

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: MFC-720 and MFC-721 Grading and Paving

SECTION B. Project Description and Purpose:

The TREAT facility (Materials and Fuels Complex [MFC]-720) is being prepared for restart of transient testing and needs various maintenance, modifications, and replacements to bring the facility to operational status. The asphalt around MFC-720 and MFC-721 is in poor condition and needs to be replaced. In addition, storm water drainage within these areas is not adequately diverted from buildings and structures, and the parking area near MFC-721 is mostly gravel and needs to be paved. The following is the scope for the proposed project:

- Remove asphalt around MFC-720 and near MFC-721
- Grade areas around and near MFC-720 and MFC-721 (including north side) to a contour that supports storm water drainage
- Construct a new rock storm water drainage basin in the northeast corner of the TREAT facility
- Add a concrete manhole, catch basins, and storm water drainage piping to the parking area near MFC-721
- Add pole lighting throughout the MFC-721 parking area and replace outdoor light fixtures above doors
- Construct an underground electrical duct bank in the MFC-721 parking area for light pole power
- Pave the areas around MFC-720 and the MFC-721 parking area
- Paint parking stall lines on the new parking lot asphalt
- Remove and replace sidewalks near MFC-721
- Replace MFC-721 rain gutters and add downspouts and splash blocks.

The Department of Energy Idaho Operations Office (DOE-ID) previously prepared an Environmental Assessment (EA) for the Resumption of Transient Testing of Nuclear Fuels and Materials (DOE/EA-1954) and issued a Finding of No Significant Impact (FONSI). An Environmental Checklist (EC) (Idaho National Laboratory [INL]-14-025 "2014 to 2018 Transient Testing Program Activities") and Plan (PLN)-4687 "General Environmental Requirements for the Resumption of Transient Testing of Nuclear Fuels and Materials at Idaho National Laboratory" were also prepared for the reactivation of the TREAT facility. The EA for the restart of TREAT (DOE/EA-1954) analyzed effects of activities associated with restart on the TREAT Reactor Building (MFC-720), the TREAT Reactor Control Building (MFC-721), and the cable corridor between the two facilities (DOE/EA-1954 p. 17). Activities analyzed in the EA were limited to refurbishment or like-for-like replacement of systems and equipment necessary to prepare the TREAT Reactor for restart and operation. Analysis of impacts to cultural resources associated with the TREAT restart was limited to the direct area of potential effects (APE). The direct APE was limited to buildings, parking lot footprints at the time of survey, surrounding gravel aprons, the roadway between MFC-720 and MFC-721, the buried cable corridor parallel to the road, and a narrow strip of land between the cable corridor and adjacent road where staging, laydown, and temporary parking areas were expected to be located (DOE/EA-1954 p. 21). In addition, the EA noted, "Disturbance of soil and vegetation will only occur within parking area around TREAT and MFC-721 and the cable corridor that parallels the roadway from the TREAT Reactor Control Building to TREAT" (p. 20) and "New footprints would not be established and soil disturbance would be minimized..." (p. 29).

Although the TREAT facility maintenance, modifications and replacements are part of DOE/EA-1954, EC INL-14-025, and PLN-4687 "General Environmental Requirements for the Resumption of Transient Testing of Nuclear Fuels and Materials at Idaho National Laboratory," the impacts associated with the proposed action were not analyzed in these documents.

This EC documents asphalt replacement and improvements to storm water drainage at MFC-720 and MFC-721 and parking area modifications at MFC-721. The project area has been previously disturbed, and the proposed action is unlikely to result in cumulative impacts to resources analyzed in the EA.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Fugitive dust may be generated during excavation activities.

Discharging to Surface-, Storm-, or Ground Water

The storm water rock basin inside TREAT and the storm water catch basins and pipe distribution drainage system near MFC-721 do not qualify as shallow injection wells. The storm water catch basins are enclosed concrete structures that drain to the piping system (non-perforated) that discharges to an above ground storm water culvert that discharges on the south side of the road. There is no subsurface discharge from either of these systems.

Disturbing Cultural or Biological Resources

The project will disturb soil inside the TREAT fence and areas near MFC-721.

MFC-720 and MFC-721 are potentially eligible for nomination to the National Register of Historic Places. Removal and/or changes of original features could adversely impact these historic properties.

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Generating and Managing Waste

Typical non-hazardous construction waste such as asphalt, concrete, Resource Conservation and Recovery Act (RCRA) empty marking paint cans, etc., will be generated during the project. Light bulbs/tubes/fixtures/ballasts may be generated when replacing the outdoor building light fixtures.

Releasing Contaminants

There is a potential for spills associated with subcontractor fueling activities. The north side of MFC-721 has a no action CERCLA site that does not have any restrictions regarding soil disturbance. Soil associated with this site will be incorporated into the newly contoured slope.

Using, Reusing, and Conserving Natural Resources

Removed asphalt will be placed in the asphalt pile at the CFA landfill for reuse/recycle. Other waste that is suitable for recycle, such as scrap metal, will be diverted from landfill disposal when practicable.

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, items B1.3 "Routine maintenance," B1.15 "Support buildings, B1.33 "Stormwater runoff control"

Justification: Project activities described in this EC are consistent with 10 CFR 1021, Appendix B to Subpart D, items B1.3 "Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- (a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses;
- (b) Door and window repair or replacement;
- (c) Wall, ceiling, or floor repair or replacement;
- (d) Reroofing;
- (e) Plumbing, electrical utility, lighting, and telephone service repair or replacement;
- (f) Routine replacement of high-efficiency particulate air filters;
- (g) Inspection and/or treatment of currently installed utility poles;
- (h) Repair of road embankments;
- (i) Repair or replacement of fire protection sprinkler systems;
- (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces;
- (k) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation);
- (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor;
- (m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;
- (n) Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes);

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- (o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and
- (p) Removal of debris.

B1.15 "Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.5, B6.6, and B6.10 of this appendix."

B1.33 "Design, construction, and operation of control practices to reduce stormwater runoff and maintain natural hydrology. Activities include, but are not limited to, those that reduce impervious surfaces (such as vegetative practices and use of porous pavements), best management practices (such as silt fences, straw wattles, and fiber rolls), and use of green infrastructure or other low impact development practices (such as cisterns and green roofs).

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: 3/02/2017