

# DOE-ID NEPA CX DETERMINATION IDAHO NATIONAL LABORATORY

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CX Posting No.: DOE-ID-ICP-16-009,  
Rev. 1

## SECTION A. Project Title: INTEC – Upgrade of the Emergency Communication System, Revision 1

## SECTION B. Project Description

This revised project addresses the design, procurement, and installation of an upgrade to the emergency communication system (ECS) for the Idaho Nuclear Technology and Engineering Center (INTEC). The existing system does not meet the new Life Safety codes and parts are no longer available for the antiquated system. Approximately 50 buildings will be included in the system modification and upgrade of ECS equipment. Additional actions have been identified while performing the original scope.

### Specific actions:

- Remove old ECS equipment such as ECS panels, strobes, horns, conduit/wire, etc. as necessary
- Install new wireless ECS panels and new speakers in ~39 facilities; facilities that are deemed to be “unoccupied” will not have new ECS communication equipment installed
- Install new strobes when necessary
- Connect new speakers/strobes to new ECS panels using existing conduit/wire when possible
- Install conduit/wire to connect new speakers/strobes to new ECS panels when necessary
- Install power wiring to new ECS panels from electrical distribution panels
- Program and test communication equipment
- Remove existing fire alarm panel internals (including power) and re-use the fire alarm panel enclosures to house new terminal strips or similar ECS components for connecting of the existing field devices to the new ECS base panels
- Reroute existing telephone connections for each building fire panel (~39 locations) to the new EST3 panel’s Digital Alarm Communicator Transmitter (DACT) associated with the existing fire panel
- Replace existing smoke detectors due to hardware incompatibility/UL listing concerns
- Install new smoke detectors above each new fire panel to comply with updated code requirements where not currently met
- Replace any defective manual pull stations and sprinkler water flow devices (it is believed that existing functional field devices can be re-used except where defective)
- Re-program, test and commission the new EST3 panel for the fire alarm system

The following 50 buildings are involved with ECS upgrade project, however not every building will receive a new fire or ECS panel as a panel may serve more than one facility: CPP-603, 626, 2710, 604, 605, 649, 606, 644, 613, 616, 797, 1749, 652, 655, 659, 662, 663, 666, 679, 684, 692, 697, 698, 1604, 1606, 1608, 1617, 1618, 1631, 1634, 1674, 1646, 1647, 1650, 1662, 1663, 1666, 1671, 1673, 1683, 1684, 1686, 1688, 1689, 1696, 2719, 1774, 1798, 1799 (for further details about these buildings and the ECS upgrade refer to Appendix A of TFR-445).

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

**1. Air Pollutants** - If excavation is necessary to replace existing ECS equipment, then fugitive dust emissions may be generated as a result of excavation of gravel/soils.

Project activities may generate emissions from operating diesel-fueled mobile equipment (i.e., forklifts, scissor lifts, etc.). Such equipment is exempted as mobile internal combustion engines per IDAPA 58.01.01.222.02.e.

**2. Asbestos Emissions** – Limited quantities of non-friable and friable asbestos-containing material (ACM) may be generated during the FCS building modifications. Submittal of internal notification is required prior to removal of ACM. Non-radioactive friable and non-friable ACM waste will be disposed of at the INL Landfill Complex as appropriate and the radioactive friable or non-friable ACM waste will be disposed of at an approved offsite facility.

**4. Chemical Use and Storage** – The proposed project activities will involve the use of fuels for diesel-powered equipment and chemicals, such as adhesives, sealants, and paints. As applicable, project personnel will use non-hazardous chemical substitutes in place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/specifications of the project. Spill prevention/minimization measures will be used during storage and use of chemicals.

**5. Contaminated Sites Disturbance** - Any soil disturbance activities that may be required for equipment repair/replacement will be performed within Site CPP-88. A notice of soil disturbance will be completed and approved prior to excavation actions.

**6. Cultural/Historical Resource Disturbance** – CPP-603 and CPP-604 are eligible for listing on the National Register of Historic Places and are considered a Category 2 historic properties; CPP--606 is also eligible for listing on the National Register of Historic Places and is considered a Category 3 historic property. Removal and/or changes of original features may adversely impact these historic properties; however, the project activities as described are exempt as safety system activities. As such, the project may proceed as described without further cultural resource review.

**9. Waste Generation and Management** – Waste will be generated in the process of removing old ECS materials. As applicable, hazardous waste determinations will be performed on all generated waste to determine the appropriate management practices. Hazardous, mixed, low-level, and/or universal waste disposal will be conducted at appropriate licensed disposal facilities.

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Some of the impacted INTEC buildings are Hazardous Waste Management Act (HWMA)/Resource Conservation and Recovery Act (RCRA) permitted facilities. However, the nature of the minor modifications will not require modifications to the HWMA/RCRA permits.

Industrial waste will be generated as a result of the ECS upgrade project. Examples of industrial waste include horns, strobes, speakers, wiring, mounting brackets, metal conduit, packaging, etc. that are not deemed to be hazardous. This waste stream will be managed through Waste Generator Services and disposed of at the INL Landfill Complex.

**10. Material or Waste Handling and Trans.** – All applicable waste would be diverted from disposal in the landfill where conditions allow. Project personnel will use every opportunity to recycle, reuse and recover materials and divert waste from the landfill when possible. The project will practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycle content or are non-toxic or less toxic alternatives. New equipment will meet either the Energy Star or SNAP requirements as appropriate (see <https://sftool.gov/GreenProcurement>).

**11. Interaction with Wildlife/Habitat** - Project personnel will take steps (e.g., installation of bird netting) to mitigate potential bird nesting in areas where nesting could be disturbed by project activities (e.g., covered door railings and porticos above doorways). Project personnel are not to disturb active bird nesting sites.

**17. Work within areas Subject to Flooding** – The following buildings are within the Bureau of Reclamation 100-year Big Lost River floodplain: CPP-613, 644, 652, 684, 749, 1604, 1617, 1618, 1634, 1674, 1646, 1662, 1673, 1683, 1686, 1774. If the hypothetical 100-year flood event occurs while hazardous, mixed, and/or universal waste are generated or present in these buildings, then the potential exists for flood waters to contact and “wash out” the hazardous wastes. As discussed in 40 CFR 264.18(b), procedures need to be in effect which will cause the wastes to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters.

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| <b>SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s):</b> Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date. |
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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: Categorical Exclusion B2.5, Safety and environmental improvements

Justification: The emergency communication upgrades will ensure the INTEC system is efficient and in compliance with new Life Safety codes.

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

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on November 15, 2018.