



NEPA Categorical Exclusion Determination Form

Program or Field Office: U.S. Department of Energy (DOE) Office of Legacy Management (LM)

Project Title: Unmanned Aircraft Systems (UAS) Operations at the University of Arizona Santa Rita Experimental Range, Pima County, Arizona.

Location: The University of Arizona (UA) Santa Rita Experimental Range (SRER), Sonoran Desert, Arizona

Proposed Action or Project Description:

DOE LM is proposing to fund the UA with a grant for research collaboration to use UAS to acquire multispectral imagery. Activities would occur at the UA SRER in Pima County, Arizona. Flights may cross over the northern tip of the Coronado National Forest in the Santa Rita Mountains; however, all flights would originate and end from the UA SRER. Different UAS multispectral calibration procedures would be tested to develop an optimal processing pipeline for deriving surface reflectance. UAS multispectral data would be compared to National Ecological Observatory Network data to determine optimal flight, calibration, and data-processing procedures. The proposed action would include planning, conducting UAS flights (data acquisition), and data evaluation. All UAS flights would be conducted by UA personnel. DOE LM/Legacy Management Support personnel would observe flight operations and assist with processing the data and reporting. Project personnel would travel via passenger vehicle from Tucson to the SRER, which will include highway travel and some driving on well-maintained and graded dirt roads. The UA's Draft Aviation Safety Program (ASP) would be reviewed by a certified DOE aviation manager. A final version of the ASP would be transmitted to DOE as part of the grant transmittal process. No aviation activities would commence until the required Flight Safety Program is approved by a certified DOE aviation manager and permission is received from LM to proceed with aviation activities. Proposed activities would commence in spring 2020 and extend intermittently through 2021.

Categorical Exclusion(s) Applied:

- A1: Routine DOE business actions
- B3.2 Aviation Activities.

For the complete DOE National Environmental Policy Act (NEPA) regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of Title 10 *Code of Federal Regulations* Section 1021 (10 CFR 1021).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

The proposal 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 proposal that may affect the significance of the environmental effects of the proposal.

The proposal 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.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized by the LM Director per DOE Policy 451.1), I have determined that the proposed action fits within the specified classes of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer Signature and
Determination Date

Tracy A. Ribeiro

Digitally signed by Tracy A.

Ribeiro

Date: 2020.04.22 12:30:51 -06'00'