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March 19, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

| | |
|---|---|
| PROJECT NAME | : Final Area-Wide Environmental Impact Report for Massachusetts National Guard Properties at the Massachusetts Military Reservation (MMR) – MPMG Range |
| PROJECT MUNICIPALITY | : Sandwich |
| PROJECT WATERSHED | : Cape Cod |
| EEA NUMBER | : 5834 |
| PROJECT PROPONENT | : Massachusetts Army National Guard (MA ARNG) |
| DATE NOTICED IN MONITOR | : February 10, 2020 |

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) and hereby determine that this project **requires** the preparation of a Supplemental Environmental Impact Report (EIR). The Massachusetts Army National Guard (MA ARNG; Proponent) submitted an Expanded NPC which described the construction and operation of a Multi-Purpose Machine Gun (MPMG) Range at Camp Edwards and included a request that I allow a Single Supplemental EIR to be prepared in lieu of a Draft and Final Supplemental EIR. Based on review of the Expanded NPC, the Proponent may submit a Single EIR in accordance with the limited Scope included in this Certificate.

Project Background and MEPA History

The Massachusetts Military Reservation (MMR)[1] Master Plan was designated as a "major and complicated" project and a Special Review Procedure (SRP) was established as further detailed in the Certificate on the Notice of Project Change and the Major and Complicated Procedure (issued July 10, 1997). A Certificate on the Draft Area-Wide EIR was issued on October 22, 1999 and a Certificate on the Final Area-Wide EIR for the MMR Master Plan was issued on July 16, 2001. Several NPCs were subsequently filed and Certificates were

[1] The MMR was renamed the Joint Base Cape Cod (JBCC) in 2013.

issued for NPCs on: proposed upgrades at Bravo, Echo and Sierra Ranges (March 24, 2006); a return to the use of lead-bullet ammunition at MMR (November 9, 2006); changes in the Small Arms Range Improvement Project (SAR-IP) (August 10, 2007); installation of an eXportable Combat Training Capability (XCTC) system (January 22, 2010); Soldier Validation Lane (SVL) training activities (May 6, 2011), and construction of a Unit Training Equipment Site (UTES) facility (February 22, 2013). The November 9, 2006 Certificate on the NPC required a Supplemental EIR which was submitted in August 2012. A Certificate on the Supplemental EIR was issued on September 29, 2012 which found the Supplemental EIR was adequate. The remaining NPCs did not require further MEPA review.

The MMR Master Plan divided the property into two separate sections referred to as the Cantonment Area and Camp Edwards Training Area. The 5,000-acre Cantonment Area (referred to as the southern 5,000 acres in the Final EIR) was identified for new military and civilian development projects. Administrative buildings, barracks, vehicle and equipment maintenance shops, housing, and runways are located in this area. The Camp Edwards Training Area (referred to as the northern 15,000 acres in the Final EIR) was set aside for permanent protection of water supplies, wildlife habitat, and open space, while allowing compatible military training, including a small arms range. The Camp Edwards Training Area is coterminous with the Upper Cape Water Supply Reserve Area (described below). The Final EIR proposed a set of Environmental Performance Standards (EPS) which guide both military and civilian users in the protection of natural, cultural, and groundwater resources within the Camp Edwards Training Area. The Certificate on the Final EIR required MEPA review for future projects within the Camp Edwards Training Area that exceed certain thresholds, including “lowered thresholds” for activities involving any new impervious area, vegetative clearing or other land alteration (as detailed in the Informational Supplement to the FEIR, dated August 15, 2001).

