

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 : HVAC Upgrades FTLB – SERF; NREL Tracking No. 13-017

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-13-017	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 (NREL STM)** Final Site-Site Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South Table Mountain Complex (February 2003)
- B1.16 Asbestos removal** Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, "National Emission Standards for Hazardous Air Pollutants"; 40 CFR part 763, "Asbestos"; 29 CFR part 1910, subpart I, "Personal Protective Equipment"; and 29 CFR part 1926, "Safety and Health Regulations for Construction"; and appropriate state and local requirements, including certification of removal contractors and technicians).

Rationale for determination:

The U.S. Department of Energy (DOE) proposes improvements to the heating, ventilation, and air conditioning (HVAC) systems of the Field Test Laboratory Building (FTLB) and the Solar Energy Research Facility (SERF) at the National Renewable Energy Laboratory (NREL) South Table Mountain (STM) campus located in Golden, Colorado.

PROPOSED ACTION

The FTLB exhaust fans have reached the end of their useful life and need to be replaced, as well as exhaust fan EF-57 needs redundancy. The ductwork in the SERF is deteriorating and needs to be replaced. The following tasks would be included in this project:

- 1) Provide and install new vacuum pump in FTLB Central Plant. The vacuum pump is part of a central vacuum system available for lab, office, and hallway cleanup throughout the building. The installation would provide equipment equivalent to original design and is intended to replace the existing equipment.
- 2) Provide and install replacement fans for the FTLB EF-57 exhaust fan with new drive, more capacity, and would make the system redundant. This replacement would require cutting into the roof of the FTLB at this location by removing a 20 SQFT section of the roof. Additional roof support structure would also need to be installed to support the installation of two new exhaust fans (EF-57 a and b), that are heavier than the old fan they are replacing. The roof would be repaired and sealed, and ducting would be reconfigured to match up with new fans. The non-friable roofing materials to be removed contain asbestos and would be removed through manual methods by a certified asbestos abatement contractor. The new fans would be hoisted to the FTLB roof with a crane.
- 3) Provide and install FTLB west fan loft exhaust fans and drive motors. New motors would be in horizontal positions to reduce bearing wear and failure. In order to access this location in the FTLB, a wall would be temporarily removed, to access the west fan loft where the failing fan coil is located. Ducting would be reconfigured to match up with new fan.
- 4) Provide and install replacement reheat recovery coil for the SERF West Fan Loft, south plenum. Coil would be coated to reduce exposure to acid exhaust. The coil purpose would be to recover energy used to heat or cool the labs where exhaust is being pulled from in order to save energy.
- 5) Provide and install SERF west first floor main duct. An opening would be made in the chase wall on the first and second floors to remove and replace the vertical exhaust riser. Existing duct would be removed and replaced with new that is the same size and in the same location. The SERF ductwork would be removed by hand with the use of small equipment.

PREVIOUS NEPA DETERMINATIONS

Internal and external modifications of existing facilities and infrastructure modifications and improvements were within the scope of the Proposed Action analyzed in the July 2003 NREL STM Site-Wide Environmental Assessment (DOE/EA-1440). DOE/EA-1440 and its Finding of No Significant Impact (FONSI) are hereby incorporated by

reference.

IMPACTS OF PROPOSED ACTION

This proposed action would not include land disturbing activities and would have no impact to stormwater. There are no floodplains, wetlands, or Waters of the United States in the vicinity of the affected NREL facilities.

The proposed action would require removal of approximately 20 SQFT of asbestos containing roofing materials. The potential for the generation of asbestos fibers would be minimized by the use of a certified asbestos abatement contractor utilizing proper manual methods to keep the non-friable material intact. The project would require the use of mobile point emission sources, such as trucks, cranes, etc., but these emissions would be negligible given the size and duration of the construction activity.

The proposed project activities do not have the potential to impact wildlife, rare plants, or their habitat.

The proposed project activities would largely occur on the interior of the existing FTLB and SERF buildings with minor activities on the exterior roof of the FTLB. 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. Construction activities would comply with applicable noise ordinances. Traffic impacts would be minimal and coordinated with the proper agencies of jurisdiction as necessary.

Approximately 20 SQFT of non-friable asbestos containing roofing materials would be generated as result of this proposed action. The asbestos containing roofing material would be properly managed and disposed of in accordance with applicable federal, state, and local regulations by a certified asbestos abatement contractor. NREL EHS has taken swiipe samples of the interior of the SERF ducts to be replaced and the results are uploaded to the PMC. The samples indicate the presence of some heavy metal contamination. The ducts would be properly removed, managed, and recycled/disposed in accordance with applicable regulations.

The proposed action would be conducted in accordance with existing NREL environmental, health and safety policies and programs, including but not limited to construction safety, electrical safety, asbestos containing building material management, waste management, and equipment disposition.

NEPA DETERMINATION

DOE has determined based upon the information above, there are no extraordinary circumstances presented by this proposed action. DOE has determined the modifications and improvements to the HVAC systems of the FTLB and SERF are bounded by the environmental impact analysis contained in DOE/EA-1440, and its Findings of No Significant Impact. Additionally, DOE has determined that the proposed removal of non-friable asbestos containing roof materials from the FTLB is consistent with the actions contained in DOE categorical exclusion B1.16 "Asbestos removal," and therefore is 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:

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.

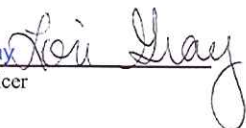
Note to Specialist :

EF2a created by Robert V Smith on 09/13/2013

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Electronically Signed By: Lori Gray
NEPA Compliance Officer



Date: 9/13/2013

FIELD OFFICE MANAGER DETERMINATION