

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Advanced Test Reactor (ATR) Fuel Oil Leak Excavation and Cleanup

SECTION B. Project Description and Purpose:

A leak in the underground fuel oil transfer piping between buildings Test Reactor Area (TRA)-627 and tank TRA-776 (located in an underground vault immediately north of TRA-670) has been confirmed at the Advanced Test Reactor (ATR) Complex. The line containing the leak is approximately 1000 feet of buried 1.5" carbon steel piping between the pump house TRA-627 and tank TRA-776. Excavation of a test trench is needed to determine if fuel oil-laden soil is present and conduct a visual inspection of the piping. After trenching, further evaluation would be conducted to determine the approximate leak location, and if oil-laden soil is identified, to determine the extent of remediation efforts.

The excavation location has the potential for other underground utilities, including plant air piping, firewater piping, electrical distribution lines, and fuel oil piping. Therefore, vacuum excavation is required, and test trenches would be located in an area off the road near the intersection of Bass and Grayling streets inside the ATR Complex perimeter. Total disturbed area is expected to be approximately 25 feet X 25 feet. The depth of the suspected leaking fuel oil line is not precisely known but is suspected to be approximately 6-8 feet deep. The extent of required excavation is dependent on identification of oil-laden soil during the excavation. If oil-laden soil is not identified in this excavation location, a trench box will be placed around the fuel oil line to allow activities to split the fuel line and narrow the suspected leak location to piping west or east of the trenched area. Periodic radiological control oversight may be required during excavation.

The scope includes excavation of diesel contaminated soil along the length of the line, if required. The level of corrective action will be determined by Department of Environmental Quality (DEQ) and may not require the removal of contaminated soil. However, other activities associated with site cleanup may be required. Required actions will be discussed with the Program Environmental Lead prior to starting work to verify compliance with this Environmental Checklist (EC) and to determine if modification of the EC is required.

Project Start Date: May 2016

Project End Date: May 2016

Project Cost: Approximately \$10,000.00 - \$100,000.00

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Maintenance activities could generate fugitive dust.

Disturbing Cultural or Biological Resources

Maintenance activities would be conducted within facility boundaries and may involve soil disturbance activities that could impact cultural and biological resources (e.g., such as arrowheads, bone fragments, or any other cultural artifact).

Generating and Managing Waste

Activity would generate a variety of waste such as contaminated soil and other waste typical of maintenance.

Releasing Contaminants

Although not anticipated, the proposed activity has a potential for release of small amounts of air emissions and of fuel oil.

Using, Reusing, and Conserving Natural Resources

All materials would be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill where conditions allow. The project would practice sustainable acquisition.

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

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“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: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, 10 CFR 1021, Appendix B to Subpart D, Categorical Exclusion B6.1 "Cleanup actions"

Justification: The proposed activities are consistent with CX B6.1 "Small-scale, short-term cleanup actions, under RCRA, Atomic Energy Act, or other authorities, less than approximately 10 million dollars in cost (in 2011 dollars), to reduce risk to human health or the environment from the release or threat of release of a hazardous substance other than high-level radioactive waste and spent nuclear fuel, including treatment (such as incineration, encapsulation, physical or chemical separation, and compaction), recovery, storage, or disposal of wastes at existing facilities currently handling the type of waste involved in the action. These actions include, but are not limited to:

- (a) Excavation or consolidation of contaminated soils or materials from drainage channels, retention basins, ponds, and spill areas that are not receiving contaminated surface water or wastewater, surface water or groundwater would not collect and if such actions would reduce the spread of, or direct contact with, the contamination;
- (b) Removal of bulk containers (such as drums and barrels) that contain or may contain hazardous substances, pollutants, contaminants, CERCLA-excluded petroleum or natural gas products, or hazardous wastes (designated in 40 CFR part 261 or applicable state requirements), if such actions would reduce the likelihood of spillage, leakage, fire, explosion, or exposure to humans, animals, or the food chain;
- (c) Removal of an underground storage tank including its associated piping and underlying containment systems in accordance with applicable requirements (such as RCRA, subtitle I; 40 CFR part 265, subpart J; and 40 CFR part 280, subparts F and G) if such action would reduce the likelihood of spillage, leakage, or the spread of, or direct contact with, contamination;
- (d) Repair or replacement of leaking containers;
- (e) Capping or other containment of contaminated soils or sludges if the capping or containment would not unduly limit future groundwater remediation and if needed to reduce migration of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products into soil, groundwater, surface water, or air;
- (f) Drainage or closing of man-made surface impoundments if needed to maintain the integrity of the structures;
- (g) Confinement or perimeter protection using dikes, trenches, ditches, or diversions, or installing underground barriers, if needed to reduce the spread of, or direct contact with, the contamination;
- (h) Stabilization, but not expansion, of berms, dikes, impoundments, or caps if needed to maintain integrity of the structures;
- (i) Drainage controls (such as run-off or run-on diversion) if needed to reduce offsite migration of hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum or natural gas products or to prevent precipitation or run-off from other sources from entering the release area from other areas;
- (j) Segregation of wastes that may react with one another or form a mixture that could result in adverse environmental impacts;
- (k) Use of chemicals and other materials to neutralize the pH of wastes;
- (l) Use of chemicals and other materials to retard the spread of the release or to mitigate its effects if the use of such chemicals would reduce the spread of, or direct contact with, the contamination;
- (m) Installation and operation of gas ventilation systems in soil to remove methane or petroleum vapors without any toxic or radioactive co-contaminants if appropriate filtration or gas treatment is in place;
- (n) Installation of fences, warning signs, or other security or site control precautions if humans or animals have access to the release; and
- (o) Provision of an alternative water supply that would not create new water sources if necessary immediately to reduce exposure to contaminated household or industrial use water and continuing until such time as local authorities can satisfy the need for a permanent remedy."

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: 5/24/2016