



Department of Energy

Argonne Site Office
9800 South Cass Avenue
Argonne, Illinois 60439

AUG 09 2013

Dr. Eric Isaacs
Director, Argonne National Laboratory
President, UChicago Argonne, LLC
9700 South Cass Avenue
Argonne, IL 60439

Dear Dr. Isaacs:

SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DETERMINATION FOR ARGONNE NATIONAL LABORATORY (ARGONNE)

The Argonne Site Office (ASO) has approved the following as a categorical exclusion (CX) under the category of "B 3.6 Small-scale research and development, laboratory operations, and pilot projects."

- Nauticas Research Program (ASO-CX-299)

Therefore, no further NEPA review is required. However, if any modification or an expansion of the scope is made to the above project, additional NEPA review will be necessary.

Enclosed please find a copy of the approved Environmental Review Form (ERF) for the project. If you have any questions, please contact Kaushik Joshi of my staff at (630) 252-4226.

Sincerely,

Joanna M. Livengood
Site Manager

Enclosure:
As Stated

cc: J. Stauber, ANL, w/encl.
N. VanWermeskerken, ANL, w/encl.
L. Skubal, ANL, w/encl.
K. Joshi, ASO, w/encl.
M. McKown, DOE-CH, w/encl.
P. Siebach, DOE-CH, w/encl.

Environmental Review Form for Argonne National Laboratory

Click on the question mark for instructions, contacts, and additional information on specific line items (?)

Project/Activity Title: NAUTICAS

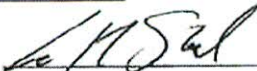
ASO NEPA Tracking No. ASO CX-299 **Type of Funding:** WFO


B&R Code _____

Identifying number: _____ **WFO proposal #** _____ **CRADA proposal #** _____

Work Project # _____ **ANL accounting # (item 3a in Field Work Proposal)** _____

Other (explain) _____

Project Manager: L. Skubal **Signature:**  **Date:** 7.31.13

NEPA Owner: N. Van Wermeskerken **Signature:**  **Date:** 7-31-13

ANL NEPA Reviewer: Joel Stauber **Signature:**  **Date:** 8/1/13

- I. **Description of Proposed Action:** The project involves detection of material using a radiation generating device. Various materials, ranging from 10 pounds to 200 pounds, will be used. These include, but are not limited to, sugar, vegetable oil, and cyanuric acid.
- II. **Description of Affected Environment:** The work will be conducted both on site and at various DoD sites. On site the work will be conducted in an old accelerator vault on the first floor of building 211. The material will be kept locked up with a limit to who has access to the vault. When the experiments are being conducted, the material of choice remains in sealed containers, and the vault door is closed. The vault is in a building that houses two active accelerators, which are in the basement, within their own vaults.

Once the research here is considered sufficient, the instrument and one of the materials will be shipped to a location chosen by the sponsor. Shipping of instrument and material will be per ANL and DOT regulations. Research there will be conducted by Argonne staff in water. The radiation generating device and the vacuum sealed containers of cyanuric acid will be placed in the water for testing of the device. There is no plan to open the containers of material during the experiments.

- III. **Potential Environmental Effects:** (Attach explanation for each "yes" response. See Instructions for Completing Environmental Review Form)

A. Complete Section A for all projects.

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 Yes No

The amounts used are required by the sponsor. There is no plan to release any material to the environment. The containers will be sealed and there are no combustibles present.

2. Air Pollutant Emissions Yes No

3. Noise Yes No

4. Chemical/Oil Storage/Use Yes No

The chemicals of interest are in the amount of 200 pounds, subdivided into smaller sealed packages.

