FINDING OF NO SIGNIFICANT IMPACT
FOR
Detection Sciences Testing and Applied Research
and
Facility for Energetic Material Research Projects
Transportation Security Lab
Federal Aviation Administration, William J. Hughes Technical Center
Egg Harbor Township, Atlantic County, New Jersey

Introduction: The Science and Technology Directorate (S&T), a Component within the U.S. Department of Homeland Security (DHS), provides sound, evidence-based scientific and technical perspectives to address a broad spectrum of current and emerging threats. S&T prepared an Environmental Assessment (EA) in accordance with the National Environmental Policy Act of 1969, 42 United States Code [USC] §§ 4321 *et seq.* (NEPA), the Council on Environmental Quality (CEQ) *Regulations Implementing the Procedural Provisions of NEPA* (40 Code of Federal Regulations [CFR] Parts 1500-1508), other relevant federal and state laws and regulations, and the Department's own policies and practices on implementing NEPA to evaluate the potential impacts resulting from the Proposed Action and this Finding of No Significant Impact (FONSI) documents the reasons why the Proposed Action does not have a significant effect on human health and/or the environment.

Purpose and Need: The ***purpose*** of the Proposed Action is to construct, operate, and maintain the Detection Sciences Testing and Applied Research (DSTAR) Center and Facility for Energetic Material Research (FEMR) at the William J. Hughes Technical Center in Atlantic County, New Jersey. The proposed DSTAR and FEMR would fill existing capability gaps and outstanding needs to provide the necessary infrastructure to enable Material Characterization, Trace Detection Technology Testing and Evaluation (T&E), Methods and Tools, Explosives Synthesis and Preparation, and Full-Scale Shock and Thermal Testing.

The Proposed Action is ***needed*** to meet critical mission needs and ensure the Transportation Security Laboratory's (TSL) mission capabilities to protect the Homeland are met.

Alternatives: An alternatives analysis was prepared to develop and evaluate potential solutions to fulfill the expanding mission needs. The alternatives analysis identified two alternatives that would address the capability gaps and then assessed each alternative based on its effectiveness for operation, cost, schedule, and risk. These alternatives and a no action alternative were addressed in the EA.

1. [Proposed Action] Lease additional property from the FAA and site the DSTAR and FEMR Project at TSL.
2. FEMR would be located at TSL, but the proposed DSTAR Center would be sited at the nearby National Aerospace Research & Technology Park (NARTP).
3. The No Action Alternative

Proposed Action: The Proposed Action evaluated in the EA is to construct and operate the DSTAR Project. The DSTAR Project will interface with the existing TSL operations by co-locating multiple laboratories that perform research and technical functions foundational to the entire breadth of the TSL mission. The DSTAR Center and FEMR will be used for conducting hazardous explosive synthesis and safety testing. Co-location of these laboratories improves the safety and operational efficiency of TSL activities supporting T&E of next-generation technologies, creating increased return on investment from existing Developmental Test and Evaluation (DT&E) and Independent Test and Evaluation (IT&E) laboratories, while also allowing for the existing warehouse facilities to return to their optimal use – providing critical storage for test articles and technologies.

S&T ONL has established a partnership with the United States Army Corps of Engineers (USACE) Philadelphia District to award a design and construction contract in support of the DSTAR Project requirement. The USACE Philadelphia District will provide program management, contractual, and technical support for the project. The USACE Philadelphia District will utilize a variety of contractual tools to execute the design and construction in the most time-efficient and cost-effective manner possible. The USACE Philadelphia District intends to award contracts to an Architectural & Engineering firm of Record (A/E-of-Record) for the Preliminary and Final Design Phase. Following the Preliminary and Final Design Phase, USACE would subsequently award a contract to a construction firm for the construction phase.

Other Alternatives Considered: The FEMR would be located at TSL, but the DSTAR Center would be sited at the nearby NARTP. The alternatives analysis determined that the construction of the DSTAR Center at NARTP may offer some minor short-term advantages associated with constructing the new facility in an undeveloped area, but these do not outweigh the long-term inefficiencies associated with operating the DSTAR Center at a location that is separate from FEMR and other TSL facilities.

