



**Environmental Review Form for Argonne
National Laboratory**

| | |
|----------------------|---------------------|
| Form: | ANL-985 |
| Version: | 4 |
| Your Form ID: | ANL-985-833 |
| Form Status: | Approved |
| Date: | 2/6/2017 1:29:31 PM |
| Created By: | McGhee, Jeffery |

Creator

| | | | |
|--------------|---|----------------|---------------------------------|
| Badge: | 44645 | Name: | McGhee, Jeffery |
| Cost Center: | 206 | Division: | NWM |
| Job Title: | Sr. Principal Safety and Compliance Specialist | Employee Type: | Regular Full-Time Exempt |
| Building: | 212 | Lab Extension: | 2-5712 |

General Information

Project/Activity Title: B203 2MeV Decommissioning Project
 ASO NEPA Tracking No.: 2544 Type of Funding: Laboratory
 B & R Code: Identifying Number: 01635
 SPP Proposal Number: CRADA Proposal Number:
 Work Project Number: wp03313 ANL Accounting Number: (Item 3a in Field Work Proposal)
 Other (explain):
 List appropriate NEPA Owners:
 Division: FMS NEPA Owner:

Cost Code

Task: 03313K1 Center: 208 Project: CSI Activity: 03313-K1-208

Description of Proposed Action

The scope of work is the removal of the 2 MeV Van De Graff Accelerator equipment from where it is installed in Building 203, P Wing, and disposition the equipment as appropriate and allowed. The equipment is no longer operating (out of service in 2013), and is not a permanent part or structure of Building 203 proper. The equipment removal includes the accelerator, beam line components, vacuum pumps, motors, an associated gas supply tank and wiring and conduit that supplied the power for the operations. It is not anticipated that there will be need for demolition of any portion of the structure as part of this dismantlement operation.

Description of Affected Environment

Building 203 P Wing interior

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 | <input checked="" type="radio"/> | <input type="radio"/> | Where possible metals will be recycled if they meet the free release criteria consistent with the Argonne Site Sustainability Plan. |

| | | | | | |
|----|-----|---|----------------------------------|----------------------------------|--|
| | | under items 2, 4, 6, 7, 8, 16, and 20 below, as applicable | | | |
| 2. | | Air Pollutant Emissions | <input checked="" type="radio"/> | <input type="radio"/> | As described in the decommissioning play all Sulfur Hexafluoride was removed from the system in 2013 and backfilled to 2 Psi with Nitrogen, thus this hazard has been removed from the system. Asbestos may be in the wiring or insulation of the equipment. Asbestos will be remediated by following the Laboratory procedures within the areas that are currently occupied (P Wing) by the accelerator and associated equipment, in accordance with the US and Illinois EPA requirements using trained and licensed personnel and controls for air release being HEPA filter systems. The Argonne SME for NESHAP reporting will be available if there are any discoveries of asbestos beyond that expected and planned for, and work will be paused to ensure that proper notifications and controls are in place prior to proceeding. |
| 3. | | Noise | <input type="radio"/> | <input checked="" type="radio"/> | |
| 4. | | Chemical/Oil Storage/Use | <input checked="" type="radio"/> | <input type="radio"/> | There are no plans to incorporate any materials that are not already present, and the only material that is possibly present is sulfur hexafluoride. |
| 5. | | Pesticide Use | <input type="radio"/> | <input checked="" type="radio"/> | |
| 6. | | Toxic Substances Control Act (TSCA) Substances | | | |
| | 6a. | Polychlorinated Biphenyls (PCBs) | <input checked="" type="radio"/> | <input type="radio"/> | While it is not expected that PCB's will be present, because of the age of the equipment (1963) it is possible to encounter an electrical component that contains PCB's. If encountered PCB containing wastes will be isolated, collected and controlled through the disposal process in accordance with the Laboratory waste management processes for TSCA regulated PCB waste. |
| | 6b. | Asbestos or Asbestos Containing Materials | <input checked="" type="radio"/> | <input type="radio"/> | Asbestos will be removed or disturbed during this project. It will be done in accordance with the controls if the IEPA permit and notification and using the Argonne procedures and controls established by the NWM division conducted by licensed staff under the observation of the Argonne Industrial Hygiene group. Work will utilize supplemental HEPA air filtration systems along with containment systems. In all cases these supplemental systems will remain in place until full clearances are given for each area consistent with the applicable regulations and guidelines. Notifications to the Illinois Environmental Protection Agency for start of asbestos work will be done consistent with the current Argonne procedures in consultation with Bob Utesch and the HEW Division Industrial Hygiene support team. |
| | 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. | | Waste Management | | | |
| | 9a. | Construction or Demolition Waste | <input checked="" type="radio"/> | <input type="radio"/> | The waste is dismantlement waste, but could be seen as demolition waste if there is a need to remove a shield block or two in order to allow removal of the beam transport and vacuum lines. Materials that are removed will be evaluated for recycling and directed accordingly to the waste streams as appropriate to minimize landfill or non reuse of materials. |
| | 9b. | Hazardous Waste | <input type="radio"/> | <input checked="" type="radio"/> | |
| | 9c. | Radioactive Mixed Waste | <input checked="" type="radio"/> | <input type="radio"/> | This is not anticipated due to the lower energy of the equipment, however without full knowledge of past use it is possible to encounter an activated metallic component that may fail a TCLP test for certain materials such as lead. Any material that is encountered that may meet this definition will be handled through the Argonne waste management processes to identify the handling, packaging and disposition in accordance with the RCRA and radioactive materials restrictions. |
| | | | | | These wastes will be generated within the building, and will be prepared to minimize the |

