



DOE-ID-INL-22-022 R1

April 2022

Changing the World's Energy Future

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SECTION A. Project Title: USG #121 Test

SECTION B. Project Description and Purpose:

Revision 1:

This revision addresses the use of a C-17 aircraft as part of the testing and an additional landing location for the helicopter.

The C-17 aircraft had not been originally planned to fly at lower altitudes or to perform repeated passes over the INL site. The current plan is to fly the aircraft at 1,500 ft AGL and fly repeated passes over various areas of the INL site. The aircraft will be staged from and fueled at the Idaho Falls airport.

It is currently planned for the helicopter to land on Lincoln Blvd. The proposed landing location is near the intersection of the gravel pit and Lincoln Blvd. Lincoln Blvd will be closed approximately 0.5 miles North and 0.5 Miles South of the location to keep the general population away. See Figure 1-1 below. This closure will last approximately 10 minutes on April 26th and 27th.



Figure 1-1. Helicopter Landing Location

All previous Hold Points and Project-Specific Instructions from the original ECP remain valid.

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Original ECP:

The Idaho National Laboratory (INL) Wireless Test Bed (WTB) USG 121 Customer has requested the use of the INL test range, and off-site areas surrounding the INL desert site to perform radio frequency (RF) testing and research over a vast range of technologies. This research and testing will examine the various operational characteristics of fixed and mobile transceivers including the use of RF collection sensors and data recording devices.

Existing INL facilities and infrastructure, roads and disturbed grounds will serve as the primary work location for those involved in the USG 121 effort. INL T-roads furnish access to some test locations and the appropriate steps will be taken to coordinate with the INL Fire Marshal and Security as required. There may be a couple vehicles that will park at the edge of a T-road without vegetation. The effort is not anticipated to disturb the soil or associated foliage. Existing ground rods will be used when needed. Remote and portable WTB work locations will require temporarily placed restrooms; potable or wastewater utilities are not required.

Customer equipment is in the form of Vehicle mount, rack mount, manpack or handheld transceivers/radios/servers. The associated antennas range from small omni multiband antennas to half size cellular directional antennas. GPS antennas will be used to provide timing and are smaller than a baseball. External communication will be facilitated through VSAT or commercial satellite services. Customer provided satellite dishes may range between 0.33 to 2 meters. Associated VSAT/Satellite equipment will be rack mountable and no larger than three rack space units. Military style vehicles/ATV's will be used for RF equipment. Helicopters and UAV/UAS's will also carry RF equipment. The helicopter use for UAV runway and will fly above the 1500 foot restriction other than when landing. The helicopters and UAV/UAS's will takeoff and land at the designated INL landing/takeoff areas northeast of INTEC (UAV landing strip).

INL WTB staff will assist with customer equipment and utilize existing power and HVAC within INL approved workspace. Antennas will be placed outside of the buildings and the required coax cable will be ran through existing pass-through ports. At trailer locations, including locations where the customers use their vehicle as a workspace, the customer will integrate equipment into the trailer/vehicle and use trailer/vehicle HVAC and power. Antennas will be deployed outside of the trailer/vehicles and coax will be ran through pass-through ports or windows.

INL WTB work trailers require external AC and/or generator connections facilitated by INL electrician and/or site services. Deep cell batteries and/or portable generators may be used with vehicle workspace configurations. All batteries will be strapped down within the vehicle and hitch mount racks will hold/secure portable generators and fuel cans. If required and as directed by the fire marshal, a fire break up to 30-ft in radius may be mowed around field generators; no sagebrush will be mowed. No customer generated/provided excess material or waste will be left at INL. For all areas located outside the INL boundary, project personnel will coordinate with BLM to obtain all the necessary special use permits for this type of operation.

The duration of testing is expected to be approximately 2 weeks.

Please refer to Table 1 and Maps 1 and 2, 3 below for detailed location information.

