

Department of Energy

Argonne Site Office 9800 South Cass Avenue Argonne, Illinois 60439

MAY 1 9 2011

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 (ANL)

Argonne Site Office (ASO) has approved the following as a categorical exclusion (CX) under the category of "B 3.6 Siting/construction/operation/decommissioning of facilities for bench-scale research, conventional laboratory operations, small-scale research and development and pilot projects".

- Building 203 Upgrade and Operation of the Detector Laboratory (ASO-CX-288)

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, inengood

Dr. Joanna M. Livengood Manager

Enclosure: As Stated

cc: M. Kamiya, ANL/ESQ, 201, w/encl. B. DiGiovine, ANL/PHY, 203, w/encl. N. Van Wermeskerken, ANL/PSE, 208, w/encl.

Environmental Review Form for Argonne National Laboratory

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

(?)Project/Activity Title: Upgrade and Operation of the Detector Lab

(?)ASO NEPA Tracking No.		(?) Type of Funding : B&R Code <u>KB04</u>	
(?)Identifying number: Work Project # Other (explain)	WFO proposal # ANL accounting # (ite	CRADA prop m 3a in Field Work Prop	posal # osal)
(?)Project Manager: B. DiGiovi	ne Signature:	E.	Date: <u>5-10-11</u>
(?)NEPA Owner: N. A. Van We	rmeskerken_Signature: _	Vana a ermechakir	Date: <u>5-10-11</u>
ANL NEPA Reviewer: <u>M. A. Kan</u>	niya Signature?,	" Nunga	Date: 5/11/2011

I. (?)Description of Proposed Action: The proposed work project for the upgrade of the present detector lab will expand the capabilities and quality of work performed in order to better serve the Physics Division's experimental program. A clean room will be constructed to allow clean assembly, repair, and storage of the present stock of gaseous detectors, superheated liquid detectors, and Si and Diamond detectors. A wire bonding machine will also complement our upgrade to give in house capability of repairing and installing wire bonds on Si detectors for the upgrade of HELIOS as well as the repair of the present stock of Si detectors. Electronics and data acquisition systems will be implemented to allow for mobile testing of the detectors in the detectors lab as well as in place in the experimental areas. Gas handling systems, pumping stations and associated systems will be installed in the detector lab to allow for much more efficient testing of detector systems well ahead of installation in the actual experimental areas.

The new enclosure will be 12'x16'. It is listed as a Class 1000 ante room with a Class 100 clean room. The sides will be flexible plastic. The oscilloscope will be a table top scope, placed on a wheeled cart. The data acquisition system will be standard desk top computers.

II. <u>(?)Description of Affected Environment:</u> Building 203, room G018 is a basement lab near the ATLAS facility. It is primarily an electronics lab. The tile in part of the room is the old red asbestos tile. The plumbing has asbestos at the transitions, not on the straight runs. The pipes were tested for asbestos and the transitions have asbestos and the straight runs do not. There is a small amount of old, unused equipment that will be removed and excessed, recycled or disposed.

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



The components of the clean room will be premeasured and precut prior to being brought on site. The whole system is modular to allow ease of construction.

