FINAL FINDING OF NO SIGNIFICANT IMPACT (FONSI)

RADIATION FACILITY AT THE LITTLE MOUNTAIN TEST FACILITY
HILL AIR FORCE BASE, UTAH

Background

Pursuant to the National Environmental Policy Act (NEPA), as amended by Public Law 118-5, Fiscal Responsibility Act of 2023 (42 United States Code 4321 et seq.) and the Department of the Air Force's (DAF's) *Environmental Impact Analysis Process* (32 Code of Federal Regulations [CFR] 989), the DAF assessed the potential environmental consequences associated with the construction of an approximately 50,000-square-foot radiation facility at the Little Mountain Test Facility (LMTF), Utah. The Environmental Assessment (EA) for this proposal (EAXX-007-25-000-1736848104) is incorporated by reference into this finding per 40 CFR 1508.13 and 40 CFR 1502.21.

The LMTF is a state-of-the-art test facility. It is an Air Force Materiel Command laboratory dedicated to simulation testing of nuclear hardness, survivability, reliability, and electromagnetic compatibility of defense systems. The Air Force Nuclear Weapons Center test laboratories at the LMTF simulate environments for nuclear radiation, air blast, shock and vibration, electromagnetic pulse, electromagnetic interference, and compatibility testing. Nuclear hardness testing subjects military materials and components to ionizing radiation, electromagnetic pulses, shock waves, neutron radiation, and vibrations to evaluate survivability under wartime conditions. Aging surveillance testing evaluates the effects of aging on various components of missile systems. The LMTF currently has the facilities and equipment to test military materials and components.

The purpose of the proposed action is to support an increase in demand for nuclear hardness simulation testing and planned test equipment upgrades associated with the Sentinel Program. The Sentinel Program is a full recapitalization of the Minuteman III Intercontinental Ballistic Missile (ICBM) weapons system. A fully functional and operational facility is needed at LMTF to provide space for the unique test equipment and personnel to meet future nuclear hardness testing mission requirements.

The EA, incorporated by reference into this finding, analyzes the potential environmental consequences of constructing a new radiation facility at the LMTF. The EA considers all potential impacts of Alternative 1 (New Radiation Facility at the LMTF) and the no action alternative. The EA also considers cumulative environmental impacts with other projects within the region of influence.

Three action alternatives were identified as potentially meeting the purpose and need for the proposed action. However, through the screening of alternatives based on whether or not they met the purpose and need for the action and the requirements of selection standards, two of the

alternatives for implementing the proposed action were eliminated from further analysis in the EA.

Alternative 1. New Radiation Facility at the Little Mountain Test Facility

The DAF would construct a new 50,000-square foot facility providing space for the Advanced Radiation Environment Simulator (ARES) Test Stand, a new Small Flash X-Ray (SFXR), 14-mega-electron volt (MeV) neutron generator, and self-shielded irradiators. The self-shielded irradiators are currently located at an existing facility at LMTF and would be relocated to the new building to centralize testing functions. Both the relocation of the self-shielded irradiators and the new SFXR would be required to support expanded testing requirements. The proposed new equipment (ARES, SFXR, and 14 MeV neutron generator) would be specially designed and manufactured for use in the new building at LMTF.

The new facility would be entirely climate controlled and include radiation effects laboratories, loading docks, support areas for material storage and dosimetry testing, a conference room, and personnel offices in support of the new testing capabilities planned at LMTF. The proposed single-story building would consist of an administrative wing attached to a high bay wing containing the test cells and other workspaces. The laboratory area would include a receiving area with a loading dock to accommodate forklifts and delivery trucks and sufficient circulation space for testing operations. Overhead bridge cranes would be installed throughout the high bay area. The proposed architectural design character and use of materials would be modern but consistent with the existing character of the buildings on the LMTF campus and within the design standards for Hill AFB. Walls and ceiling would be constructed to shield personnel, civilians, and the environment (e.g., passing wildlife) from the radiation generated by the equipment, using a combination of methods that include concrete (in-place and modular), earth barriers, and the provision of proper standoff distances. A 12-foot-wide perimeter road would be constructed around the radiation facility to provide access to the exterior of the building and allow for maintenance and snow removal.