Project Change

The proposed project change, as described in the current NPC, includes the construction of an eight lane MPMG Range at the site of the existing Known Distance (KD) small arms range. The MPMG will have six lanes (each 800 meters long) that are 25 meters (m) wide at the firing line and extend to 100 m wide at a distance of 800 m. The middle two lanes will extend an additional 700 meters to a total length of 1,500 meters to accommodate 0.50 caliber rifles. The range has been designed and will be designated as a copper ammunition-only range. The project also includes construction of a series of structures collectively referred to as Range Operations and Control Areas (ROCA); including: range control tower (657 sf), range operations and storage facility (800 sf), ammunition breakdown building (185 sf), bleacher enclosure (726 sf), range classroom building (800 sf), and covered mess shelter (800 sf). The project also includes installation of strategic firebreaks along the exterior of the MPMG range to reduce the risk of a large wildfire and assist in managing the fighting of fires. Installation of the firebreaks will require 10 acres of new gravel road (approximately 4.5 miles) and 77 acres of mowed firebreak edge.

The purpose of the project is to construct a mission required MPMG Range to allow the MA ARNG to efficiently attain required training and weapons qualifications requirements within the state of Massachusetts. Currently, the three closest MPMG ranges are located at Camp Ethan Allen in Vermont (over 270 miles away), Fort Dix in New Jersey (over 300 miles away), and Fort Drum in New York (over 370 miles away). The project will support higher quality, mission-

essential training activities at Camp Edwards, while limiting the need for travel to out-of-state training sites and the attendant loss of critical training time and resources.

Project Site

The project is proposed at Camp Edwards, which encompasses approximately 15,000 acres of the 20,554-acre Joint Base Cape Cod (JBCC; formerly known as the MMR). Camp Edwards is located within Bourne and Sandwich. The land that comprises Camp Edwards is owned by the Commonwealth of Massachusetts and is in custody of the Massachusetts Division of Fish and Game (DFG)'s Division of Fisheries and Wildlife (DFW), which has leased the property to the Department of the U.S. Army. The Army, in turn, licensed the land to the MA ARNG for training. The current lease held by the Army expires in 2051. The MPMG Range therefore will be constructed on state-owned land that is leased to the Federal government. The MPMG Range is proposed at the site of the existing 600-yard KD Range which has a footprint of 38.5 acres (36 acres of managed grasslands and 2.5 acres of supporting range control area). The footprint of the MPMG Range is comprised of the existing KD Range and immature pitch pine, scrub oak, shrubland, pitch pine oak forest, and pitch pine scrub oak. The project site (and 98% of Camp Edwards) is located within Priority and/or Estimated Habitat as mapped by DFW's Natural Heritage and Endangered Species Program (NHESP).

Permits and Jurisdiction

The MPMG Range is undergoing MEPA review and requires a NPC because it consists of a material change to the project prior to the taking of all Agency Actions. The project change exceeds the mandatory EIR threshold at 301 CMR 11.03(1)(a) because it will result in the direct alteration of 50 or more acres of land (209 total acres). The project also exceeds ENF thresholds for land and state-listed rare species as specified in Sections 11.03(1)(b)(1) and 11.03(2)(b)(2) of the MEPA regulations. The project as proposed, while consistent with the uses envisioned in the Final EIR Master Plan, exceeds the "lowered thresholds" related to the clearing of two or more acres of vegetation and construction of new buildings and structures of more than 500 sf.

The project requires review by the Environmental Management Commission (EMC), which was established by Massachusetts Law (Chapter 47 of the Acts of 2002). It also requires a Conservation and Management Permit (CMP) from the Natural Heritage and Endangered Species Program (NHESP).

The project is being implemented by the MA ARNG as part of its training activities at MMR-Camp Edwards. Because this project is being undertaken by a State Agency, MEPA jurisdiction is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Environmental Impacts and Mitigation

The project will alter 209 total acres of land, of which approximately 38.5 acres has been previously altered (KD Range), and will result in a "Take" of several state-listed rare species. The project will reduce impervious area by 0.8 acres. Measures to avoid, minimize, and mitigate environmental impacts include: construction-period best management practices (BMPs), permanent preservation of 310 acres of forest, implementation of species-specific protection and

monitoring plans, active habitat management activities, and construction of firebreaks and prescribed burnings to reduce the risk of wildfires.

