

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Land Mobile Radio Completion Project

SECTION B. Project Description:

This revision is to capture the additional installation of repeaters to increase the strength of Radio Frequency (RF) transmission equipment to increase signal strength that was not adequate after initial project completion. This revision also includes additional facilities that were not identified in the original environmental checklist (EC).

The digital Land Mobile Radio Service that is currently in place at Idaho National Laboratory (INL) is supplied through a managed service contract with White Cloud Communications. The service provides inadequate signal strength in many facilities. The proposed action would install additional RF transmission equipment to increase the signal strength to required levels.

The proposed action includes installation of RF transmission equipment at all of the major INL campuses. Installation includes rack mounted equipment in equipment rooms, new antennas, connecting cables, and other related modifications. Equipment installation would be in existing equipment rooms at all locations except the Idaho Nuclear Technology and Engineering Center (INTEC), where a new shelter and associated site preparation would be needed. New towers would be needed at INTEC and the Radioactive Waste Management Complex (RWMC). New towers and the shelter would require minor ground disturbance. Modifications to equipment rooms would include conduit installations, electrical modifications (additional circuits), heating, ventilating, and air conditioning (HVAC) modifications (ducting changes or installation of additional cooling equipment), equipment anchoring, and other activities required to support the installation.

The work would interface with the existing managed service contract and the end user devices (hand held, mobile, and base station radios) currently deployed. There would be some minor interfaces with on-going operations and maintenance of existing communications systems.

Major equipment would be procured for compatibility with the system currently in place. It would be factory assembled into racks and factory tested, then transported to the INL and installed in the equipment rooms at each of the six major site campuses--Advanced Test Reactor Complex, Central Facilities Area, INTEC, Materials and Fuels Complex, Specific Manufacturing Capability, and RWMC. Factory technicians would oversee the installation and testing of the new equipment. Similar equipment would be used at the Idaho Falls Research and Education Campus, but, instead of an antenna system, the signals will be transmitted over fiber optic cables to various buildings and distributed in the buildings by premise distribution equipment. The technology is similar to cell phone systems, but it operates at a different frequency. The antennas would be connected to equipment by cables and would be mounted on structures, towers, etc., as deemed most appropriate. The project also includes site preparation activities.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions - Asbestos may be contained in some of the roofs. The project will evaluate installation locations to determine if asbestos will be disturbed. If the project must disturb asbestos, all appropriate training, controls, and notifications requirements will be followed.

Disturbing Cultural or Biological Resources - Ground disturbance for site preparation and installation of new towers and shelters requires a cultural resource review and survey if located outside of defined facility fences (Contact Branda Pace at 526-0916). Bird nests may be encountered on the top of buildings. Biological Resources will be contacted for applicable requirements if bird nests are discovered in the vicinity of the construction activity (contact Jackie Hafla at 227-9031). Ground disturbance outside of fenced facilities requires biological review (contact Jackie Hafla at 227-9031) and will require revegetation if disturbance is extensive (contact Jenifer Nordstrom 526-8119).

Generating and Managing Waste - Small amounts of non-hazardous waste such as scrap wire/cable, conduit, packaging material, empty chemical containers, etc., may be generated on the project. There is also a potential for creating some asbestos waste from roofs that are disturbed during antenna installation. Pollution prevention/waste minimization will be implemented where economically practicable to reduce the volume and/or toxicity of waste generated. All waste will be characterized, handled, and disposed at the direction of the facility Waste Generator Services (WGS) representatives.

Releasing Contaminants - Typical Construction chemicals such as lubricants, cleaners, paints, etc., will be used on the project. All subcontractor chemicals and associated Material Safety Data Sheets (MSDS's) will be submitted for approval on a chemical inventory list prior to bringing them on site. These chemicals will be entered into the Comply Plus Chemical Management System by the appropriate Chemical Coordinator.

Asbestos may be disturbed on the roofs where the antennas are to be placed. Appropriate training, controls, and notifications will be followed when disturbing asbestos.

Using, Reusing, and Conserving Natural Resources - All materials would be reused and/or recycled where economically practicable and as accepted by the customer. All applicable waste would be diverted from disposal in the landfill where conditions allow. New equipment would meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see <https://sftool.gov/green-products/0/hvacmechanical?agency=0>). In addition, the project would practice sustainable acquisition, as

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appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, or are non-toxic or less-toxic alternatives.

SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

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 Department of Energy (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 Comprehensive Environmental Response, Compensation, and Liability Act (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 that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusions B1.7, "Electronic equipment" and B1.19 "Microwave, meteorological, and radio towers"

Justification: Project activities in this EC are consistent with 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusion B1.7, "Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment" and B1.19, "Siting, construction, modification, operation, and removal of microwave, radio communication, and meteorological towers and associated facilities, provided that the towers and associated facilities would not be in a governmentally designated scenic area..."

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: 12/3/2014