

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

Bettis Atomic Power Laboratory

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

**Outfall (OF-001) National Pollutant Discharge Elimination System (NPDES) Detention
Basin 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 proposed scope of the project is to improve existing stormwater drainage infrastructure by constructing new stormwater best management practices (BMPs) to improve water quality and control rate and volume of stormwater discharge at Outfall 001 (OF-001). OF-001 discharges to Bull Run adjacent to Bettis Road southeast of the Bettis Laboratory and has a drainage area of approximately 58 acres. To comply with the regulatory requirements and meet effluent limits, the construction of a large BMP is proposed. This proposed project will include the construction of an approximately six million gallon dry extended detention basin at the discharge point of OF-001. The dry extended detention basin will require clearing and grubbing, excavation, site grading, new drainage installation to route the OF-001 flow into the BMP, energy dissipation, and an outlet structure to control the rate of discharge from the basin to Bull Run. In addition to the construction of the basin, additional supporting features will be constructed and/or installed such as a basin access road, forebay, bioretention soil media, chemical feed injection system, precast concrete vault with knife gate, and infrastructure for safe outfall sampling. Once the new Bull Run sampling station is operating the existing sampling station will be subsequently removed. Due to the age of the existing sampling station, it is suspected the building contains asbestos, polychlorinated biphenyl, and lead containing materials.

In order to complete this work, the project will impact approximately eight acres of land and primarily impact the stormwater sewer system. Grading for the dry extended detention basin may require modification of the existing Springwater Intercept System force main location. Prior to commencing construction of the dry extended detention basin, the demolition of the buildings of the newly acquired East End Land/Minchoff property must be completed as a separate task.

The project does not violate applicable regulatory requirements, require construction or major expansion of waste handling facilities, and results in the 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 is not connected to other actions with potentially significant and/or cumulative impacts.

CONCLUSION

The OF-001 NPDES Detention Basin Project is categorically excluded from additional NEPA documentation under 10 CFR 1021 Subpart D, Appendix B, B1.15, B1.16, B1.17, B1.23, B1.27, B1.31, B1.33, B1.34, B2.2, and B3.1. The categorical exclusions that applies 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 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.

B1.16 Asbestos Removal

Removal of asbestos-containing materials from buildings in accordance with applicable requirements (such as 40 CFR part 61, "National Emissions Standards for Hazardous Air Pollutants"; 40 CFR part 763, "Asbestos"; 29 CFR part 1910, subpart I, "Personal Protective Equipment", and 29 CFR part 1926, "Safety and Health Regulations for Construction"; and appropriate state and local requirements, including certificate of removal contractors and technicians).

B1.17 Polychlorinated Biphenyl Removal

Removal of polychlorinated biphenyl (PCB)-containing items (including, but not limited to, transformers and capacitors), PCB-containing oils flushed from transformers, PCB-flushing solutions, and PCB-containing spill materials from buildings or other aboveground locations in accordance with applicable requirements (such as 40 CFR part 761).

B1.23 Demolition and Disposal of Buildings

Demolition and subsequent disposal of buildings, equipment, and support structures (including, but not limited to, smoke stacks and parking lot surfaces), provided that there would be no potential for release of substances at a level, or in a form, that could pose a threat to public health or the environment.

B1.27 Disconnection of Utilities

Activities that are required for the disconnection of utility services (including, but not limited to, water, steam, telecommunications, and electrical power) after it has been determined that the continued operation of these systems is not needed for safety.

B1.31 Installation or Relocation of Machinery and Equipment

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that the uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of the environmental impacts.

B1.33 Stormwater Runoff Control

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).

B1.34 Lead-based Paint Containment, Removal, and Disposal

Containment, removal, and disposal of lead-based paint in accordance with applicable requirements (such as provisions relating to the certificate of removal contractors and technicians at 40 CFR part 745, "Lead-Based Paint Poisoning prevention In Certain Residential Structures").

B2.2 Building and Equipment Instrumentation

Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms and safeguards and security equipment).

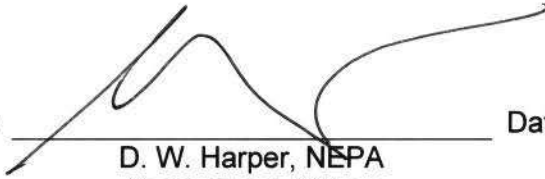
B3.1 Site Characterization and Environmental Monitoring

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 vadose (unsaturated) zone, well logging, and installation or 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 and fauna; and
- (j) Archeological, historical, and cultural resource identification in compliance with 36 CFR Part 800 and 43 CFR Part 7.

NRLFO Approval:



A handwritten signature in black ink, appearing to read 'D. W. Harper', is written over a horizontal line. The signature is stylized and extends above and below the line.

D. W. Harper, NEPA
Compliance Officer

Date:



A handwritten date '3/31/2022' in black ink is written above a horizontal line.

CX Determination Date