Single EIR Request

The Expanded NPC includes a request to file a Single Supplemental EIR and was subject to an extended comment period. Consistent with the criteria for granting a Single EIR, the Expanded NPC provided a detailed project description, a baseline for evaluating environmental impacts and a comprehensive alternatives analysis. The Expanded NPC identified how the project is designed to achieve consistency with regulatory standards and how measures will be taken to avoid, minimize and mitigate project impacts.

Comments from State and Regional Agencies do not identify any significant impacts that were not reviewed in the Expanded NPC, note deficiencies in the alternatives analysis, or identify additional alternatives for further review.

Review of the Expanded NPC

The Expanded NPC included a description of the site's history, the project change, and potential environmental impacts, provided associated project plans, and identified measures to avoid, minimize, and mitigate project impacts. It included a draft Conservation and Management Permit application (Appendix B), Noise Assessment (Appendix D), and a Greenhouse Gas (GHG) analysis (Appendix H). The Expanded NPC identified agency coordination that has occurred since 2015 regarding the project, including meetings with the Environmental Management Commission (EMC) and its advisory councils (the Community Advisory Council and the Science Advisory Council) and NHESP. Comments from the EMC acknowledge the Proponent's ongoing consultation and indicate that the project design has incorporated all comments they provided during this time. Prior to submitting the expanded NPC, letters soliciting feedback were also sent to adjacent municipalities, state and federal agencies, and Native American tribes as part of the Federal National Environmental Policy Act (NEPA) process. The Expanded NPC indicated that three comment letters were received (from the EMC, US EPA, and DCR) as part of the NEPA process and were used to assist in the preparation of the document.

The Expanded NPC described the orders, acts, and regulations that govern activities at Camp Edwards, including but not limited to: MA Executive Order (EO) 414: *Establishing the Upper Cape Water Supply Reserve and Commission;* MA EO 433: *Establishing the Environmental Management Commission (EMC) of the MMR*; Chapter 352 of the Acts of 2000 which created the Upper Cape Regional Water Supply Cooperative; Chapter 47 of the Acts of 2002 which created the Upper Cape Water Supply Reserve Area; and the Memorandum of Agreement (MOA) between the Commonwealth and the U.S. Army and National Guard Bureau which established a long-term management structure for the Camp Edwards Training Area.

*Consistency with Chapter 47 of the Acts of 2002*

The project is located within the Upper Cape Water Supply Reserve (The Reserve), created by Chapter 47 of the Acts of 2002. The Reserve is coterminous with the Camp Edwards Training Area. The Reserve is public conservation land dedicated to the natural resource

purposes of water supply and wildlife habitat protection and the development and construction of public water supply systems, and the use and training of the military forces of the Commonwealth; provided that, such military use and training are compatible with the natural resource purpose of water supply and wildlife habitat protection. The MPMG Range, if properly managed, appears to be consistent with the intent of Chapter 47 and the type of use originally envisioned in the 2001 FEIR. In addition, the MA ARNG's operations and management of the MPMG Range, associated fire breaks, and rare species mitigation program (described below) are essential to ensure ongoing compatibility with natural resource protection in the Reserve.

The Expanded NPC included a discussion of the Environmental Performance Standards (EPS), which were identified during MEPA review of the FEIR and formally established in 2001 under EO 443 and Chapter 47 of the Acts of 2002. The EPS restrict certain activities and provide standards for performance that guide both military and civilian users in the protection of natural, cultural, and groundwater resources within the Camp Edwards Training Area. The Expanded NPC included a discussion of the project's compliance with the EPS and described the Operations, Maintenance, and Monitoring Plan (OMMP) which will be implemented at the MPMG Range. The OMMP will address requirements for periodic soil and groundwater sampling and analysis, maintenance of soil berms and other engineered designs for projectile capture, recycling of harvested projectiles from the range and other maintenance and operations issues as required under the EPS. Sampling results and information from management and mitigation actions, training utilization, and coordination with other projects and environmental programs within the MMR will be reported and compared against the EPS in the annual "State of the Reservation Reports" required by the Certificate on the Final EIR for the MMR Master Plan and by Chapter 47 of the Acts of 2002.

