

ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Grantee/Contractor Laboratory: Princeton University/Princeton Plasma Physics Laboratory (PPPL)
Project/Activity Title: Removal of C-Site Motor Generator (MG) Equipment
NEPA Tracking No.: Type of Funding SC
B&R Code: Total Estimated Cost: \$0

DOE Cognizant Secretarial Officer (CSO): William F. Brinkman

Contractor Project Manager: Signature:
Date:

Contractor NEPA Reviewer: Jerry D. Levine
Signature:
Date: 2/11/10

I. Description of Proposed Action: The C-Site Motor Generator (MG) sets and equipment supported PPPL fusion experiments at C-Site from 1961 to the early 1990's. The MG sets were used to provide a means for energy storage such that power drawn from the utility at a controlled rate could be supplied to C-Site experiments in pulses of short durations. This action would remove the existing unused MG equipment from the C-Site MG Building. The removal would be conducted by a buyer (to be identified) who would remove the equipment for re-use or scrap at no cost to PPPL. Completion of this activity would allow future utilization of the space in the building. Work would involve the removal of approximately 4,475 tons of carbon steel and copper that would be recycled to the maximum extent possible, and about 300 lbs of other materials (e.g., non-asbestos pipe insulation, miscellaneous hardware) that would be disposed as domestic waste. In addition, about one-half cubic yard of asbestos insulation would be removed and disposed of by a certified asbestos contractor. Small quantities of items such as oily rags would be disposed as hazardous waste. Chemicals such as bearing oil, Freon, and carbon dioxide were previously removed from the equipment affected by this proposed action. Additional details on the equipment to be removed are provided on the attachments.

II. Description of Affected Environment: Work would take place in the C-Site Motor Generator (MG) Building (see attached map and figures). No environmentally sensitive resources would be affected.

III. Potential Environmental Effects: (Attach explanation for each "yes" response, and "no" responses if additional information is available and could be significant in the decision making process.)

A. Sensitive Resources: Will the proposed action result in changes and/or disturbances to any of the following resources?

Table with 2 columns: Resource description and Yes/No response. Resources include Threatened/Endangered Species, Wetlands, Archaeological/Historic Resources, etc. All responses are 'No'.

**B. Regulated Substances/Activities: Will the proposed action involve any of the following regulated substances or activities?**

	<u>Yes/No</u>
13. Clearing or Excavation (indicate if greater than 5 acres)	13. No
14. Dredge or Fill (under Clean Water Act section 404; indicate if greater than 10 acres)	14. No
15. Noise (in excess of regulations) <i>Hearing protection would be used if required (per the Industrial Hygienist).</i>	15. No
16. Asbestos Removal <i>About one-half cubic yard of asbestos insulation on cooling water piping would be removed.</i>	16. Yes
17. PCBs	17. No
18. Import, Manufacture or Processing of Toxic Substances	18. No
19. Chemical Storage/Use	19. No
20. Pesticide Use	20. No
21. Hazardous, Toxic, or Criteria Pollutant Air Emissions	21. No
22. Liquid Effluent	22. No
23. Underground Injection	23. No
24. Hazardous Waste <i>Waste such as oily rags would be disposed of as hazardous waste.</i>	24. Yes
25. Underground Storage Tanks	25. No
26. Radioactive (AEA) Mixed Waste	26. No
27. Radioactive Waste	27. No
28. Radiation Exposures	28. No

**C. Other Relevant Disclosures. Will the proposed action involve the following?**

	<u>Yes/No</u>
29. A threatened violation of ES&H regulations/permit requirements <i>Equipment would require application of proper electrical and/or mechanical safing procedures, including lockout/tagout. Removal activities would apply safety requirements of the PPPL ES&amp;H Manual and PPPL policies and procedures (e.g., hoisting and rigging). Appropriate personal protective equipment (e.g., hearing protection, hard hats, safety shoes, gloves, etc.) would be used. Work preplanning (e.g., job hazard analyses) to mitigate hazards would be conducted, and the area would be posted to limit unauthorized access.</i>	29. No
30. Siting/Construction/Major Modification of Waste Recovery, or TSD Facilities	30. No
31. Disturbance of Pre-existing Contamination	31. No
32. New or Modified Federal/State Permits	32. No
33. Public controversy	33. No
34. Action/involvement of Another Federal Agency (e.g. license, funding, approval)	34. No
35. Action of a State Agency in a State with NEPA-type law. (Does the State Environmental Quality Review Act Apply?)	35. No
36. Public Utilities/Services	36. No
37. Depletion of a Non-Renewable Resource	37. No

