

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

### SECTION A. Project Title: USG#91

### SECTION B. Project Description and Purpose:

USG#91 has requested the use of INL and surrounding areas to conduct Radio Frequency (RF) testing and research. The goal of this research and testing is to examine operational characteristics of wireless equipment at various test locations on and off the INL desert site. A variety of vehicle mounted transceivers will be tested and evaluated.

All environmental Aspects, Work Activities, Conditions and Requirements identified in this EC reflect the proposed scope of work. Prior approval will be obtained through a CERCLA Notice of Soil Disturbance before any soil disturbance occurs. Any anomalies shall be reported to the N&HS Program Environmental Lead. No fixed potable/wastewater utilities will be provided. Portable toilets will be temporarily placed at several field locations.

The customer shall be permitted to fuel generators with the use of safety glasses and nitrile gloves upon receiving a fueling safety brief. WTB personnel will be available to assist the customer test team with fueling and installation activities which require INL qualifications/certifications.

The INL Fire Marshal will establish requirements for mitigation and control of portable generator fire hazards, including but not limited to: defining buffer areas around any heat producing equipment (vehicles and generators), no smoking, fire extinguisher(s), shovel, comms (radio/cell), allowing generators to cool prior to refueling, and placement of generators in secondary containments to prevent drips/spills. In some instances, mowing a fire break up to 30-ft in radius around the generators may be required. No sagebrush will be mowed under this EC.

Customer field test locations fall on disturbed/gravel areas on two-track/T-roads/T-road intersections and will also utilize CFA-699. Access to test locations will include the use of INL two-track/T-roads. Access via two-track/T-roads will invoke coordination and approvals from INL Fire Marshal and Security. Various test configurations will be tested using mobile units. Test sites will consist of a parked vehicle, multiple antennas, portable generators, associated cabling, and the installation of metal grounding rods will be driven into the ground up to a depth of four (4) feet. Some ground rods are still in place from previous efforts and will be left in place for future testing. Appropriate notifications/modifications and approvals will be obtained for "emerging" test locations and their use of ground rods.

Antennas used in this effort will include the following types:

Monopole HF antenna which is comprised of one (1) vertical (~30 ft.) mast. Each mast will utilize Kevlar or parachute cord guy wires secured with 12" stakes and hose clamps. One ground rod for RF performance grounding will be driven into the ground up to one (1) foot deep at each antenna location. The physical footprint of this antenna is approximately 10 x 10 feet.

Tripod mounted 5.8 GHz panel antenna.

Table 1 – Test Site Locations: (Not all locations will be used simultaneously, the customer test plan will dictate which sites are used and when)

Description	Latitude	Longitude
Reno (North of INL Boundary)	44°3'42.43"N	112°43'55.77"W
Short Range RX	43°55'9.90"N	112°45'0.90"W
Medium Range RX	43°41'55.69"N	112°49'24.62"W
Long Range RX	43°39'10.30"N	112°50'11.70"W
CFA-699	43°31'55.72"N	112°56'42.96"W

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

#### Air Emissions

Air emissions from portable electrical generators in place less than one year are not stationary sources and therefore do not require a permit.

#### Disturbing Cultural or Biological Resources

Project activities have the potential to impact biological and cultural resources.

Sagebrush disturbance is not anticipated. Mowing is prohibited unless approved by biological resources personnel and will be minimized to the extent possible

#### Generating and Managing Waste

Activities will generate industrial waste (e.g., common office trash). All Solid Waste will be managed by WGS.

#### Releasing Contaminants

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Typical construction chemicals such as fuels, lubricants, adhesives, paints, concrete, concrete cure, asphalt, refrigerants, etc., will be used and will be submitted to chemical inventory lists with associated Safety Data Sheets (SDSs) for approval in the vendor data system prior to use. The facility Chemical Coordinator will enter these chemicals into the INL Chemical Management Database. All chemicals will be managed in accordance with laboratory procedures. When dispositioning surplus chemicals, project personnel must contact the facility Chemical Coordinator for disposition instructions. Although not anticipated, there is a potential for spills when using chemicals or fueling equipment. In the event of a spill, notify facility PEL. If the PEL cannot be contacted, report the release to the Spill Notification Team (208-241-6400). Clean up the spill and turn over spill cleanup materials to WGS

**Using, Reusing, and Conserving Natural Resources**

Recyclable materials such as paper, plastic, and metal will be recycled to the extent practicable.

**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:** 10 CFR 1021, Appendix B to Subpart D, item B3.11 "Outdoor tests and experiments on materials and equipment components"

**Justification:** The proposed action is consistent with 10 CFR 1021, Appendix B to Subpart D categorical exclusion B3.11, "Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water-immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for nondestructive actions such as detector/ sensor development and testing and first responder field training."

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: 8/26/2019