SECTION A. Project Title: PBF-622 Fiber Optic Cable Installation

SECTION B. Project Description and Purpose:

Revision 1:

The original EC identified the addition of an aerial fiber optic cable to PBF-622 aboveground using a power pole. The fiber optic cable was added but was laid on top of the ground. It was recognized that the aerial cable would limit future capability for movement of research equipment in the future and limits some activities and therefore, is not the preferred method. The preferred method is to trench the cable underground. The cable would be trenched at least 18" inches in depth. The trench would generally follow the path of the cable laying on the ground but some adjustments may be necessary to accommodate underground obstructions. See the figure below for the proposed path of the underground fiber optic cable.

Original EC:

National and Homeland Security (N&HS) uses the Power Burst Facility (PBF) building 622 (PBF-622) for research and development activities. The proposed action supplies fiber optic communications to the building. Project activities include installation, termination, and testing one (1) GFE 48 strand fiber optic cable from an exterior pole mounted fiber optic junction box to a current above ground communications conduit on the west side of PBF-622. The communication conduit will be intercepted and a new NEMA 4 junction box installed and used for the new cable run inside PBF-622. A GFE wall mounted equipment rack will be installed on the south wall of PBF-622 with patch panel and fiber enclosure. A dedicated 120VAC power circuit will be provided for the rack and sourced from a nearby electrical panel. The work is scheduled to be performed prior to December 01, 2018 and will last approximately 2-weeks. The costs are estimated to be approximately $32,200.00.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Emissions from installation activities are expected to be minimal. No asbestos work is anticipated. Emissions/fumes from common construction adhesives and are anticipated. Fugitive dust is expected during trenching activities. If portable emission sources are used, equipment must meet opacity requirements.

Discharging to Surface-, Storm-, or Ground Water

N/A
Disturbing Cultural or Biological Resources

All ground disturbing activities in the CITRC area, even in previously disturbed or built locations, requires a written Cultural Resource Review (CRR) prior to implementing project activities. Further, all ground disturbing activities in CITRC will need to be monitored by INL Cultural Resource Management Office (CRMO) personnel and may require DOE to consult with the Idaho State Historic Preservation Office (SHPO) and or the Shoshone-Bannock Tribes.

Generating and Managing Waste

Industrial waste, in the form of common construction debris, is expected. All Solid Waste would be managed by Waste Generator Services (WGS).

Releasing Contaminants

Typical construction chemicals such as lubricants, adhesives, etc., will be used during the project.

Using, Reusing, and Conserving Natural Resources

All applicable waste will be diverted from disposal in the landfill when possible. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible.

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification:

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: 10 CFR 1021, Appendix B to Subpart D, B4.7 “Fiber optic cable.”

Justification: The proposed activities are consistent with CX B4.7 "Adding fiber optic cables to transmission facilities or burying fiber optic cable in existing powerline or pipeline rights-of-way. Covered actions may include associated vaults and pulling and tensioning sites outside of rights-of-way in nearby previously disturbed or developed areas."

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

Approved by Jason L. Anderson, DOE-ID NEPA Compliance Officer on: 06/29/2021