*Alternatives Analysis*

The Expanded NPC evaluated the following: No-Build Alterative, alternative locations, and alternative configurations of the MPMG Range. The following thirteen criteria were used to screen and evaluate project alternatives: 1) sufficient land area, 2) reduce travel, 3) minimize conflicts with other existing ranges, 4) maximize co-location within existing Impact Area, 5) proximity to utilities, 6) proximity to roads, 7) minimize environmental concerns, 8) minimize new ground disturbance, 9) central location to minimize off-site impacts, 10) meet mandated training requirements, 11) meet Army Range Requirement Model (ARRM) requirements, 12) comply with applicable regulations and planning documents, and 13) ensure no net loss of training capacity.

According to the Expanded NPC, application of the first two screening criteria eliminated all off-site locations. The remaining 11 screening criteria were applied to the following alternative locations within Camp Edwards: New Undisturbed Range Alternative, Different Existing Range Alternative (site of existing Alpha or Sierra Ranges), and KD Range Alternative. Locating the MPMG Range on an undisturbed portion of Camp Edwards was dismissed as it would increase habitat fragmentation and impacts to rare species and did not meet screening criteria #7-8. Locating the MPMG Range at the Alpha Range was dismissed as its adjacency to surrounding ranges would require the use of a restraint bar on fire arms to prevent the soldier from firing high, low, and from left to right. If restraint bars were not used, the associated

Surface Danger Zone[2] would preclude the use of surrounding ranges. The Sierra Range location was dismissed as a substantial investment in this site was made in 2012 to upgrade the range to a Modified Record Fire (MRF) Range and constructing the MPMP Range at this location would require dismantling and relocating the MRF Range. According to the ExNPC, this alternative would not meet screening criteria #3, #7, and #12. The ExNPC indicated that the KD Range was selected as the location for the MPMG Range because it is located within an existing MA ARNG facility, eliminates the need for out-of-state travel to meet mission and training requirements, provides adequate space for the required facilities, utilizes previously disturbed land, and is located near existing infrastructure and utility connections.

Once the KD Range was selected as the preferred location, the following layouts were evaluated: Full Build, Reduced Scale, and Preferred Alternative (as described herein). According to the ExNPC, the No Build Alternative was dismissed as it would limit the capability of the MA ARNG to carry out its assigned mission to provide adequate training facilities and would not meet the project purpose or need. The Full Build Alternative consists of a range that is built fully in accordance with the standard design contained in the Army Training Range Design Guide (TC 25-8). This alternative would consist of a ten-lane range with four extended 1,500 meter lanes, which would increase the training capabilities of the range for guns and rifles which utilize 0.50 caliber ammunition. This alternative was dismissed as it would increase noise and rare species impacts and would require clearing an additional 97 acres of land (306 total acres) compared to the Preferred Alternative. According to the ExNPC, this alternative would not meet screening criteria #3, #7, #8, and #12. The Reduced Scale Alternative is substantially similar to the Preferred Alternative; however, all lanes would be 800-meters long (i.e. this alternative eliminates the two 1,500-meter long lanes). This alternative would reduce the amount of land clearing by 71 acres (138 total acres) compared to the Preferred Alternative. The ExNPC indicated this alternative was dismissed as the elimination of the 1,500-m lanes would not allow use of M2 machine guns and M82 sniper rifles which utilize 0.50 caliber ammunition, thus reducing training capabilities of the range. According to the ExNPC, the Preferred Alternative (as described herein) was selected as it fulfills the project purpose and need while reducing environmental impacts. The design represents minimization from the standard design contained in the TC 25-8 guidance document (through providing two extended lanes instead of 10), while still reaping the benefits of 1,500 meter long lanes for training purposes. Additionally, based on the results of a Noise Assessment, the impacts of the Preferred Alternative were further reduced through shifting the location of the MPMG Range slightly north to reduce noise impacts to abutters.

