PMC-EF2a

(2.04.02)

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

RECIPIENT: Alfred University **STATE:** NY

PROJECT TITLE : Novel Oxide Ceramics for Solar Engery Harvesting

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
Congressionally Directed Project	DE-EE0003093	GFO-10-397	EE3093

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:

B5.1 Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation.

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).

Rational for determination:

Alfred University proposes to use federal funds to develop and test new meso & nano structured titanate oxide ceramics for the use in solar energy. This project addresses DOE's program area for hydrogen, where photocatalysts might be used to achieve the DOE hydrogen cost goal, and for solar energy where the project centers on photovoltaic devices.

This project will include synthesizing materials by chemical and solid state approaches, hydrothermal synthesis of candidate materials, charectarization of candidate materials, preparation of mesostrutured films, preparation of mesostructured photocatalysts, preparation and prefromance of photovoltaic cells, performance of photocatalysts, and project management and reporting.

Project activities will take place indoors within a research laboratory. An R & D questionnaire has been submitted which thoroughly addresses safety and chemical handling protocols.

This project comprises of research and development studies within existing laboratory facilities; therefore a CX B5.1 & B3.6 will apply.

NEPA PROVISION

Note to Specialist :

None Given.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 5/24/10

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required