

NA-LA NEPA COMPLIANCE OFFICER (NCO) COMPLIANCE DETERMINATION FORM
Triad No: LAN-19-03

PROJECT/ACTIVITY TITLE: Technical Area-68 Water Canyon Test Site Expansion	Accession No: 24708 PRID No: 19P-0031	Date: June 28, 2019
PURPOSE: The Department of Energy's (DOE) National Nuclear Security Administration (NNSA) Los Alamos Field Office proposes to consolidate existing Los Alamos National Laboratory (LANL) capabilities for the research, development, and equipment calibration for imaging techniques to detect materials of interest by expanding the Technical Area (TA)-68 Water Canyon Test Site. Consolidation of activities would improve the efficiency of operations that support mission critical programs that respond to current and emerging threats.		
Location: TA-68 Water Canyon Test Site	Project Contact: Juan G. Duque, Physical Chemistry and Applied Spectroscopy, jduque@lanl.gov, (505) 695-6155.	
NATIONAL ENVIRONMENTAL POLICY ACT COVERAGE: The following categorical exclusions apply to the proposed action: Department of Energy National Environmental Policy Act (NEPA) Implementing Procedures 10 Code of Federal Regulations Part 1021, Appendix B to Subpart D of Part 1021—Categorical Exclusions Applicable to Specific Agency Actions: <i>B1.2 Training exercises and simulations</i> Training exercises and simulations (including, but not limited to, firing-range training, small-scale and short-duration force-on-force 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. <i>B1.11 Fencing</i> Installation of fencing, including, but not limited to border marking, that would not have the potential to significantly impede wildlife population movement (including migration) or surface water flow. <i>B3.6 Small-scale research and development, laboratory operations, and pilot projects</i> Siting, construction, modification, operation, and decommissioning of facilities for small-scale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment. <i>B3.11 Outdoor tests and experiments on materials and equipment components</i> 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.

DESCRIPTION OF PROPOSED ACTION

Consolidation of operations would require expansion of the TA-68 Water Canyon Test Site and would entail the clearing of approximately ten acres of trees, shrubs, and herbaceous plants and subsequent grading and leveling (Figure 1). The cleared site would have base course and concrete pads of various dimensions constructed and several portable containers [Conex boxes] for the storage of supplies and equipment transported on-site. The expanded site would have outdoor lighting installed for use during night operations. The expanded site would not be illuminated when not in use. The existing dirt roadway that provides access to the TA-68 Water Canyon Test Site from New Mexico State Road 4 would require the addition of base course to provide stability and reduce erosion. Additionally, road culverts would be installed as necessary to allow passage of water under the road. Base course would be applied throughout the expanded site portion.



Figure 1: Existing TA-68 Water Canyon Test Site (designated as Water site) and the proposed expansion (referred to as the Cal site) for the research, development, and equipment calibration for imaging techniques.

Initially, site power would be provided by diesel generators until such time that an electrical powerline is connected to the site. Internet service would also be provided via the same structures that would convey electrical power. The powerline is acknowledged in this analysis as a reasonably foreseeable future option to diesel generators. However, funding has not been obligated; the schedule is not yet identified; and exact routing has not been determined. Therefore, when this information becomes available a further NEPA analysis will be required. Provided there are no extraordinary circumstances related to the construction of the powerline that may have significant environmental effects DOE NEPA categorical exclusion B4.12 is expected to apply. Categorical exclusion B4.12 pertains to construction of electric powerlines approximately 10 miles in length or less, or approximately 20 miles in length or less within previously disturbed or developed powerline or pipeline rights-of-way.

No hazardous operations would be conducted within the expanded portion of the site. The proposed activities would support operations at the TA-68 Water Canyon Test Site primarily in the research, development, and calibration of sensors.

IMPACT ASSESSMENT

An assessment of potential impacts is provided in Table 1 below.

Table 1. Environmental Impact Analysis by Resource Category

Environmental Resource Category	Impact Analysis
Land Use	The expansion of the TA-68 Water Canyon Test Site does not change the land use and is compatible with current operations.
Visual	The proposed location is isolated from other LANL occupied office sites and would be noticeable only from the immediately surrounding mesas. The site is not visible from New Mexico State Road 4.
Geology and Soils (geologic hazards, soil productivity, capability, erodibility, and mass failure)	There would be no effect to geology of the area. Removal of vegetation [trees, shrubs, and herbaceous plants] during grubbing and ground leveling during construction would disrupt the soil surface and could lead to higher wind and water erosion. The area would be greater than 1 acre and would require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit to regulate storm water discharges from construction activities. During construction soil erosion and sedimentation would be avoided or minimized through best management practices and compliance with the NPDES permit requirements regarding erosion and sedimentation control.

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Environmental Resource Category	Impact Analysis
Water (regulations, surface and groundwater quality and quantity, groundwater recharge, streamflow regimes)	<p>The proposed site location is not in the 100 year floodplain nor is there standing water on the site. Surface water quality could be affected by the construction due to increased silt load resulting from runoff during and following soil-disturbing activities. Soil disturbances associated with installation or construction activities can potentially result in impacts to water quality. Vegetation removal and the installation of impervious surfaces can alter site runoff patterns.</p> <p>As a proposed construction site greater than one acre the project would be required to and file a Notice of Intent and follow the requirements of a NPDES Construction General Permit and to prepare a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP is designed to minimize the amount of sediment and other pollutants associated with construction sites from being discharged in stormwater runoff. Best management practices would be implemented post construction to prevent or minimize the discharge, such as, sediment general debris, and oil and grease from entering into stormwater runoff. Similarly, a spill plan would also be required. The site-specific spill plan would address chemicals and any petroleum product use and storage on the work site and the actions to take in case of a spill.</p> <p>There would be no operational effluent discharge and no effects to groundwater. Surface water runoff would increase due to site clearing and of impervious surface area.</p>
Non - radiological Air Quality	<p>During the construction phase, emissions from heavy equipment (e.g., bulldozers, excavators, trucks) would temporarily affect ambient air quality. Air emissions from construction vehicles and equipment would be minor and temporary resulting in negligible impacts to air quality. Ground disturbing activities such as site clearing and road improvement would temporarily generate fugitive dust. To minimize the effects of fugitive dust during construction, dust suppression methods would be implemented.</p> <p>Once operational the use of diesel generator(s), until such time as a powerline is run to the site, would result in minor air emissions.</p>
Radiological Air Quality	<p>Neither construction nor operations would generate radiological air emissions.</p>
Noise	<p>There would be a temporary and localized minor increase in the noise level during construction. Low level operational noise would be primarily from human activities and generator operation.</p>