5. Pesticide Use Yes No

6. Polychlorinated Biphenyls (PCBs) Yes No

7. Biohazards Yes No

8. Effluent/Wastewater (If yes, see question #12 and contact Gregg Kulma (FMS-SEP) at 2-9147 or gkulma@anl.gov) Yes No

9. Waste Management

a) Construction or Demolition Waste Yes No

b) Hazardous Waste Yes No

Will be disposed of per ANL Waste Management requirements.

c) Radioactive Mixed Waste Yes No

d) Radioactive Waste Yes No

e) PCB or Asbestos Waste Yes No

f) Biological Waste Yes No

g) No Path to Disposal Waste Yes No

h) Nano-material Waste Yes No

10. Radiation Yes No

11. Threatened Violation of ES&H Regulations or Permit Requirements Yes No

12. New or Modified Federal or State Permits Yes No

13. Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste Yes No
14. Public Controversy Yes No
15. Historic Structures and Objects Yes No
16. Disturbance of Pre-existing Contamination Yes No
17. Energy Efficiency, Resource Conserving, and Sustainable Design Features Yes No

B. For projects that will occur outdoors, complete Section B as well as Section A.

18. Threatened or Endangered Species, Critical Habitats, and/or other Protected Species Yes No
19. Wetlands Yes No
20. Floodplain Yes No
21. Landscaping Yes No
22. Navigable Air Space Yes No
23. Clearing or Excavation Yes No
24. Archaeological Resources Yes No
25. Underground Injection Yes No
26. Underground Storage Tanks Yes No
27. Public Utilities or Services Yes No
28. Depletion of a Non-Renewable Resource Yes No

C. For projects occurring outside of ANL complete Section C as well as Sections A and B.

29. Prime, Unique, or Locally Important Farmland Yes No
30. Special Sources of Groundwater (such as sole source aquifer) Yes No
31. Coastal Zones Yes No

Work will be done at a place of the sponsors choosing and will occur in water. At no time will there be any release of a chemical substance by Argonne employees. The radiation

generated by the device does not change the water or sediment. Sea water does not become activated upon irradiation. Aquatic life located within 180 cm from the device will receive a dose of 2.0 mrem/hr. It is unlikely that aquatic life will be within this short distance.

32. Areas with Special National Designations (such as National Forests, Parks, or Trails) Yes No

33. Action of a State Agency in a State with NEPA-type Law Yes No

34. Class I Air Quality Control Region Yes No

IV. Subpart D Determination: (to be completed by DOE/ASO)

Are there any extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal? Yes No

Is the project connected to other actions with potentially significant impacts or related to other proposed action with cumulatively significant impacts? Yes No

If yes, is a categorical exclusion determination precluded by 40 CFR 1506.1 or 10 CFR 1021.211? Yes No

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? Yes No

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 3.6 Small-scale research and development, laboratory operations, and pilot projects.

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.

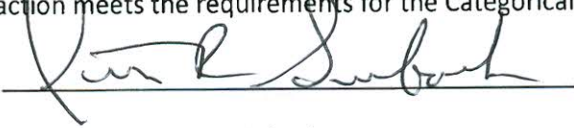
ASO NEPA Coordinator Review: Kaushik Joshi

Signature: K Joshi

Date: 8-6-2013

ASO NCO Approval of CX Determination:

The preceding pages are a record of documentation that an action may be categorically excluded from further NEPA review under DOE NEPA Regulation 10 CFR Part 1021.400. I have determined that the proposed action meets the requirements for the Categorical Exclusion identified above.

Signature: 

Date: 8/7/2013

Peter R. Siebach
Acting Argonne Site Office NCO

ASO NCO EA or EIS Recommendation:

Class of Action: _____

Signature: _____

Date: _____

Peter R. Siebach
Acting Argonne Site Office NCO

Concurrence with EA or EIS Recommendation:

CH GLD: _____

Signature: _____

Date: _____

ASO Manager Approval of EA or EIS Recommendation:

An ___ EA ___ EIS shall be prepared for the proposed _____ and
_____ shall serve as the document manager.

Signature: _____

Date: _____

Dr. Joanna M .Livengood

Manager