

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-19-022 NWTC PNNL UAS Thermal Tracking

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-AC36-08GO28308	NREL-19-022	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:

**B3.2 Aviation activities** Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

Rationale for determination:

The U.S. Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) is proposing to test a thermal camera tracking system that has been developed to detect wildlife movements around wind turbines. This project would be a joint research effort between NREL and the Pacific Northwest National Laboratory (PNNL).

Project activities would take place at the NREL Flatirons Campus (formally called the National Wind Technology Center) located in Jefferson County, Colorado. An Unmanned Aircraft System (UAS) would be used to simulate the wildlife movements (birds and bats) at a variety of angles and elevations. Researchers would use a mobile thermal camera system to record the flights.

Multiple flights are proposed to take place from late April through June, 2019. Flights would take place around Flatiron campus sites 3.3, 3.4 and 4.0. System cameras and components would be placed in multiple locations around the campus during each flight. No ground disturbing activities would occur.

Flights would be piloted by Red Mountain Scientific (RMS), an authorized DOE Commercial Aviation Services provider. Flights would be conducted at or below the 400' allowable ceiling for UAS operations within the Class D airspace of Rocky Mountain Metropolitan Airport and in accordance with NREL policies, procedures, and safety requirements for conducting UAS missions on DOE facilities.

RMS would conduct the flights in compliance with their Small UAS Operating Policies and Procedures and with FAA Part 107 regulations. The aviation plan for this project has been reviewed and approved by the Golden Field Office's Aviation Manager and Office Director. The identified flight risks for the subject mission have been adequately identified and mitigated to moderate risk per the DOE Risk Assessment.

Flights would not occur within the boundaries of the Rocky Flats National Wildlife Refuge. In the event of accidental landing onto the refuge, DOE's Special Use Permit (61172-19-001) with the US Fish and Wildlife Service would allow for retrieval of the equipment.

**NEPA PROVISION**

DOE has made a final NEPA determination.

Notes:

NREL  
Laura Margason, 4/18/2019

## 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.

## SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: \_\_\_\_\_

 **Kristin Kerwin**  
NEPA Compliance Officer

Date: 4/19/2019

## 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: \_\_\_\_\_