GENERIC CATEGORICAL EXCLUSION FOR FACILITY SAFETY AND ENVIRONMENTAL IMPROVEMENTS, PACIFIC NORTHWEST NATIONAL LABORATORY, RICHLAND, WASHINGTON

Proposed Action

The U.S. Department of Energy (DOE) Pacific Northwest Site Office (PNSO) proposes to perform improvements to existing facilities to enhance safety and environmental systems.

Location of Action

Facility safety and environmental improvements would occur at the Pacific Northwest National Laboratory (PNNL) Richland and Sequim campuses and at other facilities associated with PNNL within the United States.

Description of the Proposed Action

PNNL and its subcontractors perform safety and environmental improvements of facilities (including but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility, and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves; monitoring devices; facility air filtration systems; substation transformers or capacitors; adding safety features such as railings, walkways or other safety-related features; safety-code features such as addition of structural bracing to meet earthquake standards and/or sustain high wind loading; replacement of aboveground or belowground tanks and related piping (provided that there is no evidence of leakage).

Prior to replacing or upgrading facility components, PNNL may need to isolate, disconnect, and remove utilities (power, communications, water, and sewer), and disconnect, pack and/or remove machinery and equipment or other items that are to be replaced and/or upgraded as needed. Buildings, structures, and equipment would be decontaminated as needed. Implementation may generate small quantities of excess materials, hazardous or radioactive wastes, PCBs, asbestos and other debris. Such materials would be recycled, re-used, or disposed of, as appropriate.

The proposed action would include reasonably foreseeable actions necessary to implement the proposed activities, such as minor excavations, establishment of temporary structures, equipment and material staging, waste management, equipment maintenance, office and furniture moves, and award of grants and contracts. Modification activities might involve minor noise levels; air emissions such as localized dust or fumes from construction equipment; or water effluents such as construction rinse water, dust suppression, or hydrotest water. In all instances, environmental impacts are expected to be small and temporary in nature and would be controlled via implementation of standard best

management practices and adherence to any applicable permits. These actions would not include rebuilding or modifying substantial portions of a facility. Additional National Environmental Policy Act (NEPA) review would be required for actions that result in a significant change in the expected useful life, design capacity, or function of a facility, or when widespread and persistent contamination would need to be removed to enable facility improvements or upgrades to proceed.

Biological and Cultural Resources

It is not likely that facility safety and environmental improvements would result in adverse 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 and 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 categorical exclusion (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 NEPA analysis and review.

Categorical Exclusion to Be Applied

Because the proposed action is to perform improvements to facility safety and environmental systems, the following CX, as listed in the DOE NEPA implementing procedures, 10 CFR 1021, would apply:

B2.5 Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core

monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, ‘‘Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities’’ and 40 CFR part 280, ‘‘Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks’’). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel).

Generic CXs are authorized by 10 CFR 1021.410(f) for recurring activities to be undertaken during a specified period of time, 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, or undergo major expansion, from activities authorized 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 or 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.

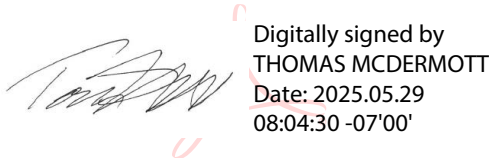
Environmental Impacts Considered when Preparing this CX	
Would the Proposed Action:	Evaluation:
Result in more than minimal air impacts?	There might be temporary and localized dust and fumes from construction equipment while improvements are made. These would be minimized as necessary, using water applications or other emission controls, and would be compliant with applicable permits, local, state, and federal regulations, DOE Orders, and PNNL guidelines.
Increase offsite radiation dose measurably?	Facility safety and environmental improvements are not likely to increase offsite radiation dose.

Require a radiological work permit?	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. The radiation received by workers during the performance of activities would be administratively controlled below DOE limits as defined in 10 CFR 835.202(a). Under normal circumstances, those limits control individual radiation exposure to below an annual effective dose equivalent of 5 rem.
Discharge any liquids to the environment?	During facility safety and environmental improvements, there might be minor quantities of liquid effluents created, for example, fire-or safety system-proofing wastewater, hydrotest water, cleanup rinse water, and water used for soil compaction after excavation. Effluents would be managed in accordance with applicable local, state, and federal regulations, PNNL requirements and best management practices.
Require a Spill Prevention, Control, and Countermeasures plan?	The proposed activities are not likely to require a Spill Prevention, Control, and Countermeasures plan. Standard best management practices would be implemented to prevent and control accidental releases of fluids.
Use carcinogens, hazardous, or toxic chemicals/materials?	Although unlikely, proposed activities might involve the use of carcinogens, hazardous and/or toxic chemicals and materials. For example, some activities might 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 (use of less toxic chemicals in place of more toxic chemicals) would be considered when reasonable.
Involve hazardous, radioactive, polychlorinated biphenyl, or asbestos waste?	Building construction and modifications might generate hazardous or possibly radioactive waste (if alterations must be conducted in a contaminated area) such as excess wire, conduit, and pipe. If unrecyclable, such wastes would be characterized, handled, packaged, transported, treated, stored, and/or disposed of in existing treatment, storage, and disposal facilities in accordance with applicable local, state, and federal regulations, DOE Orders, and guidelines.
Cause more than a minor or temporary increase in noise level?	Equipment used for facility improvements may cause short-term, intermittent increases in noise. These would be typical of construction equipment and would be within regulatory limits and temporary.

Create light / glare, or other aesthetic impacts?	Facility modifications may require construction lighting to allow for work to proceed after dark. This would be a temporary impact. No other aesthetic impacts are expected to occur.
Require an excavation permit (e.g., for test pits, wells, utility installation)?	Facility safety and environmental modifications might require excavation permits. Stipulations in the excavation permit to minimize potential impacts to safety and the environment would be followed.
Disturb an undeveloped area?	Proposed activities would occur at existing facilities and would not disturb undeveloped areas.
Result in more than minimal impacts on transportation or public services?	Proposed activities would not have more than a minor impact on transportation or public services.
Disproportionately impact low-income or minority populations?	Proposed activities would not disproportionately impact low income or minority populations.
Require environmental or other permits from federal, state, or local agencies?	Although not expected, facility safety and environmental improvement activities might require submittal of a notice of construction to the State Department of Health, for example, when a modification results in a change to an existing radiological control system. Notifications and approvals might be required from the Benton County Clean Air Authority, for example, to use temporary air pollution sources such as portable generators. 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:_____

Tom McDermott
PNSO NEPA Compliance Officer

cc: ES Norris, PNNL