| | | | | |
|---|---|----------------------------------|----------------------------------|---|
| 9d. | Radioactive Waste | <input checked="" type="radio"/> | <input type="radio"/> | chance for release when systems are removed from service and dismantled. This will be accomplished by decontamination, dismantlement by tools rather than cutting, and fixing contamination in place where possible to reduce the potential for an environmental release during transit from installed locations to packaging locations. Size reduction will be accomplished whenever possible to lessen the number of shipments needed, thus reducing the potential risk to the public and the environment. Characterization will be done to determine if the waste is LLW with disposition pathways identified at DOE or commercial sites as appropriate to ensure that the waste meets all applicable waste acceptance criteria. |
| 9e. | Asbestos Waste | <input checked="" type="radio"/> | <input type="radio"/> | These tasks will be accomplished in accordance with the IEPA notification to the state and permits, by licensed staff and supervisors, using locally erected engineering controls to reduce the potential for spread and release of a NESHAP material into the environment. These activities will be monitored by the Argonne Industrial Hygiene group both for personnel exposure and controls, but also environmental and free release monitoring. |
| 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 checked="" type="radio"/> | <input type="radio"/> | The work will be done in accordance with the Argonne Health Physics Program compliant with 10 CFR 835, and following Argonne controls. |
| 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 checked="" type="radio"/> | <input type="radio"/> | The project was reviewed by the Argonne Cultural Resources Management who determined there was no culturally or historical significance. Report is attached. |
| 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"/> | |
| Section B (For Projects that Occur Outdoors) | | Yes | No | |
| 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 type="radio"/> | <input checked="" type="radio"/> | |
| 28. | Depletion of a Non-Renewable Resource | <input type="radio"/> | <input checked="" type="radio"/> | |
| Section C (For Projects Outside of ANL) | | Yes | No | |
| 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)

A project specific CX is required from DOE ASO for this proposed action.

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: DOE approves this ERF under the following categories of 10 CFR, Part 1021, Subpart D, Appendix B: B 1.23 Demolition and disposal of buildings B 1.16 Asbestos removal B 1.17 Polychlorinated biphenyl removal B 1.27 Disconnection of utilities | | |
| 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: decommissioning plan

[View Attachment](#)

Comments

Add Approver

| Approver Name | Approver Badge | Reason | Delete |
|-------------------|----------------|-----------------|--------------------------|
| Murdoch, Colin M. | 207696 | project manager | <input type="checkbox"/> |
| Rock, Cynthia M. | 48996 | program manager | <input type="checkbox"/> |

Notifications

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

| Badge | Name | Division | Delete |
|--------|-------------------|----------|--------------------------|
| 207696 | Murdoch, Colin M. | FMS | <input type="checkbox"/> |

ASO-CX Number

ASO-CX- 341

Comments:

DOE ASO and DOE Chicago track this ERF approval as ASO-CX-341.

Approval

| <u>Approver</u> | <u>Action</u> | <u>Date Routed</u> | <u>Action Date</u> | <u>Approval Reason / Comments</u> | <u>Approval Type</u> |
|-----------------------------------|---------------|--------------------|--------------------------|---|----------------------|
| McGhee, Jeffery | APPROVED | 2017-03-15 | 2017-03-15 09:11:44.0 | Creator : | PRIMARY |
| McGhee, Jeffery | APPROVED | 2017-03-15 | 2017-03-15 09:11:44.0 | Allows access to the form : | PRIMARY |
| McGhee, Jeffery | APPROVED | 2017-03-15 | 2017-03-15 09:11:44.0 | Project Manager : | PRIMARY |
| Rock, Cynthia M. | APPROVED | 2017-03-15 | 2017-03-15 10:24:27.0 | program manager : | PRIMARY |
| Murdoch, Colin M. | APPROVED | 2017-03-15 | 2017-03-15 10:08:29.0 | project manager : | PRIMARY |
| Matton, Philip B. | APPROVED | 2017-03-15 | 2017-03-22 15:19:52.0 | NEPA Owner Approval for Argonne Environmental Review : | PRIMARY |
| Ptak, Jill S. | APPROVED | 2017-03-22 | 2017-03-24 09:44:02.0 | ANL NEPA Reviewer : | PRIMARY |
| Hellman, Karen B. | APPROVED | 2017-03-24 | 2017-03-27 14:48:50.0 | ANL-985 Review and Approval : | PRIMARY |
| Stine, Gail Y. | APPROVED | 2017-03-27 | 2017-03-27 14:57:45.0 | ANL-985 Review and Approval : | PRIMARY |
| Lee, Alice J. for Kearns, Paul K. | APPROVED | 2017-03-27 | 2017-03-27 15:31:37.0 | ANL-985 ANL COO Review and Approval : | DELEGATE |
| Joshi, Kaushik N. | APPROVED | 2017-03-27 | 2017-03-30 14:46:56.0 | ANL-985 DOE-ASO Review and Approval : ASO-CX-341 | PRIMARY |
| Siebach, Peter R. | APPROVED | 2017-03-30 | 2017-04-03 16:12:36.0 | ANL-985 DOE NEPA Compliance Officer Review and Approval : | PRIMARY |