SECTION A. Project Title: Development of Nuclear Energy-Related Infrastructure and Capabilities at the Utah Nuclear Engineering Radiation Measurement Laboratory – University of Utah

SECTION B. Project Description

This project will upgrade the nuclear engineering measurement lab of the Nuclear Engineering Measurement Laboratory at the Utah Nuclear Engineering Program, University of Utah by purchasing two high energy resolution HPGe detector counting systems, a scintillation detector counting system, a gas detector counting systems, and a digital oscilloscope. This equipment will be used for teaching purposes and in performing research.

SECTION C. Environmental Aspects / Potential Sources of Impact

Radioactive Material Use – Utah does neutron activation analysis when a sample is irradiated in their reactor and when safe to be taken out for measurements. They also generate short-time activated materials for laboratory courses. Work is performed under their NRC license and the university’s RSC surveillance.

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 teaching 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 11/28/2011