*Land Alteration*

The MMR contains one of the largest remaining pine barrens habitats in the northeastern United States and is the largest intact area of relatively unfragmented interior forest remaining on Cape Cod. The project will alter 209 total acres of land; including 199 acres for the MPMG Range (38.5 of which have already been cleared and altered for construction of the KD Range)

[2] A SDZ is a mathematically-predicted area that a projectile will impact upon return to earth, either by direct fire or ricochet. The SDZ is the area extending from a firing point to a distance downrange based on the projectiles fired and weapon system used. The SDZ has specific dimensions for the expected caliber or the weapon being fired, so that all projectile fragments are contained in this area. The SDZ for a range must be contained within the controlled boundaries of a training site for the range to be considered buildable and usable without a special waiver from regulations.

and 10 acres associated with firebreaks. The project will decrease impervious area by 34,848 sf (4,356 total sf) through demolition of existing structures at the KD Range. As explained below, the mitigation for these and other rare species impacts associated with various projects planned by the MA ARNG is being addressed through combination of land transfers to DFW and active habitat management or conversion within mitigation bank focal areas. To mitigate impacts associated with land alteration for this particular project, MA ARNG has agreed to permanently protect approximately 310 acres of forest within Camp Edwards and the MA ARNG will actively manage approximately 832 acres of on-site forest through mechanical forestry. These activities are described below in greater detail and are being planned and designed in consultation with NHESP to preserve or enhance habitat for state-listed species.

*Rare Species*

Within the MPMG Range footprint, the work will result in the disturbance of approximately 170.5 acres of pine barrens habitat that includes Pitch Pine Oak Forest (PPOF), Pitch Pine Scrub Oak (PPSO), and Scrub Oak Shrubland (SOS) natural communities as well as approximately 36 acres of existing Managed Grassland (MG) habitat within the KD Range footprint. NHESP has determined that, as a result of the construction and operation of the MPMG Range, there will be a "take" of several State-listed lepidopterans (moths and butterfly) species and there may be a "take" of Eastern Box Turtle *(Terrapene Carolina),* Eastern Whip-poor-will *(Caprimulgus vociferou*s), and sandplain grassland bird species. Projects resulting in a "take" of state-listed species may only be permitted if they meet the performance standards for a Conservation and Management Permit (CMP) pursuant to 321 CMR 10.23. According to the Expanded NPC, and as confirmed by comments from NHESP, the MA ARNG has initiated consultation with NHESP to identify means to avoid, minimize, and mitigate impacts to these species.

The Expanded NPC described a combination of mitigation strategies that require MA ARNG to establish a mitigation bank and an overall strategy to facilitate long-term planning efforts for the JBCC, thereby maximizing positive impacts. Specifically, the MA ARNG proposes a combination of land transfers to DFW and active habitat management or conversion within mitigation bank focal areas comprised of approximately 3,400 acres for pine barrens habitat, approximately 1,180 acres for forest cover retention, 150 acres of intensive management, and a reserve of approximately 250 acres for potential sandplain grassland creation. The Expanded NPC indicates that a portion of the requisite land transfers to DFG occurred in 2019, and the remainder has been accepted by DFW but is in the process of completion through the receipt of all required approvals. This Camp Edwards-wide approach to mitigation is intended to be used for future projects, in addition to the MPMG Range.

