

# DOE-ID NEPA CX DETERMINATION

**SECTION A. Project Title: DOE-ID/RESL Wavelength-Dispersive X-Ray Spectrometer for Chemistry Research & Development**

**SECTION B. Project Description**

The DOE-ID Radiological & Environmental Sciences Laboratory (RESL) has a need for a complete state-of-the-art fully automated sequential wavelength-dispersive X-ray fluorescence (WD-XRF) spectrometer system. The WD-XRF spectrometer system will be primarily used for elemental analyses of soil, liquids (waters), air filters, unknown precipitates, and other environmental samples, as well as for quality control of other materials used in the preparation of performance testing materials for radiological and inorganic testing programs.

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

RESL has all applicable procedures and processes for radioactive, mixed, and hazardous waste that may be generated by the analysis of RESL samples by WD-XRF. RESL reviews new instrumentation purchases for environmental impacts, quality, etc. according to RESL-AP-4 Procurement of Items and Services and RESL-AP-2 Program Safety Analyses, Form 451.01.

**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 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 5/21/2012