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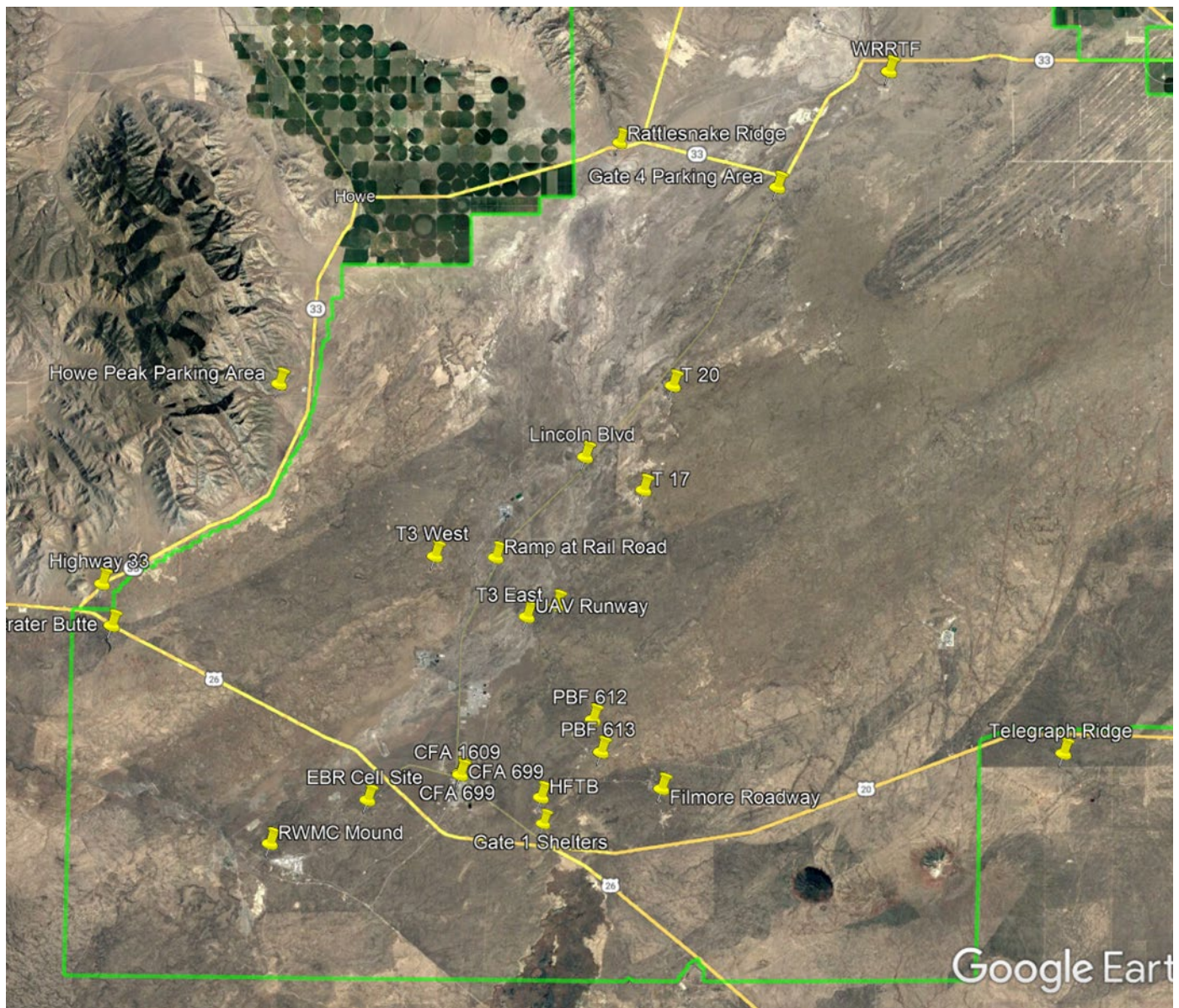
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Table 1

Description	Latitude	Longitude
CFA 699	43°31'55.36"N	112°56'42.14"W
CFA 1609	43°31'52.68"N	112°56'41.89"W
PBF -613	43°32'27.45"N	112°51'43.91"W
PBF -612	43°33'17.30"N	112°52'1.06"W
Crater Butte	43°35'41.66"N	113° 8'58.28"W
UAV Runway	43°35'55.19"N	112°54'20.74"W
Howe Peak Parking Area	43°41'52.15"N	113° 3'5.20"W
Rattlesnake Ridge	43°48'4.28"N	112°51'1.99"W
HFTB	43°31'17.73"N	112°53'50.98"W
WRRTF	43°49'51.62"N	112°41'28.70"W
T3 East	43°36'12.17"N	112°53'18.18"W
T3 West	43°37'28.09"N	112°57'35.50"W
T17	43°39'9.51"N	112°50'13.17"W
T20	43°41'49.42"N	112°49'10.61"W
Gate 1 Shelters	43°30'39.81"N	112°53'45.57"W
Filmore Roadway	43°31'31.18"N	112°49'36.10"W
Highway 33	43°36'45.40"N	113° 9'19.18"W
Telegraph Ridge	43°32'24.17"N	112°35'27.34"W
Ramp at Railroad	43°37'26.11"N	112°55'26.47"W
Lincoln Blvd	43°40'0.25"N	112°52'16.89"W
8 Mile	44° 3'57.67"N	112°59'18.58"W
4 Corners	43°59'15.03"N	112°43'47.33"W
Gate 4 Parking	43°46'54.09"N	112°45'27.51"W
Antelope	43°43'20.75"N	113°32'26.51"W
Reno	44° 3'46.66"N	112°43'55.42"W
RR South	43°35'0.97"N	112°55'27.71"W
Site 8	43°35'56.23"N	112°55'17.69"W
C 1	43°43'34.69"N	112°46'35.17"W
C 2	43°36'25.04"N	112°54'18.14"W
Site 5	43°39'35.95"N	112°51'57.60"W
West Gravel (Alternate)	43°40'36.00"N	112°52'45.00"W
Site 4	43°42'43.96"N	112°51'4.40"W
Site 1	43°41'30.19"N	112°48'1.27"W
Site 7	43°45'46.70"N	112°44'48.39"W

