PROJECT/ACTIVITY TITLE: TA-49 Open Burn Training Exercises and Simulations for Firefighting and Fire-Rescue Personnel

Accession No: 23374 PRID No: 17P-0215 Date: 12/26/2017

PURPOSE: Conduct open burning of structures, buildings, facilities, or materials to educate and train firefighting and fire-rescue personnel utilizing fire response drills and employing investigatory practices and techniques.

Location: Technical Area (TA)-49 Hazardous Devices Team training area

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NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COVERAGE: Department of Energy National Environmental Policy Act Implementing Procedures 10 Code of Federal Regulations Part 1021, Appendix B to Subpart D of Part 1021—Categorical Exclusions Applicable to Specific Agency Actions [there is one categorical exclusion to the proposed action]:

B 1.2 Training exercises and simulations

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.

BACKGROUND

The Department of Energy/National Nuclear Security Administration (DOE/NNSA) proposes to conduct open burns for firefighting and fire-rescue personnel training at the TA 49 training facility at Los Alamos National Laboratory (LANL) (Figures 1 and 2). TA-49 covers 1,280 acres (518 hectares) and is largely undeveloped. The TA is within the south-central portion of LANL and is bordered on the south by Bandelier National Monument. Land use designations include High-Explosive Testing, Physical and Technical Support, and Reserve. The TA-49 firing site facility is used to train LANL employees and other Federal and state agency personnel to identify suspect devices and properly respond to bomb threats. The Hazardous Devices Team conducts training activities at the TA-49 firing site training facility with the capability to respond immediately to hazardous devices and incidents. The training facility is uniquely capable of supporting a variety of hazardous training scenarios including the proposed activity involving open burning for arson investigation. Currently, the training facility does not support open burn training activities. This new training capability would be available to state and federal, including LANL, to support a need for nationwide training for which facilities are either at regional capacity or non-existent.

DESCRIPTION OF PROPOSED ACTION

The proposed action involves controlled open-burn scenarios that simulate arson events. Items such as a small wood structure or a vehicle is set on fire using a point source ignition commonly found in arson scenarios, such as kerosene, gasoline, or diesel fuel. The fire burns to a desired stage for arson training purposes, and then is extinguished. The burn stage can range between limited burn areas up to total burn in order to simulate various stages for investigation. The open burn activity is proposed to take place on an existing graveled training area measuring approximately 31,000 square feet (0.72 acres). The Los Alamos County Fire Department will be on-

site for fire protection for each open-burn training session. The fire is extinguished by fire department crews before the arson investigation training begins. \(^1\)



Figure 1. Location of TA-49 at LANL

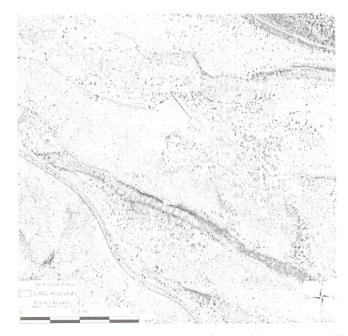


Figure 2. Location of proposed fire training area at TA-49

¹ Project meeting with Christopher Johansen and Christian Rittner, Security and Emergency Operations: Emergency Response (SEO-ER), November 7, 2017.

IMPACT ASSESSMENT

By design the Proposed Action is to mitigate and prevent long-term adverse environmental impacts. See Table 1 below for an assessment of potential impacts.

Table 1. Environmental Factors Checklist

Environmental Factor	Analysis
Land Use	The Proposed Action would be compatible with existing land use.
Visual	The Proposed Action in TA-49 is located approximately 1,900 feet (0.35 miles) from the boundary of Bandelier National Monument and its associated wilderness area. The National Park Service and the Environmental Protection Agency monitor visibility impairment within national parks and their wilderness areas under 40 Code of Federal Regulations (CFR) Part 51, Subpart P <i>Protection of Visibility</i> . As Bandelier National Monument and its wilderness area is designated as a Class 1 protected area under the Regional Haze program in 40 CFR Part 51, DOE/NNSA and National Park Service personnel will discuss the proposed activities, prior to implementation, and develop a mutually-agreed upon plan for how to conduct these activities and minimize any potential short-term visibility issues within Bandelier National Monument and the wilderness area. ³
Geology and Soils (geologic hazards, soil productivity, capability, erodibility, and mass failure)	No change to current conditions.
Water (surface and groundwater quality and quantity, groundwater recharge, streamflow regimes)	No change to current conditions.

² 40 CFR Part 51, Subpart P – Protection of Visibility, Section 300, Purpose and Applicability.

³ The wilderness area of Bandelier National Monument was designated as wilderness, and was administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act under Public Law 94-567 – October 20, 1976; 40 CFR Part 51, Subpart P – Protection of Visibility, Section 300, Purpose and Applicability.

