



Environmental Review Form for Argonne National Laboratory

Form:	ANL-985
Version:	5
Your Form ID:	ANL-985-1205
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Date:	12/5/2018 11:55:08 AM
Created By:	Ritsche, Michael T.

Creator

Badge:	53492	Name:	Ritsche, Michael T.
Cost Center:	167	Division:	EVS
Job Title:	SGP Site Manager	Employee Type:	Regular Full-Time Exempt
Building:	240	Lab Extension:	2-1554

General Information

Project/Activity : Generic Categorical Exclusion (CX) for Use of UASs, UAS, TBS for Research Campaigns at
Title: the ARM Southern Great Plains Sites in Oklahoma and Kansas

ASO NEPA Tracking No.:	Type of Funding:	
B & R Code:	Identifying Number: 167	
SPP Proposal Number:	CRADA Proposal Number:	
Work Project Number:	ANL Accounting Number:	(Item 3a in Field Work Proposal)
Other (explain):		

List appropriate NEPA Owners:
Division: CLS NEPA Owner:

Financial Plans

To select a Financial Plan, click the magnifying glass icon to open a search window.

Cost Center: Project: Phase: Task:

Description of Proposed Action

The Department of Energy (DOE) Atmospheric Radiation Measurement (ARM) Southern Great Plains (SGP) user facility is seeking approval through the National Environmental Policy Act (NEPA) to allow the use of the following unmanned aircraft: - UASs-Unmanned Aerial System small (under 55lbs) to collect atmospheric data and imagery; - UAS-Unmanned Aerial System (>55lbs) to collect atmospheric data and imagery; and - TBS-Tethered Balloon System to collect atmospheric data and imagery. These systems will be used for a variety of climate and meteorological research campaigns measuring atmospheric variables including capturing IR and Visible imagery. The UAS will include both fixed wing and multirotor systems. The SGP is a user facility that offers high-quality data and simulations for atmospheric scientists to use from year-round instrumentation. Researchers from around the world supplement the continuous observations with guest instruments during field research campaigns or by requesting increases in the frequency of measurements. Data are used in a variety of ways from single observation analyses, to multi-observation process studies, to assimilation into Earth system models. ARM transmits all data gathered at the SGP to the ARM Data Center and they are made freely available for anyone to use. Operations of all UASs/UAS/TBS will be conducted according to an approved Federal Aviation Administration (FAA) Form 7711-1 Certificate of Waiver or Authorization for each UASs/UAS/TBS and an Argonne National Lab (ANL) Site Office and the Office of Aviation Management (OAM) approved Aviation Safety Plan for each specific campaign. Vance Air Force Base (AFB) Radar Approach Control (RAPCON) approvals are required for any operations conducted within Vance AFB 1B Military Operations Area (MOA) restricted airspace

Description of Affected Environment

The Southern Great Plains (SGP) observatory consists of in situ and remote-sensing instrument clusters arrayed across approximately 9,000 square miles in north-central Oklahoma and south Kansas (See attached document ARM SGP CF. AFs.

EFs.pdf) . The main hub of the SGP observatory is the heavily instrumented Central Facility southeast of Lamont, Oklahoma. The Central Facility is located 26 miles Northeast of Vance AFB and within the MOA restricted area that begins at 7000 ft AGL. The CF is also located approximately 11NM southwest of the Blackwell/Tonkawa municipal airport.

