

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: S&TF Lab 203 Remodel; NREL Tracking No. 19-025

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-19-025	GO28308

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:

DOE/EA-1968 SITEWIDE ENVIRONMENTAL ASSESSMENT, U.S. DOE NATIONAL RENEWABLE ENERGY
(NREL STM) LABORATORY, SOUTH TABLE MOUNTAIN CAMPUS, GOLDEN, COLORADO

Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL), proposes to remodel Laboratory 203 at the Science and Technology Facility (S&TF) located at the NREL South Table Mountain (STM) campus in Golden, Colorado.

Laboratory 203 would be divided into two laboratory spaces (Labs 203a and 203b) measuring approximately 1,530 sq. ft. and 1,790 sq. ft., respectively, to increase the number of laboratories within the S&TF that contain chemical fume hoods. The proposed project would involve the removal and disposal of existing laboratory equipment, demolition and remodeling of the space into two separate spaces, and operation of the new spaces.

Demolition actions would involve removal of duct work and plumbing, disconnection of fire suppression and compressed gas service, and demolishing the wall to the service corridor to accommodate a new double door. The existing fume hood and associated duct work would also be removed and disposed.

A wall would be constructed to divide laboratory 203 and create the two new spaces. Utilities that serviced laboratory 203 would be separated and rerouted to service the two new spaces as required, including ventilation, lighting, and toxic gas alarms and monitoring points. A new 6' x 8' double access door would be installed in the wall between Lab 203a and the service corridor, and the existing pedestrian door would be relocated to meet egress requirements. Two new chemical fume hoods and associated infrastructure and casework would be installed into the new spaces (one hood per lab). The Copper-Indium-Gallium-Selenide Deposition System that is currently installed in laboratory 203 would be moved temporarily during construction and relocated to one of the new laboratory spaces.

Research that would be conducted in the two laboratory spaces would include bench-scale testing for PV research, which is similar to work performed in other labs in the S&TF and of the lab that is being remodeled. Operation of the two laboratory spaces would result in an increase in the use of water, gases, chemicals, and electricity, but the increase would be minimal compared to the overall use of these resources within the S&TF. As such, no change in the use, mission, or operation of existing facilities would result from the proposed project.

The fume hood that would be removed and disposed is approximately 60 cu. ft. in size, and its associated duct work is approximately 12 feet long. The hood was previously used for PV research involving use acid baths, doping thin-film deposits, and other chemical products, and is potentially contaminated with hazardous chemical residue. A decommissioning plan would be developed prior to beginning work, and sampling would occur to determine the type and levels of contamination within the fume hood and duct work prior to removal. The fume hood would be decontaminated where possible, and any components that cannot be decontaminated would be encapsulated and disposed of as hazardous waste. Non-hazardous waste materials generated would include demolition debris, fume hood components, and other miscellaneous wastes, which would be reused, recycled, or disposed of in accordance with applicable regulations and NREL policy and procedures.

The proposed project would not involve ground disturbance as all construction activities would occur within the S&TF. Construction activities would generate some indoor emissions of particulate matter, but would be negligible and short-term. Noise impacts would consist of a short-term, intermittent increase in indoor noise levels.

Individuals working on this project would be exposed to physical, chemical, and electrical hazards. All decommissioning work would be performed in accordance with the decommissioning plan. Existing corporate health and safety policies and procedures would be followed including employee training, proper protective equipment, engineering controls, and monitoring. Additional policies and procedures would be implemented as necessary if new health and safety risks are identified. Workers would also be exposed to silica; engineering controls and air monitoring would be implemented as required, and respiratory protection would be used when needed.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

NREL
Nicole Serio, 4/16/2019

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

 Electronically
Signed By: Kristin Kerwin

NEPA Compliance Officer

Date: 4/23/2019

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: _____