

**Engineer** 

# Environmental Review Form for Argonne National Laboratory

Form: ANL-985

Version: 4

Your Form ID: ANL-985-845 Form Status: Approved

**Date:** 2/21/2017 1:44:51 PM

Created By: Negri, Maria C.

Creator

Badge: 40330 Name: Negri, Maria C.

Cost Center: 155 Division: ES

Job Title: Principal Agronomist/Environmental Employee Type: Regular Full-Time Exempt

Building: 362 Lab Extension: 2-9662

**General Information** 

Project/Activity Title: Experimental Phytotechnology at the Koppers facility in Stickney, IL

ASO NEPA Tracking No.: Type of Funding: SPP

B & R Code: Identifying Number: P-17069

SPP Proposal Number: P-17069 CRADA Proposal Number:

Work Project Number: ANL Accounting Number: (Item 3a in Field Work Proposal)

Other (explain):

List appropriate NEPA Owners: Division: ES NEPA Owner:

**Cost Code** 

Task: Center: Project: Activity:

#### **Description of Proposed Action**

Koppers is currently leasing a property along the Illinois and Michigan Canal in Stickney, IL from the MWRD. This land, historically used since the early 1900s for industrial activities, has residual policiylic aromatic hydrcarbons (PAH) contamination from past creosote manufacturing in shallow soil. Parts of this property are in use as a transfer facility (active railroad and barge terminals are on the property); however much of the area, approximately 2 hectares (Ha), is now being considered for additional remediation. Argonne will: 1. Conduct a site evaluation, in collaboration with Koppers' Corporate Engineering department, of environmental conditions such as depth and extent of contamination, main contaminants and their concentrations, hydrogeological conditions, soil quality and suitability for plant growth, analysis of existing vegetation and soil). This assessment will include the supplementation of existing data with ad-hoc sample collection and investigations as needed. Argonne will provide instructions regarding sampling methods and suggest analytical labs in case the capability is not available within the Koppers network. 2. Develop a deployment plan, and a planting and experimental plan in which several different plants will be planted based on previous research, environmental conditions, and adaptation to local climate. Argonne will recommend to Koppers several plant suppliers and oversee site planting by a contractor 3. Develop and submit a monitoring and maintenance plan for the first five years from planting: 4. Assist Koppers in the installation of the experimental planting and monitoring infrastructure Manage the installed system, guide the collection of samples and retrieve monitoring data per monitoring plan, periodically inspect the planting for troubleshooting and progress recording 5. Prepare a yearly report.

## **Description of Affected Environment**

The research will be conducted on a piece of property alongside the Illinois Michigan Canal. The property, approximately 2 Ha, is owned by the Metropolitan Water Reclamation District of Greater Chicago and leased by Kopppers. The area is an old industrial site with legacy contamination and a barge/rail terminal which serves the Koppers plant. The site is a brownfield and the MWRD is interested in Koppers entering in an experimental remediation study as part of their lease renewal agreements.

#### **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		0	see respective fields		
2.	Air Pollutant Emissions		$\odot$			
3.	Noise		$\odot$			
4.	Chemical/Oil Storage/Use		$\odot$			
5.	Pesticide Use	0	$\odot$			
6.	Toxic Substances Control Act (TSCA) Substances					
	6a. Polychlorinated Biphenyls (PCBs)	•	0	PCBs and creosote components are part of the legacy soil contamination from Koppers and previous industries since the early 1900's		
	6b. Asbestos or Asbestos Containing Materials	$\circ$	⊚			
	6c. Other TSCA Regulated Substances	$\circ$	⊚			
	6d. Import or Export of Chemical Substances	0	⊙			
7.	Biohazards	О	$\odot$			
8.	Effluent/Wastewater (If yes, see question #12 and contact Peter Lynch (FMS-SEP) at 2-4582 or lynch@anl.gov)	0	•			
9.	Waste Management					
	9a. Construction or Demolition Waste	О	$\odot$			
	9b. Hazardous Waste	•	О	It is possible that ANL may collect soil samples, approx 2 lb each, which may be hazardous. All samples will be returned to Koppers for proper disposition after analysis.		
	9c. Radioactive Mixed Waste	О	$\odot$			
	9d. Radioactive Waste	0	$\odot$			
	9e. Asbestos Waste	0	$\odot$			
	9f. Biological Waste	0	⊙			
	9g. No Path to Disposal Waste	0	⊙			
	9h. Nano-material Waste	0	•			
10.	Radiation	0	⊙			
11.	Threatened Violation of ES&H Regulations or Permit Requirement		•			
12.	New or Modified Federal or State Permits	0	•			
13.	Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste	0	•			
14.	Public Controversy	0	•			
15.	Historic Structures and Objects	0	$\odot$			
16.	Disturbance of Pre-existing Contamination	•	0	Our project is studying ways to degrade existing contaminants through microbial activity and plant root interactions.		
17.	Energy Efficiency, Resource Conserving, and Sustainable Design Features	0	•			
	Section B (For Projects that Occur Outdoors)		No			
18.	Threatened or Endangered Species, Critical Habitats, and/or other Protected Species	0	•			
19.	Wetlands	О	$\odot$			
20.	D. Floodplain		$\odot$			
21.			$\odot$			
22.	Navigable Air Space	0	$\odot$			
23.	Clearing or Excavation	0	⊙			

