

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Materials and Fuels Complex (MFC)-776 (Zero Power Physics Reactor [ZPPR]) Roof Repairs/Replacement

SECTION B. Project Description:

The MFC-776 (ZPPR) roof has several areas that are cracking and needs to be repaired, and the roof eventually needs to be replaced. This project will repair/patch the damaged areas as part of a routine maintenance activity.

In addition, project personnel have decided to run a field test on a product called Milliken CC8 Concrete Cloth to see if it would be a suitable material for re-roofing ZPPR. The proposed test will consist of dressing an existing soil stockpile that sits inside the MFC fence to a 1:1 slope and installing rolls of the concrete cloth on top of the dressed soil pile. The material will be rolled out in sheets, anchored to the soil with steel spikes, sealed together, and will be hydrated per the manufacturer representative's instructions. The material will remain in place until project personnel can determine how the system holds up to environmental forces (possibly up to a year). Once the test is completed, the material will be removed from the soil pile and disposed of at the direction of Waste Generator Services (WGS). The soil pile would be left in place and used for fill material at MFC.

The MFC-776 (ZPPR) is a historic building, eligible for listing on the National Register of Historic Places. One of its most unique and character-defining features is the roof system. If the decision is made to replace the roof, a separate environmental checklist would be prepared.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions - Fugitive dust may be generated while dressing the existing soil pile. All reasonable precautions will be used to prevent particulate from becoming airborne. If dust suppression is required, the subcontractor will record the type of dust suppression used (water) and at what frequency in their daily logbooks. Once installed, the concrete cloth acts as a cover to help prevent dust from blowing from the stockpiled soil.

The existing roofing material contains Category I non-friable asbestos. Qualified roofers will use removal methods that will not render the material friable and the waste will be sent to the Central Facilities Area (CFA) Landfill Complex for disposal.

Disturbing Cultural or Biological Resources - The MFC-776 (ZPPR) is a historic building, eligible for listing on the National Register of Historic Places. One of its most unique and character-defining features is the roof system. If the roof is replaced with in-kind materials, similar in color, texture, etc., and is made to look like the existing roof, a determination of no adverse impact would be made and the activity would be exempted from cultural resource review (Idaho National Laboratory [INL] Cultural Resource Management Plan Table 2 #3).

Use of the concrete cloth product has the potential to change the appearance of the roof and result in an adverse impact to this historic property. Project personnel must contact Julie Williams (526-0926) with Cultural Resources prior to starting the test of the concrete cloth so that options can be discussed. If the product can be made to mimic the existing roof material, a determination of no adverse impact would be made and no mitigation would be required.

Generating and Managing Waste - Construction roofing debris such as the existing roofing foam, wood, packaging material, cardboard, empty chemical containers, paint rollers/brushes, etc., will be generated on the project. Category I non-friable asbestos containing roofing material will be generated as well. Methods that will be used to remove the material will not render it friable or make the material Regulated Asbestos Containing Material (RACM). Category I non-friable asbestos containing material (ACM) will be disposed at the CFA Landfill Complex. All waste will be disposed at the direction of WGS.

Using, Reusing, and Conserving Natural Resources - All materials would be reused and/or recycled where economically practicable and as accepted by the customer. In addition, the project would 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 recycled content, or are non-toxic or less-toxic alternatives (see <https://sftool.gov/green-products/0?agency=7>).

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 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)).

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References: 10 CFR 1021, Appendix B to Subpart D, items B3.11 "Outdoor tests and experiments on materials and equipment components."

Justification: Project activities described in this Environmental Checklist (EC) are consistent with 10 CFR 1021, Appendix B to Subpart D, item B3.11 "Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for nondestructive actions such as detector/sensor development and testing and first responder field training."

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: 12/18/2014