PMC-ND

(1.08.09.11)

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



RECIPIENT: Doshi and Associates, Inc.

STATE: WI

PROJECT TITLE:

A novel unit operation to remove hydrophobic contaminants

Funding Opportunity Announcement Number DE-FOA-0000560

Procurement Instrument Number DE-EE0005772

NEPA Control Number CID Number GFO-0005772-001

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:

B3.6 Small-scale research and development, laboratory 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 operations, and pilot 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.

## Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Doshi & Associates, Inc. to develop a new unit operation called Vacuum Air Flotation (VAF) to remove hydrophobic contaminants from paper mill process water. Project work would include, design, construction of test units, and laboratory and field testing of the units.

Doshi & Associates would perform three tasks for this project. These include:

- Task 1 Construct and Test Batch Unit
- Task 2 Construct and Test Continuous Unit
- Task 3 Construct and Test Pilot Sized Commercial Unit

Task 1 would involve the designing, constructing and testing of a batch unit in a controlled laboratory setting. The goal of Task 1 is to evaluate the effectiveness of the VAF design concept.

Based upon the experience gathered in Task 1, Task 2 would involve designing, constructing and testing of a continuous flow unit in a controlled laboratory setting. The goal of Task 2 is to verify the effectiveness of a continuous flow unit in removing hydrophobic particles.

All work in tasks 1 and 2 would occur at the USDA forest products laboratory in Madison, Wisconsin.

Task 3 would involve the design, construction and testing of a continuous flow unit for testing in a commercial setting. The goal of Task 3 is to evaluate the effectiveness of the VAF unit in a mill setting. All testing work in Task 3 would occur at SCA Tissue North America in Menasha, Wisconsin.

For all tasks, no new construction, permits, licenses, authorizations, or modifications to existing facilities would be required.

All solid waste generated by the projects would be disposed of appropriately and would comply with all required standards for disposal of solid wastes.

No additional affects to resources or additional concerns were found to exist during this review.

Based on review of the project information and the above analysis, DOE has determined the 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 exclusion B3.6 "small scale research and development, laboratory operations, and pilot projects," and is categorically excluded from further NEPA review.

EPA PROVISION		
DOE has made a final NEPA determinat	ion for this award	
Insert the following language in the awar	rd:	
Block 11 of the Notice of Financial Assis	pe or objective of your project you are required to obstance Award before proceeding. You must receive with work beyond that currently approved.	
Note to Specialist:	g with work beyond that currently approved.	
Advanced Manufacturing Office. This NEPA determination does not not NEPA review completed by Roak Par		
GNATURE OF THIS MEMORANDUM	CONSTITUTES A RECORD OF THIS DECIS	SION.
EPA Compliance Officer Signature:	Segred by Kristin Kerwin NEPA Compliance Officer	Date:11/26/2014
ELD OFFICE MANAGER DETERMIN		
Field Office Manager review required		
Field Office Manager review required		
CO REQUESTS THE FIELD OFFICE M	IANAGER REVIEW FOR THE FOLLOWING	REASON:
Manager's attention. Proposed action falls within an EA or EI	S category and therefore requires Field Office Mar	ager's review and determination.
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