IV. **Section D Determination:** Is the project/activity appropriate for a determination under Subpart D of the DOE NEPA Regulations for compliance with NEPA?

Yes

**DOE-PSO NEPA Compliance Officer (NCO) Review:**

Concurrence with Proposed Class of Action Recommended

CX

EA

EIS

Category B1.16 Removal of Asbestos from Buildings

B1.23 Demolition and Subsequent Disposal of Buildings, Equipment and Support Structures

For Categorical Exclusions (CXs):

A. The proposed action fits within a class of actions that is listed in Appendix A or B to Subpart D.

For classes of actions listed in Appendix B, the following conditions are integral elements; i.e., to fit within a class, the proposal must not:

- 1) Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders;
- 2) Require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities;
- 3) Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or
- 4) Adversely affect environmentally sensitive resources.

B. There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal; and

C. The proposal is not "connected" to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

V. DOE Recommendation Approval:

SC GLD: ~~Irene Atney~~ Louis F. Sadler Signature: Louis F. Sadler  
Assistant Chief Counsel Date: 02/04/10

VI. NEPA Compliance Officer Subpart D CX Determination and Approval:

Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer, I have determined that the proposed action fits within the specified class of actions, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

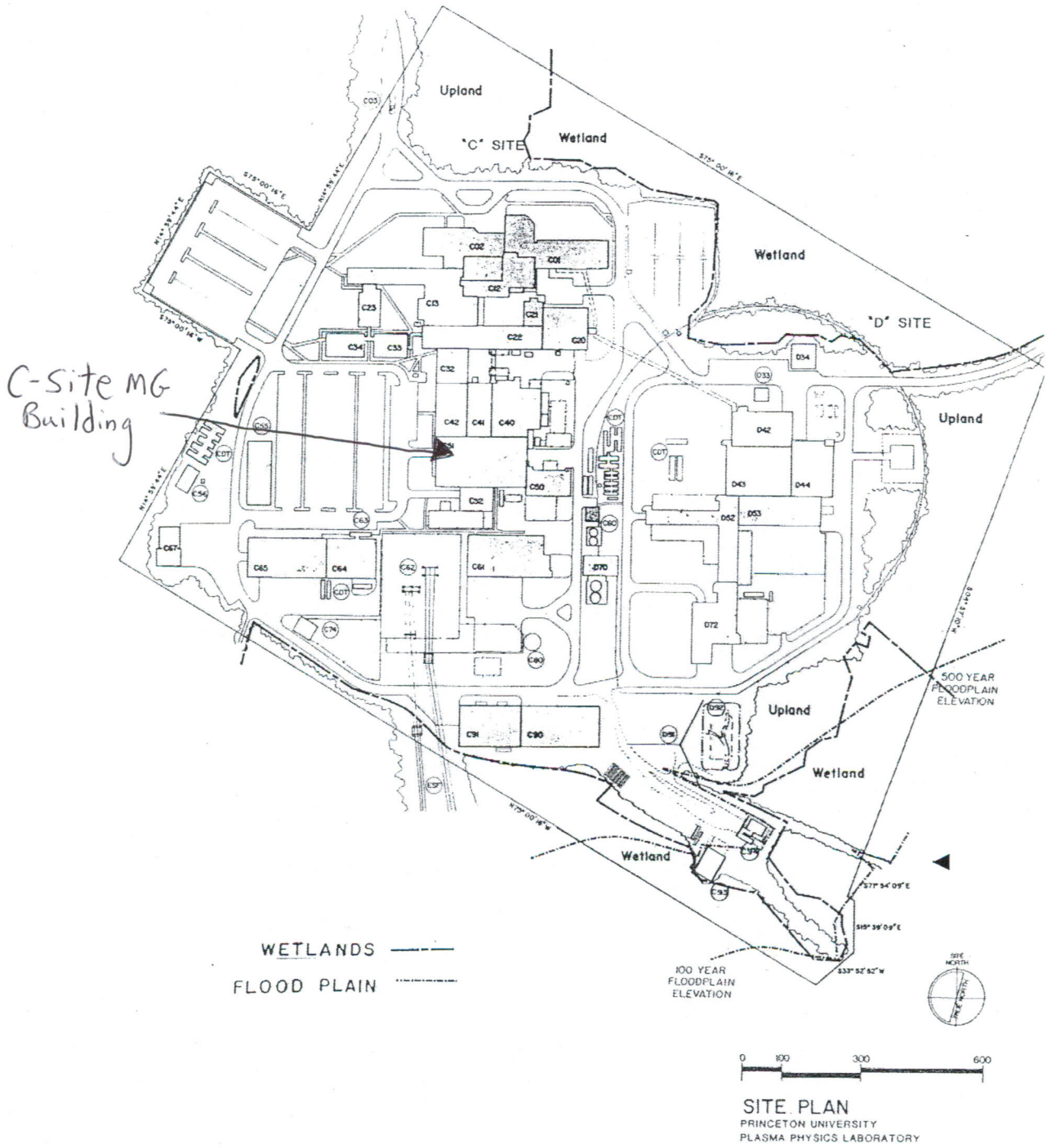
PSO NCO: H. Allen Wrigley Signature: [Signature]  
Date: February 2, 2010