No Action Alternative: The No Action alternative does not meet the purpose and need for the Proposed Action, but was carried forward for analysis, as required by CEQ regulations. No action would maintain the existing conditions of the TSL in its current state and there would be no change in disturbance of vegetative cover, soils, wildlife habitat, stormwater run-off quantity and quality, or air quality. However, under the No Action Alternative, without the appropriate investment in TSL's infrastructure, TSL would be unable to fill existing capability gaps and meet critical mission needs to ensure TSL's mission capabilities to protect the Homeland are met.

Environmental Effects: The EA documents that the Proposed Action will result in no direct, indirect, or cumulative, significant environmental impacts.

The Proposed Action has no mechanism to impact land use; geology, topography, and soils; cultural resources; water resources (wetlands, floodplains, surface water, wild and scenic rivers, and coastal resources); environmental justice and protection of children; public health and safety; infrastructure; and hazardous and toxic materials and waste, therefore, a detailed analysis of these topics was not warranted in the EA. The six resources for which impacts were further analyzed include: visual aesthetics, air quality, noise, water resources, biological resources, and socioeconomics.

Visual Aesthetics — The DSTAR Project Study Area is located within the highly developed TSL area. The construction area would be visible only to staff within the TSL, and there would be limited visibility of the construction area due to the alignment of the TSL. The construction area would not be visible to the public due to dense wooded areas separating the DSTAR Project Study Area from public areas outside of the William J. Hughes Technical Center (WJHTC). Views of the completed DSTAR Center and FEMR would be primarily limited to authorized personnel working at TSL. No significant impacts are anticipated on visual resources. The construction of the DSTAR would have a direct, short-term, less-than-significant adverse impact on visual aesthetics, and the operation of the DSTAR would have a direct, long-term, negligible adverse impact on visual aesthetics.

Air Quality — The Proposed Action's construction impacts to air quality are primarily from: 1) combustion emissions due to the use of fossil fuel-powered equipment and vehicles; and 2) particulate emissions during earth-moving and demolition activities. Total combined direct and indirect emissions associated with construction of the Proposed Action were estimated on a calendar-year basis, and based on these estimates, none of the estimated emissions associated with constructing the Proposed Action are above the conformity threshold values established at 40 CFR Part 93.153(b). Operation of the DSTAR and FEMR facilities would generate similar emissions with the same impacts as current operations at TSL and be subject to permitting

requirements as required under the Clean Air Act (CAA), which is enforced by the New Jersey Department of Environmental Protection (NJDEP). No significant impacts on air quality are anticipated; therefore, the construction of the Proposed Action would result in direct, short-term, minor adverse impacts to air quality, and operation of the Proposed Action would result in direct, long-term, negligible adverse impacts to air quality.

Noise — There are no sensitive receptors within the Area of Impact (AOI). As a result, construction activities that generate noise, such as the use of heavy machinery, would only be audible to authorized personnel present in nearby facilities within or adjacent to TSL. For personnel who are temporarily outdoors and near the construction activities, noises from active construction would be audible but temporary and not exceed 90 dBA, which is the permissible exposure level defined by OSHA. The sound levels from construction activities would be minimally audible to personnel working inside a TSL facility due to the presence of interior building walls. No significant impacts on noise are anticipated; therefore, the construction of the Proposed Action would have a direct, short-term, less-than-significant adverse impact to personnel at TSL and no impact on the surrounding community. Operation of the Proposed Action would have a direct, long-term, negligible adverse impact on personnel at TSL and no impact on the surrounding community.

Water Resources (stormwater and groundwater) — The DSTAR Project Study Area does not contain water resources such as wetlands; 100- and 500-year flood zones; Coastal Zone Management Area (CZMA) and Coastal Area Facility Review Act (CAFRA) resources; or surface water bodies. Construction of the Proposed Action may result in increases in stormwater run-off volumes and sedimentation of run-off leaving the construction area. Because the Proposed Action would disturb greater than 1 acre or more of land during construction, construction would comply with a Stormwater Pollution Prevention Plan to minimize stormwater volume and velocity, soil erosion, and sedimentation of stormwater run-off. Perched groundwater is often encountered at the existing fill/natural soil interface, as a result, the A/E-of-Record would consider the possibility of encountering perched groundwater and groundwater level fluctuations when developing the design for the DSTAR Project. No significant impacts on water resources are anticipated; therefore, the construction of the Proposed Action would have a direct, short-term, negligible adverse impact on surface water and groundwater quality, and operation of the Proposed Action would have a direct, long-term, negligible adverse impact on surface water and groundwater quality.