The proposed action would include the construction and use of an approximately 28,000-gallon aboveground storage tank (AST) for dielectric oil (not fuel) to support the ARES. The AST would be used to support ARES maintenance, as the oil is within the equipment, but is drained into the AST for temporary oil storage during ARES maintenance. The ARES would have a reclamation system that captures, weighs, filters, and reuses the dielectric oil.

Approximately 25,000 cubic yards of soil excavated from the hillslope for the radiation facility construction would either be reused within the footprint of the radiation facility for recontouring of the adjacent slopes and/or be trucked to the Weber County Class VI Construction and Demolition Landfill, located on West 900 South, approximately 0.5 mile from the LMTF access control gate.

The proposed action would include an additional 30 personnel who would support testing operations at the proposed radiation facility. Existing vehicle parking at the LMTF is adequate to support the proposed radiation facility and no new parking is proposed.

The total area anticipated to be impacted by the construction of the radiation facility at the LMTF would be 62,200 square feet (i.e., 1.4 acres).

No Action Alternative

Under the no action alternative, the DAF would not construct a new radiation facility at LMTF. The DAF and contractor personnel would continue to use existing space and would not have the new equipment and testing capability to support the anticipated increased testing operations. The existing self-shielded irradiators would continue to be maintained/operated on the site rather than being relocated to the new building. Under the no action alternative, the LMTF would not have the needed new capabilities to support modern weapon systems (e.g., recapitalized ICBM systems).

Summary of Findings

Land Use. There would be long-term negligible beneficial impacts on land use. Undeveloped land in the LMTF would be permanently developed as a radiation facility. However, the proposed use of the undeveloped land as a radiation facility would be compatible with the LMTF designated land uses.

Noise. Noise caused by proposed action would result in short-term, minor, adverse impacts. At approximately 500 feet from the construction activities, the predicted maximum noise levels would be below 65 A-weighted decibels. No construction noise would extend beyond the LMTF boundaries. Noise from operations of the LMTF would be minimal and would not exceed noise levels from similar testing operations at other LMTF facilities. No sensitive noise receptors would be impacted.

Air Quality and Greenhouse Gases. There would be minor, short-term and long-term impacts on air quality. There would be an increase in criteria pollutant emissions due to construction activities, but the increase would be minor and localized and would end with the completion of construction activities. Similarly, proposed new combustion equipment (e.g., boilers, generators) and additional personnel commuting daily to the newly constructed radiation facility would generate longer-term emissions, but the impacts on air quality would not be significant. The net change in greenhouse gas emissions from the proposed action would be well below the insignificance indicator (threshold) and would therefore be considered insignificant on a global scale.

Soils and Topography. There would be minor, short-term. and long-term adverse impacts on soils and topography from the construction of the radiation facility. Approximately 1.4 acres of soils would be disturbed as a result of construction, but best management practices (BMPs) would be implemented to minimize erosion of disturbed soils from stormwater runoff. Increased impermeable surfaces could permanently increase surface soil erosion during stormwater runoff. The local topography of the LMTF would be altered by the construction of the radiation facility.

Water Resources. There would be short-term, minor, adverse impacts on water resources from soil disturbance during construction activities. Sediments from disturbed soils could be

transported into surface waters during stormwater events. Hazardous materials used during construction could impact surface and groundwater quality. However, BMPs implemented during and following construction activities would minimize these impacts. Increased impervious surfaces following construction of the radiation facility could increase the stormwater runoff potential and increase sediment discharge into surface water during precipitation events.

