

ENVIRONMENTAL EVALUATION NOTIFICATION FORM

Grantee/Contractor Laboratory: Princeton University/Princeton Plasma Physics Laboratory (PPPL)

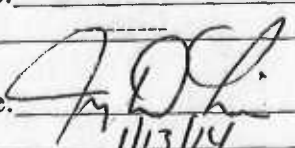
Project/Activity Title: Generic Categorical Exclusion: Routine Maintenance Activities

CH NEPA Tracking No.: \_\_\_\_\_ Type of Funding N/A

B&R Code: \_\_\_\_\_ Total Estimated Cost: N/A

Contractor Project Manager: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Contractor NEPA Reviewer: Jerry D. Levine Signature: 

Date: 11/13/14

**Description of Proposed Action:** This Categorical Exclusion covers routine renovation and maintenance activities of a general and repetitive nature which include installation, modification, removal, replacement, and preparation for a wide variety of activities that occur for existing PPPL buildings and structures and on previously disturbed grounds at PPPL. It includes small support structures such as sheds, enclosures, docks, room additions, and trailers. These activities are not for new major programmatic actions but for miscellaneous activities and maintenance actions to support projects, programs, and facilities that require additions, repairs, modifications, or replacements.

Activities include:

**MECHANICAL:** Mechanical installation, maintenance, and removal activities covered include:

- 1) Systems and equipment such as air, water, sewer, steam, sanitary, natural gas, fueling, special laboratory or scientific support systems, cafeteria and kitchen appliances, hydraulic systems, pneumatic systems, potable systems, non-potable systems, fire protection devices, vehicles, cranes and hoists, fixtures, machine tools, insulation, and system structural supports.
- 2) Standard systems for HVAC and building systems including ductwork, glove boxes, fume hoods, fans, and cooling coils, and ancillary parts such as fixtures, insulation, valves, gauges, monitoring equipment, fans, pumps, filters, chillers and cooling towers.

**ELECTRICAL:** Electrical installation, maintenance, and removal activities covered include

- 1) Conduit and wire systems, lighting and lightning protection systems, public address systems, telephone systems, security systems, computer systems, audio/visual systems, fire alarm and smoke detection systems, vehicles and the ancillary components such as light fixtures, outlets, ground bars, transformers, panels, circuit breakers, ground rods, disconnects, motors, switchgear, computers, motor control centers, control cabling, compressors, meters, utility repairs, batteries, etc.
- 2) Specialized equipment (e.g., torus in-vessel tiles, field coils, neutral beam equipment, motor generator equipment), experimental projects diagnostics systems, etc.

**CIVIL/STRUCTURAL:** Civil or structural installation, maintenance, and removal activities covered include:

- 1) Partition, block, or sheetrock walls and ancillary attributes such as painting and trim work;
- 2) Access docks, concrete/housekeeping pads, stairs, platforms, walkways, and guardrails;
- 3) Tile or carpeting of floors, ceiling replacement or installations, door installation and finishing
- 4) Roof repairs, upgrades, and replacements
- 5) Elevator repairs, upgrades and replacements

- 6) Exterior building maintenance and upgrades such as window and/or frame installations, wall maintenance and installations including brick tuck-pointing, sealing, wood and plastic panel replacements, tower and intake louvers
- 7) Equipment support structure
- 8) In addition, small support structures which may include concrete foundations, pads, above and below grade utilities contiguous to the building are included.

**GROUNDS:** Grounds maintenance activities covered include:

- 1) Grading and re-grading of selected areas and storm water conveyances
- 2) Erosion control and stabilization activities including rip-rap, erosion matting, filter fabric, and silt fencing
- 3) Landscaping maintenance and horticultural activities around buildings, park areas, and foot trails
- 4) Tree removal, pruning, planting, and grass/lawn maintenance
- 5) Fertilizer, herbicide, and pesticide applications
- 6) Installation, maintenance, and repair of fencing, gates, signs, posts, poles or bollards
- 7) Storm sewer and culvert maintenance
- 8) Maintenance and operation of soil, sand, mulch, gravel, salt, recycling, etc. storage areas
- 9) Winter maintenance activities associated with snow removal and de-icing of roads and walkways
- 10) Control of invasive species
- 11) Maintenance, repair, augmentation, removal and replacement of exterior roads, parking lots, swales, sidewalks, linings, sewers, basins, collection boxes, sumps, sump pumps, monitoring wells and instrumentation, etc.

**RESTRICTIONS:** This categorical exclusion determination does not apply to the following:

- 1) Activities that impact wetlands or flood plains
- 2) Support structure installation activities exclusively for a major new programmatic installation
- 3) Installation of new buildings

II. **Description of Affected Environment:** PPPL is located on Princeton University's James Forrestal Campus in Plainsboro Township, Middlesex County (central New Jersey), adjacent to the municipalities of Princeton, Kingston, East and West Windsor, and Cranbury, NJ. It occupies approximately 88.5 acres in the areas known as "C- and D-sites." PPPL has operated on the current site since 1959. The closest urban centers are New Brunswick, 14 miles (22.5 km) to the northeast, and Trenton, 12 miles (19 km) to the southwest. Within a 50-mile (80 km) radius are the major urban centers of New York City, Philadelphia, and Newark. Princeton University's main campus is approximately three miles west of the site, primarily located within the borough of Princeton.

The estimated resident population within 10 miles (16 kilometers) of PPPL is about 500,000. The total estimated population within a 50-mile (80 kilometer) radius of PPPL is approximately 16.4 million.

Surrounding the site are lands of preserved and undisturbed areas including upland forest, wetlands, open grassy areas, and a minor stream, Bee Brook, which flows along PPPL's eastern boundary. These areas are designated as open space in the James Forrestal Campus (JFC) site development plan.

The climate of central New Jersey is classified as mid-latitude, rainy climate with mild winters, hot summers, and no dry season. Temperatures may range from below zero to above 100 degrees Fahrenheit (°F) (-17.8° Celsius (C) to 37.8° C); extreme temperatures typically occur once every five years. Approximately half the year, from late April until mid-October, the days are freeze-free. Normally, the

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climate is moderately humid with a total average precipitation about 46 inches (116 cm) evenly distributed throughout the year.

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?**

	<u>Yes/No</u>
1. Threatened/Endangered Species and/or Critical Habitats	1. No
2. Other Protected Species (e.g. Burros, Migratory Birds)	2. No
3. Wetlands	3. No
4. Archaeological/Historic/Cultural Resources	4. No
5. Prime, Unique or Important Farmland	5. No
6. Non-Attainment Areas	6. No
7. Class I Air Quality Control Region	7. No
8. Special Sources of Groundwater (e.g. Sole Source Aquifer)	8. No
9. Navigable Air Space	9. No
10. Coastal Zones	10. No
11. Areas w/Special National Designation (e.g. National Forests, Parks, Trails)	11. No
12. Floodplain	12. 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 1 acre; if more than 5,000 sq. ft., a Soil Erosion / Sediment Control Permit may be required from Freehold Soil Conservation District.) <i>Some activities may involve some kind of digging or excavation, which would be performed in accordance with existing PPPL procedures, including the obtainment of any necessary permits.</i>	13. Yes
14. Dredge or Fill (under Clean Water Act section 404; indicate if greater than 1 acre)	14. No
15. Noise (in excess of regulations)	15. No
16. Asbestos Removal <i>Some activities may involve penetration of asbestos containing walls, asbestos tile or insulation removals, etc. These activities would require support from an asbestos certified subcontractor. The removal would comply with state and federal regulations.</i>	16. Yes
17. Polychlorinated Biphenyls (PCBs) <i>Some activities may involve removal and disposal of small amounts of PCB materials, which would be disposed by the PPPL Waste Management Group in accordance with existing PPPL procedures and relevant state and federal requirements.</i>	17. Yes
18. Import, Manufacture or Processing of Toxic Substances	18. No
19. Chemical Storage/Use <i>Some activities may require storage and use of chemicals such as compressed gases, cleaning solvents, etc. All such storage and use would be conducted in accordance with products MSDS's, approved PPPL policies, procedures and requirements of the ES&amp;H Manual.</i>	19. Yes
20. Pesticide Use <i>Some activities such as grounds maintenance may require use of pesticides, which would be done in accordance with products Material Safety Data Sheets (MSDS's), approved PPPL policies, procedures and requirements of the ES&amp;H Manual.</i>	20. Yes

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|-----|--|---------|
| 21. | Hazardous, Toxic, or Criteria Pollutant Air Emissions<br><i>Small air emissions from some activities are possible and would be limited and conducted in accordance with applicable state and federal regulations, applicable permits, and DOE and PPPL requirements.</i>                             | 21. Yes |
| 22. | Liquid Effluent<br><i>Small amounts of liquid effluents are possible from some activities. All such effluents would be limited in accordance with existing PPPL procedures and relevant state and federal requirements.</i>  | 22. Yes |
| 23. | Underground Injection  | 23. No  |
| 24. | Hazardous Waste<br><i>Small amounts of hazardous wastes (e.g., solvent rags used for cleaning components) may be generated by some activities, and would be disposed by the PPPL Waste Management Group in accordance with existing PPPL procedures and relevant state and federal requirements.</i> | 24. Yes |
| 25. | Underground Storage Tanks  | 25. No  |
| 26. | Radioactive (AEA) Mixed Waste  | 26. No  |
| 27. | Radioactive Waste<br><i>Small amounts of low level radioactive waste may be generated by some work activities, which would be handled and disposed by the PPPL Waste Management Group in accordance with existing PPPL procedures and relevant state and federal requirements.</i>                   | 27. Yes |
| 28. | Radiation Exposures<br><i>The potential may exist for small radiation exposures of workers from some activities. Any such exposures will be controlled in accordance with existing PPPL procedures with the support of the PPPL Health Physics Division.</i>   | 28. Yes |

**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<br><i>The requirements of 10CFR851 (as implemented under the DOE approved PPPL Worker Safety and Health Program) would be applied to these activities.</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<br><i>Some activities may involve modifications to existing federal and state permit requirements (e.g., air permits), which would be accomplished by the PPPL Environmental Services Division using existing PPPL procedures.</i>  | 32. Yes       |
| 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.<br>(Does the State Environmental Quality Review Act Apply?)   | 35. No        |
| 36. Public Utilities/Services<br><i>Some activities may involve onsite modifications or repairs to public utilities and services such as electrical equipment/wiring, water, natural gas, communications, etc. Such activities would be done in cooperation with the relevant public utilities and in accordance with existing PPPL procedures.</i> | 36. Yes       |
| 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

Categories: B1.3, Routine maintenance/custodial services for buildings, structures, infrastructures, equipment; B1.4, Installation/modification of air conditioning systems for existing equipment; B1.5, Improvements to cooling water systems within existing building, structure; B1.6, Installation/modification of retention tanks, small basins to control runoff, spills; B1.7, Acquisition/installation/operation/removal of communication systems, data processing equipment; B1.8, Modifications to screened water intake/outflow structures; B1.11, Fencing, no adverse effect on wildlife movement/surface water flow; B1.13, Construction/acquisition/relocation of onsite pathways, short onsite access roads/railroads; B1.15, Siting/construction/operation of support buildings/support structures; B1.16, Removal of asbestos from buildings; B1.17, Removal of polychlorinated biphenyl-containing items from buildings, other aboveground locations; B1.21, Noise abatement; B1.22, Relocation of buildings; B1.23, Demolition/disposal of buildings; B1.27, Disconnection of utilities; B1.28, Minor activities to place a facility in an environmentally safe condition, no proposed uses; B1.31, Relocation/operation of machinery and equipment; B1.32, Traffic flow adjustments, existing roads; B2.1, Modifications to enhance workplace habitability; B2.2, Installation of/improvements to building/equipment instrumentation (remote controls, emergency warning systems, monitors); B2.3, Installation of equipment for personnel safety and health; B2.5, Safety and environmental improvements of a facility, replacement/upgrade of facility components

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

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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:

PSO Staff: Tracy H. Estes Signature: [Signature]  
Date: 1-14-14

SC GLD: Michael McCann Signature: [Signature]  
Date: 11-23-14

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: Peter Siebach Signature: [Signature]  
Date: 1/26/14