Potential Environmental Effects

- Attach explanation for each "yes" response near bottom of form.
- **See Instructions for Completing Environmental Review Form.**

Section A (Complete For All Projects)		Yes	No	Explanation
1.	Project evaluated for Pollution Prevention and Waste Minimization opportunities and details provided under items 2, 4, 6, 7, 8, 16, and 20 below, as applicable	<input type="radio"/>	<input checked="" type="radio"/>	
2.	Air Pollutant Emissions	<input type="radio"/>	<input checked="" type="radio"/>	
3.	Noise	<input type="radio"/>	<input checked="" type="radio"/>	
4.	Chemical/Oil Storage/Use	<input type="radio"/>	<input checked="" type="radio"/>	
5.	Pesticide Use	<input type="radio"/>	<input checked="" type="radio"/>	
6.	Toxic Substances Control Act (TSCA) Substances			
6a.	Polychlorinated Biphenyls (PCBs)	<input type="radio"/>	<input checked="" type="radio"/>	
6b.	Asbestos or Asbestos Containing Materials	<input type="radio"/>	<input checked="" type="radio"/>	
6c.	Other TSCA Regulated Substances	<input type="radio"/>	<input checked="" type="radio"/>	
6d.	Import or Export of Chemical Substances	<input type="radio"/>	<input checked="" type="radio"/>	
7.	Biohazards	<input type="radio"/>	<input checked="" type="radio"/>	
8.	Effluent/Wastewater (If yes, see question #12 and contact Peter Lynch (HSE) at 2-4582 or lynch@anl.gov)	<input type="radio"/>	<input checked="" type="radio"/>	
9.	Waste Management			
9a.	Construction or Demolition Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9b.	Hazardous Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9c.	Radioactive Mixed Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9d.	Radioactive Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9e.	Asbestos Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9f.	Biological Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9g.	No Path to Disposal Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9h.	Nano-material Waste	<input type="radio"/>	<input checked="" type="radio"/>	
10.	Radiation	<input type="radio"/>	<input checked="" type="radio"/>	
11.	Threatened Violation of ES&H Regulations or Permit Requirement	<input type="radio"/>	<input checked="" type="radio"/>	
12.	New or Modified Federal or State Permits	<input type="radio"/>	<input checked="" type="radio"/>	
13.	Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste	<input type="radio"/>	<input checked="" type="radio"/>	
14.	Public Controversy	<input type="radio"/>	<input checked="" type="radio"/>	
15.	Historic Structures and Objects	<input type="radio"/>	<input checked="" type="radio"/>	
16.	Disturbance of Pre-existing Contamination	<input type="radio"/>	<input checked="" type="radio"/>	
17.	Energy Efficiency, Resource Conserving, and Sustainable Design Features	<input type="radio"/>	<input checked="" type="radio"/>	
Section B (For Projects that Occur Outdoors)		Yes	No	
18.	Threatened or Endangered Species, Critical Habitats, and/or other Protected Species	<input type="radio"/>	<input checked="" type="radio"/>	
19.	Wetlands	<input type="radio"/>	<input checked="" type="radio"/>	
20.	Floodplain	<input type="radio"/>	<input checked="" type="radio"/>	
21.	Landscaping	<input type="radio"/>	<input checked="" type="radio"/>	
22.	Navigable Air Space	<input checked="" type="radio"/>	<input type="radio"/>	UAS and TBS will be flown at heights greater than 150 ft above ground level

23.	Clearing or Excavation	<input type="radio"/>	<input checked="" type="radio"/>	
24.	Archaeological Resources	<input type="radio"/>	<input checked="" type="radio"/>	
25.	Underground Injection	<input type="radio"/>	<input checked="" type="radio"/>	
26.	Underground Storage Tanks	<input type="radio"/>	<input checked="" type="radio"/>	
27.	Public Utilities or Services	<input type="radio"/>	<input checked="" type="radio"/>	
28.	Depletion of a Non-Renewable Resource	<input type="radio"/>	<input checked="" type="radio"/>	
Section C (For Projects Outside of ANL)		Yes	No	
29.	Prime, Unique, or Locally Important Farmland	<input type="radio"/>	<input checked="" type="radio"/>	
30.	Special Sources of Groundwater (such as sole source aquifer)	<input type="radio"/>	<input checked="" type="radio"/>	
31.	Coastal Zones	<input type="radio"/>	<input checked="" type="radio"/>	
32.	Areas with Special National Designations (such as National Forests, Parks, or Trails)	<input type="radio"/>	<input checked="" type="radio"/>	
33.	Action of a State Agency in a State with NEPA-type Law	<input type="radio"/>	<input checked="" type="radio"/>	
34.	Class I Air Quality Control Region	<input type="radio"/>	<input checked="" type="radio"/>	

