GENERIC CATEGORICAL EXCLUSION FOR INSTALLATION, MAINTENANCE, TESTING, AND CALIBRATION OF EQUIPMENT, PACIFIC NORTHWEST NATIONAL LABORATORY, RICHLAND, WASHINGTON

Proposed Action

The U.S. Department of Energy (DOE) Pacific Northwest Site Office (PNSO) proposes to install, relocate, maintain, test, qualify, and calibrate equipment for research, environmental monitoring, safety and health monitoring, and radiation detection.

Location of Action

Actions covered by this generic categorical exclusion (CX) may occur at the Pacific Northwest National Laboratory (PNNL) campuses in Richland and Sequim, Washington, or at other research or operations sites throughout the United States and its territories.

Description of the Proposed Action

The proposed action is to install or relocate laboratory equipment, electronic hardware, maintenance equipment, health and safety equipment, safeguards and security equipment, radiation monitoring equipment, sensors, alarms, control systems, remote monitoring and surveillance systems, and similar equipment and systems. Other activities include, but are not limited to, equipment and systems maintenance, upgrades, and qualification for use, calibration of sensors or diagnostic equipment, and testing and modifications to improve system reliability or to augment information on safety-related system components.

The proposed action would also include reasonably foreseeable actions necessary to implement the equipment installation and qualification such as personnel and material staging, small scale excavation for equipment foundations or utility connections, management of temporary piles of dirt/debris from excavation, location of temporary support structures (e.g., utility connections, sanitary facilities, and office trailers), and award of grants and contracts.

Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

Any excavation would comply with requirements for excavation safety and protection of the environment. For example, requirements to avoid underground utilities, protect cultural and biological resources, and implement excavation safety requirements would be followed.

Biological and Cultural Resources

It is not likely that equipment installation, maintenance, or qualification would result in any impacts to sensitive biological or cultural resources. However, biological and/or cultural resource reviews would be conducted when projects have the potential to impact resources to

assure that impacts to sensitive resources are avoided or minimized.

The biological resources review will identify the occurrence of federally and state-protected species and habitats in the project area such as avian species protected under the Migratory Bird Treaty Act (MBTA); species protected by the Marine Mammal Protection Act (MMPA); essential fish habitat as defined by the Magnuson-Stevens Fisheries Conservation and Management Act (MSA); plant and animal species and critical habitat protected under the Endangered Species Act (ESA), including candidates for such protection; and state species listed as threatened or endangered. Resource review recommendations will be followed during small-scale research activities to assure there are no adverse impacts to sensitive species and resources.

DOE will conduct a cultural resources review as part of the Section 106 process of the National Historic Preservation Act (NHPA). The Section 106 process assesses undertakings to determine if the undertaking will have an adverse effect/impact to historic properties.

If the biological and/or the cultural resources review determines that resources may be adversely affected/impacted, the use of this CX would be reevaluated. Potential options could be, but are not limited to, changing the proposed activity location, the development of mitigation measures to render the impacts not significant, or the performance of additional National Environmental Policy Act (NEPA) analysis and review.

Categorical Exclusion to Be Applied

Because the proposed action is to install, relocate, maintain, test, and calibrate equipment, the following CXs, as listed in the DOE NEPA implementing procedures, 10 CFR 1021, would apply:

B1.31 Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

B2.2 Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

B2.4 Activities undertaken to (1) qualify equipment for use or improve systems reliability or (2) augment information on safety-related system components. These activities include, but are not limited to, transportation container qualification testing, crane and

lift-gear certification or recertification testing, high efficiency particulate air filter testing and certification, stress tests (such as ‘‘burn-in’’ testing of electrical components and leak testing), and calibration of sensors or diagnostic equipment.

Generic CXs are authorized by 10 CFR 1021.410(f) for recurring activities to be undertaken during a specified time period, after considering potential aggregated impacts.

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, is not related to other actions with individually insignificant but cumulatively significant impacts, and is not precluded by 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 the table below:

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 results in uncontrolled or unpermitted releases.
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).

