

DOE-ID NEPA CX DETERMINATION

SECTION A. Project Title: Implementation of a Low-Level Gamma-Ray Counting Facility – University of Texas at Austin

SECTION B. Project Description

The prime objective of this University of Texas proposal is to implement a dedicated low-level background gamma-ray counting Compton suppression system for teaching and research. This will be accomplished by purchasing a HPGe low-background gamma-ray detector, low-background streamline vertical cryostat, and additional associated equipment.

SECTION C. Environmental Aspects / Potential Sources of Impact

Radioactive Material Use – This low-level counting system detects radiation emitted from radioactive materials contained in the samples. Samples which are considered radioactive will be handled as required by the facility NRC and/or Texas Department of State Health Services licenses.

Radioactive Waste Generation – Some samples will meet the regulatory definition of radioactive and thus must be disposed as radioactive waste. Radioactive waste will be handled and disposed as required by the facility NRC and/or TDSHS licenses.

Biological Hazards – Some (typically foreign) soils are regulated by the U.S. Department of Agriculture and must be handled as if they are biologically hazardous to domestic plants.

Contaminated Soils – Some soil samples may originate from sites considered contaminated.

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: B3.6 Siting, construction, modification, operation, and decommissioning of facilities for small-scale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial development.

Justification: The activity consists of purchasing equipment for educational and research purposes.

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

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on 5/22/2012