

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-19-021 FTLB Gas Storage

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-19-021	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 construct and operate an outdoor gas storage area equipped with a gas distribution system to reduce the amount of flammable gas stored inside the Field Test Laboratory Building (FTLB) located at the NREL South Table Mountain (STM) campus in Golden, Colorado.

The proposed project would involve the installation of tanks and infrastructure for storage and distribution of low pressure hydrogen, carbon monoxide, and flammable gas cylinders. The outdoor storage area would be installed on the existing parking area to the west of the FTLB. All gases that would be installed in the new structure are currently in use at the FTLB.

The outdoor structure would measure approximately 67' x 16' x 12'. The structure would have a canopy roof and contain a gas distribution system, and would be surrounded by a chain link fence with pedestrian gates and jersey barriers. A refill trailer parking area and a tube trailer for storage and delivery of low pressure hydrogen gas would also be installed. Construction would involve removing and excavating sections of the existing parking area to install a concrete pad to support the structure, and a trench that would be routed from the outdoor structure to the west side of the FTLB. The estimated area of concrete to be installed is approximately 1500 sq. ft.

The trench would run in two major sections measuring approximately 65' long and 75' long respectively, and in three smaller sections measuring approximately 5', 8', and 7' long respectively. The trench would be approximately 2' wide would vary from approximately 1' to 2' deep. The trench would house gas lines and electrical conduit. A trench drain connection to the storm sewer system would also be installed.

The gas and electrical lines would be routed through the concrete trench and into the west side of the FTLB, which would require penetration of the exterior surface of the building. The main gas lines would be installed in both the first and second floor corridors of the FTLB, and smaller lines would be installed to direct gas into the individual laboratory zones. The main gas lines would be ½" stainless steel lines, and the smaller laboratory lines would be ¼" steel lines. Racks and additional support lines would be installed as needed. Installation of the new house gas lines would require numerous wall and ceiling penetrations through concrete block and drywall. All penetrations would be sealed with appropriate sealant to maintain the required separation rating.

The proposed project would also involve modifying FTLB Room 123 to serve as a Fire Control Area. Room 123 is used for gas cylinder, waste, and drum storage, and the proposed modifications would accommodate this use. Specific activities would include removing and replacing the existing concrete stair, handrail, and landing, replacing the door and frame at the north entrance of the room, replacing the cylinder cage and rolling gate, and removing the existing concrete curb. Additionally, a 2 hour rated wall, door, ceiling upgrades, and HVAC would be installed. Installation of the HVAC would involve roof penetration for the vent.

All ground disturbance would occur in previously disturbed areas; the project location is an existing parking lot for the FTLB. The surrounding parking area asphalt would be used as the laydown area. All ground disturbing activities would be conducted in accordance with existing NREL policies and procedures that guide such work. Erosion control measures would be implemented and maintained during the course of the project to minimize any potential erosion and/or stormwater impacts.

Project activities would not affect cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands, and no permits would be required. A migratory bird nesting survey would be completed if project activities involving ground disturbance occur between March 15 and September 15. If nests or eggs are found, the area would be cordoned off with a proper buffer until nestlings fledge.

Mobile air emissions from construction equipment, which would include a skidsteer, backhoe, cement truck, delivery and pickup trucks, and asphalt or concrete-related installation equipment, would be negligible and short-term. Construction-related noise would consist of a short-term, intermittent increase in ambient noise levels and would follow applicable noise ordinances. Construction waste would be reused, recycled, or disposed of in accordance with applicable regulations and NREL policy and procedures.

Individuals working on this project could be exposed to physical hazards. 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 could 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.

Include the following condition in the financial assistance agreement:

A migratory bird nesting survey would be completed if project activities involving ground disturbance occur between March 15 and September 15.

Notes:

NREL
Nicole Serio 4/11/2019

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.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____

 Electronically
Signed By: **Kristin Kerwin**

NEPA Compliance Officer

Date: 4/11/2019

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: _____