SECTION A. Project Title: Radioactive Powder Characterization Equipment for Enhanced Research and Teaching Capability – Texas A&M University

SECTION B. Project Description

Texas A&M University proposes to acquire a x-ray diffractometer and particle size analyzer to expand the research, training, and teaching capabilities of the Fuel Cycle and Materials Laboratory (FMCL) at the university. This equipment will allow for characterization of certain radioactive and hazardous powders. The infrastructure upgrade is designed to establish missing capabilities within the controlled area boundaries of the FMCL. A challenge related to work with enriched powder and certain hazardous chemicals is that standard characterization tools are not as readily available without shipping to a national laboratory. This infrastructure will alleviate that challenge.

SECTION C. Environmental Aspects / Potential Sources of Impact

The action will involve the analysis of various materials, including radioactive isotopes. This will generate low-level waste mostly consisting of contaminated paper towels and personal protective equipment. Small quantities of chemical and hazardous wastes will be generated. All wastes will be disposed of by through the Office of Environmental Health and Safety at Texas A&M University. 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)

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on 07/10/2018