DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-19-048 R1

SECTION A. Project Title: USG#96 Contractor Test Rev 1

SECTION B. Project Description and Purpose:

Revision 1:
This revision encompasses project changes captured in an addendum approved on 11/7/2019 as well as the addition of a new testing location.

The addendum added scope that includes: As necessary, remove snow from the ramp at the railway siding (along gravel path at the intersection of Lincoln Boulevard and the railroad tracks) and other areas that may require snow removal. Cultural Resource Management and Veolia personnel are not concerned about snow removal at the rail siding. Project activities at the INL Site require cultural and biological resource review. Snow removal from non-paved areas, other than the railroad ramp, may not proceed without written documentation from the Cultural Resource Management Office (CRMO). Contact Suzan Henrikson (208-526-2985) or Reese Cook (208-526-4029) for help with cultural resource surveys. Personnel must follow instructions and requirements resulting from these reviews. Project personnel also plan to conduct work at test areas located at Mountain Home Air Force Base and Dugway Proving Grounds. This EC does not cover work at the other sites.

The new testing location is identified as Reno Road. The coordinates are 44°0'54.50" N, 112°45'28.50" W. Plowing may also have to occur at the new test location as well as the ramp as discussed above, Telegraph Ridge, Gate 4 and town locations. Gate 4 and town locations are paved and are covered under routine F&SS snow removal operations.

Original EC:
United States Government (USG) #96 has requested the use of Idaho National Laboratory (INL) locations and surrounding areas to perform radio frequency (RF) testing and research. This research and testing examine test equipment operational characteristics at test locations on and off the INL Site. The research and testing use fixed and mobile transceivers at locations to collect information using sensors and data recording devices.

The project must obtain approval for soil disturbance through a CERCLA Notice of Soil Disturbance before any soil disturbance occurs. Ground rod installation requires a subsurface investigation, and anomalies must be reported to the National and Homeland Security (N&HS) Program Environmental Lead (PEL). The project does not use fixed potable water or wastewater utilities. Portable toilets will be temporarily placed at several field locations.

Customer test locations fall on disturbed areas such as roadways or parking lots. INL T-roads furnish access to some test locations and requires coordination and approvals from INL Fire Marshal and Security. Stationary and mobile units will test various sensor and transmitter configurations, including multiple antennas with ground rods (driven about 5 feet deep). Some ground stakes are still in place from previous efforts and will be left in place for future testing. Appropriate notifications and approvals will be obtained for "emerging" test locations and using ground rods at those locations.

At the testing location, a vehicle parks near a high frequency (HF) antenna and connects to the antenna via RF transmission lines. Deep cell batteries and portable generators power equipment at test locations. Some locations also use a 1.2 meter satellite dish mounted in the back of a truck, on the top of an SUV, or on the ground to support field communications.

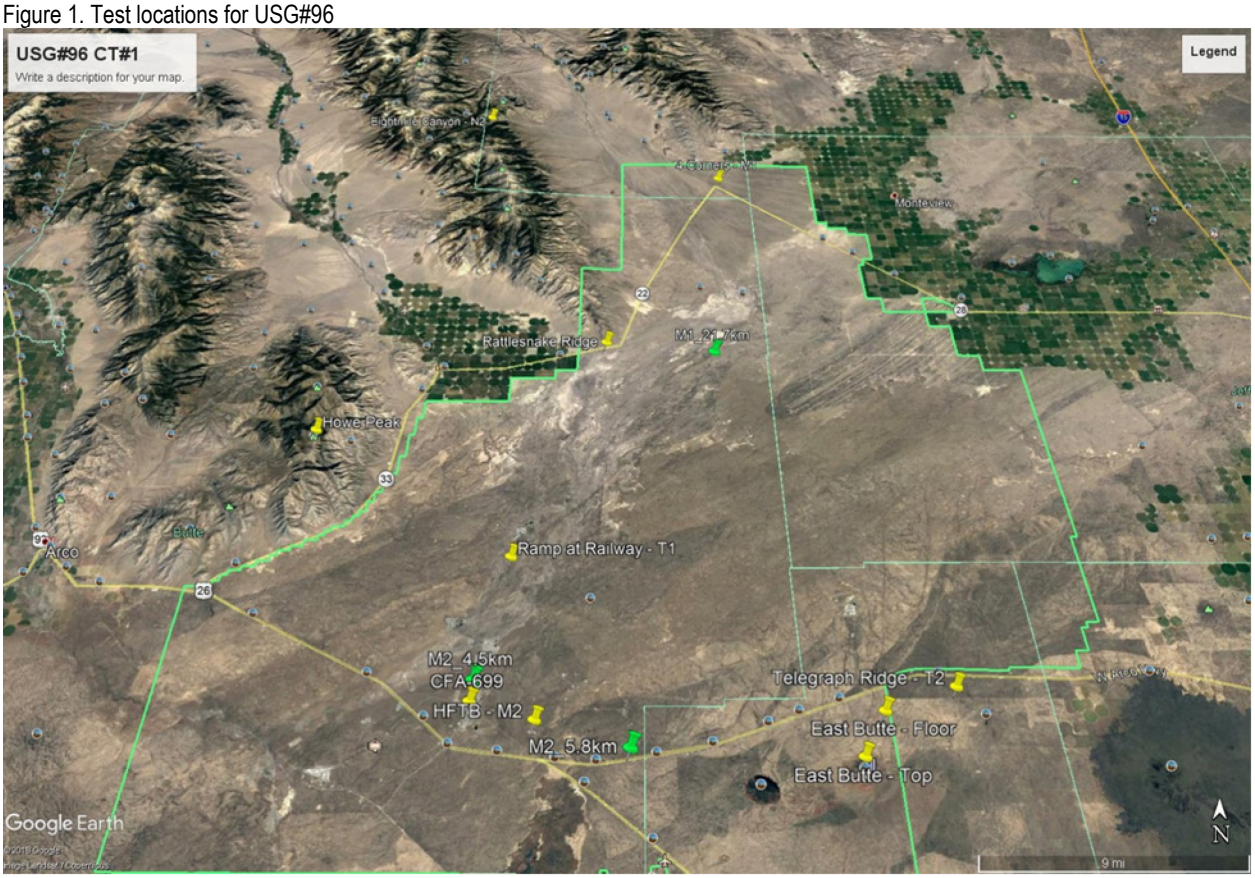
In some instances, project activities may require mowing a fire break up to 30-ft in radius around field generators. No sagebrush will be mowed under this EC. Table 1 lists test site locations that are shown in Figure 1.

