

**U.S. Department of Energy
Naval Reactors Laboratory Field Office**

Naval Reactors Facility

National Environmental Policy Act (NEPA) Categorical Exclusion (CX)
Determination Summary Form

NAVAL REACTORS FACILITY (NRF) FIRE WATER UPGRADE PROJECT

REFERENCE

10 CFR Part 1021, Department of Energy National Environmental Policy Act Implementation Procedures, Subpart D, Typical Classes of Actions

PROJECT SCOPE DISCUSSION

The purpose of the NRF Fire Water Upgrade (FWU) project is to construct a new fire water storage tank and associated pump house that will support future projects and meet the requirements of the International Fire Code as future projects move forward. The project will be located within the NRF Administrative Area (i.e., inside the security fence) in a graveled area south of the Spent Fuel Packaging Facility. This location is in close proximity to power and water sources. The location encompasses Site NRF-75, a "No Action" Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) area where formerly located above ground fuel oil tanks resulted in oil contamination in some of the soils, and surface remediation was performed.

The scope of this project includes constructing a new 150,000 to 250,000 gallon fire-water storage tank, constructing a pump house, and installing a pumping station inside the pump house. The pump house will enclose two 2,000 gallons per minute (gpm) water pumps, a 500 gpm pressure maintenance pump, and associated piping. Site preparation work will include characterization of certain soils in the construction area for potential environmental and radiological contaminants, with focus on the CERCLA "No Action" site; excavation; installation of the piping connections to the current fire-water and raw-water systems; and installation of duct banks to provide power and fire alarm communications. Construction will include pouring concrete foundations, steel erection, framing, mobile crane operation, welding, painting, insulating, final grading, and commissioning. The FWU project is scheduled to begin soil characterization in late summer of 2017. Construction is scheduled to begin in the spring of 2018 and finish in the fall of 2018. General Plant Project (GPP) funds will be used.

The project does not violate applicable regulatory requirements, require construction or major expansion of waste handling facilities, result in unpermitted releases of hazardous substances, or adversely affect environmentally sensitive resources, including wetlands. The project does not involve genetically engineered organisms or species. There are no extraordinary circumstances related to the proposed action. The project has not been segmented to meet the definition of a categorical exclusion and it is not connected to other actions with potentially significant and/or cumulative impacts.

CONCLUSION

The NRF Fire Water Upgrade project is categorically excluded from additional NEPA documentation under 10 CFR 1021 Subpart D, Appendix B, CX B1.15, CX B2.5 and CX B3.1. Specifically, the CXs that apply are the following:

B1.15 Support buildings

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, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

B.2.5 Facility Safety and Environmental Improvements

Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel).

B3.1 Site characterization and environmental monitoring

Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to:

- (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing;
- (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools);
- (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells;
- (d) Aquifer and underground reservoir response testing;

- (e) Installation and operation of ambient air monitoring equipment;
- (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes);
- (g) Sampling and characterization of water effluents, air emissions, or solid waste streams;
- (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources);
- (i) Sampling of flora or fauna; and
- (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

NRLFO Approval: Christopher M. Hervit Date: 8/30/2017
C. M. Hervit CX Determination Date