



**Environmental Review Form for Argonne National Laboratory**

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<b>Version:</b>	4
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<b>Created By:</b>	Sydelko, Thomas G.

**Creator**

Badge:	<b>45884</b>	Name:	<b>Sydelko, Thomas G.</b>
Cost Center:	<b>208</b>	Division:	<b>FMS</b>
Job Title:	<b>Consultant</b>	Employee Type:	<b>Non-Regular Full-Time Non-Exempt</b>
Building:	<b>214</b>	Lab Extension:	<b>2-3309</b>

**General Information**

Project/Activity Title: Indoor Bench-Scale Research Projects and Conventional Laboratory Operations

ASO NEPA Tracking No.: \_\_\_\_\_ Type of Funding: DOE, SSP, or CRADA

B & R Code: \_\_\_\_\_ Identifying Number: N/A

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: \_\_\_\_\_

Division: EGS NEPA Owner: \_\_\_\_\_

Division: PSC NEPA Owner: \_\_\_\_\_

Division: PSE NEPA Owner: \_\_\_\_\_

Division: FMS NEPA Owner: \_\_\_\_\_

**Cost Code**

Task: Center: Project: Activity:

**Description of Proposed Action**

All proposed actions will be indoor bench-scale research projects and conventional laboratory operations conducted in existing buildings at Argonne. Specifically, bench-scale chemical, biological, and physical studies, experiments and related activities including the assembly/ disassembly of experimental instrumentation and research equipment are within the scope of the proposed actions. However, construction work including the installation of utilities and minor modifications in existing laboratory spaces needed to prepare for bench-scale research must be documented through a Site-Wide Installation/Maintenance Activity Categorical Exclusion determination. This categorical exclusion determination does not apply to the following activities: - Research activities that take place in areas or laboratories of historical significance unless these activities are excluded by the Argonne Cultural Resources Management Plan with the Illinois Historical Preservation Agency. - Research activities that require major building renovations or additions. - Research activities that require either: for nuclear facilities, a new or revised Documented Safety Analysis(es), or for accelerator facilities a new or revised Safety Assessment Document(s). - Biosafety level (BSL) work. For coverage of BSL work please refer to ASO-CX-298 for the requirements. - Research activities that generate "No Path Forward" wastes. - Research activities that emit a radioactive emission not included in the Argonne Title V permit. - Research activities that require new or modified regulatory permits. - Pilot-scale or production activities to verify a concept or demonstrate a process. - Any research experiment, measurement, or test that would use more than five gallons of liquid chemicals or five pounds of solid chemicals. See the storage requirements for acutely hazardous waste in Section III.A.4: Chemical Storage/Use and Section III.A.9: Waste Management. - Management of petroleum or non-petroleum products such as motor oil or vegetable oil equal to or greater than 30 gallons. - Construction of new emissions sources that are not bench-scale R&D or that involves radioactive emissions.

**Description of Affected Environment**

All proposed activities will be conducted indoors in existing bench-scale laboratory spaces.

