

# **SITEWIDE CATEGORICAL EXCLUSION FOR ROUTINE MAINTENANCE AT PACIFIC NORTHWEST NATIONAL LABORATORY**

## **Proposed Action**

The U.S. Department of Energy (DOE) Pacific Northwest Site Office (PNSO) proposes to conduct routine maintenance at Pacific Northwest National Laboratory (PNNL) facilities and existing infrastructure.

## **Location of Action**

The proposed action would occur on the PNNL site in Richland, Washington and in other PNNL facilities located in the State of Washington.

## **Description of the Proposed Action**

PNNL proposes to conduct routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructure (including, but not limited to, pathways, roads, and railroads), vehicles, and equipment. PNNL would also conduct localized vegetation and pest control. Some of these activities could result in the removal of asbestos-containing materials and polychlorinated biphenyl (PCB)-containing items from buildings, transmission systems, or associated infrastructure. PNNL would undertake actions foreseeably necessary to manage these wastes in compliance with DOE orders, as well as federal and state regulations and guidelines.

Routine maintenance activities include, but are not limited to:

- custodial services to preserve facility appearance, working conditions, and sanitation
- repair or replacement of facility equipment, infrastructure, road embankments, and fire protection sprinkler systems
- reroofing
- road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces
- erosion control and soil stabilization measures (e.g., reseeded and revegetation)
- repair and maintenance of transmission facilities
- routine testing and calibration of facility components, subsystems, and portable equipment
- routine decontamination of the surfaces of equipment, rooms, fume hoods, and other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming)
- removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors)
- routine maintenance of air conditioning systems
- routine maintenance and modification of screened water intake and outflow structures such that intake velocities, volumes, and water quality are consistent with existing permit limits.

Routine maintenance could result in replacement to the extent the replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in significant change in the expected useful life, design capacity, or function of the facility.

These routine activities would be managed in accordance to, and in compliance with, DOE orders, as well as federal and state regulations and guidelines.

## **Biological and Cultural Resources**

It is not likely that routine maintenance activities would result in adverse impacts to sensitive biological or cultural resources. However, when special project circumstances warrant it, biological and cultural resource reviews would be conducted to assure that impacts to sensitive resources are avoided and minimized.

The biological resource review would identify the occurrence of federal- and state-protected species in the project area (e.g., avian species protected under the Migratory Bird Treaty Act; plant and animal species protected under the Endangered Species Act, including candidates for such protection; and species listed as threatened or endangered by the State of Washington). Resource review recommendations would be followed to assure no adverse impacts to sensitive species and resources.

The cultural resource review would assure that impacts to sensitive cultural resources are avoided. If consultation with the State Historic Preservation Office and/or affected tribes is deemed necessary, it would be initiated before project implementation.

## **Categorical Exclusion to Be Applied**

As the proposed action is routine maintenance, including maintenance of air conditioners and water intake and outflow structures, the following categorical exclusions (CXs), as listed in the National Environmental Policy Act (NEPA) implementing procedures, 10 CFR 1021, would apply:

- B1.3 Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructure, and equipment in a condition suitable for a facility to be used for its intended purpose....
- B1.4 Installation or modification of air conditioning systems required for temperature control for operation of existing equipment.
- B1.8 Modifications to screened water intake and outflow structures such that intake velocities and volumes and water effluent quality and volumes are consistent with existing permit limits.
- B1.16 Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, “National Emission Standards for Hazardous Air Pollutants;” 40 CFR part 763, “Asbestos;” 29 CFR part 1910, subpart I, “Personal Protective Equipment;” and 29 CFR part 1926, “Safety and Health Regulations for Construction;” and appropriate state and local requirements, including certification of removal contractors and technicians).

B1.17 Removal of PCB-containing items (including, but not limited to, transformers and capacitors), PCB-containing oils flushed from transformers, PCB-flushing solutions, and PCB-containing spill materials from buildings or other aboveground locations in accordance with applicable requirements (such as 40 CFR part 761).

## 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 connected to other actions with potentially significant impacts [40 CFR 1508.25(a)(1)], is not related to other actions with individually insignificant but cumulatively significant impacts [40 CFR 1508.27(b)(7)], and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during environmental impact statement preparation.

The “Integral Elements” of 10 CFR 1021 are satisfied as discussed in Table 1.