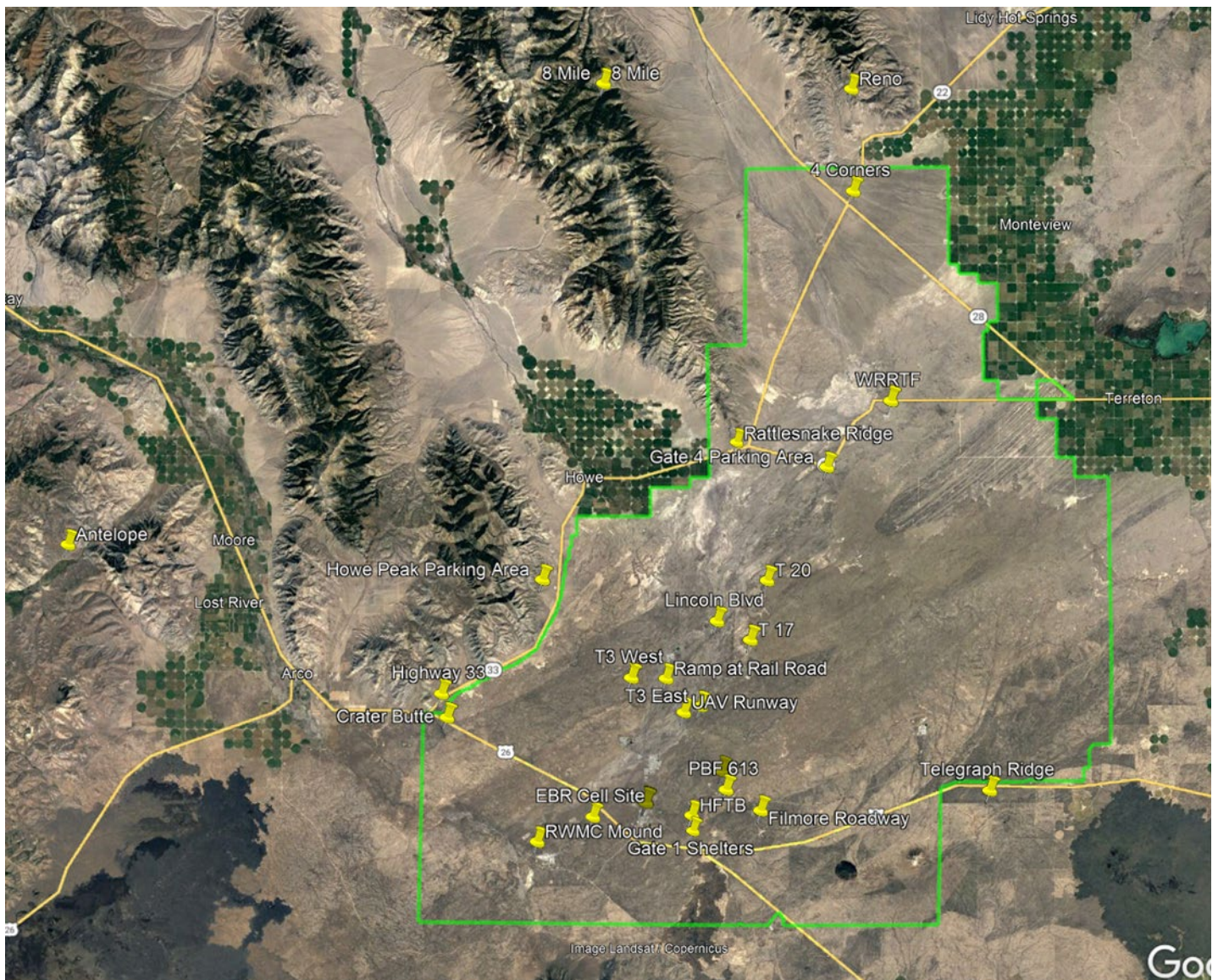
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Map 1.