Biological Resources — Construction of the Proposed Action could result in the permanent conversion of up to approximately 6 acres of oak-pine habitat to developed areas within the DSTAR Project Study Area. This area of tree clearing would be minor in scale compared to the remaining area of oak-pine habitat (5,100 acres) at WJHTC and therefore would not result in a significant net loss of habitat at a landscape scale. To support good forest management at the WJHTC, S&T will partner with the FAA on its forest management plan for the campus. S&T will also strive to incorporate and maximize tree planting as part of its landscaping for the DSTAR project. Based on this, the Proposed Action would have a direct, short- and long-term negligible, adverse effect on upland forested vegetation due to the conversion of upland forest to industrial land.

In compliance with Section 7 of the Endangered Species Act (ESA), S&T identified three federally threatened species. Of the two federally listed plants, American chaffseed (*Schwalbea americana*) and Swamp pink (*Helonias bullata*), neither have been documented at WJHTC and the conditions of the DSTAR Project Study Area are not suitable for their growth or survival. Therefore, the Proposed Action would have no effect on the two federally listed plant species. Of the federally listed bat species, only Northern long-eared bat (NLEB) (*Myotis septentrionalis*) has been detected at WJHTC, and the project area may be within the range of potential summer habitat for Tricolored bats (TCB). Bats are predominately

nocturnal and temporary noise during construction could disturb roosting bats. However, nighttime construction is not proposed as part of the Proposed Action. No known hibernacula are present within or adjacent to the Proposed Limit of Disturbance (LOD). The Proposed Action may affect but is not likely to adversely affect the NLEB and TCB. S&T received concurrence with mitigation measures from the USFWS under Section 7 of the ESA for its may affect determination on the NLEB and TCB on January 19, 2024. S&T commits to the proposed mitigation measures as listed under Impact Mitigation Measures section below.

Potential impacts on migratory birds could include disturbance to breeding individuals, particularly if ground-disturbing or vegetation removal activities occurred during the nesting season and nests are present within, or adjacent to, the LOD areas. However, when not nesting, most birds would avoid the construction area and relocate to other more suitable habitats at WJHTC, or in the surrounding area. No suitable bald eagle habitat has been documented at the WJHTC. Therefore, the Proposed Action would have a direct, short-term, less-than-significant adverse impact on migratory birds, and no impact on bald eagles.

Given the lack of suitable habitat, the Proposed Action would have no effect on federally threatened and endangered plant species and would not adversely affect migratory birds or eagles. No further consultation on these species under Section 7 of the ESA is required.

Socioeconomics — The Proposed Action would require the construction contractor to employ skilled laborers and make expenditures on building materials, construction equipment, vehicles, supplies, and support facilities (e.g., office trailers, safety equipment, erosion-control materials). However, the temporary increase in employment and spending on equipment, supplies, and local services would have a direct, short-term, negligible beneficial impact on local socioeconomic conditions in Egg Harbor Township and Atlantic County. Operating the Proposed Action could require hiring one additional engineer, one additional security guard, one additional technician for in-house maintenance activities, and likely a small addition to the janitorial staff. Operating the Proposed Action would also require expenditures on specialized equipment and supplies. The expenditures on additional staff, equipment, and supplies would have a direct, short-term, negligible beneficial impact on local socioeconomic conditions.

Impact Mitigation Measures: S&T incorporated impact mitigation measures into the Proposed Action to ensure that potential impacts associated with the construction and operation of the DSTAR and FEMR remain at less-than-significant levels. S&T is responsible to ensure full compliance with the impact mitigation measures listed below.

