

PMC-EF2a

(2.04.02)

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



RECIPIENT: Dow Corning Corporation

STATE: ME

PROJECT TITLE : Contributing to Net Zero Building: High Energy Efficient EIFS Wall Systems

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-00001115	DE-EE0003915	GFO-0003915-001	NT3915

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.
- B5.1 Actions to conserve energy or water** (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

## Rational for determination:

DOE is proposing to provide federal funding to Dow Corning to install Vacuum Insulated Panels (VIP) on an existing commercial building at Brunswick Landing. DOE funding would be used to upgrade the exterior of a 1,621 square-foot building by replacing the existing siding with an energy efficient, exterior insulation and finishing system (EIFS).

NETL made two previous NEPA determinations for the proposed project: 1) where work would be conducted (West Warwick, Rhode Island; CX B3.6 and B5.1; signed 9.29.2012) and 2) where data results would be analyzed (Midland,

Michigan; CX B3.6; signed 9.29.2010). Since these determinations were signed, only the locations have changed. This NEPA determination applies to Task 5 and the remaining tasks are covered by the previous determinations.

- Task 1.0 – Project Management
- Task 2.0 – Exploration
- Task 3.0 – Development
- Task 4.0 – Approach to Application and Lab Trial
- Task 5.0 – Field Trial and Scale-up
- Task 6.0 – Code Compliance Testing and Acceptance
- Task 7.0 – Operating Procedure Development
- Task 8.0 – Final Report Evaluation
- Task 9.0 – Project Management

The proposed building on which siding would be replaced is Building 592 at Brunswick Landing (former Naval Air Station) located at 90 Pegasus Street, Brunswick, Maine 04011. Brunswick Landing is being redeveloped by the Midcoast Regional Redevelopment Authority. Building 592 is currently unoccupied and the former Veterinary Clinic. It is a 1,621 square-foot, single story structure on a concrete slab foundation. The building is located on the eastern-central portion of Brunswick Landing. The 0.4 acre parcel is bordered to the west by Building 24 (former Personnel Support Detachment), to the north by Burbank Avenue, to the east by Pegasus Street and Building 43 (Telephone Exchange) and to the south and southwest by Building 21 and 26 (former Child Care Centers).

The proposed project would involve installing foam encapsulated VIPs on 1,400 square-feet of Building 592. The individual panels would be visible as the entire façade would have an updated EIFS finish. During installation, transite siding, a known asbestos containing material will be abated by an asbestos abatement contractor who will dispose of the material according to federal, state and local regulations. An asbestos abatement certificate will be provided to confirm the workers were not exposed to hazardous material.

The proposed project is not located in a wetland or floodplain, nor are threatened and endangered species known to occur in the area. According to the National Register of Historic Places, Brunswick Landing is not an historic district.

Bench-scale lab testing and data analysis of the Brunswick installation would be conducted at Fraunhofer Inc. located at 25 First Street, Cambridge, Massachusetts 02140.

Based on this information, DOE has determined the work outlined is consistent with activities identified in categorical exclusion A9 (information gathering, analysis and dissemination), B3.6 (small-scale research and development, laboratory operations and pilot projects) and B5.1 (actions to conserve energy or water).

#### NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Cristina Tyler 4.26.2012

DOE Funding: \$1,241,120  
 Cost Share: \$310,280  
 Total Project Cost: \$1,551,400

#### SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: \_\_\_\_\_

 Electronically Signed By Kristin Kerwin  
 NEPA Compliance Officer

Date: 4/26/2012

#### 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