

PMC-EF2a

(20102)

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



RECIPIENT: Veeco

STATE: MA

PROJECT
TITLE :

Accelerating the Advancement of High-Efficiency, Low-Cost Thin Film CIGS PV Solar Cell Manufacturing

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000234	EE0004740	GFO-0004740-001	EE4740

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.
- A1** Routine actions necessary to support the normal conduct of agency business, such as administrative, financial, and personnel actions.

Rational for determination:

Veeco Proposes to use federal funding to make improvements to the existing manufacturing system, implement a new glass deposition system, as well as lease existing office space for new employees. The first 12 months of this project will take place at the Clifton Park facility in Clifton Park, NY, the entire 3 year span of this project will take place at the Lowell facility in Lowell, MA.

This project will include for budget period 1, the design and build of a production CIGS deposition system in the Lowell, MA facility; characterization and process optimization of a single stage system to reduce manufacturing costs; multi-stage development and transfer of the best known processes from the optimization to the new deposition system. Budget period 2 will include process enhancement of the multi-stage development of CIGS deposition system; and manufacturing integration validation of the new deposition system. Budget period 3 will include a continuation of the multistage development and provide further process and hardware enhancements.

The recipient proposes to increase power levels which will require upgrades to the main electrical box and facility wiring, an increase in chiller capacity to include associated plumbing, installation of a nitrogen purge system adjacent to the building, installation of a pure water treatment system inside the Lowell facility building, and installation of a glass washer and AquaSave water treatment system. The Lowell facility and Clifton Park facilities are located in industrial areas and currently has manufacturing operations existing. The only outdoor construction associated with this project includes the pouring of a concrete pad for the nitrogen purge system. This pad is not expected to adversely affect cultural resources as this ground has been previously disturbed for the construction of the original building.

The applicant has submitted and R & D Questionnaire which thoroughly addresses the chemical and safety handling protocols. Both of the sites where work will take place have an EHS policy for health and safety.

This project is comprised of a 3 year study to improve the manufacturing capacity of thin film photovoltaics, as well as leasing office space; therefore a CX B5.1 & A1 apply.

NEPA PROVISION

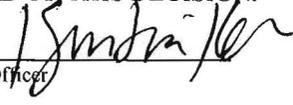
DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 3/1/2011

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Kristin Kerwin  Date: 3/3/2011
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager