



Environmental Review Form for Argonne National Laboratory

<b>Form:</b>	ANL-985
<b>Version:</b>	4
<b>Your Form ID:</b>	ANL-985-779
<b>Form Status:</b>	Approved
<b>Date:</b>	9/2/2016 8:39:53 AM
<b>Created By:</b>	Rodi, Diane J.

**Creator**

Badge:	49281	Name:	Kemner, Kenneth M.
Cost Center:	110	Division:	BIO
Job Title:	Senior Physicist, Group Leader	Employee Type:	Regular Full-Time Exempt
Building:	203	Lab Extension:	2-1163

**General Information**

Project/Activity Title: Integrating Atmospheric, Ecological, and Biogeochemical Monitoring in Wetlands

ASO NEPA Tracking No.: \_\_\_\_\_ Type of Funding: LDRD

B & R Code: \_\_\_\_\_ Identifying Number: 2017-051-N0

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: BIO NEPA Owner: \_\_\_\_\_

**Cost Code**

Task: Center: Project: Activity:

**Description of Proposed Action**

PI is developing a research team and high frequency environmental sampling platform that integrates biogeochemistry and omics--based approaches with atmospheric monitoring capabilities at Argonne to explore the link between sediment-water microbial biogeochemistry of wetlands and atmospheric Green House Gases (GHGs). Towards that end the PI and his research team will require access to wet lands on site at Argonne to collect environmental samples for downstream analysis of soil/water chemistry, GHG production, and microbial community composition and function. Work to be conducted at the wet land locations consists solely of collecting environmental samples. Downstream environmental analyses at Argonne all fall under the scope of the current ASO-CX-298 for BSL1 and 2 work. This ERF is intended to solely cover the environmental sampling aspect of this project.

**Description of Affected Environment**

Argonne wet lands areas are specifically required under the scope of work and the interests of the DOE's Biological and Environmental Research Office. Early work (e.g. within the first 6 months) will involve the identification of the specific spots to be sampled within the wet land areas on site. Discovery of the Hine's emerald dragonfly in the Midwest, including IL, and its designation as an endangered species, raises concerns regarding habitat disruption during this project. The PI will avoid the wet lands area where this dragonfly species is most likely to occur (see attached map and designated area in green), limit the size of the samples to golf ball-sized or smaller, return all unused samples to their site of origin by scattering in that area, and maintain contact with the Argonne NEPA Reviewer to ensure that project procedures continue to comply with any future policies developed to protect threatened and endangered species habitats.

**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 checked="" type="radio"/>	<input type="radio"/>	Any waste generated will be at the Argonne site within the PI's laboratory space. Hazardous RCRA wastes generated will be stored within the PI's SAA and sent out through WM.
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.	<b>Toxic Substances Control Act (TSCA) Substances</b>			
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 (FMS-SEP) at 2-4582 or lynch@anl.gov)	<input type="radio"/>	<input checked="" type="radio"/>	
9.	<b>Waste Management</b>			
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"/>	
<b>Section B (For Projects that Occur Outdoors)</b>		<b>Yes</b>	<b>No</b>	
18.	Threatened or Endangered Species, Critical Habitats, and/or other	<input checked="" type="radio"/>	<input type="radio"/>	The PI will avoid sample collection within the designated green area on the attached map as that will most likely be identified in the future as a protected wetland habitat area. The PI will avoid streams/water flows and their

	Protected Species			corresponding banks from foot traffic and avoid direct sampling in those areas. Unused samples will be returned to their original location after testing.
19.	Wetlands	<input checked="" type="radio"/>	<input type="radio"/>	The sites at Argonne to be sampled are designated wet lands as required for the scope of work. Activities within the wet lands will consist of walking/wading in the wetlands (water typically up to about shin level). Sample volumes typically will be the size of a golf ball or much smaller.
20.	Floodplain	<input type="radio"/>	<input checked="" type="radio"/>	
21.	Landscaping	<input type="radio"/>	<input checked="" type="radio"/>	
22.	Navigable Air Space	<input type="radio"/>	<input checked="" type="radio"/>	
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"/>	
<b>Section C (For Projects Outside of ANL)</b>		<b>Yes</b>	<b>No</b>	
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

#### 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

<b>Section D</b>		<b>Yes</b>	<b>No</b>
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: 10 CFR, Part 1021 (NEPA Implementing Procedures), Subpart D, Appendix B, B3.16 Research activities in aquatic environments.			
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:** Area on site likely to be identified as a protected wetlands habitat [View Attachment](#)

**File Description:** Identified endangered species on site [View Attachment](#)

## Comments

This is a new scope of work LDRD project with the ultimate goal of acquiring long term funding within DOE BER's Next Generation Ecosystem Experiment.

## 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
215793	Hickmon, Nicki L.	EVS	
32474	Gaspar, William R.	EVS	
58262	Sullivan, Casey J.	FMS	

## ASO-CX Number

### ASO-CX- 332

Comments:

This ERF is approved under Appendix B 3.16 Research activities in aquatic environments. It is tracked as ASO-CX-332.

## Approval

<u>Approver</u>	<u>Action</u>	<u>Date Routed</u>	<u>Action Date</u>	<u>Approval Reason / Comments</u>	<u>Approval Type</u>
Rodi, Diane J.	APPROVED	2016-09-14	2016-09-14 11:05:18.0	Creator :	PRIMARY
Rodi, Diane J.	APPROVED	2016-09-14	2016-09-14 11:05:18.0	Allows access to the form :	PRIMARY
Kemner, Kenneth M.	APPROVED	2016-09-14	2016-09-14 12:50:34.0	Project Manager :	PRIMARY
Rodi, Diane J.	APPROVED	2016-09-14	2016-09-14 11:05:18.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
Kosky, Karen M.	APPROVED	2016-09-14	2016-09-14 13:01:10.0	ANL NEPA Reviewer :	PRIMARY
Hellman, Karen B.	APPROVED	2016-09-14	2016-09-16 11:06:27.0	ANL-985 Review and Approval :	PRIMARY
Stine, Gail Y.	APPROVED	2016-09-16	2016-09-20 08:50:05.0	ANL-985 Review and Approval :	PRIMARY
Kearns, Paul K.	APPROVED	2016-09-20	2016-09-20 13:09:55.0	ANL-985 ANL COO Review and Approval :	PRIMARY
Joshi, Kaushik N.	APPROVED	2016-09-20	2016-09-23 14:17:19.0	ANL-985 DOE-ASO Review and Approval : <b>This ERF approved as ASO-CX-332.</b>	PRIMARY
Siebach, Peter R.	APPROVED	2016-09-23	2016-09-23 16:27:00.0	ANL-985 DOE NEPA Compliance Officer Review and Approval :	PRIMARY