

PMC-ND

(1.08.09.13)

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



RECIPIENT: Teledyne Scientific & Imaging

STATE: CA

PROJECT TITLE : Sacrificial Protective Coating Materials that can be Regenerated In-Situ to Enable High Performance Membranes

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000560	DE-EE0005759	GFO-0005759-002	GO5759

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:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Teledyne Scientific & Imaging, LLC to develop a chemically resistant and anti-fouling coating for low-cost Weak Black Liquor (WBL) membranes for pulp and paper manufacturing. Budget Period 1 of this project was previously approved by GFO-0005759-001 on August 27, 2012. Two additional tasks have been added to Budget Period 1 since the last NEPA review. This NEPA review is for the two additional tasks added to Budget Period 1 and the remaining proposed project activities in Budget Periods 2 and 3.

The proposed project activities include the design, development, fabrication and laboratory testing of membrane based concentration of WBL in which organic materials are separated from water so that filtered water can be reused. Project management, reporting, and development of a business/economic case for the application of the membrane separation process in a pulp mill is also planned. All laboratory activities would occur at either the TSC laboratory facility located in Thousand Oaks, CA or at the MeadWestVaco laboratory facility located adjacent to their paper mill in Covington, VA. No physical modifications are needed at either of the laboratories and no new permits, licenses or authorizations would be required to complete the proposed activities. All laboratory facilities have active safety plans, systems, and processes comply with required standards. All hazardous materials and non-hazardous waste would be managed in accordance with federal, state, and local environmental regulations.

This project does include the use of nanoscale materials used as polymers and surfactants. These materials are only planned to be used in water soluble liquid media, so no inhalation risks would be present. All unused coating material would be stored, labelled, and disposed of according to protocols developed by Environmental Health & Safety personnel.

Based on review of the project information and the above analysis, DOE has determined the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusions A9 "Information gathering,

analysis, and dissemination," B3.6 "Small-scale research and development, laboratory operations, and pilot projects," B3.15 "Small-scale indoor research and development projects using nanoscale materials," and is 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.

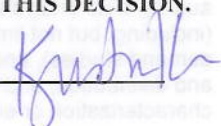
Note to Specialist :

Advanced Manufacturing Office
This NEPA Determination does not require a tailored NEPA provision.
Casey Strickland 12/08/14

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

Electronically Signed By: Kristin Kerwin
NEPA Compliance Officer



Date: 12/10/2014

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: _____