(2.04.02)

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

RECIPIENT:NREL

STATE: CO

PROJECT TITLE : FTLB 158-03 Install Condensing Unit; NREL Tracking No. 11-020

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number NREL-11-020 GO10337

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- Final Site-Site Wide Environmental Assessment of the National Renewable Energy Laboratory's (NREL) South
 Table Mountain Complex (February 2003)
- B1.4 Installation or modification of air conditioning systems required for temperature control for operation of existing equipment
- B1.16 Removal of asbestos-containing materials from buildings in accordance with 40 CFR part 61 (National Emission Standards for Hazardous Air Pollutants), subpart M (National Emission Standard for Asbestos); 40 CFR part 763 (Asbestos), subpart G (Asbestos Abatement Projects); 29 CFR part 1910, subpart I (Personal Protective Equipment), Sec. 1910.134 (Respiratory Protection); subpart Z (Toxic and Hazardous Substances), Sec. 1910.1001 (Asbestos, tremolite, anthophyllite and actinolite); and 29 CFR part 1926 (Safety and Health Regulations for Construction), subpart D (Occupational Health and Environmental Controls), Sec. 1926.58 (Asbestos, tremolite, anthophyllite, and actinolite), other appropriate Occupational Safety and Health Administration standards in title 29, chapter XVII of the CFR, and appropriate state and local requirements, including certification of removal contractors and technicians.

Rational for determination:

This project would be for the installation of a pre-purchased condensing unit for Atlas Weather-Ometer #4 in Field Test Laboratory Building (FTLB) Lab 158-03 at the National Renewable Energy Laboratory's (NREL) South Table Mountain (STM) Complex in Golden, Colorado. The proposed project would also include:

• Provide and install hard copper refrigerant lines from the condensing unit to the Weather-Ometer and connect to the existing Weather-Ometer.

• Provide and install electrical service and control wiring to the condensing unit, including final control wiring connections to the Weather-Ometer.

• Coordinate condensing unit start-up with both Atlas and Envirotronics service technicians present (they would be paid for under a separate contract).

Condensing unit was manufactured by Envirotronics, model number 1.0-7.5 AC Condensing Unit, 460 volt, 3 phase, 60 Hertz, 20 amps, and is designed for exterior installation. Control wiring is 230 volts, two wires. Condensing unit weighs approximately 1100 pounds and has been pre-charged with refrigerant and oil. Additional refrigerant (R-22) would need to be added to compensate for the additional volume of the refrigerant piping and the cooling coils in the Weather-Ometer.

Condensing unit would be installed on the south flat roof of the FTLB, at the west end. Piping and power would be run to this unit from FTLB Lab 158-03. The installation of the condensing unit on roof of FTLB, which would occur in April to May 2011, would require cutting into and removing some of the existing roof materials, some of which are asbestos containing materials (ACM). Standard construction methods except for the asbestos abatement would be performed by trained workers. All fibers would be contained and disposed of according to standard NREL asbestos abatement procedures. During the operational phase, this condensing unit would provide additional cooling to the Weather-Ometer.

The asbestos abatement activities would be conducted in accordance with applicable federal, state, and local regulations, including, but not limited to, the OSHA Asbestos in Construction (29 CFR 1926.1101) and General Industry (29 CFR 1910.1001) Standards, US EPA asbestos National Emission Standards for Hazardous Air Pollutant (NESHAP)(40 CFR 61 Part M) regulations, and the State of Colorado Air Quality Control Commission Regulation No. 8 Part B – Emission Standards for Asbestos. Furthermore, the asbestos abatement work would abide by NREL Laboratory Level Procedure 6-4.18 - Asbestos Management. By utilizing the proper engineering controls, work practices, and personal protective equipment, this would project would not result in emissions of asbestos fibers or other air pollutants above regulatory thresholds, and would not pose a health risk to the abatement workers or

occupants of the FTLB. The asbestos containing building materials would be disposed of offsite at properly licensed disposal facility.

This proposed project would not impact prime farmlands, wetlands, floodplains, critical habitats, threatened and endangered species, or culture resources. The FTLB is less than 50 years old, is not on the National Register of Historic Places, and not within a historic district. The project would result in negligible air emissions of particulates and VOCs (potentially from the spray-on encapsulant). The removal of non-friable asbestos containing roof materials a licensed abatement contractor, and its subsequent offsite disposal at a properly licensed disposal facility presents a de minimis risk to human health and the environment. The proposed activity would not generate hazardous waste.

Based upon the information above, this proposed action would qualify for Categorical Exclusions B1.4 and B1.16.

NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

EF2a created by Rob Smith on 04/07/2011.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:

Lori Plummer /KOU //Lummer NEPA Compliance Officer

Date: 4/8/2011

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:

Field Office Manager

Date: