

**CATEGORICAL EXCLUSION FOR INSTALLING A PHOTOVOLTAIC
POWER GENERATION ARRAY AND ELECTRIC CAR CHARGING
STATIONS, ENVIRONMENTAL MOLECULAR SCIENCES LABORATORY,
PACIFIC NORTHWEST SITE OFFICE,
RICHLAND, WASHINGTON**

Proposed Action

The U.S. Department of Energy (DOE), Pacific Northwest Site Office (PNSO) proposes to install a photovoltaic power generation array and electric car charging stations.

Location of Action

The proposed action would occur in a landscaped infiltration swale located immediately north of the Environmental Molecular Sciences Laboratory (EMSL) and at the adjacent north parking area on the Pacific Northwest National Laboratory (PNNL) Site.

Description of the Proposed Action

PNSO proposes to install a photovoltaic array in a 61 by 83 meter grassy swale that is adjacent to the EMSL north parking lot to provide onsite power generation. In addition, 8 to 12 car charging stations for recharging electric vehicles, as well as for research use would be installed in the north EMSL parking lot. A trench of about 13 meters would be excavated from the swale southward to connect with the EMSL electrical utilities. Power to the charging stations would be provided by a photovoltaic solar energy collection system and from the EMSL facility. The swale would be regraded and graveled or otherwise hardscaped before installing the collection system, allowing irrigation and lawn maintenance to be discontinued to the swale area.

The project would include site prep, excavation, curbs, sidewalks, conduit, wire, inverter, metering, display, and necessary electrical charging equipment. Sufficient capacity would be incorporated into the design and site preparation to support future expansion of the photovoltaic system and charging stations. This categorical exclusion (CX) would also include those actions foreseeably necessary to the proposal such as the award of grants and contracts.

Cultural Resources Review

Shallow excavations would be required at the grassy swale to accommodate an electrical raceway, concrete pads, and supports. The overall EMSL site has been surveyed for the presence of cultural resources several times in the past; no sensitive artifacts have been found to date. An additional survey would be requested to support this project. As excavation proceeds, workers would be directed to look for artifacts, and if any are found, to stop work until they are evaluated. Work conducted under this CX would not be expected to result in adverse impacts to sensitive cultural resources.

Ecological Resources Review

It is not likely that the proposed action would adversely affect native plant and animal species in the vicinity because the work would occur adjacent to an existing parking lot and within a landscaped area near EMSL. An ecological resource review would be requested to support this project for confirmation. As site preparation proceeds, workers would be directed to look for nesting or migratory birds, and if any are found in the vicinity, to stop work until they are evaluated. Work conducted under this CX would not be expected to result in adverse impacts to sensitive native ecological resources.

Categorical Exclusion to Be Applied

As the proposed action is to operate and modify microbiological and biomedical research facilities, the following CX as listed in the DOE National Environmental Policy Act (NEPA) implementing procedures, 10 CFR 1021, would apply:

B1.15 Siting, construction (or modification), and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; employee health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (including security posts); fire protection; and similar support purposes, but excluding facilities for waste storage activities, except as provided in other parts of this appendix.

Eligibility Criteria

The proposed activity meets the eligibility criteria of 10 CFR 1021.410(b) because the proposed action does not have any extraordinary circumstances that might affect the significance of the environmental effects; is not directly connected [40 CFR 1508.25(a)(1)] to other actions with potentially significant impacts, is not directly related to other proposed actions with cumulatively significant impacts [40 CFR 1508.25(a)(2)], and is not an interim action precluded by 10 CFR 1021.211.

The "Integral Elements" of 10 CFR 1021 are satisfied as discussed below:

| INTEGRAL ELEMENTS, 10 CFR 1021, SUBPART D, APPENDIX B (1)-(4) | |
|---|--|
| WOULD THE PROPOSED ACTION: | EVALUATION: |
| Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health? | The proposed action would not threaten a violation of regulations or DOE or executive orders. |
| Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities? | No waste management facilities would be constructed under this CX. Any wastes would be managed in accordance with applicable regulations. |
| Disturb hazardous substances, pollutants, or contaminants that preexist in the environment such that there would be uncontrolled or unpermitted releases? | No preexisting hazardous substances, pollutants, or contaminants would be disturbed in a manner that results in uncontrolled or unpermitted releases. |
| Adversely affect environmentally sensitive resources, including, but not limited, to: <ul style="list-style-type: none"> • protected historical/archaeological resources • protected biological resources and habitat • jurisdictional wetlands, 100-year floodplains • Federal- or state-designated parks, wilderness areas, wildlife refuges, or monuments. | <p>The proposed action would not disturb environmentally sensitive resources. Refer to the "Description of the Proposed Action."</p> <p>The proposed action would not adversely affect floodplains, wetlands regulated under the Clean Water Act, national monuments or other specially designated areas, prime agricultural lands, or special sources of water.</p> |

Checklist Summarizing Environmental Impacts: The following checklist summarizes environmental impacts that were considered when preparing this CX determination. Answers to relevant questions are explained in detail in the text following the checklist.

| Would the proposed action: | | YES | NO |
|-----------------------------------|--|------------|-----------|
| 1 | Result in more than minimal air impacts? | | X |
| 2 | Increase offsite radiation dose measurably? | | X |
| 3 | Require a radiological work permit? | | X |
| 4 | Cause more than a minor or temporary increase in noise level? | | X |
| 5 | Discharge any liquids to the environment? | X | |
| 6 | Require a Spill Prevention Control and Countermeasures plan? | | X |
| 7 | Require an excavation permit (e.g., for test pits, wells, utility installation)? | X | |
| 8 | Disturb an undeveloped area? | | X |
| 9 | Use carcinogens, hazardous, or toxic chemicals/materials? | X | |
| 10 | Involve hazardous, radioactive, polychlorinated biphenyl, or asbestos waste? | X | |
| 11 | Require environmental permits? | | X |

Explanations

5. Liquid wastes might be generated for activities such as dust management, fire system-proofing wastewater, and cleanup rinsewater. Effluents would be managed in accordance with PNNL requirements and best management practices.
7. Excavation to support installation of a solar energy system and car charging stations would require an excavation permit to identify the presence of any underground utilities and to make certain that any sensitive cultural and ecological resources are identified and protected. A preliminary engineering sub-surface scan has been performed to identify any buried utilities in the vicinity.
9. Although not expected, activities could use small quantities of hazardous chemicals or materials during installation activities. If so, these materials would be managed in accordance with PNNL requirements.
10. Although not expected, proposed installation activities could result in small quantities of hazardous wastes. If unrecyclable, such wastes would be characterized, handled, packaged, transported, stored, and/or disposed of in existing treatment, storage, and disposal facilities in accordance with applicable regulations, DOE Orders, and PNNL guidelines.

Compliance Action

I have determined that the proposed action satisfies the DOE NEPA eligibility criteria and integral elements, does not pose extraordinary circumstances, and meets the requirements for the CX referenced above. Therefore, using the authority delegated to me by DOE O 451.1B, Change 1, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation.

Signature:  Date: 9-30-09
 Michael J Weis *for*
 PNSO NEPA Compliance Officer

cc: R. S. Weeks, PNNL