Mitigation specific to the MPMG Range intended to meet the performance standards of a CMP include the following combination of land transfers to DFW, land preservation, and land management:

- Preservation of 133 acres within Camp Edwards in perpetuity as open space through transfer of the land to DFW.[3] The land is identified as the 133-acre Tract 5 located within

[3] The Expanded NPC indicated that this Land Transfer occurred in 2019 and that DFW has agreed to provide credit for the land.

the Towns of Falmouth, Bourne, and Sandwich along the JBCC southern boundary and abuts the Crane Wildlife Management Area;

- Preservation of 177 acres of land with management of vegetation for rare species, identified as a Forest Canopy Reserve Area within Camp Edwards;
- Preservation of 36 acres for grassland management for rare species, identified as a Grassland Mitigation Focal Area located in the Cantonment Area to optimize conditions for grassland species;
- Active management (mechanical forestry and prescribed burns) of 832 acres of pine barren natural community, identified as Pine Barrens Mitigation Focal Areas;
- Implementation of turtle sweeps before, during, and after the construction period to remove Eastern Box Turtles from the construction areas;
- Implementation of a NHESP-approved plan to protect state-listed turtle species during the construction phase of the project;
- Post-construction monitoring of Eastern Box Turtles and other species to assess the effectiveness of mitigation measures;
- Implementation of a long-term monitoring and management plan to maintain habitat quality within the pine barrens; and
- Provision of funds for monitoring and research activities through 2025.

The land to be preserved and/or actively managed for rare species will remain under control of the MA ARNG. It is anticipated that conditions in the CMP and the MA ARNG Integrated Natural Resource Management Plan (INRMP) will provide the mechanism to enforce the commitments to preserve and maintain the land in perpetuity. The INRMP is a requirement established by the Sikes Act Improvement Act (SAIA) of 1997, 16 USC §670a *et seq.* The INRMP integrates all aspects of natural resources management within the rest of MA ARNG's mission, and is the primary tool for managing the ecosystems and habitats at Camp Edwards while ensuring the successful accomplishment of the military mission at the highest possible levels of efficiency. The existing INRMP process requires annual meetings between all Sikes Act partners, including DFW, MA ARNG and the US Fish and Wildlife Service. This annual meeting amongst other things will review the compliance and progress of the objectives established in the CMP. The Expanded NPC indicated the most recent INRMP (2009) is currently being updated and confirmed that the Camp Edwards-wide mitigation strategy described above will be incorporated into the INRMP.

The mitigation measures identified above are intended to provide a long-term net benefit to the conservation of state-listed species that may be impacted from the construction and operation of the MPMG Range. In addition, these measures will combine with ongoing site-wide management activities detailed in the INRMP and will result in a net benefit across Cape Edwards. Comments from NHESP acknowledge the Proponent has been actively engaged with the NHESP and anticipates that the project should be able to meet the necessary performance standards of a CMP.

*Water Resources*

There are no wetlands, surface waters, or floodplains located in or near the project site. Portions of the project site are located within multiple Zone II Wellhead Protection Areas and Cape Cod is a federally designated sole source aquifer. The groundwater beneath the proposed MPMG Range is being managed in accordance with the Impact Area Groundwater Study Program (IAGWSP) which began in 1997 following an Administrative Order from the US EPA to clean up groundwater contamination at Camp Edwards, including the removal of potential contamination sources and unexploded ordinance (UXO). The MA ARNG will coordinate with the IAGWSP to ensure the proposed MPMG Range construction and operations do not interfere with ongoing site investigations, remediation, and monitoring activities. I refer the Proponent to comments from MassDEP which request the installation of down gradient groundwater monitoring wells to determine baseline groundwater conditions.

*Greenhouse Gas (GHG) Emissions*

The project is subject to the GHG Policy because it exceeds thresholds for a mandatory EIR. The Policy requires Proponents to quantify carbon dioxide ($CO_2$) emissions and identify measures to avoid, minimize or mitigate such emissions. Projects that alter over 50 acres of land are also required to analyze the carbon associated with removal of trees and soil disturbance during the construction period and loss of carbon sequestration. The Expanded NPC included a GHG analysis that compared the No Build to the Preferred Alternative. The analysis accounted for the following sources of GHG emissions: transportation (travel for out-of-state training, travel of work crews, travel to MPMG Range once constructed), land clearing (biomass removal-both above and below ground), construction-period (land clearing, range construction, Range Operations and Control Areas (ROCA) demolition and construction), and range operations (firing of weapons, ROCA structures). A summary of the GHG analysis is provided in the table below.