Categorical Exclusion

Other (Use field below to enter other categorical exclusion)
 Atmospheric and Environmental Research

ANL NEPA Reviewer Use Only

- My approval is the final approval necessary
 This form requires additional approval from DOE

To be Completed by DOE/ASO

Section D	Yes	No
Are there any extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal?	<input type="radio"/>	<input checked="" type="radio"/>
Is the project connected to other actions with potentially significant impacts or related to other proposed action with cumulatively significant impacts?	<input type="radio"/>	<input checked="" type="radio"/>
If yes, is a categorical exclusion determination precluded by 40 CFR 1506.1 or 10 CFR 1021.211?	<input type="radio"/>	<input type="radio"/>
Can the project or activity be categorically excluded from preparation of an Environment Assessment or Environmental Impact Statement under Subpart D of the DOE NEPA Regulations?	<input checked="" type="radio"/>	<input type="radio"/>
If yes, indicate the class or classes of action from Appendix A or B of Subpart D under which the project may be excluded: The project may be excluded under the following category of Part 1021, Subpart D, Appendix B: B3.2 Aviation activities.		
If no, indicate the NEPA recommendation and class(es) of action from Appendix C or D to Subpart D to Part 1021 of 10 CFR.		

Attachments

File Description: Map of ARM SGP Facilities [View Attachment](#)

Comments

This ERF CX approval is tracked as ASO-CX-359.

Add Approver

Approver Name	Approver Badge	Reason	Delete

Notifications

The approval notification email will be copied to the people listed below.

Badge	Name	Division	Delete
298291	Erlenbeck, Sean R	ESH	

ASO-CX Number

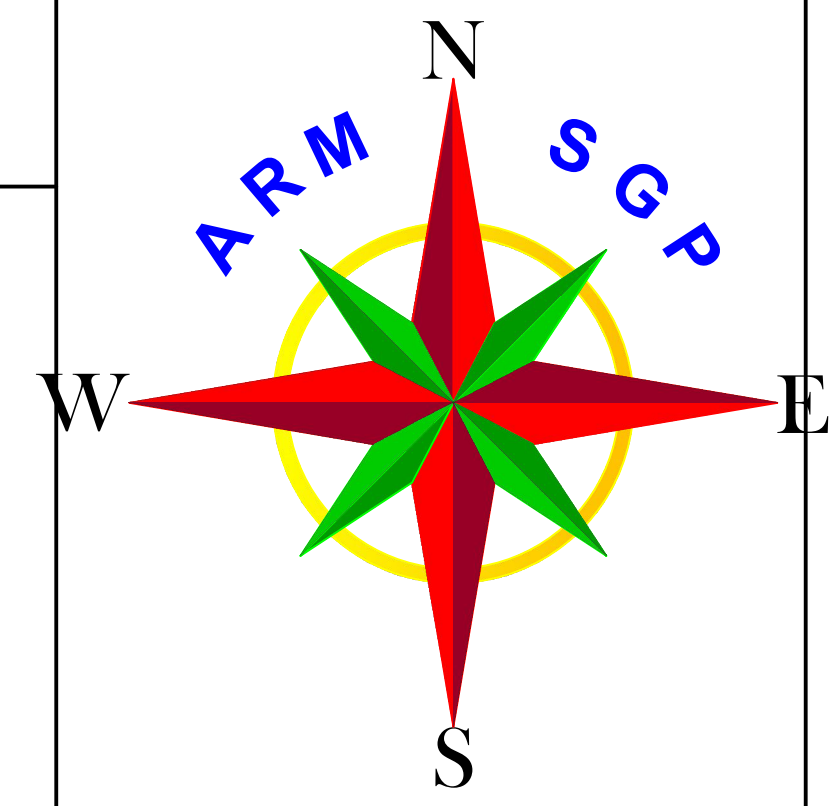
ASO-CX- 359

Comments:

This DOE ERF CX approval is tracked as ASO-CX-359.

