# DOE-ID NEPA CX DETERMINATION
# Idaho National Laboratory



CX Posting No.: DOE-ID-INL-12-026

**DIRECTIONS:** Responsible Managers, Program Environmental Lead (PEL), and Environmental Support personnel complete this form by following the instructions found at the beginning of each section and submit to Environmental Support & Services (see Environmental Points of Contact, NEPA/Environmental Checklist Support at http://webfiles/es&h/es&s/contacts.pdf).

**Enter a Valid Charge Number:** 101653B80

**SECTION A. Project Title:** Upgrade to the Concrete Masonry Unit (CMU) Wall at Test Reactor Area (TRA)-670

**SECTION B. Project Description**

The purpose of this project is to ensure the concrete masonry unit (CMU) separating the control room and the Reactor Data Acquisition System (RDAS) room located at TRA-670 meets the PC-4 seismic standard. The following is the summary of the overall upgrade modification approach for the 4" CMU.

The main issue with the CMU wall is the wall's capacity in the vertical direction. To solve this issue, the design firm Simpson Gumpert and Hertz (SGH), would provide a design using steel square/rectangular hollow structural section (HSS) shapes. These members would span from the floor to the ceiling and be placed so that they are in contact with the wall. A secure connection needs to be made at the top and bottom of this vertical member (i.e., the member would be secured to the floor and to the ceiling). Vertical members were estimated to be needed approximately every four feet on-center (this value may change as SGH proceeds with the actual analysis). The vertical members would be connected to the wall using through-bolts. The bolts would go through the vertical members, then through the wall, then through the backing plate. SGH has been instructed to minimize the amount of conduit or equipment that needs to be moved when making this design. This approach is current as of the last time SGH had a walk-down of the wall (September 2011).

Projected start date: January of 2013
Projected end date: September of 2014
Estimated cost: $ 295,000

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Disturbing Cultural or Biological Resources:** TRA-670 is eligible for nomination to the National Register of Historic Places and removal and/or changes of original features will adversely impact this historic property. See Section E for project conditions and instructions.

**Generating and Managing Waste:** The work associated with this project would result in concrete dust and chips. All waste generated during this project would be transferred to Waste Generator Services (WGS) for proper disposition. See Sections E and F pertaining to the management and/or handling of the following:

- Suspect Polychlorinated Biphenyl (PCB)-containing material
- Disturbing cultural/biological resources
- Asbestos, lead and other waste.

**Releasing Contaminants:** All chemicals utilized by this evolution would be managed in accordance with laboratory procedures. See Section F for project instructions.

**Using, Reusing, and Conserving Natural Resources:** All materials would be reused and recycled where economically practicable and as accepted by the customer. All applicable waste would be diverted from disposal in the landfill where conditions allow. See Section F for project instructions.

**SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s):** Identify applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date. or the document numbers for referenced environmental assessments, environmental impact statements, CERCLA record of decisions, or a previously approved EC number.

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, or similar requirements of DOE or Executive Orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or 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) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). 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:** National Environmental Policy Act (NEPA) Implementing Procedure, Final Rule, " 10 CFR 1020 Appendix B to Subpart D, Categorical Exclusion B2.5 "Facility safety and environmental improvements"

**Justification:** This activity is required to bring the facility up to current seismic design standards. Project activities in this Environmental Checklist (EC) are consistent with 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusion B2.5, "Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in

accordance with applicable requirements (such as 40 part CFR 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 part CFR 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel)."

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: 11/29/2012