Quality, Industrial Waste Water Discharge Permit with Pima County Regional Wastewater Reclamation Department, Fluorescent & High Intensity Discharge Lamp Recycling, Battery Recycling, Use of Class 3B and 4 Lasers and Hazardous Waste Disposal. Liquid effluents consisting of solvents, acids, bases, chemical reagents and other liquid wastes will be disposed of through the campus Division of Environmental Health and Safety, which picks up waste in approved containers and disposes of it through licensed facilities.

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 operation).

## NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA

	decision regarding the project.		
	Prohibited actions include: Outdoor installation of the prototype. This restriction does not preclude you for Laboratory research and developme. If you move forward with activities that final NEPA decision, you are doing so a cost share.	om:	E Contracting Officer in advance of the osts may not be recognized as allowable
	Note to Specialist:		
	CristinaTyler 7.25.2012		
	Total Project cost: \$1,855,935 DOE share: \$1,480,935		
SIC	NATURE OF THIS MEMORANDUM	CONSTITUTES A RECORD OF THIS DEC	CISION.
NE	PA Compliance Officer Signature:	NEPA Compliance Officer	Date:7/25/2012
FIE	LD OFFICE MANAGER DETERMIN	NATION	
	Field Office Manager review required		
NC	O REQUESTS THE FIELD OFFICE N	MANAGER REVIEW FOR THE FOLLOWIN	NG REASON:
	Manager's attention.	I exclusion but involves a high profile or controve IS category and therefore requires Field Office M	
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	SED ON MY REVIEW I CONCUR W		: Date:
		ITH THE DETERMINATION OF THE NCO Field Office Manager	
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