

# DOE-ID NEPA CX DETERMINATION

## SECTION A. Project Title: Upgrade to the 1 MW TRIGA Research Reactor Pool Liner at WSU – Washington State University

## SECTION B. Project Description

Washington State University (WSU) proposes to enhance the safety, performance, and continued operational reliability of the WSU Nuclear Science Center 1 MW TRIGA reactor by 1) restoring the reactor tank concrete, which is in much need of repair due to epoxy failure, and 2) replacing the epoxy concrete tank liner with a modern, robust epoxy liner. The proposed project will repair and replace the barrier between reactor shielding (pool water) and containment barrier (concrete pool) for at least a design life of 14 years. The reactor pool serves as primary cooling and shielding for the reactor – serving two of the most important safety functions of the facility and is essential for the continued safe and efficient operations of the research reactor facility. Safe operation of the reactor facility is critical to DOE and other federal agencies. The Nuclear Science Center (NSC) reactor facility serves a critical need for reactor-produced radioisotopes utilized in DOE-funded research. The facility supports teaching, research, nuclear workforce development, national security, emergency preparedness, and national training of emergency personnel.

## SECTION C. Environmental Aspects / Potential Sources of Impact

During the dewatering, hydrolasing, and sealing activities, a minor amount of waste will be generated. The liquid waste in the form of wash water will be surveyed according to established procedures. Solid waste will be surveyed, bagged, and disposed of by the Nuclear Science Center (NSC). WSU has estimated that the amount of waste generated by the project will be one 55-gallon drum. The cost of the associated waste disposal as radioactive contaminated articles will be burdened by the NSC separately from this grant. Qualified NSC staff members will serve as health physics support and will provide onsite installation teams with any support they require to finish the project.

## SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: For Categorical Exclusions (CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment 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; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not “connected” nor “related” (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: 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.

Justification: The activity consists of the acquisition and installation of a new pool liner that will enhance the safety, performance, and operational efficiency and reliability of the WSU nuclear reactor and associated facility.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)  Yes  No

Approved by Jason Anderson, DOE-ID NEPA Compliance Officer, on 07/23/2021.