Yes X No

2. (?)Air Pollutant Emissions	Yes No <u>X</u>
3. (?)Noise	Yes <u>No X</u>
4. (?)Chemical/Oil Storage/Use	Yes X No
Alcohol will be used to clean the electronic parts.	
5. (?)Pesticide Use	Yes No <u>X</u>
6. (?) Polychlorinated Biphenyls (PCBs)	Yes <u>No X</u>
7. (?) Biohazards	Yes No <u>X</u>
8. (?)Liquid Effluent (wastewater)	Yes No <u>X</u>
9. (?)Waste Management	
 a) Construction or Demolition Waste The only anticipated waste will be of old equipment currently in the l will be precut prior to its arrival on site. 	Yes X No ab. The clean room
 b) Hazardous Waste Chemicals, such as alcohol, will be used to clean and dry the electron will be handled in accordance with the LMS Waste Managemen 	Yes <u>X</u> No ic parts. The waste t Procedures.
 c) Radioactive Mixed Waste d) Radioactive Waste e) PCB or Asbestos Waste The plumbing has asbestos at the transitions but not on the straight ru at this time that the pipes would need to be cut or removed. The required to have asbestos awareness training before they can wo floor tiles were confirmed to have asbestos. If the tiles are to be removed by trained certified workers and disposed of according Management Procedures. 	Yes No X Yes No X Yes No X Yes No X ns. It is not expected e contractors will be rk in the area. The removed, they will be to the LMS Waste
 f) Biological Waste g) No Path to Disposal Waste h) Nano-material Waste 	Yes No <u>X</u> Yes No <u>X</u> Yes No _X
10. (?)Radiation	Yes No <u>X</u>
11. (?) Threatened Violation of ES&H Regulations or Permit Requiremen	
	ts Yes <u>No X</u>
12. (?)New or Modified Federal or State Permits	ts Yes <u>No X</u> Yes <u>No X</u>
 (?)New or Modified Federal or State Permits (?)Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste 	ts Yes <u>No X</u> Yes <u>No X</u> Yes <u>No X</u>
 12. (?)New or Modified Federal or State Permits 13. (?)Siting, Construction, or Major Modification of Facility to Recover, Treat, Store, or Dispose of Waste 14. (?)Public Controversy 	ts Yes <u>No X</u> Yes <u>No X</u> Yes <u>No X</u> Yes <u>No X</u>
 12. (?)New or Modified Federal or State Permits 13. (?)Siting, Construction, or Major Modification of Facility to Recovery Treat, Store, or Dispose of Waste 14. (?)Public Controversy 15. (?)Historic Structures and Objects 	ts Yes <u>No X</u> Yes <u>No X</u> Yes <u>No X</u> Yes <u>No X</u> Yes <u>No X</u>

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- There is some legacy Radium contamination from a previous incident the occurred in the 1950's. Horizontal surface areas that are not usually disturbed, but maybe with construction, were surveyed. Small amounts of radioactivity were found on normally undisturbed surfaces. The readings were less than 100 dpm/cm². WMO will be requested to remove any material if the surveyed areas are to be disturbed during construction along with coverage by Health Physics. It will also be required that WMO use portable HEPA filtered systems during cleanup.
- 17. (?)Energy Efficiency, Resource Conserving,
 Yes X
 No

 and Sustainable Design Features
 Yes
 Yes

The project manager will research this subject when acquiring quotes and will balance with the cost, and needs of the project.

B. For projects that will occur outdoors, complete Section B as well as Section A. N\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 Se N\A	ctions A 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
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

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?

Is the project connected to other actions with potentially significant impacts or related to other proposed action with cumulatively significant impacts?

If yes, is a categorical exclusion determination precluded by 40 CFR 1506.1 or 10 CFR 1021.211?

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?

If yes, indicate the class or classes of action from Appendix A or B of Subpart D under which the project may be excluded. <u>B. 6 "Siting/construction/operation/decommissioning</u> of facilities for bench-scale research, conventional laboratory operations, small-scale research and development 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 N. Joshi

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Date: 5-18-2011

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: Peter R. Siebach Acting Argonne Site Office NCO

Date: 5/18/2011

Yes ____ No X

Yes No X

Yes No

Yes X No

ASO NCO EA or EIS Recommendation:

Class of Action:

Signature:

Peter R. Siebach Acting Argonne Site Office NCO

Concurrence with EA or EIS Recommendation:

CH GLD:

Signature:

rev. October 2010

Date:

Date:

ASO Manager Approval of EA or EIS Recommendation:

An _____EA ____EIS shall be prepared for the proposed ______and _____and _____shall serve as the document manager.

Signature: _____

Dr. Joanna M .Livengood Manager Date: _____