

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

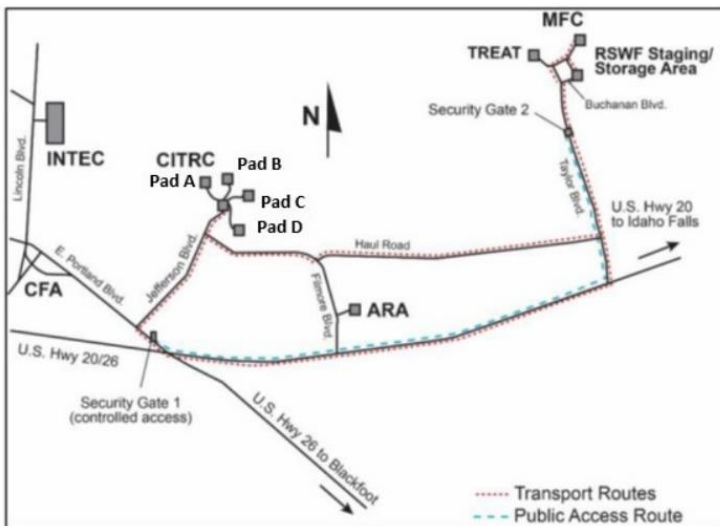
SECTION A. Project Title: Pad A Site Characterization at CITRC for Project Pele

SECTION B. Project Description and Purpose:

The Office of the Secretary of Defense Strategic Capabilities Office (SCO) is proposing to construct and demonstrate a prototype mobile microreactor at the Critical Infrastructure Test Range Complex (CITRC) Pad A at the Idaho National Laboratory (INL) Site Figure 1). In preparation for the project, SCO is proposing to perform site characterization at Pad A and the INL borrow pit that will be used as the basis for designing the shielding structure for the mobile microreactor. Site characterization work typically includes drilling several small-diameter bore holes to depths of 20 to 100 feet at the site, collecting samples of the cuttings for analysis, and performing other subsurface measurements in the borings as part of a typical geotechnical investigation.

The proposed site characterization would be performed by a qualified SCO subcontractor under the guidance of INL personnel and is anticipated to be completed in 20 – 30 days. It is anticipated that all activities would occur in previously disturbed areas; however, some vegetation clearing at the borehole locations may occur in order for truck mounted equipment to reach the desired location. Because this activity would require ground disturbance, dust may be generated. Dust suppressions will be implemented as needed. Emissions from operations of heavy equipment are not regulated as stationary sources, and it is anticipated that no emission reporting is required. Any waste generated during activities would be disposed of as required by Waste Generator Services using established plans and procedures. Additionally, any chemical use (i.e., bentonite) would be used per the manufacturer instructions and reported as required by INL Chemical services.

Figure 1. CITRC in relation to other INL Site Facilities.



SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Project activities have the potential to release ozone depleting substances and greenhouse gases.

Discharging to Surface-, Storm-, or Ground Water

NA

Disturbing Cultural or Biological Resources

There is the potential for this work to impact vegetation and for project personnel to interact with various wildlife species. A Biological Resource Review will be arranged within two weeks prior to the initiation of any activities that might disturb soil or vegetation and again following completion of project activities. A nesting bird survey is included with the Biological Resource Review for actions occurring between April 1 - October 1 per compliance with the Migratory Bird Treaty Act. Bat surveys are also included with the Biological Resource Review in accordance with the INL Bat Protection Plan. This undertaking involves ground disturbance within the CITRC area. LWP-8000 requires on-site cultural resource monitoring of any ground disturbing activities conducted at CITRC.

Generating and Managing Waste

When wastes are generated, how they are disposed can adversely affect the environment. Managing wastes appropriately and responsibly and implementing recycling or reuse practices, where feasible, during project activities can reduce the potential impact on the environment.

Releasing Contaminants

When chemicals are used during the project there is the potential for spills that could impact the environment (air, water, soil).

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Using, Reusing, and Conserving Natural Resources

Project description indicates materials will need to be purchased or used that require sourcing materials from the environment. Being conscientious about the types of materials used could reduce the impact to our natural resources.

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:

B3.1 "Site characterization and environmental monitoring"

Justification:

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: 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; Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); 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; Aquifer and underground reservoir response testing; Installation and operation of ambient air monitoring equipment; 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); Sampling and characterization of water effluents, air emissions, or solid waste streams; Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); Sampling of flora or fauna; and Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jason L. Anderson, DOE-ID NEPA Compliance Officer on: 6/15/2023