

DOE-ID NEPA CX DETERMINATION

SECTION A. Project Title: Nuclear Engineering and Science Equipment for Strategic Fuels Analysis Research in the Nuclear and Radiological Engineering Program at the Georgia Institute of Technology

SECTION B. Project Description

Georgia Tech proposes to purchase and install an imaging system to go with the existing x-ray source in a fully equipped irradiation laboratory, addition of spectroscopic instruments to perform energy resolution measurements in supplement of imaging, and tissue equivalent proportional counters (TEPC) for improved characterization of the neutron fields.

SECTION C. Environmental Aspects / Potential Sources of Impact

Radioactive Material Use – Activities will use radioactive sources that are covered by the USNRC and/or State of Georgia licensed activities at Georgia Tech for operations in the Radiological Science and Engineering Laboratory (RSEL) and related laboratories. No changes to existing radioactive licenses/permits are anticipated. Waste handling, storage, and disposal activities to support RSEL and related laboratories operations are in place at Georgia Tech. Georgia Tech and the RSEL and related laboratories, working with the Georgia Tech Office of Radiological Safety, are prepared to handle any and all radioactive material related issues as a result of teaching and research activities within the RSEL and related laboratories.

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 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 04/10/2015