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Environmental Resource Category	Impact Analysis
<p>Ecological (floodplains, wetlands, threatened or endangered species and habitat, migratory birds, exotic organisms)</p>	<p>The location is a fairly open area with a scattering of shrubs and trees along with herbaceous plants and grasses. There are no wetlands on the site. Animal species are common and generally found throughout the various habitats within LANL and adjacent properties. The proposed expansion area is not within LANL's Threatened and Endangered Species Habitat Management Plan habitat areas. Therefore, no biological assessment is required.</p> <p>To prevent site disturbance and protect project resources deer/elk fencing would be erected and maintained that would surround both the existing and proposed expansion areas. Trees and shrubs would be chipped and, if feasible, the resulting mulch spread on-site. Trees that were removed during the original construction for the existing site and stacked around the perimeter would be either removed or mulched and spread on-site to reduce the risk of wildfire. Existing and proposed site structures would be assessed and modified, as necessary, to reduce or prevent attractiveness and opportunity for birds' searching for nesting locations.</p> <p>During construction activities, compliance with the Migratory Bird Treaty Act restricts vegetation removal during the peak bird breeding season, May 15 through July 31, unless LANL biological resources staff have conducted a nest check to ensure that there are no nesting birds present. If active nests are found, the nest tree or shrub would be left in place until the nesting is complete.</p>
<p>Human Health – Radiological Impacts on the Public</p>	<p>The Proposed Action would not have radiological air emissions.</p>
<p>Human Health – Chemical Impacts on the Public</p>	<p>The Proposed Action would not have chemical air emissions.</p>
<p>Human Health – Worker Health</p>	<p>There would be no public access to the site during construction or operations. Construction and operation hazards are well understood and present no unique risks to worker personnel. All construction and operations employees and contractors would be required to adhere to the appropriate health and safety plans and emergency response plans and trained to operate under a health and safety program that meets industry and Occupational Safety and Health Administration standards and regulations.</p>

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Environmental Resource Category	Impact Analysis
Cultural Resources (archeological and historical)	A cultural resources survey was conducted and completed the week of June 24, 2019. No cultural resources were found within the project footprint and access road. However, there are sites within the general area; therefore, to ensure that the cultural sites are not affected by TA-68 Water Canyon Test Site expansion the project would delineate clear construction boundaries not to be exceeded and implement LANL's Cultural Resources Management Plan.
Socioeconomics	Minor benefit from resulting from the consolidation of activities increasing the efficiency of operations. Operational consolidation resulting in increased efficiency could attract additional customers interested in utilizing LANL's unique expertise.
Infrastructure	There is sufficient infrastructure to meet the project requirements. The dirt access road would be improved by the addition of base course to provide stability and reduce erosion.
Waste Management	<p>Construction would require the disposal of vegetation (green waste) from clearing and grubbing. If feasible, green waste generated from the site clearing activities may be mulched in place and used to control soil erosion and establish conditions for post construction site revegetation where appropriate.</p> <p>During the operational period, solid waste is expected to be very minimal with no anticipated generation of hazardous waste. Regardless, there is sufficient landfill capacity and hazardous waste treatment storage and disposal facilities that would accept construction and operationally generated solid and hazardous waste.</p>
Transportation	No or very minor increase in local traffic from construction and project personnel driving to the site.
Environmental Justice	No effect. There are no adverse effects identified from the proposed action. Therefore, there would be no disproportionately high and adverse cumulative effects human health or environmental effects on minority populations and low-income populations due to site construction or operations.
Facility Accidents	There are no postulated site accidents that would pose a significant adverse health risk to workers, the public, or the environment.

CONCLUSION

Based on this NEPA determination analysis, there are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders. Consequently, no further NEPA analysis is necessary or required.

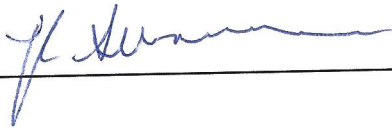
NEPA Determination

Based on my review of the Proposed Action, as the National Nuclear Security Administration's Los Alamos Field Office (NA-LA) NEPA Compliance Officer, I have determined that the Proposed Action as described herein, falls within the DOE NEPA Implementing Procedures listed in 10 CFR Part 1021, Subpart D, Appendix B 10 CFR Part 1021, Appendix B to Subpart D of Part 1021—Categorical Exclusions Applicable to Specific Agency Actions: B1.2 *Training exercises and simulations*; B1.11 *Fencing*; B3.6 *Small-scale research and development, laboratory operations, and pilot projects*; and B3.11 *Outdoor tests and experiments on materials and equipment components*. There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or executive orders. If changes are made to the scope of the action so that it is no longer bounded by the enclosed description, or the project is changed to encompass other actions, NEPA requirements for the action would need to be reassessed at that time and further analysis may be required.

NNSA NEPA Compliance Officer: Jane Summerson

Date:

Signature:



7/1/2019