Approval

<u>Approver</u>	<u>Action</u>	<u>Date Routed</u>	<u>Action Date</u>	<u>Approval Reason / Comments</u>	<u>Approval Type</u>
Ritsche, Michael T.	APPROVED	2018-12-05	2018-12-05 11:56:34.0	Creator :	PRIMARY
Ritsche, Michael T.	APPROVED	2018-12-05	2018-12-05 11:56:34.0	Allows access to the form :	PRIMARY
Ritsche, Michael T.	APPROVED	2018-12-05	2018-12-05 11:56:34.0	Project Manager :	PRIMARY
Rodi, Diane J.	APPROVED	2018-12-05	2018-12-05 12:09:47.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
Ptak, Jill S.	APPROVED	2018-12-05	2018-12-14 16:41:16.0	ANL NEPA Reviewer :	PRIMARY
Hellman, Karen B.	APPROVED	2018-12-14	2018-12-14 17:07:44.0	ANL-985 Review and Approval :	PRIMARY
Stine, Gail Y.	APPROVED	2018-12-14	2018-12-20 10:11:05.0	ANL-985 Review and Approval :	PRIMARY
Lee, Alice J. for Kearns, Paul K.	APPROVED	2018-12-20	2018-12-20 12:59:54.0	ANL-985 ANL COO Review and Approval :	DELEGATE
Joshi, Kaushik N.	APPROVED	2018-12-20	2019-01-07 14:21:13.0	ANL-985 DOE-ASO Review and Approval : Tracked as ASO-CX-359.	PRIMARY
Siebach, Peter Rudolf	APPROVED	2019-01-07	2019-01-10 17:07:51.0	ANL-985 DOE NEPA Compliance Officer Review and Approval :	PRIMARY



EF31 Anthony, KS
61.3 Miles
ecor

EF9 Ashton, KS
38.4 Miles
ebbr,irt,mfrsr
sirs,smos,swats

EF34 Maple City, KS
51.5 Miles
ebbr

EF11 Byron, OK
48.1 Miles
irt,mfrsr,sirs,
smos,swats

EF32 Medford, OK
23.5 Miles
ebbr

EF33 Newkirk, OK
31.6 Miles
ecor

EF12 Pawhuska, OK
61 Miles
ebbr,irt,mfrsr,
sirs,swats

AF6 Deer Creek, OK
X-SAPR
11.7 Miles

AF7 Nardin, OK
C-SAPR
13.3 Miles

AF10 Lamont, OK
RWP
8.8 Miles

AF8 Tonkawa, OK
RWP
9.1 Miles

EF15 Ringwood, OK
45.9 Miles
ebbr,irt,mfrsr
sirs,smos,swats

AF5 Garber, OK
X-SAPR
9.8 Miles

AF4 Billings, OK
X-SAPR
7.2 Miles

EF37 Waukomis, OK
31.8 Miles
ecor

AF9 Billings, OK
RWP
9.6 Miles

EF36 Marshall, OK
33.7 Miles
ebbr

EF38 Omega, OK
63 Miles
ecor

EF35 Tryon, OK
56.4 Miles
ebbr

EF21 Okmulgee, OK
104.8 Miles
ecor,irt,
sirs,smos

ARGONNE NATIONAL LABORATORY		ARM SGP	
CF, AFs, EFs, and TRADEWIND ENERGY WIND FARM			
DRAWN BY: LJS	SIZE: D	DWG NO.	REV
	SCALE: N/A	TOLERANCE: +/- 1.5%	SHEET