DOE-ID NEPA CX DETERMINATION IDAHO NATIONAL LABORATORY

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CX Posting No.: DOE-ID-ICP-17-010

SECTION A. Project Title: INTEC - Interim Storage Area Upgrades

SECTION B. Project Description

The Interim Storage Areas (ISA-1 and ISA-3) will be upgraded to improve the storage areas, improve the access points and place radiation barriers to reduce exposure to nearby work areas. The Interim Storage Areas upgrades are needed to support the long term storage of RH-TRU waste, waiting Waste Isolation Pilot Plant (WIPP) disposal.

The ISA-1 will be enlarged to accommodate storing more ISCs, reduce radiation exposure, and give the operators better access to operate and maneuver their heavy equipment while transporting ISCs. The existing ISA-1 includes a gravel, asphalt/concrete surface lay-down area for staging waste containers in Interim Storage Containers (ISCs). The current set up of ISA-1 is not wide enough to allow the forklifts to place the ISCs without their wheels traversing over the edges of the asphalt and breaking up the asphalt. ISA-1's narrow width forces the operators to use extreme care when performing multi-point turns because the balance of the forklift is disrupted as the tires leave the asphalt. Also, the radiation levels being recorded in the nearby buildings and wells are increasing.

The ISA-3 entrance will be improved to accommodate the heavy equipment accessing ISA-3 by asphalting the north and south sides of Sequoia Ave., and asphalting the east and west sides of the gate, allowing a wider access through the entrance. The existing ISA-3 is difficult to access for some heavy equipment. The current entrance is set to accommodate a straight entry from approximately a 20' wide road. This requires many vehicles to make multi-point turns. The surface on the south side of the road has a soft gravel base where vehicles tend to get stuck during wet times of the year.

SECTION C. Environmental Aspects / Potential Sources of Impact

- 1. Air Pollutants Fugitive dust emissions will be generated as the result of the operation of heavy equipment used for preparing the base and laying the base materials for the asphalt pad. Fugitive emissions will be controlled. As necessary, the project will provide radiological analytical data to Environmental Programs to allow radiological emissions to be calculated for all diffuse sources, particularly disturbed soils within CERCLA areas to the Air Permitting Technical Resource. Project activities will also generate emissions from operating diesel fueled mobile equipment (graders, forklifts, etc.). Such equipment is exempted as mobile internal combustion engines per IDAPA 58.01.01.222.02.e.
- **4. Chemical Use and Storage** Typical construction type chemicals such as fuels, lubricants, marking paint, cleaners, etc., will be used on the project. Project personnel will use non-hazardous chemical substitutes in the place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/specifications of the activity. Spill prevention/minimization measures will be used during storage and use of chemicals/fuels.
- **5. Contaminated Sites Disturbance** CERCLA areas will be disturbed during excavation for ISA upgrades. Project personnel must obtain a Notice of Disturbance prior to starting the ISA upgrades.
- **6. Cultural/Historical Resource Disturbance** This work will be performed within facility boundaries and previously disturbed areas. It is unlikely that archaeological resources will be encountered. The Stop Work will be invoked immediately should unusual materials (i.e., bones, flakes of obsidian, "arrowheads" or other artifacts, rusty cans, etc.) be encountered.
- **9. Waste Generation and Management** Project personnel do not anticipate generating <u>hazardous</u>, <u>radioactive</u>, <u>or mixed waste</u>. However, there is a potential of equipment leaks, chemical product spills. Should hazardous or mixed waste streams be generated, the waste streams will be managed through Waste Generator Services.

Limited quantities of <u>industrial waste</u> (nonhazardous, nonradioactive) will be generated. This waste stream will be managed through Waste Generator Services and disposed of at the INL Landfill Complex.

10. Hazardous/Rad. Material or Waste Handling and Trans - A hazardous waste determination will be performed for all waste streams to identify the appropriate management practices. Waste streams will be evaluated to determine if any of these materials can be recycled or reused and will be evaluated to implement actions for minimizing waste generation.

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16. Use, Reuse and Recycling of Resources –INL borrow sources may be used to provide backfill (soil and gravel). Backfill taken from INL borrow sources must be coordinated through the BEA Road and Grounds Manager and completion of required form.

17. Work in Areas Subject to Flooding – The following INTEC facilities will support the proposed action: Interim Storage Areas (ISAs) 1 and 3 (CPP-1789). Activities and facilities at the INL are considered to be within the 100-year floodplain if they are within the areas shown on the site-wide Big Lost River floodplain map.

The northeastern corner of CPP-1789 (along Birch St.) is within the 100-year Big Lost River floodplain; therefore, activities that occur in the northeast corner of CPP-1789 may experience some 100-year flood related impacts. The southern area of CPP-1789, including Sequoia Ave., is not within the 100-year floodplain. Thus the ISA-3 entrance improvements to accommodate the heavy equipment accessing ISA-3 by asphalting the north and south sides of Sequoia Ave. are not within the 100-year floodplain.

A small area in the south portion of currently existing ISA-1, south of Palm Ave., adjacent to Cypress Ave. appears to be within the 100-year Big Lost River floodplain. The 100-year flood elevations correspond to the northeast corner of INTEC represent the hypothetical flood in the current existing ISA-1 area and the proposed new ISA-1 extension area. The water surface elevation of the 100-year flood at the INTEC NE corner is 4907.35 ft msl. Ground surface elevations of these two areas were surveyed and mapped by the project and compared to this flood elevation. The map provided by the project indicates the ground surface elevations in this area are above 4907.35 ft msl, and, therefore, outside of the Big Lost River 100-year floodplain.

The proposed new ISA-1 extension area north of Palm Avenue is immediately adjacent to the drainage ditch that conveys the local watershed overland flow 100-year floodplain. Any gravel or pavement modifications or other modifications in this area must allow runoff to flow to the ditch and not interfere with the flow characteristics of this drainage ditch. If modifications to this ditch such as culverts are planned they must maintain the capacity of the 100-year event in this ditch.

The hypothetical flood may disrupt access to the work area and temporarily interfere with work activities. Work could resume after flood waters subside. The proposed activities are not expected to cause any impacts or changes to the Big Lost River floodplain dimensions, elevations, flow volumes, or velocities.

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: 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, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: B6.6, Modification of a facility for storing, packaging, repackaging waste and B6.10, Siting/construction/operation/decommissioning of small upgraded or replacement waste storage facilities

Justification: The ISA-1 and ISA-3 storage areas upgrade and improvement project will not have a significant effect on the human environment.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on May 25, 2017.