## ADDITIONAL INFORMATION

### Removal of C-Site Motor Generator (MG) Equipment

The equipment that would be removed under this action includes:

- All MG sets/flywheels and associated switchgears
- All DC copper bus runs from each generator to the bus tunnels
- Duplex boards, including meter relays, recording instruments, annunciators and associated control wires
- Two DC control boards consisting of 31 panels containing DC field contactors, potentiometers & resistors, magnetic amplifiers, relays and meters
- Frequency converter
- 36 motorized DC disconnect switches
- All oil pumps and jacking pumps
- All oil tanks for each MG set and associated pipes and filters
- All cooling water pipes for each generator & its heat exchanger
- DC/AC relay control boards
- Transfer control panels & cables
- Blowers and air filters
- Small MG set (75 HP motor/50 KW DC Generator)
- Generator exciter sets (4)
- Dynamic Brakes for the MG Sets & associated switchgears
- Liquid Rheostats, control panel boards, heat exchangers
- Two Worthington chillers, 1750 HP each, including two evaporators (16' long, 4' OD and 46.5" ID) covered with asbestos insulation, and two condensers (6.5' long, 5' diameter each)
- 350 KW diesel generator (non-operable – formerly the C-Site diesel generator)
- OH cooling water system, including 8' x 11' aluminum tank, pump, filter, heat exchanger and piping
- 480 Volt motor control center
- Voltage regulator
- Two control/instrument panels for cooling water
- Carbon Dioxide (CARDOX) fire extinguisher system (for MG sets), including a 4 ton capacity CO<sub>2</sub> storage tank (CO<sub>2</sub> has been previously removed), compressor and associated piping, controls & alarms

