# DOE-ID NEPA CX DETERMINATION
# Idaho National Laboratory



CX Posting No.: DOE-ID-INL-15-038

**SECTION A. Project Title:** Central Facilities Area (CFA) and Materials and Fuels Complex (MFC) Live Fire Range Modifications

**SECTION B. Project Description:**

The principle purpose of the live fire facilities at Idaho National Laboratory (INL) is to provide firearms and tactical training/qualification requirements for Protective Force Personnel. Live fire facilities are located at the Central Facilities Area (CFA) and the Materials and Fuels Complex (MFC). Training activities at the live fire ranges reduces risks inherent in employing armed personnel. The live fire ranges may also be used by other Department of Energy (DOE) and DOE-contractor personnel and federal, state and local law enforcement, and military personnel for training, testing, qualification, and competition. Other approved organizations may also use the live fire ranges for training and to conduct testing and evaluation of products and equipment.

The following includes a brief description of the live fire ranges:

Range 1
- 1200 yard long range uses include shooter engaging targets at unknown distances
- Shooting the FN240 machine gun
- Shooting .50 Barrett
- Shooting from a moving vehicle (MRAP)
- Shooting 40mm grenades (in the fenced area at the berm)
- LAW rockets and RPG
- Auto prop for engaging vehicles
- Explosive training

Range 2
- 50 yards deep, steel target range
- Pneumatic steel targets
- Horizontal target runner (“running man”)
- Use of plate racks

Range 3
- 100 yards deep with turning targets on the 25 yd, 50 yd, and 100 yd line
- Twenty shooting lanes
- Turning targets will face or edge the shooter with the ability of altering the exposed time
- This range has a 22 yard deep asphalt pad that allows the shooter to advance on the target.
- Can use all small arms calibers (hand guns and rifles)

Range 4
- Indoor range, 25 yd deep
- Eight shooting lanes
- Turning targets that edge and face the shooter.
- Strictly a non-lead range, lead-free ammunition only is used on the outdoor ranges.
- Shooter can advance on the targets
- Use small arms ammunition, hand guns and rifles up to 5.56x45 calibers. (no .308 or .50 cal)

Range 5
- 800 yard deep range with targets located at the 100 yd, 200 yd, 300 yd, and 400 yd
- Can use all small arms ammunition including .50 cal
- Sighting in optics and sniper training.
- Training with the full automatic machine gun (7.62 NATO)
- Training with the 40mm chalk round.
- Handgun training
- Auto prop for engaging vehicles

Range 6
- 600 yard deep natural train range with pneumatic targets.
- Horizontal target runner (“running man”)
- Auto prop for engaging vehicles
- Use of plate racks and steel targets

Range 7
- Explosive and ballistic breaching range
- Explosive training range

Range 8

- "Shoot house" use for room entry training

The scope of this EC covers operation of the gun range and the modifications discussed in this environmental checklist (EC).

Modernization of the live fire facilities at CFA and MFC is needed to support firearms and tactical training for Protective Force Personnel.

Live fire range improvements at CFA would include the following activities:

1. Replace electro-mechanical target turners (60 at Range 3 and 18 at Range 5) and associated utilities with Action Target pneumatic target turners. The new target turners require an air compressor. Electrical modifications to power the air compressor and target turner controls would be performed at Range 3 and Range 5.
2. Install a new pneumatic target controller on Range 6 and relocate the down range target controller components. This would require about 30 feet of trenching from the down range target controller to the new location about 30 feet to the East (next to the existing berm). Approximately 30 feet of conduit for new control wiring would be installed in the trench. Precast concrete blocks (2 ft. X 2 ft. X 6 ft.) and a soil berm would act as protective backing (bullet protection) for the new down range target controller.
3. Install a concrete facade wall to perform training on breaching facility doors and windows. The concrete facade would contain door pockets/jams and is approximately 30 ft. long x 9 ft. tall x 9 in. deep.

Target turner installation would include removal of target turners, installation of buried conduit for control conductors and air hose, construction of a new room to house the air compressors, installation of new target turners, electrical modifications for powering compressors and target controls, and installation of a new target control system. Construction of the concrete facade wall would require demolition the existing wood wall, excavation for new wall concrete footings, and erection of the new concrete wall.

Live fire range improvements at MFC would include the following major activities:

1. Install 10 new target turners and control system. Installation would include burying conduit for control conductors and air hose, installing a new air compressor in the cargo container already at the location, and performing electrical modifications for powering air compressor and target controls.
2. Install a ballistic knee wall to protect target turner equipment, and remove asphalt for new wall placement.
3. Install a 10 ft. x 20 ft. office trailer. Trailer installation would include excavation for placement of gravel pad and placement of a concrete stoop at the trailer entrance. Electrical modifications would be needed for trailer lighting, heating, ventilating, and air conditioning (HVAC) and receptacles.
4. Clear vegetation from around an area approximately 100 ft. x 200 ft. behind the bullet impact berm on the pistol range to create a training area.

