PMC-ND
(1.08.09.13)

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

RECIPIENT: NREL **STATE:** CO

PROJECT TITLE : NREL STM SERF Facade Restoration; NREL 14-014

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-14-014	GO28308

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:

DOE/EA 1440 S-I (NREL STM) Final Supplement to Final Site-Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South Table Mountain Complex (May 2008)

Rationale for determination:

The U.S. Department of Energy (DOE) proposes the restoration of the aluminum-based sheeting (facade) that covers the exterior of the Solar Energy Research Facility (SERF) at the National Renewable Energy Laboratory (NREL) South Table Mountain (STM) campus located in Golden, Colorado. Within the STM campus, the SERF is located in Campus Development Zone 4 – Central Campus.

PROPOSED ACTION
The SERF was built in 1993 and has an exterior surface made from a material known as Alucobond, which is a composite panel consisting of two aluminum cover sheets and a fire-resistant core, and is covered with a sealant. Over the past twenty years, the surface of this paneling has collected a layer of grime from environmental conditions (e.g. dust, pollution, minerals in rainwater, etc.) and either needs to be cleaned or replaced to protect the panel. NREL evaluated options for cleaning the Alucobond facade material and discovered that typical cleaning processes could damage the metal substrate and could cause irreversible damage. The investigation also indicated that a full restoration of the facade including stripping the existing sealant and applying a new high performance coating to the material would restore the Alucobond material to a like new condition with a renewed 20-30 year life span expectancy. Based upon that investigation, the intent of this project would be to provide a complete performance and aesthetic restoration to the SERF exterior Alucobond facade.

The scope of work for this proposed project can be found in the Project Management Plan, which has been uploaded to the PMC database. Essentially, the proposed project would consist of the following tasks:
1) Any necessary project design and pre-planning
2) The removal of the existing surfacing coating system and the preparation the surface for application of a new coating system.
3) Application of a colored high performance architectural coating system to the exterior architectural metal panels, window frames, and vertical stacks on all four elevations from top of roof to ground elevation including approximately 53,639 square feet of Alucobond factory coated aluminum panels; the south, east, and west elevation aluminum window frames; and vertical stacks.
4) Removal and replacement of joint sealant to the exterior architectural metal cladding consisting of metal to metal cladding joints, vertical and horizontal and door frame to metal, window frame to metal, and window frame to glass.
5) A potential additional scope item would include the removal of the existing DOW123 sealant at the vertical joints of the Alucobond material on the panels and replace the DOW123 material with a new colored metal strip properly sealed to better match the appearance of the building.

PREVIOUS NEPA DETERMINATIONS
Operation and maintenance of new and modified facilities was included within the scope of the Proposed Action

analyzed in the July 2003 NREL STM Site-Wide Environmental Assessment (DOE/EA-1440). Specifically, the Proposed Action of DOE/EA-1440 included preventive and corrective maintenance of existing buildings within Site Development Zone 4. DOE/EA-1440 and its Finding of No Significant Impact (FONSI) are hereby incorporated by reference.

IMPACTS OF PROPOSED ACTION

The proposed project would not require any ground disturbance activities; therefore no stormwater quality or erosion impacts are anticipated. There are no floodplains, wetlands, or Waters of the United States in the vicinity of the proposed project area. NREL has received a Jurisdictional Determination from the U.S. Army Corps of Engineers for the ephemeral drainages on the STM site.

As the proposed project would not require land disturbing activities, no fugitive particulate air emissions are expected. The project would require the utilization of mobile point emission sources, such as trucks, boom or bucket lifts, etc., but these emissions would be negligible given the size and duration of the construction activity. Application of the new high performance coating system would be conducted in conformance with EPA and State of Colorado Volatile Organic Compound (VOC) air emission regulations.

Per the 2010-2011 site-wide wildlife survey, no threatened, endangered, or candidate wildlife species were observed at STM, nor was habitat for such species identified. Similarly, the vegetation survey during the same time period found no rare plants or habitat that may support federally protected plant species in the area proposed for this project. As there is vegetation, trees, and shrubs around the footprint of the SERF, a migratory bird nesting survey would be conducted prior to any potential vegetation disturbing activities if these activities are conducted after March 15th and before September 15th. If nests or eggs are found, the particular area would be cordoned off with a proper buffer until nestlings fledge. This would ensure that no migratory birds, nests or eggs are destroyed during construction.

Archeological and cultural resources on STM site were assessed in DOE/EA-1440 and its two subsequent Supplemental Environmental Assessments (DOE/EA-1440-S-I and DOE/EA-1440-S-II), including Section 106 consultations with the Colorado State Historic Preservation Officer. The proposed project would not impact known cultural resources at the STM site.

There would be noise typical of construction equipment during construction. Work would be conducted only during daylight hours. Construction-related noise would consist of a short-term increase in ambient noise levels. Noise impacts would vary with the phase of construction and occur intermittently. Project activities would comply with applicable noise ordinances. Traffic impacts would be minimal and coordinated with the proper agencies of jurisdiction.

The proposed project would require the use of chemicals to strip the existing sealant, prep the surface of aluminum siding, and application of a new high performance coating. Several of these chemicals would be classified as hazardous materials and their safety data sheets (formerly known as MSDSs) are uploaded to the PMC database. All existing joint sealants would be removed and the exterior existing surface would be scuff sanded and cleaned with soap and water. This wastewater would be discharge into the sanitary sewer. Isopropyl alcohol would be wiped on by hand to clean surface in prep for primers. Primers would be rolled on by hand. Barrier coat and topcoat would be thinned and applied using a sprayer. Areas would be masked off and tarps or other means of secondary containment would be used to avoid product contact with soil. Disposal of old sealant joints and any chemical waste would be done off-site by the construction contractors and in accordance with the manufacturer's recommendation. All hazardous materials and waste generated would be managed in accordance with federal, state, and local environmental regulations.

The proposed project would comply with NREL's construction safety policies and procedures. The contractor would have to submit a project-specific health & safety plan and a hazard assessment would be conducted prior to the start of project activities. The project safety plan and hazardous assessment would address potential issues such as the use of hazardous materials, proper PPE, fall protection, proper rigging, scaffolding, and operation of boom/bucket lifts.

NEPA DETERMINATION

DOE has determined based upon the information above, there are no extraordinary circumstances presented by this proposed action. DOE has determined the corrective maintenance of the SERF's aluminum facade is bounded by the environmental impact analysis contained in DOE/EA-1440, and its Findings of No Significant Impact.

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 :

ND prepared by Rob Smith on 5/1/2014.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: Electronically Signed By: Lori Gray / Lori Gray / Date: 5/1/2014

NEPA Compliance Officer

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: _____ Date: _____

Field Office Manager