PMC-ND

(1.08.09.13)

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



RECIPIENT: Alcoa Inc.

STATE: PA

PROJECT TITLE:

Novel Thermal Break with Simplified Manufacturing for R7 Commercial Windows

Funding Opportunity Announcement Number DE-FOA-0001027

DE-EE0006716

Procurement Instrument Number NEPA Control Number CID Number

GFO-0006716-001 GO6716

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, 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) laboratory operations, 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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Alcoa, Inc. for the production of novel thermal-break technology with simplified manufacturing for new and or retrofit R7 commercial windows. The proposed thermal-break technology is an innovative concept that incorporates a sandwich-type structure where foam is used as thermal-break material captured between two aluminum pieces creating a highly insulating frame system.

Alcoa, Inc. proposes to validate new thermal break technology; design and develop an R-7 commercial window that would meet DOE specifications; optimize a simplified manufacturing process for the thermal break assembly; and build and install a pilot manufacturing line. These activities would all take place at one of two locations: Alcoa, Inc.'s research and development center located at 100 Technical Drive in Alcoa Center, PA 15069 and Kawneer Company, Inc.'s research center located at 555 Guthridge Ct. in Norcross, GA 30092. All research and development activities would take place in existing facilities designed for this type of research; therefore, no modifications or new permits, additional licenses and/or authorizations would be necessary.

Potential solid waste would include aluminum scrap which would be recycled, and foam and composite (aluminum + foam) which would be taken to a landfill. No siting, construction or major expansion of waste storage, disposal, recovery, or treatment actions/facilities would be required. Each facility where proposed project activities would occur has existing health and safety policies in place. All work would follow the guidelines set forth in those policies and pose no threat to statutory, regulatory or permit requirements for environment, health and/or safety. Potential VOC emissions from adhesives use are anticipated to be negligible (10 lbs. or less).

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 that this project is consistent with actions outlined in DOE categorical exclusions A9 "Information gathering, analysis, and dissemination" and B3.6 "Small-scale research and development, laboratory operations, and pilot projects" and is therefore 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:

U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Question... Page 2 of 2

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:

	letermination does not rec pleted by Rebecca McCon	quire a tailored NEPA provision. rd 08/07/2014.		
SIGNATURE OF	THIS MEMORANDUM	CONSTITUTES A RECORD OF THIS DECISION.		
NEPA Compliance Officer Signature: NEPA Compliance Officer Signature: NEPA Compliance Officer			Date:	8/7/2014
FIELD OFFICE MANAGER DETERMINATION				
☐ Field Office N	Manager review required			
NCO REQUESTS	THE FIELD OFFICE M	ANAGER REVIEW FOR THE FOLLOWING REA	SON:	
 □ 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 I	REVIEW I CONCUR WIT	TH THE DETERMINATION OF THE NCO :		
Field Office Manager's Signature:			Date:	
		Field Office Manager		