Have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited, to: • protected historic/archaeological resources • protected biological resources and habitat • jurisdictional wetlands, 100-year floodplains • Federal- or state-designated parks and wildlife refuges, wilderness areas, wild and scenic rivers, national monuments, marine sanctuaries, national natural landmarks, and scenic areas.	No environmentally sensitive resources would be adversely affected by the proposed actions. 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. Potential impacts to Biological or Cultural resources would be addressed as described above.

Summary of Environmental Impacts

The following table summarizes environmental impacts considered when preparing this CX determination.

Environmental Impacts Considered when Preparing this CX	
Would the Proposed Action:	Evaluation:
Result in more than minimal air impacts?	Installation or relocation of equipment is not expected to have more than minimal impacts to air quality; impacts would likely be limited to short-term operation of generators during installation or small amounts of dust from excavations.
Increase offsite radiation dose measurably?	The proposed activities would not measurably increase offsite radiation dose; however, sealed sources could be used for equipment calibration and testing.
Require a radiological work permit?	The proposed installation activities themselves are not expected to require a radiation work permit, but one could be required if the equipment installation, maintenance, or qualification occurs within a radiological area. Sealed sources could be used for equipment calibration or testing and may require a radiation work permit.
Discharge any liquids to the environment?	The proposed activities are not expected to result in any discharge of liquids to the environment.
Require a Spill Prevention, Control, and Countermeasures plan?	The proposed activities would not require a Spill Prevention, Control, and Countermeasures plan.
Use carcinogens, hazardous, or toxic chemicals/materials?	The proposed activities may involve the use of carcinogens, hazardous and/or toxic chemicals and materials. Excavation equipment might contain toxic chemicals such as antifreeze, hydraulic fluids, or fuel. Cleaning solvents and other chemicals used to maintain equipment may be used. Sealed sources used for calibration and testing could present a carcinogenic risk to staff if stored or handled

	improperly. Project inventories would be maintained at the lowest practicable levels, and chemical wastes would be recycled, neutralized, or regenerated if possible. Product substitution (use of less toxic chemicals in place of more toxic chemicals) would be considered where reasonable.
Involve hazardous, radioactive, polychlorinated biphenyl, or asbestos waste?	The proposed activities generally could generate hazardous, radioactive, PCB, or asbestos waste. Small amounts of radioactive or hazardous waste could be generated if the installation occurs within an existing radiological or hazardous area. If unrecyclable, such wastes would typically be characterized, handled, packaged, transported, treated, stored, and/or disposed of in treatment, storage, and disposal facilities in accordance with applicable regulations.
Cause more than a minor or temporary increase in noise level?	There could be temporary noise increases during installation; this would be short-term, minor, and within applicable limits.
Create light / glare, or other aesthetic impacts?	The proposed activities would not create long-term light, glare, or other aesthetic impacts. There could be short-term use of lights if work at night is required.
Require an excavation permit (e.g., for test pits, wells, utility installation)?	Excavation activities may occur and activities might require an excavation permit, such as a PNNL or Hanford Site excavation permit. Stipulations in the excavation permit to minimize potential impacts to safety and the environment would be followed.
Disturb an undeveloped area?	Any disturbances would be within or contiguous to a previously disturbed area with active utilities and roads readily accessible. Additional NEPA review would be required if the installation would impact native habitats, cultural properties, or other sensitive resources.
Result in more than minimal impacts on transportation or public services?	The proposed actions would not disturb transportation or public services except when the equipment or systems are specifically installed to monitor transportation points such as border crossings. In those cases, there could be small temporary impacts during installation and minor on-going impacts on commercial traffic from equipment use.
Disproportionately impact low-income or minority populations?	The proposed actions would not disproportionately impact low-income or minority populations.
Require environmental or other permits from federal, state, or local agencies?	Although not expected, equipment installation or relocation might require notifications to or permits from local, state, or federal authorities or agencies. Activities will abide by all applicable permit requirements.

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, I have determined that the proposed action may be categorically excluded from further NEPA review and documentation. This determination must be reviewed at least once every 5 years.

Signature: Digitally signed by THOMAS MCDERMOTT Date: 2025.04.23 12:16:20 -07'00'

Tom McDermott
PNSO NEPA Compliance Officer

cc: ES Norris, PNNL