

PMC-EF2a

(20402)

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



RECIPIENT: 3M Company

STATE: MO

PROJECT TITLE : 3M Columbia Solar Film

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	EE0000131	GFO-0000131-008	EE131

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.

Rational for determination:

The State of Missouri proposes to provide \$800,000 in SEP ARRA funds to the 3M Company for the purchase, fabrication and installation of a new solar film manufacturing line that would be installed at 3M's existing plant at 5400 Route B, Columbia, MO 65203. The 3M site is a fully permitted developed site under industrial use.

The manufacturing line includes customized film coating and lamination equipment used in flexible solar panels. The primary raw material used in this operation is PET (polyester). In addition, a very small quantity of proprietary coatings would be used. The coating material polymerizes with the film, becoming part of the film. The film is then shipped off-site to the solar manufacturer/panel assembly facility.

Based on information provided by the recipient and a review of aerial photographs, the 3M property is part of a 100-acre industrial complex. The new equipment would be installed inside a recently constructed addition to an existing building. No new construction or expansion of the building footprint would be needed. Therefore, the proposed project would not impact threatened or endangered species, other sensitive wildlife or habitat, wetlands or floodplains. The State Historical Preservation Officer determined that no historic properties would be adversely affected by the proposed project. Equipment installation is internal to an existing building so no noise impacts are expected.

In 1999, the Department of Natural Resources (DNR) issued 3M a violation for contamination of soil and ground water from a surface water impoundment formerly located south and east of the proposed project area. In August 2010, the DNR reviewed this proposed project and confirmed that ground water flow is east-southeast, or away from the proposed project area. Further, the project would not involve extraction or injection and groundwater would not be affected.

The cooling water is a closed loop system that uses 100 to 200 gallons per year. Occasionally, there may be small quantities of cooling water blowdown (e.g., 10-20 gallons) that would occasionally be discharged to the city sanitary sewer. The cooling water would only be used to cool equipment and would not come in contact with any chemical processes.

The Missouri DNR, Hazardous Waste Program, was contacted to confirm that 3M Columbia is registered with EPA as a large quantity generator (EPA # MOD054950670) and with the State (State # 001582). 3M must report any changes as a result of this project to the Missouri DNR and may be required to provide additional information with their routine reports.

The Missouri DNR, Air Quality Program, reviewed the proposed project and determined that there would be no emissions from the process. Emissions from the small amount of isopropyl alcohol used to clean the equipment would

not require 3M to obtain a construction permit. Additionally, none of the New Source Performance Standards would apply to this equipment. 3M would need to obtain an amendment to their Basic Operating Permit within 30 days of starting up the equipment.

3M Columbia would ensure that the appropriate codes and standards are used in the fabrication and installation of the new equipment.

Based on the above information, DOE has determined that the work outlined is consistent with activities identified in Categorical Exclusion B5.1, Actions to Conserve Energy.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

This EF2a was prepared by Chris Paulsen.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Date: 12/22/10
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