

# DOE-ID NEPA CX DETERMINATION

## SECTION A. Project Title: UC Irvine Reactor upgrade to enhance safety and reliability – University of California Irvine

## SECTION B. Project Description

The University of California, Irvine (UCI) proposes to purchase a fuel surveillance camera, digital console chart recorder, and personal dosimetry system to increase the safety and security of its Mark I TRIGA® reactor facility. The equipment upgrade will also improve the fuel surveillance and management program to increase the reliability of the reactor instrumentation and control systems. The reactor facility is used in support of research and education programs in radiochemistry, nuclear fuels, and materials for extreme environments by students, faculty, and researchers from across the country as well as industry researchers.

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

Radioactive waste generated is collected and disposed of at approved waste dispose sites. UC Irvine has an approved petition through the South Western Low Lever Radioactive Waste Compact which allows for up to 254 cubic feet of waste annual to be disposed of. Radioactive waste is packaged in accordance with disposal site and Waste Broker requirements. Manifests are signed by certified UC Irvine employees.

Mixed waste generated is collected and disposed of at approved waste dispose sites. UC Irvine has an approved petition through the South Western Low Lever Radioactive Waste Compact which allows for up to 254 cubic feet of waste annual to be disposed of. Mixed waste is packaged in accordance with disposal site and Waste Broker requirements. Manifests are signed by certified UC Irvine employees.

Air emissions are unchanged by the proposal and are subject to the NRC Facility Operating License.

## 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: B2.2 Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

Justification: The activity consists of the acquisition, installation, testing, and commissioning of equipment to upgrade reactor reliability, safety, and security.

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

Approved by Jason Anderson, DOE-ID NEPA Compliance Officer, on 07/23/2021.