

# ENVIRONMENTAL CHECKLIST IDAHO NATIONAL LABORATORY

## SECTION A. Project Title: MFC Dial Room Replacement Project

## SECTION B. Project Description:

The proposed project is to construct and operate a new dial room at the Materials and Fuels Complex (MFC) to continue operation of the telecommunications system at the Idaho National Laboratory (INL). As part of the INL Private Branch Exchange (PBX) consolidation effort, the need to replace Central Facilities Area (CFA), Radioactive Waste Management Complex (RWMC), and Power Burst Facility (PBF) PBX switches will eliminate the current switches potential failure and provide the necessary maintainable hardware and software to support INL missions. The project will maintain the existing dial room in the basement of MFC-752 as a splice/conduit/equipment room. The existing dial room needs to be replaced due to limited equipment storage space, poor access to existing cable routing, water seepage issues, and outdated telecommunications equipment (end-of-life hardware and software support).

The MFC dial room replacement project will include a new modular dial room facility; approximately 30' X 40' in size. The structure will be an engineered metal or concrete building with a steel frame; exterior siding, interior gypsum board walls, steel and plywood floors, metal roof system, which will rest on a new concrete foundation and house the necessary heating, ventilation and air conditioning (HVAC), electrical, life safety and communications systems but will not require connections to water or sewer. As with all new buildings, the Federal Guiding Principles will be followed during design and construction.

The dial room will be located directly south of MFC-759 and east of MFC-TR-1. The location is inside the MFC perimeter fence and would not require any cultural or biological reviews prior to excavation. MFC-752 wall penetrations for conduit will be the only modifications to the existing building and a historic building review and clearance has been granted. Directly west of MFC-TR-1 is a remediated Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site (radiologically contaminated line and soil). A new electrical ductbank may need to be installed through this area if the overhead power is not utilized. Although EPA notification would not be required, the project would need to contact RadCon for work support within the CERCLA site.

The project will reconfigure the existing underground telecommunications cabling system, which will include the installation of new conduit duct banks between the existing dial room and the new modular dial room.

Estimated start date: Late Summer 2010  
Estimated end date: Spring 2011  
Approximate Project Cost: \$5,000,000 to \$6,000,000

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

**Air Emissions** - Fugitive dust may be generated during excavation activities for the concrete foundation and trenching for the communications ductbank. All reasonable precautions will be taken to prevent fugitive dust during excavation. Fugitive dust control methods (water truck, etc.) that are used will be documented in the subcontractors daily logbook and will be used as a record to show compliance to the INL Title V air permit.

Subcontractor equipment such as generators, welders, etc. will be required to meet the opacity requirements established in the IDAPA regulations and INL Title V air permit. Equipment that does not meet these requirements will not be allowed on the project. There is also a possibility that some of the existing conduit may be asbestos conduit. If asbestos has to be disturbed during the project, all applicable requirements such as training, control methods, notifications, sampling, etc. will be followed.

**Disturbing Cultural / Biological Resources** - Core holes to accommodate a new telecommunication cable will need to be drilled through an existing wall of MFC-752, which is eligible for nomination to the National Register of Historic Places. Julie Braun of the Cultural Resource Management (CRM) Office reviewed the proposal and determined that drilling work in MFC-752 would not adversely affect historic features of the building and could be performed without further CRM office involvement.

**Generating and Managing Waste** - Industrial waste in the form of general construction debris such as waste concrete, scrap metal, scrap wire, packaging material, RCRA empty containers, etc. will be generated during the project. Outdated telecommunications equipment from the existing dial room will either be sent out as excess property or disposed of after evaluation. This equipment may contain circuit boards, batteries, solders, etc. that would need to be removed prior to disposal.

There is the potential that some of the existing cable that will be removed may be lead cable. If lead cable is discovered, the subcontractor will stop work and consult BEA on removal options. Lead waste will be disposed or recycled as applicable. There is also a possibility that some asbestos waste may be generated from activities associated with asbestos conduit. All waste will be characterized, stored, and disposed at the direction of WGS.

**Releasing Contaminants** - Typical construction chemicals such as concrete, adhesives, paints, fuels, lubricants, weld rod, etc. will be used during the project. All subcontractor chemicals that are used on the project will be submitted to BEA for approval on the subcontractor chemical inventory list through the vendor data system. The Construction Chemical Coordinator will track these chemicals in the INL Comply Plus Chemical Management System. Precautions will be taken by the subcontractor to prevent chemicals from being spilled. Any spills would be contained and cleaned up immediately and all appropriate notifications would be made.

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Refrigerant will be used in the HVAC equipment. Certified refrigeration technicians will be used when working with these refrigerants. The facility owner will be responsible for HVAC maintenance after project turnover. PCB's are not anticipated on this project. Telecommunication cable would not be associated with PCB's. The project will tie in power to the existing switchgear but the power cable and duct banks will be new. If suspect PCB's are discovered, the subcontractor will stop work and notify BEA prior to disturbing.

The existing facility may have lead cable and asbestos conduit. If these are found the subcontractor will be required to follow all applicable requirements (training, abatement requirements, control methods, sampling, etc.). Immediately west of MFC-TR-1 there is a remediated CERCLA site (radiologically contaminated line and soil). A new electrical ductbank may be brought through that area if the overhead power is not utilized. Although EPA notification would not be required, MFC Radiological Control will be contacted for support prior to beginning any work within the CERCLA site.

**Using, Reusing, and Conserving Natural Resources** – As indicated in the Generating and Managing Waste Aspect, a variety of general construction debris will be generated, some of which may be reused or recycled after evaluation. Some of the excessed materials and equipment from the existing dial room may also be reused.

**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: 10 CFR 1021, Appendix B, B1.7 "Acquisition, installation, operation, and removal of communication systems..." and B1.15 "Siting, construction (or modification) of support buildings..., including those for computer and data processing, administrative services, security; and similar support purposes..."

Justification: The MFC dial room replacement will house a variety of upgraded communications equipment in support of the overall telecommunications capability at the Idaho National Laboratory. This work is consistent with similar work in process or planned for other INL facilities and is appropriately covered under CX categories B1.7 and B1.15.

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 2/5/2010**