## 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"/>	See individual explanations below.
2.	Air Pollutant Emissions	<input checked="" type="radio"/>	<input type="radio"/>	Some bench-scale research activities may emit low levels of hazardous air pollutants or criteria pollutants but are considered an insignificant activity under the Argonne Title V permit. Radionuclides can be used if they are currently permitted for use.
3.	Noise	<input checked="" type="radio"/>	<input type="radio"/>	None of the proposed research activities will increase outdoor noise levels over background. Experimental equipment assembly work allowed under this categorical exclusion may generate intermittent noise levels that would require hearing protection.
4.	Chemical/Oil Storage/Use	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve the use and storage of chemicals. The amount of chemicals used in a single experiment, measurement, or test will be limited to five gallons of hazardous liquid and five pounds of hazardous solid. The production, acquisition, storage, or use of chemicals will follow the requirements outlined in applicable LMS procedures. This includes following the import/export requirements under the TSCA procedures. The proposed activities may involve the use and storage of nanomaterials which will be monitored and approved by ESQ-IH in accordance with LMS-PROC-83 (Safe Handling of Nanomaterials) and the applicable LMS-PROC-200 (Local Work Planning and Control Implementing Procedures.) processes. Any change in the project requires a review of the NEPA documentation. If project scope changes are identified, new NEPA documentation is required.
5.	Pesticide Use	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve the use of pesticides for research. The material Pesticide handling will follow LMS-PROC-281 (Federal Insecticide, Fungicide, and Rodenticide Act Compliance.) the applicable LMS procedures of use, storage and disposal. Application of pesticides is monitored and controlled under ARG-CX-121 (Miscellaneous Routine Custodial Activities.)
6.	<b>Toxic Substances Control Act (TSCA) Substances</b>			
6a.	Polychlorinated Biphenyls (PCBs)	<input checked="" type="radio"/>	<input type="radio"/>	Any PCBs associated with the proposed activities will be limited to use of analytical standards and work with laboratory scale quantities of PCB- contaminated materials. PCB material and PCB contaminated items such as instruments and equipment will be transported, labeled, stored, and disposed in accordance with the requirements outlined in LMS-PROC-121 (Management of Polychlorinated Biphenyls.)
6b.	Asbestos or Asbestos Containing Materials	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve generation of asbestos waste. The waste will be accumulated, managed, and documented in accordance with LMS-PROC 164 (Asbestos Abatement.) Generators will consult with Waste Management Industrial Hygiene personnel before the generation of these waste streams. Personnel who generate waste and those who prepare waste requisitions are required to complete the chemical waste generator training.
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 checked="" type="radio"/>	<input type="radio"/>	The proposed activities may generate liquid effluent but only in areas for which there are proper drainage connections to ANL wastewater treatment systems. Potential radioactive and non-radioactive chemical laboratory process wastewater will be accumulated, managed, and documented in accordance with LMS-PROC-121 (Monitoring Radiological Retention Tanks) and LMS-PROC-122 (Water Pollution Control.)
9.	<b>Waste Management</b>			
9a.	Construction or Demolition Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9b.	Hazardous Waste	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve generation of hazardous waste. The waste will be accumulated, managed, and documented in accordance with WMO-PROC 37 (Packaging of Hazardous Waste and Non-Hazardous Waste.) Acutely Hazardous Waste storage is limited to 1 quart in a Satellite Accumulation Area. Generators will consult with Waste Management personnel for storage of acutely hazardous waste and before the generation of unusual or difficult waste streams. Personnel who generate waste and those who prepare waste requisitions are required to complete the chemical waste generator training.
9c.	Radioactive Mixed Waste	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve generation of radioactive mixed waste. The waste will be accumulated, managed, and documented in accordance with LMS-PROC 310 (Radioactive Waste Disposal.) Generators will consult with Waste Management personnel before the generation of unusual or difficult waste streams. Personnel who generate waste and those who prepare waste requisitions are required to complete the chemical waste generator and radioactive waste generator training.
9d.	Radioactive Waste	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve generation of radioactive waste. The waste will be accumulated, managed, and documented in accordance with LMS-PROC 310 (Radioactive Waste Disposal.) procedures. Generators will consult with Waste Management personnel before the generation of unusual or difficult waste streams. Personnel who generate waste and those who prepare waste requisitions are required to complete the required radioactive waste generator training in accordance with the requirements outlined in applicable LMS procedures.
9e.	PCB or Asbestos Waste	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve generation of PCB or asbestos waste. The waste will be accumulated, managed, and documented in accordance with LMS-PROC 126 (Management of Polychlorinated Biphenyls) and LMS-PROC 164 (Asbestos Abatement.) Generators will consult with Waste Management Industrial Hygiene personnel before the generation of these waste streams. Personnel who generate waste and those who prepare waste requisitions are required to complete the chemical waste generator training.
9f.	Biological Waste	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may generate biological waste. The waste will be accumulated, managed, and documented in accordance with LMS-PROC 37 (Packaging of Hazardous and Non-Hazardous Waste.) Generators will consult with Waste Management personnel before the generation of this waste. Personnel who generate waste and those who prepare waste requisitions are required to complete the chemical waste generator training.
9g.	No Path to Disposal Waste	<input type="radio"/>	<input checked="" type="radio"/>	
9h.	Nano-material Waste	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may generate nanomaterial waste. The waste will be accumulated, managed, and documented in accordance with LMS-PROC-224 (Handling of Nanomaterials for Disposition.) Personnel who generate waste and those who prepare waste requisitions are required to complete the required nanomaterial orientation training.
10.	Radiation	<input checked="" type="radio"/>	<input type="radio"/>	The proposed activities may involve use of radioactive materials or radiation-generating devices. Radiological protection will be provided in accordance with LMS-PROC 140 (Radiological Work Permit) Planned radiation exposures will follow the principle of "As Low as Reasonably Achievable" and will not exceed the Argonne administrative limits.
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"/>	
	Siting, Construction, or Major			