In addition to the above modifications, vehicles, drained of all fluids prior to delivery, would be procured from Pacific Recycling and placed at ranges. The vehicles would allow Protective Force to test ammunition and tactics for resolving tactical situations with deliberate shooting techniques on paper targets placed inside the vehicle. Ammunition (.308, .223 and 40 S&W) containing lead would be used for this training. It is estimated that there would be no more than 1 lb of lead within a vehicle. It is anticipated the vehicles would be returned to Pacific Recycling for recycling at the end of the training. The recycler would be made aware of lead fragments fired into the interior of the vehicle. If the vehicles are unable to be returned to the recycler, the vehicles would be dispositioned through Waste Generator Services (WGS).

Gun range operations involving tracer rounds or other fire hazards during the fire season are required to have concurrence of the INL Fire Chief's office to mitigate the potential for wildland fire.

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Air emissions** - On September 19, 1988 a Director's Permit To Construct exemption was granted prior to constructing the indoor firing range facility (B21-608). Proposed emission levels of all air contaminants are negligible and below regulatory concern. Current operations fall within the parameters used for the emission estimates completed at that time.

Project activities may also generate fugitive dust. If generation of fugitive dust is expected from project operations, reasonable precautions will be taken to prevent the particulate from becoming airborne (Idaho Administrative Procedures Act [IDAPA] 58.01.01.650-651). All dust suppression activities will be documented in accordance with requirements in the INL Title V air permit. The date, location, time, and the type and amount of dust suppressant used will be documented in project files.

**Disturbing Cultural or Biological Resources** - Excavation activities have the potential to disturb Cultural and Biological Resources. Project review by both Cultural and Biological Resources personnel must be performed and documented prior to beginning work. Recommendations in the reviews must be implemented.

**Generating and Managing Waste** - Modifications discussed in this Environmental Checklist (EC) would generate typical construction debris such as scrap conduit, wire, wood, packaging material, etc., on the project. In addition, the existing wood wall that will be removed is contaminated with lead bullet fragments. Other lead contaminated debris such as targets may be generated as well. All

waste will be characterized, stored, and disposed of at the direction of WGS. Pollution prevention/waste minimization will be implemented where economically practicable to reduce the volume and/or toxicity of waste generated.

Protective Force Personnel coordinate with WGS to perform required inspections, maintain the Generator Treatment Plan, request waste characterization and disposal as needed and assist with routine waste management activities in accordance with WGS and Protective Force procedures in regards to operation of the live fire ranges.

Before conducting a wash of the Range 4 floor or electrostatic filter wash, Protective Force Personnel will coordinate a date and time with WGS and if necessary, an Environmental Support & Services Representative to request and conduct sampling of the waste water system. WGS will supply directions in writing to the Facility Manager and Industrial Hygienist for Laboratory Protection regarding the proper disposal methods for the wastewater, at the conclusion of wastewater characterization.

**Releasing Contaminants** - Modification of the live fire ranges as discussed would involve typical construction chemicals such as fuels, lubricants, cable cleaner, etc. A chemical inventory list with associated Safety Data Sheets (SDS's) will be required to be submitted and approved by Battelle Energy Alliance, LLC (BEA) in the vendor data system. The Construction Chemical Coordinator will enter these chemicals into the Comply Plus chemical management system for tracking purposes. All spills will be reported to the Construction Field Representative and to the Spill Notification Team if applicable.

As part of live fire range operations, all chemicals (including bullets and explosives) are approved for use and tracked as part of the Comply Plus Chemical Management System. The Facility Chemical Coordinator receives all requests for chemicals to be used at the facility.

A septic tank and drainfield receive wastewater from B21-608. Wastewater is generated from facility bathrooms, drinking fountains, custodian sinks and the range wastewater treatment system that is covered by a Generator Treatment Plan. All discharges from the wastewater treatment system are sampled and discharged only if they meet Land Disposal Restriction levels.

Large amounts of lead accumulate in the berms and on the ground on the ranges. When the Live Fire Range Complex is shutdown, cleanup will be required.

**Using, Reusing, and Conserving Natural Resources** - All materials would be reused and recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill where conditions allow.

**SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s):** 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 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:** 10 CFR 1021, Appendix B, B1.2 "Training exercises and simulations," B1.12 "Detonation or burning of explosives or propellants after testing," and B1.31 "Installation or relocation of machinery and equipment."

**Justification:** Project activities are consistent with 10 CFR 1021, Appendix B, B1.2 "Training exercises and simulations (including, but not limited to, firing-range training, small-scale and short-duration force-on-fore exercises, emergency response training, fire fighter and rescue training, and decontamination and spill cleanup training) conducted under appropriately controlled conditions and in accordance with applicable requirements;" B1.12 "Outdoor detonation or burning of explosives or propellants that failed (duds), were damaged (such as by fracturing), or were otherwise not consumed in testing. Outdoor detonation or burning would be in areas designated and routinely used for those purposes under existing applicable permits issued by Federal, state, and local authorities (such as a permit for RCRA miscellaneous unit (40 CFR part 264, subpart X));" and B1.31 "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 uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications of an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation or 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 environmental impacts."

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

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 6/30/2015