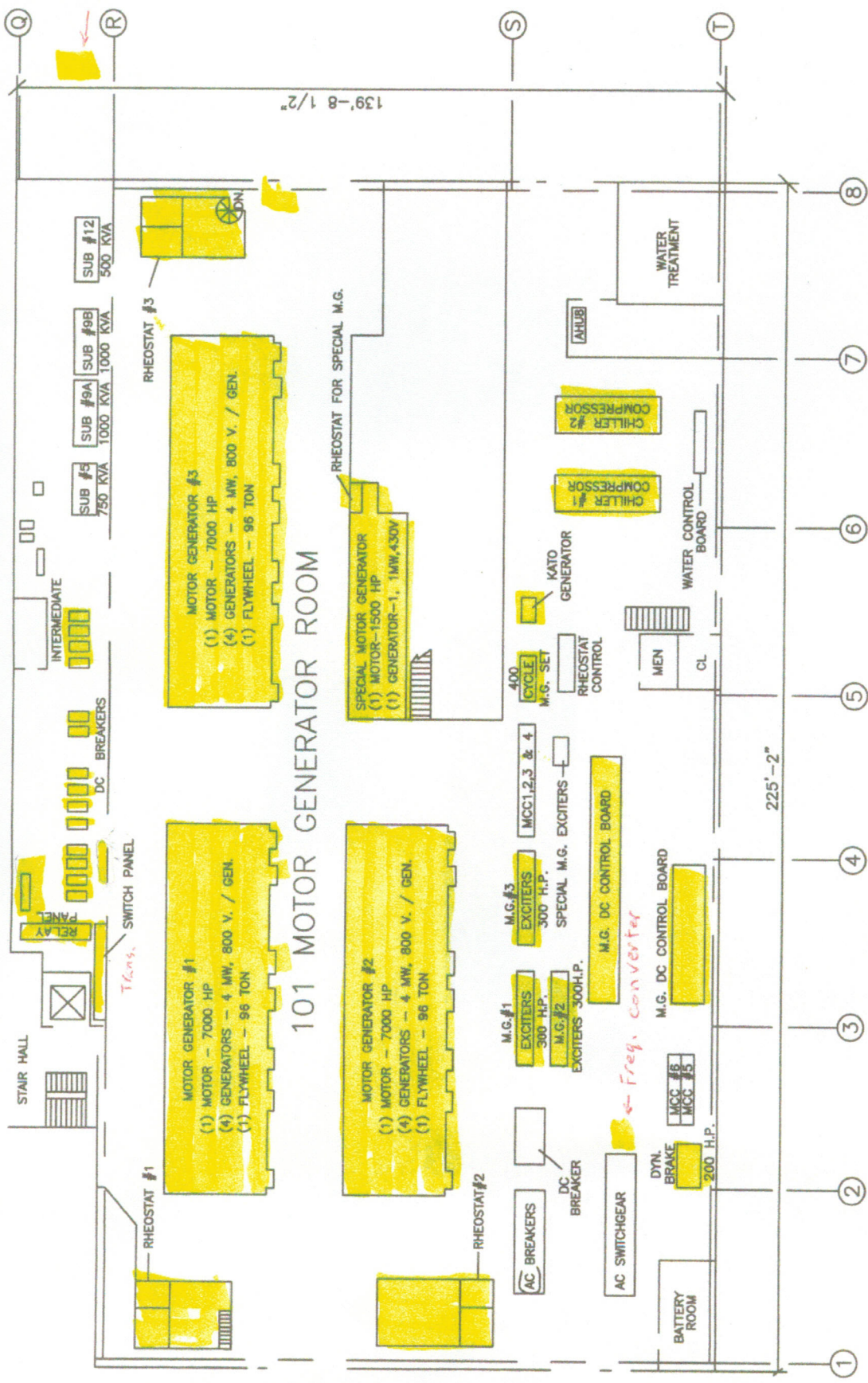


**PPPL Site Map – Floodplain and Wetlands Boundaries**

Printed copies of this document are considered UNCONTROLLED / Information Only copies. The official document is at [http://www.pppl.gov/eshis/PPPL\\_docs.shtml](http://www.pppl.gov/eshis/PPPL_docs.shtml) The Best Practices and Outreach Department maintains the signed original.

1  
2

CO<sub>2</sub> (Candax)  
Fire Prot.



BLDG. C51

C-site Motor Generator (MG) Building First Floor



BLDG. C51  
 C-site Motor Generator (MG) Building Basement