13.	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 checked="" type="radio"/>	<input type="radio"/>	These factors will be considered in the planning stage of the proposed research activities.
<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 Protected Species	<input type="radio"/>	<input type="radio"/>	
19.	Wetlands	<input type="radio"/>	<input type="radio"/>	
20.	Floodplain	<input type="radio"/>	<input type="radio"/>	
21.	Landscaping	<input type="radio"/>	<input type="radio"/>	
22.	Navigable Air Space	<input type="radio"/>	<input type="radio"/>	
23.	Clearing or Excavation	<input type="radio"/>	<input type="radio"/>	
24.	Archaeological Resources	<input type="radio"/>	<input type="radio"/>	
25.	Underground Injection	<input type="radio"/>	<input type="radio"/>	
26.	Underground Storage Tanks	<input type="radio"/>	<input type="radio"/>	
27.	Public Utilities or Services	<input type="radio"/>	<input type="radio"/>	
28.	Depletion of a Non-Renewable Resource	<input type="radio"/>	<input 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 type="radio"/>	
30.	Special Sources of Groundwater (such as sole source aquifer)	<input type="radio"/>	<input type="radio"/>	
31.	Coastal Zones	<input type="radio"/>	<input type="radio"/>	
32.	Areas with Special National Designations (such as National Forests, Parks, or Trails)	<input type="radio"/>	<input type="radio"/>	

33.	Action of a State Agency in a State with NEPA-type Law	<input type="radio"/>	<input type="radio"/>	
34.	Class I Air Quality Control Region	<input type="radio"/>	<input type="radio"/>	

### Categorical Exclusion

Other (Use field below to enter other categorical exclusion)

### ANL NEPA Reviewer Use Only

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

### Attachments

**File Description:** DOE ASO-CX-265 [View Attachment](#)

**File Description:** Cover memo to J. Livengood from P. Kearns [View Attachment](#)

### Comments

Please see cover memo to J. Livengood from P. Kearns in the attachment above. This ANL-985 is submitted as a revision to DOE ASO-CX-265 (Indoor Bench-Scale Research Projects and Conventional Laboratory Operations) generic site wide categorical exclusion dated April 6, 2010.

### 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

### ASO-CX Number

**ASO-CX- 325**

Comments:

This CX approval is periodic update of DOE ASO-CX-265.

### Approval

Approver	Action	Date Routed	Action Date	Approval Reason / Comments	Approval Type
Sydelko, Thomas G.	APPROVED	2016-01-08	2016-01-08 10:07:48.0	Creator :	PRIMARY
Sydelko, Thomas G.	APPROVED	2016-01-08	2016-01-08 10:07:48.0	Project Manager :	PRIMARY
Barkalow, Thomas	APPROVED	2016-01-08	2016-01-11 09:52:12.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
VanWermeskerken, Nancy	APPROVED	2016-01-08	2016-01-11 11:04:55.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
Brockner, William A.	APPROVED	2016-01-08	2016-01-14 07:04:32.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY

Rodi, Diane J.	APPROVED	2016-01-08	2016-01-08 14:20:20.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
Finder, Michael P.	APPROVED	2016-01-08	2016-01-11 07:56:28.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
Stauber, Joel V.	APPROVED	2016-01-14	2016-01-18 14:19:12.0	ANL NEPA Reviewer :	PRIMARY
Hellman, Karen B.	APPROVED	2016-01-18	2016-01-18 15:42:18.0	ANL-985 Review and Approval :	PRIMARY
Stine, Gail Y.	APPROVED	2016-01-18	2016-01-19 09:05:32.0	ANL-985 Review and Approval :	PRIMARY
Kearns, Paul K.	APPROVED	2016-01-19	2016-01-22 08:09:14.0	ANL-985 ANL COO Review and Approval :	PRIMARY
Joshi, Kaushik N.	APPROVED	2016-01-22	2016-03-15 15:23:44.0	ANL-985 DOE-ASO Review and Approval : <b>The tracking number of this CX approval is ASO-CX-325 and is periodic update of ASO-CX-265.</b>	PRIMARY
Siebach, Peter R.	APPROVED	2016-03-15	2016-03-15 15:41:04.0	ANL-985 DOE NEPA Compliance Officer Review and Approval :	PRIMARY

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