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
Antelope Canyon	43°43'20.71"N	113°32'28.08"W
ARA-632	43°31'30.44"N	112°49'37.56"W
Big Southern 1	43°23'46.83"N	113° 1'11.40"W
Big Southern 2	43°23'42.69"N	113° 1'28.41"W
Birch Creek 1	44° 3'42.80"N	112°51'55.98"W
Birch Creek 2	44° 4'55.42"N	112°52'36.91"W
Birch Creek 3	44° 5'50.46"N	112°52'37.96"W
Cell Site 6	43°32'0.09"N	112°49'48.53"W
CFA-699	43°31'55.72"N	112°56'42.96"W
CFA-1609	43°31'52.80"N	112°56'41.99"W
Crater Butte	43°35'41.56"N	113° 8'58.04"W
East Butte Floor	43°31'34.52"N	112°38'45.63"W
East Butte Top	43°30'2.67"N	112°39'55.83"W
EBR-1	43°31'14.96"N	112°59'57.86"W
Eightmile Canyon	44° 3'56.71"N	112°59'19.69"W
Four Corners	43°59'16.16"N	112°43'50.44"W
HFTB (M2)	43°31'18.22"N	112°53'50.26"W
Howe Peak	43°42'47.13"N	113° 6'0.28"W
Mound	43°30'6.28"N	113° 3'26.82"W

M1_27.1km	43°47'30.15"N	112°44'58.17"W
M2_4.5km	43°32'37.56"N	112°56'39.83"W
M2_5.8km	43°30'20.84"N	112°49'44.80"W
Ramp at Railway	43°37'26.52"N	112°55'27.40"W
Rattle Snake Ridge 1	43°48'4.36"N	112°51'2.21"W
Rattle Snake Ridge 2	43°48'25.64"N	112°50'55.83"W
RTMF	43°33'14.10"N	112°52'32.76"W
SAF 1	43°30'55.68"N	112° 2'13.59"W
SAF 2	43°31'2.63"N	112° 2'11.12"W
STF	43°31'15.03"N	112°53'52.62"W
T17 Location 1	43°39'10.40"N	112°50'11.10"W
T17 Location 2	43°39'2.60"N	112°50'8.30"W
T17 Location 3	43°39'16.00"N	112°50'37.60"W
TAN Dial Room	43°50'49.87"N	112°42'8.12"W
TAN Fire Station	43°50'46.18"N	112°42'23.89"W
Telegraph Ridge	43°32'24.41"N	112°35'23.15"W
WRRTF	43°49'51.70"N	112°41'28.43"W

Figure 1. Test locations for USG#96



Antennas used in this effort may include the following types:

"B&W" long wire NVIS antenna comprised of three (3) vertical (~25 ft.) support masts composed of eight (8) "cami netting" poles with antenna element cabling (~14 AWG wire) spanning horizontally across both the top and bottom of the masts. Each mast will be secured using parachute cord as guy wires with four (4) runs of cord per mast secured to 12" ground stakes. Two ground rods for RF performance grounding will be driven into the ground up to five (5) feet deep at each field test location. The physical footprint of this antenna including support cords and ground stake location is approximately 100x30 feet.

Crossed Dipole HF antenna comprised of one (1) vertical (~30 ft.) support mast with antenna element cables (~14 AWG wire) strung down from the top of the mast to the ground at four locations and secured with 12" stakes and hose clamps (antenna elements also perform guying function). One ground rod for RF performance grounding will be driven into the ground up to five (5) feet deep at each VHF antenna location. The physical footprint of this antenna is approximately 100 x 100 feet.

Monopole HF antenna 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 five (5) feet deep at each VHF antenna location. The physical footprint of this antenna is approximately 100 x 100 feet.

The 1.2 meter antenna dishes for maintaining communications are the C-Com iNetVu 1201 Fly-Away and Drive-Away units. When deployed on the top of an SUV or in the back of a truck (Drive-Away) these units require no footprint on the ground. The 1201 Fly-Away kit will be deployed in disturbed areas (parking lots or roadways) and will require a 5 ft. x 5 ft. footprint. None of these satellite units require ground rods. Direct connections to the antenna are facilitated via RF transmission lines.

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 regulated.

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. Snow removal from non-paved areas, other than the railroad ramp, may not proceed without written documentation from the Cultural Resource Management Office (CRMO).

Generating and Managing Waste

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

Releasing Contaminants

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 Environmental Staff. If the facility Environmental Staff 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: 08/08/2019