

PMC-ND

(1.08.09.13)

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

**RECIPIENT:** Building Envelope Materials**STATE:** MA

PROJECT TITLE: Minimally Invasive Retrofit Insulation Of Enclosed Roof Cavities

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0001630	DE-EE0008182	GFO-0008182-002	GO8182

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), 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.)

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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Building Envelope Materials (BEM) for the development of a retrofit insulation process for Enclosed Roof Cavities (ERCs). All design, development, fabrication and preliminary testing activities would occur in BEM's research and development facility at the Chestnut Innovation Center in Amesbury, MA. The project activities were originally reviewed by GFO-0008182-001 in August 2017. An additional task has been added to the original SOPO that would include creating webinars, additional field testing of insulation in one or more buildings, and measurement and validation activities. This NEPA review is specific to the project extension (Task 8).

The proposed project extension includes the recruitment of potential insulation projects via webinar, review of potential project sites and installation of insulation using a minimally invasive retrofit insulation technology. Buildings could be located in climate zones 4, 5 or 6 and could include single family homes, multifamily homes or brick/masonry veneer buildings. The only modifications to buildings would involve injection of closed cell polyurethane foam into wall cavities through ¼” holes. No other physical modifications or ground disturbing activities would be required and no change in the use of the building would result from project activities. Workers would wear full face respirators and disposable nitrile gloves in accordance with OSHA and NIOSH regulations. No unauthorized visitors would be allowed in rooms during injection or for 4 hours after work is completed. The only waste anticipated as part of project activities would be single use personal protective equipment, static mixers (i.e. injection gun tips), masking tape, plastic film, and a small amount of the closed cell foam that would be disposed of in contractor garbage bags according to appropriate disposal regulations.

The exact location of each field test installation has not yet been determined. Once building locations are finalized, each installation would require owner consent and possibly building permits. Under this DOE award, authorization of federal funds for individual building installations may be subject to additional Section 106 (National Historic Preservation Act) consultation by the DOE if the installation activities described above occur within any site, building, and/or structure that is included in or eligible for inclusion in the National Register of Historic Places.

DOE also conducted a review of potential issues relating to other resources of concern and found that no effects would be expected to result from the project.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

Installation activities within Task 8 are prohibited unless and until the following conditions have been met:

- (1) Once the Recipient selects the locations for the installations, the Recipient provides a list of the locations to the DOE at gonepa@ee.doe.gov;
- (2) If DOE determines it necessary, DOE completes Section 106 (National Historic Preservation Act) consultations for the applicable project locations; and
- (3) The Recipient receives written authorization from the DOE Contracting Officer to move forward with the installations.

Notes:

Building Technologies Office
This NEPA determination requires a tailored NEPA provision.

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.


There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental

effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:  Casey Strickland
NEPA Compliance Officer

Date: 4/27/2020

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
- Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____
Field Office Manager

Date: _____