SECTION A. Project Title: Enhancing Research Infrastructure at the Ohio State University Nuclear Engineering Program – The Ohio State University

SECTION B. Project Description

The Ohio State University proposes to purchase and install equipment to improve infrastructure to perform research in advanced sensor development and material property characterization. Instruments include photoluminescence and UV-Vis spectrometers, GHz oscilloscope, spectrum analyzer, pulsed laser, fiber optic sensor characterization equipment, inert environment glovebox, equipment for ultrasonics testing, and mechanical translation stages.

SECTION C. Environmental Aspects / Potential Sources of Impact

Radioactive Material Use – Solid compounds containing depleted uranium will be subjected to material property characterization techniques including optical characterization, x-ray diffraction, scanning and electron microscopy characterization. The work procedure will be overseen by The Ohio State University’s Radiation Safety Office.

The action consists of purchasing equipment to be used in research and teaching. The action would not create additional environmental impacts above those already occurring at the university.

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 purchasing and installing equipment for teaching and research purposes.

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

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on 07/18/2017