Cultural Resources. The area of potential effects (APE) falls within the Little Mountain Test Annex Historic District (the District). The proposed project would impact two to three lampposts which have been determined as contributing elements to the District. However, these have been previously modified and the lamppost removal would not impact the overall historic character of the District; therefore, the action would have no adverse effect. The construction of a new radiation facility would be designed to match the look and feel and maintain the function of the District. Neither viewshed nor auditory characteristics were contributing elements to the District; therefore, the construction of the new facility would not result in adverse effects to the District. There are no other known historic properties within the APE.

The DAF requested concurrence from the State Historic Preservation Office under Section 106 of the National Historic Preservation Act (NHPA) on its determination that the proposed action would have no adverse effect to historic properties. Concurrence from the State Historic Preservation Office with the DAF's determination was received on 28 March 2025. DAF initiated consultation with 21 federally recognized tribes on 10 December 2024 as required by Section 106 of the NHPA. Responses are included and consultation will continue under Section 106 of the NHPA and the NEPA through the duration of the EA.

Biological Resources. There would be short-term, negligible, adverse impacts on vegetation and wildlife at the LMTF from the construction of the radiation facility due to the loss of 1.4 acres of primarily nonnative grassland habitat. There are no federally listed species on the LMTF. The proposed threatened monarch butterfly (*Danaus plexippus*) could be present at the LMTF during migration. However, the construction and operation of the radiation facility at the LMTF would not disturb habitat that supports monarch butterflies and would be unlikely to directly affect any monarch butterflies, as there are no suitable flowering plants on the site. The DAF requested concurrence from the US Fish and Wildlife Service under Section 7 of the Endangered Species Act on its determination that the proposed action would have no effect on federally listed species. The USFWS acknowledged the DAF's no effect determination.

Transportation. Construction activities would have short-term, minor, adverse impacts on transportation from increased vehicle traffic on West 900 South. These impacts would end when construction activities end. The radiation facility operations would have long-term, moderate, adverse impacts on transportation from an increase in approximately 30 personnel commuting to the LMTF daily.

Hazardous Materials and Wastes, Environmental Restoration Program, and Toxic Substances. There would be short-term, negligible, adverse impacts on hazardous materials and wastes used and generated during construction activities. Only the minimum needed quantities of hazardous materials would be used during construction and facility operations. All hazardous wastes generated would be disposed of properly and in accordance with federal,

state, and local regulations. There would be no impacts on Environmental Restoration Program sites or toxic substances.

Socioeconomics. There would be short-term and long-term, negligible, beneficial impacts on socioeconomics. There would be short-term beneficial impacts from expenditures associated with the construction of the radiation facility. There would be long-term beneficial impacts from the employment of approximately 30 additional personnel, with an annual expenditure in the region of approximately $4.5 million annually.

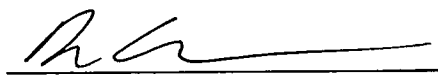
Health and Safety. There would be short-term, negligible, adverse impacts on health and safety as a result of the construction of the radiation facility. However, all construction personnel would be responsible for following federal and state safety regulations and would be required to conduct construction activities in a manner that does not increase risk to workers, military personnel, or the public. Because safety of personnel performing testing activities at the LMTF would follow existing health and safety procedures and would be paramount to operations, there would not be any long-term impacts on health and safety from the testing operations at the radiation facility.

Stakeholder Input

Based on the description of the proposed action as set forth in the EA, all activities have been found to comply with the criteria and standards of environmental quality. Coordination with appropriate federal, state, and local agencies regarding this EA is ongoing. The attached EA and this FONSI were made available to the public for a 30-day review period. No substantive public or agency comments were received.

Conclusion

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of NEPA and 32 CFR Part 989 (EIAP), which are hereby incorporated by reference, I have determined that the proposed construction and operation of a radiation facility at the LMTF composing the proposed action would not have a significant impact on the quality of the human or natural environment under any of the analyzed alternatives. Accordingly, an Environmental Impact Statement will not be prepared. This decision has been made after considering all submitted information, including a review of all public and agency comments received during the 30-day public comment period, and considering a full range of reasonable alternatives that meet project requirements and are within the legal authority of the DAF.



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Date