



Environmental Review Form for Argonne National Laboratory

Form:	ANL-985
Version:	4
Your Form ID:	ANL-985-785
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Date:	10/6/2016 12:08:52 PM
Created By:	Rodi, Diane J.

Creator

Badge:	59968	Name:	Sankaran, Rajesh
Cost Center:	145	Division:	MCS
Job Title:	Assistant Computer Scientist	Employee Type:	Regular Full-Time Exempt
Building:	240	Lab Extension:	2-3181

General Information

Project/Activity Title: Data-Driven Multiscale Coupled Urban Systems Modeling

ASO NEPA Tracking No.:	Type of Funding:
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: MCS NEPA Owner:

Cost Code

Task: Center: Project: Activity:

Description of Proposed Action

Current models used today to understand cities are not designed to investigate coupled urban systems in sufficient detail, and lack the capability to readily integrate the increasingly diverse machine-readable data, much less real-time sensor data. Initial work installing the Waggle sensor package in NYC covered under ASO-CX-320 "Waggle-Sidewalk- Lightweight Sensors for Urban Environments" will now be expanded to cover similar work in over 30 other installation locations including but not limited to the cities listed below. The Waggle sensor package includes embedded sensors and software which have been constructed on site in a dry lab. These devices are passive. They are sensor devices that read environmental and weather data. They are mounted on poles, buildings, or roofs. They have no emissions or chemical exhaust. Their environmental footprint in a field is a pole stuck in the ground or in a 5 gallon bucket of concrete on a roof. On poles or buildings they stick out about 10 inches, 20 feet up. Staff will provide Waggle packages to city employees for installation in their cities, and staff may or may not travel to those locations to provide field calibration. New York City, NY Boston, MA Washington, D.C., Montgomery County (MD), and Fairfax County (VA) Atlanta, GA Seattle, WA Portland, OR Denver, CO Chattanooga, TN Detroit, MI South Bend, IN Pittsburgh, PA Kansas City, KS and Kansas City, MO Schenectady, NY San Francisco, CA Dubai, UAE Delhi, IN Bristol, UK Newcastle, UK Hong Kong, CN Mexico City, MX Seoul, SK

Description of Affected Environment

Urban environments where minimal environmental impact is anticipated. The Waggle sensor package includes embedded sensors and software which have been constructed on site in a dry lab. These devices are passive. They are sensor devices that read environmental and weather data. They are mounted on poles, buildings, or roofs. They have no emissions or chemical exhaust. Their environmental footprint in a field is a pole stuck in the ground or in a 5 gallon bucket of concrete on a roof. On poles or buildings they stick out about 10 inches, 20 feet up.

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
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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.	<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 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 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 checked="" type="radio"/>	<input type="radio"/>	Each city will be installing the provided package onto existing city public infrastructure.
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**

Other (Use field below to enter other categorical exclusion)

Attached ASO-CX-320 below, B3.1

**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: Appendix B, B3.1, Site Characterization and Environmental Monitoring		
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:** ASO-CX-320 [View Attachment](#)

**File Description:**

**Comments**

**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
51695	Catlett, Charles Edward	MCS	
284298	Amacher, Jessica Anne	CLS	

**ASO-CX Number**

ASO-CX- 320r

Comments:

The ERF approved (as ASO-CX-320) in 2015 has been revised to include new locations. The work scope in the new locations (cities) remains the same.

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**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	2016-10-06	2016-10-06 16:14:25.0	Creator :	PRIMARY
Rodi, Diane J.	APPROVED	2016-10-06	2016-10-06 16:14:25.0	Allows access to the form :	PRIMARY
Sankaran, Rajesh	APPROVED	2016-10-06	2016-10-06 16:22:14.0	Project Manager :	PRIMARY
Rodi, Diane J.	APPROVED	2016-10-06	2016-10-06 16:14:25.0	NEPA Owner Approval for Argonne Environmental Review :	PRIMARY
Ptak, Jill S.	APPROVED	2016-10-06	2016-10-07 15:31:33.0	ANL NEPA Reviewer :	PRIMARY
Hellman, Karen B.	APPROVED	2016-10-07	2016-10-18 09:23:34.0	ANL-985 Review and Approval :	PRIMARY
Stine, Gail Y.	APPROVED	2016-10-18	2016-10-18 11:41:31.0	ANL-985 Review and Approval :	PRIMARY
Kearns, Paul K.	APPROVED	2016-10-18	2016-10-18 13:32:12.0	ANL-985 ANL COO Review and Approval :	PRIMARY
Joshi, Kaushik N.	APPROVED	2016-10-18	2016-11-01 14:36:39.0	ANL-985 DOE-ASO Review and Approval : <b>The work scope in this ERF remains the same, therefore it is approved under the same as ASO-CX-320.</b>	PRIMARY
Siebach, Peter R.	APPROVED	2016-11-01	2016-11-01 16:49:26.0	ANL-985 DOE NEPA Compliance Officer Review and Approval :	PRIMARY

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