

PMC-ND
(10/8/09 13)

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



RECIPIENT: Sundog Solar Technology

STATE: CO

PROJECT TITLE : Development of an Abrasion-Resistant Antisoiling Coating for Front-Surface Reflectors

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000923	DE-EE0006696	GFO-0006696-001	

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:

A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
B3.6 Small-scale research and development, laboratory operations, and pilot 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 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.
B3.15 Small-scale indoor research and development projects using nanoscale materials	Siting, construction, modification, operation, and decommissioning of facilities for indoor small-scale research and development projects and small-scale pilot projects using nanoscale materials in accordance with applicable requirements (such as engineering, worker safety, procedural, and administrative regulations) necessary to ensure the containment of any hazardous materials. Construction and modification activities would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible).

Rationale for determination:

DOE is proposing to provide funding to Sundog Solar to develop a high-performance front-surface reflector for Concentrating Solar Power (CSP) applications. Sundog Solar would use DOE funds to complete the research and development required to prepare several reflector samples that would be subjected to relevant tests and measurements to validate the improvements toward the specific goals of the project.

The proposed project would be completed at two separate locations (one in Colorado and one in Indiana) and specimens would be weather tested at NREL. The proposed project would involve the use and handling of solvents and nanoparticles within a laboratory environment. All of the facilities are properly equipped and permitted to conduct the proposed activities. Further, all use and handling of solvents and nanoparticle materials would be conducted by a Senior Chemist with special training in the use of these materials, and in accordance with all federal, state, and local environmental regulations. Nanoparticles pose a health risk if ingested. To prevent this potential health concern, all nanoparticles would be received and used as liquid dispersions eliminating the possibility of inhalation of airborne nanoparticles.

For all work conducted at DOE laboratories, project activities may be subject to additional NEPA review by the cognizant NEPA Compliance Officer and will be required to meet the labs health and safety requirements.

Based on a review of the project information and the above analysis, DOE has determined that project activities would not have significant individual or cumulative impact to human health and/or environment. DOE has determined that the work outlined is consistent with the actions identified in categorical exclusion A9 (information gathering, desktop analysis, computer modeling), B3.6 (Small-scale research and development, laboratory operations, and pilot projects), and B3.15 (Small-scale indoor research and development projects using nanoscale materials) and is therefore 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 determination does not require a tailored NEPA provision.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

Electronically
Signed By:

Kristin Kerwin

NEPA Compliance Officer

Date: 8/28/2014

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: _____