**Table 1.** Integral Elements, 10 CFR 1021, Subpart D, Appendix B (1)-(5)

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 generated waste would be managed in accordance with applicable regulations in existing facilities. Waste disposal pathways would be identified prior to generating waste and waste generation would be minimized.
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 would result in uncontrolled or unpermitted releases.
Have the potential to cause significant impacts on environmentally sensitive resources., including, but not limited, to: <ul style="list-style-type: none"> <li>• protected historic/archaeological resources</li> <li>• protected biological resources and habitat</li> <li>• jurisdictional wetlands, 100-year floodplains</li> <li>• Federal- or state-designated parks and wildlife refuges, wilderness areas, wild and scenic rivers, national monuments, marine sanctuaries, national natural landmarks, and scenic areas.</li> </ul>	No environmentally sensitive resources would be adversely affected. Resource reviews would be conducted for special circumstances. Refer to the Biological and Cultural Resources section for details regarding the application of cultural and biological resource reviews.  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.
Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species?	The proposed action would not involve the use of genetically engineered organisms, synthetic biology, governmentally designated noxious weeds or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements.

## Summary of Environmental Impacts

Table 2 summarizes environmental impacts considered for this CX determination. Answers to relevant questions are explained in detail in the text following Table 2.

**Table 2. Summary of Environmental Impacts Considered for this CX Determination**

<b>Would the proposed action:</b>		<b>Yes</b>	<b>No</b>
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, PCB, or asbestos waste?	X	
11	Require environmental permits?	X	

### Explanations


- Only insignificant air impacts would be expected, as routine maintenance could result in localized dust and fumes from equipment. Dust abatement measures would be employed as necessary, using water applications or other means of dust and erosion suppression, and would be compliant with applicable permits; local, state, and federal regulations; DOE orders; and PNNL guidelines.
- Activities performed in radiologically controlled areas would be performed in compliance with as low as reasonably achievable principles, applicable state and federal regulations, DOE orders, and PNNL guidelines. Radiation received by workers during the performance of activities would be administratively controlled consistent with PNNL's Radiation Protection Program requirements.
- It is possible that routine maintenance of sewer and water supply lines could result in minor and short-term liquid discharges. During maintenance activities, minor quantities of liquid effluents could be discharged (e.g., water applications to control dust and cleanup rinse water). Depending upon the effluent quality and location, effluents would be discharged to the ground or contained for treatment in accordance with applicable environmental requirements. Should concrete wastewater be generated, it would be managed in accordance with the Washington State Department of Ecology regulations and the Stormwater Management Manual for Eastern Washington. Effluents would be managed in accordance with applicable local, state, and federal regulations; PNNL requirements; and best management practices.
- Routine maintenance could require excavation permits. Stipulations in the excavation permit to minimize potential impacts to safety and the environment would be followed.
- Disturbance of undeveloped areas is not expected, as all activities would occur within the existing built environment or within other previously disturbed areas where active utilities and roads in the vicinity are readily accessible. If proposed activities were located on sensitive habitats or could cause impacts to sensitive species or their habitats (e.g., old-growth sagebrush), areas of traditional cultural properties; and properties of historic, archaeological, or architectural significance additional NEPA would be required.
- Although unlikely, proposed activities could involve the use of carcinogens, hazardous, and/or

toxic, chemicals and materials. For example, excavation equipment could contain or require the use of chemicals (e.g., antifreeze, hydraulic fluids, or fuel). In addition, road and utility alteration activities could require the use of adhesives, cleaning solvents, and other potentially toxic substances. Project inventories would be maintained at the lowest practicable levels and chemical wastes would be recycled, neutralized, or regenerated if possible. Product substitution (i.e., use of less toxic chemicals in place of more toxic chemicals) would be considered where reasonable.

10. If alterations must be conducted in a contaminated area, routine maintenance could generate hazardous, or possibly radioactive, waste (e.g., excess wire, conduit, and pipe). In addition, some activities could result in the removal of asbestos-containing materials and PCB-containing items from buildings, transmission systems, or associated infrastructure. If unrecyclable, such wastes would be characterized, handled, packaged, transported, treated, stored, and/or disposed of in existing Hanford Site or offsite treatment, storage, and disposal facilities in accordance with applicable local, state, and federal regulations; DOE orders; and PNNL guidelines.
11. Although not expected during most routine maintenance activities, the following types of permits, plans, and notifications could be required for some activities:
  - Notifications or approvals could be required from the Benton Clean Air Authority to use a temporary and portable air-pollution source (e.g., equipment using internal combustion engines such as excavation equipment and portable electric generators).
  - An erosion and sediment control plan could be required by the City of Richland for construction activities that could result in substantial erosion or sediment generation.
  - Any discharge of wastewater to ground must be reviewed prior to discharge to determine if it meets Washington State Groundwater Quality Criteria, if it requires permitting under Washington State Waste Discharge regulations (Washington Administrative Code 173-216), and/or if it meets applicable purgewater discharge requirements.
  - A Stormwater Pollution Prevention Plan, permitting, or implementation of best management practices could be required if stormwater generated during construction activities is conveyed, either directly or indirectly, to a surface water.

## 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 Order 451.1B, Change 2, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation.

Signature:  Date: 7/16/12  
Theresa L. Aldridge  
PNSO NEPA Compliance Officer