Visual Aesthetics

1. Limit and minimize the clearing of vegetation to only those trees and shrubs that require clearing for the construction of the new facilities and to comply with security requirements. Replanting of trees and shrubs would be conducted during the construction phase prior to operation of the proposed facilities in accordance with the Township of Egg Harbor's *Design Performance and Improvement Standards* (§ 94-22.11(e)).

Air Quality

1. Limit engine idling to no more than three minutes to the extent practicable.
2. Construction vehicles would utilize Tier 4-compliant engines, to the extent practicable, to reduce emissions of particulate matter and nitrogen oxides to help meet emission standards established by USEPA.

3. To mitigate the emissions of particulate matter, the construction contractor would also implement BMPs including dust suppression, such as application of water mist or other dust palliatives to the structure being demolished and to exposed soils; use of enclosures and covers over highly friable materials being demolished; covering haul trucks with tarps; and postponing dust-generating activities during sustained high wind conditions (10-40 mph with gusts at or above 50 mph).
4. Haul trucks would be covered with a tarp when transporting material to or from the DSTAR Project Study Area.
5. Perform regular maintenance of laboratory fume hoods to ensure they function according to design specifications.

Noise

1. Use shields or other physical barriers to restrict noise transmission where high noise levels are generated for an extended period of time.
2. Provide soundproof housings or enclosures for noise producing machinery.
3. Use efficient intake and exhaust mufflers on internal combustion engines that are maintained so equipment performs below noise levels specified.
4. Conduct truck loading, unloading, and hauling operations so that noise is kept to a minimum.
5. Select material transportation routes as far away from sensitive receptors as possible.
6. Shut down noise-generating heavy equipment when it is not needed (do not allow equipment to idle for more than three minutes).

Water Resources

1. Design, construct, and operate the DSTAR Project in accordance with federal- and state-required stormwater management controls.
2. Minimize creation of new impervious surfaces and manage aqueous waste streams according to existing TSL and WJHTC procedures and policies.

Biological Resources

1. Minimize the LOD to only the area necessary to construct and operate the DSTAR Project.
2. Perform tree removal during periods when migratory birds, if present, are not utilizing wooded habitat for breeding and nesting. Should any nesting birds be observed on or near areas where heavy machinery would be operated, all work would immediately cease, and the WJHTC Environmental and Occupational Safety Heath office and TSL's Environmental Manager would be contacted.
3. To support good forest management at the WJHTC, S&T will partner with the FAA on its forest management plan for the campus. S&T will also strive to incorporate and maximize tree planting as part of its landscaping for the DSTAR project.
4. S&T will avoid cutting or other means of knocking down, bringing down, or trimming of trees that are greater than or equal to 3 inches diameter at breast height will be avoided from April 1 to September 30.
5. S&T will avoid removal or modifications to structures (i.e., buildings proposed for demolition or renovations to exterior areas bats may roost in) from April 1 to September 30.

Cumulative Impact: The impacts on the environment which would result from the incremental impact of the Proposed Action, when added to other past, present, and reasonably foreseeable future actions have been considered. No significant direct or indirect effects were identified. The Project would have long- and short-term impacts associated with construction, operation, and maintenance of two new facilities. Given the location and associated mitigative measures, the Project would have no significant impacts on resources identified in the EA. Existing facilities on the WJHTC property in operation are considered as part of the environmental baseline. Within the WJHTC property no present or reasonably foreseeable future project were identified near the Project location that would cumulatively contribute to impacts on resources. Construction and operation of the DSTAR Project would not result in any significant cumulative impacts on resources identified in the EA.

Finding: The analyses presented in the EA considered both the context and intensity of the Proposed Action in determining its significance as outlined in 40 CFR 1501.3(d). Based upon the analysis in the EA, it is determined that the Proposed Action will not have a significant impact on the quality of the human and natural environment. Impact Mitigation Measures will be employed by S&T to mitigate the potential adverse impacts on the quality of the human and natural environment. Therefore, a Finding of No Significant Impact is warranted, and the Proposed Action does not require preparation of an Environmental Impact Statement.

4/9/24 — KAVITA MAINKAR-PAHLAJANI — Digitally signed by KAVITA MAINKAR-PAHLAJANI Date: 2024.04.09 11:43:05 -04'00'

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