24.	Archaeological Resources	0	⊚	
25.	Underground Injection	0	$\odot$	
26.	Underground Storage Tanks	0	$\odot$	
27.	Public Utilities or Services	0	⊚	
28.	Depletion of a Non-Renewable Resource	0	⊚	
Section C (For Projects Outside of ANL)		Yes	No	
29.	Prime, Unique, or Locally Important Farmland	О	$\odot$	
30.	Special Sources of Groundwater (such as sole source aquifer)	0	•	
31.	Coastal Zones	0	•	
32.	Areas with Special National Designations (such as National Forests, Parks, or Trails)	0	•	
33.	Action of a State Agency in a State with NEPA-type Law	0	•	
34.	Class I Air Quality Control Region	0	$\odot$	<u> </u>

#### **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

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?	0	•	
Is the project connected to other actions with potentially significant impacts or related to other proposed action with cumulatively significant impacts?	0	•	
If yes, is a categorical exclusion determination precluded by 40 CFR 1506.1 or 10 CFR 1021.211?	0	0	
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?	e	0	

If yes, indicate the class or classes of action from Appendix A or B of Subpart D under which the project may be excluded: DOE approves this ERF under the following category of 10 CFR, Part 1021, Subpart D, Appendix B: B 3.8 Outdoor terrestrial ecological and environmental research, and B 6.1 Cleanup actions

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: work scope View Attachment

#### Comments

In this project Argonne will limit itself to field monitoring and recommending work at the site. Any site preparation will be the responsibility of Koppers and its contractors. Koppers will be responsible for their own NEPA documentation on their site as required by existing regulations.

#### **Add Approver**

Approver Name	Approver Badge	Reason	Delete
Brocker, William A.	49659	NEPA manager for EGS	
Harris, Amy M.	49490	ES ESH rep	

## **Notifications**

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

Badge	Name	Division	Delete
49490	Harris, Amy M.	ES	
49659	Brocker, William A.	HSE	

# **ASO-CX Number**

## **ASO-CX-340**

Comments:

This ERF CX approval is tracked and published as ASO-CX-340

# **Approval**

• •						
<u>Approver</u>	<u>Action</u>	Date Routed	Action Date	ate Approval Reason / Comments		Approval Type
Negri, Maria C.	APPROVED	2017-02-27	2017-02-27 12:43:57.0	Creator :		PRIMARY
Negri, Maria C.	APPROVED	2017-02-27	2017-02-27 12:43:57.0	Allows access to the	ne form :	PRIMARY
Negri, Maria C.	APPROVED	2017-02-27	2017-02-27 12:43:57.0	Project Manager :		PRIMARY
Brocker, William A.	APPROVED	2017-02-27	2017-02-28 13:21:46.0	NEPA manager for	EGS:	PRIMARY
Harris, Amy M.	APPROVED	2017-02-27	2017-02-27 12:46:51.0	ES ESH rep : Will's corrections	Amy's and addressed.	PRIMARY
Brocker, William A.	APPROVED	2017-02-28	2017-02-28 13:21:46.0	NEPA Owner Appr Environmental Rev	-	PRIMARY
Ptak, Jill S.	APPROVED	2017-02-28	2017-03-03 13:52:55.0	ANL NEPA Review	ver:	PRIMARY
Hellman, Karen B.	APPROVED	2017-03-03	2017-03-09 09:39:07.0	ANL-985 Review a	nd Approval :	PRIMARY
Stine, Gail Y.	APPROVED	2017-03-09	2017-03-13 09:08:03.0	ANL-985 Review a	nd Approval :	PRIMARY
Lee, Alice J. for Kearns, Paul K.	APPROVED	2017-03-13	2017-03-13 09:17:31.0	ANL-985 ANL COO Approval :	O Review and	DELEGATE
Joshi, Kaushik N.	APPROVED	2017-03-13	2017-03-16 10:26:23.0	ANL-985 DOE-ASC Approval : Tra published as ASC	cked and	PRIMARY
Siebach, Peter R.	APPROVED	2017-03-16	2017-03-28 16:22:36.0	ANL-985 DOE NEI Officer Review and	•	PRIMARY