Environmental Factor	Analysis
Non - radiological Air Quality	Firefighter training activities using open burns are allowed under New Mexico Administrative Code 20.2.60 <i>Open Burning</i> . Under Section 112, burning of structures, buildings, facilities, or materials for instruction and training of bona fide firefighting and fire-rescue personnel is allowed, provided that:
	 All regulated asbestos-containing material is removed prior to burning The New Mexico Environmental Department is notified prior to burning⁴
	It is not anticipated that the wood structures will contain asbestos. The New Mexico Environmental Department Air Quality Bureau identified the burning of a wood shed structure as subject to a 10-day notification to the State for "demolition." The burning activity does not permit burning of any kind of waste or vegetative material such as grasses and trees. To reduce emissions of hazardous materials from burning vehicles, the following best management practices will be met.
	 The vehicle must be a 1990 or later model Remove all fluids from the vehicle Remove the battery and tires When possible, to use vehicles that have the engine, transmission, and other mechanical parts removed⁵
	Emissions from burning activities will be calculated and included in LANL's Title V Operation Permit semi-annual emissions report. ⁶
Radiological Air Quality	No change to current conditions.
Noise	Noise impacts would be temporary (only during training activities) and there are no sensitive receptors in the area.
Ecological (floodplains, wetlands, threatened or endangered species and habitat, migratory birds, exotic organisms)	Training activities would occur in a location designated for this purpose. No change to current conditions.
Human Health – Radiological Impacts on the Public	There would be no change in current conditions.
Human Health – Chemical Impacts on the Public	There would be no change in current conditions.
Human Health – Worker Health	There would be no change in current conditions.
Cultural Resources (archeological and historical)	No effect
Socioeconomics	There would be no socioeconomic impacts.

⁴ New Mexico Administrative Code Title 20 Environmental Protection, Chapter 2 Air Quality (Statewide), Part 60 Open Burning, Section 112 Burning of Materials and Structures for Firefighter Training, effective December 31, 2003.

⁵ Communication with Marjorie Stockton and Greg Kaufmann, LANL Environmental Stewardship Group, December 18, 2017.

⁶ PRID 17P-0215, Air Quality subject matter expert comments, LANL, October 30, 2017.

Environmental Factor	Analysis
Infrastructure (roads, utility corridors, communications systems, energy & fuels, distribution systems, and water)	Infrastructure is adequate to support the Proposed Action.
Waste Management	Open burning of structures is permitted under the New Mexico Environmental Department requirements and does not require additional administrative requirements for waste management. ⁷ Provided that the best management practices for vehicles used for training are met, such as removal of fluids, battery, and tires, the vehicle will be treated as construction/debris type waste. ⁸
Transportation	Very minor temporary increase of vehicles during training exercises.
Facility Accidents	The TA-49 training facility is a live firing site for explosive operations and related activities. Under LANL Procedure P101-8 Explosives Safety, fire protection personnel are required to be on call or on hand as part of the High-Explosives Hazardous Work Permit and the Integrated Work Document. Integral to LANL fire protection, Los Alamos County Fire Department personnel provide fire department emergency services to LANL, including industrial fire suppression, wildland fire suppression, and on-location standby support as requested for planned unique, hazardous activities. The activity in the proposed action is described as being similar to the hazardous activities previously and currently conducted at the TA-49 training facility. The Los Alamos Fire Department will be on-site for fire protection for each open-burn training session. In the control of the control o
Environmental Justice	No change to current conditions.

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.

⁷ PRID 17P-0215, Waste Compliance subject matter expert comments, LANL, October 27, 2017.

⁸ PRID 17P-0215, Waste Compliance subject matter expert comments, LANL October 27, 2017; Conversation with Clare Bena, LANL Environmental Compliance Programs, December 18, 2017.

⁹ TA-49, Building 114 Explosive Site Plan, LANL, June 4, 2015.

¹⁰ LANL Procedure P-101-8, Explosives Safety, Section 3.2.26.a Hot-Work Permits in High-Explosive (HE) Areas, p. 44, rev. 4, effective date May 8, 2017

¹¹ LANL Program Description PD1220, Fire Protection Program, Section 4.2 Los Alamos Fire Department, p. 16, rev. 6, effective date August 14, 2017.

¹² Project meeting with Christopher Johansen and Christian Rittner, LANL Security and Emergency Operations: Emergency Response (SEO-ER), November 7, 2017.

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 (as authorized under DOE Policy 451.1). 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: There is one categorical exclusion to the proposed action, *B 1.2 Training Exercises and Simulations*.

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 will need to be reassessed at that time and further analysis may be required.

NA-LA NEPA Compliance Officer: Jane Summerson

Date:

Signature: NCO