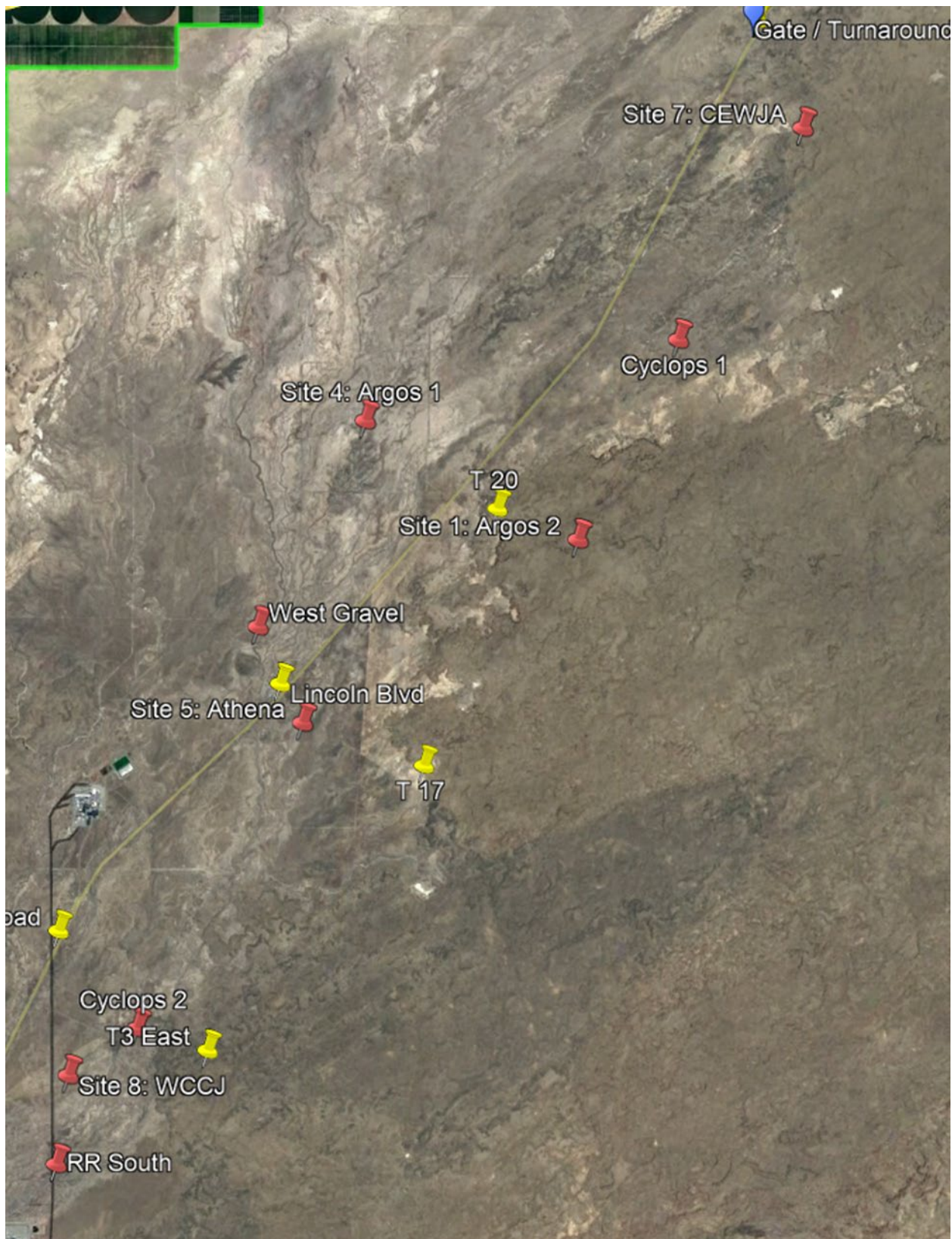
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Map 2.



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Map 3.



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SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Air emissions from portable electrical generators, in place less than one year, and from helicopters and other aircraft are not regulated.

Discharging to Surface-, Storm-, or Ground Water

N/A

Disturbing Cultural or Biological Resources

Activities that have the potential to disturb vegetation, soil or wildlife such as mowing will require a biological resource review (BRR). Contact the natural resources group (208-200-2652) two weeks prior to beginning work and upon completion of work to arrange a BRR.

Overflights of UAVs and the helicopter and vehicle traffic have a potential to disturb sage grouse.

Please refer to cultural resource review BEA-22-29 in regards to this project. Please contact Reese Cook (208)526-4029 if you have questions.

Generating and Managing Waste

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

Releasing Contaminants

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

Material will be recycled to the extent possible in an effort to minimize waste sent to the landfill.

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 L. Anderson, DOE-ID NEPA Compliance Officer on: 04/25/2022