| **Activity** | **Base Case (US tons)** | **Preferred Alternative (US tons)** |
|---|---|---|
| Transportation | 724 | 60 |
| Construction | 0 | 897 |
| Range Operations | 0.3 | 1.3 |
| Land Clearing (Biomass Removal) | 0 | 39,649 |
| **TOTAL $CO_2$ Emissions** | **724.3** | **40,607.3** |

The analysis used data from the US EPA and 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines to estimate carbon sequestration and atmospheric $CO_2$ releases. Transportation related emissions were calculated using emission factors from IPCC guidelines and applying them to vehicle type (including weight, fuel type, and fuel use), and total vehicle miles travelled (VMT). The $CO_2$ emissions associated with range operations were calculated based on a three-year (2017-2019) average of actual rounds used at Camp Edwards as adjusted to reflect the increase of training activities. To mitigate for this impact, the project includes the preservation of 310 acres of forest and active management of 832 of forest. While these forested areas currently exist (i.e., the Proponent is not creating new forestland), the mitigation package offers the benefit of preserving these resources in perpetuity. The annual GHG sequestration and lifetime sequestration from these measures is summarized in the table below.

| Management Action | Acreage | Annual Sequestration (US tons) | | Lifetime Sequestration (US tons) | |
|---|---|---|---|---|---|
| Land Preservation | 310 | 0.85 tons/acre/year | 263.5 | 230 tons/acre/year | 71,300 |
| Forestry Management | 832 | | 707.2 | | 162.012 |
| **Total MPMG Range Mitigation** | **1,142** | **-** | **970.7** | - | **233,312** |
| **Total Forest at Camp Edwards** | **13,500** | - | **11,475** | - | **3,105,000** |

As noted above, the project will not create new forest land or plant additional trees, rather the mitigation measures offer the benefit of preserving existing resources in perpetuity. The Expanded NPC indicated construction of the MPMG Range would represent 1.3% of the carbon sequestered in the total forests at Camp Edwards. The release of $CO_2$ from the project will be mitigated in 3.5 years based on just the annual GHG sequestration provided by the total forested land at Camp Edwards. The lifetime sequestration provided by the land preservation and forestry management MPMG-specific mitigation activities will mitigate the project's GHG emissions and the one-time loss of carbon associated with land clearing.

*Air Quality / Noise*

As noted in the Expanded NPC and confirmed in comments from MassDEP, operation of the MPMG Range falls under an exemption in MassDEP's noise regulations (310 CMR 7.10) for civil and national defense activities. Comments from MassDEP also clarify that noise resulting from construction of the MPMG Range is not exempt and should comply with the noise regulations. As described in the Expanded NPC, the United States Army Public Health Center (USAPHC) performed a Noise Assessment for the proposed MPMG Range in 2015 and in May of 2019. The May 2019 Noise Assessment was provided as Appendix D. The studies concluded that there would be noise impacts to the community during range use. Based on these results, the location of the MPMG Range was shifted to the north to reduce noise within adjacent residential areas. A new noise study will be performed once the MPMG Range becomes operational to determine if additional mitigation measures are necessary. A noise complaint management program will also be implemented.

*Solid/Hazardous Waste*

The project site is regulated under M.G.L. c.21E and the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). Comments from MassDEP indicate the site has been assigned Release Tracking Number (RTN) 4-0015031 and note that there may be oil and hazardous materials (OHM) and/or munitions items in on-site soils. The Proponent, in consultation with MassDEP and the IAGWSP, should develop and implement a plan for the management of OHM, including contaminated soil and munitions items that may be found during construction. I refer the Proponent to comments from MassDEP for additional guidance on this issue.

*Construction Period*

The NPC identifies the construction period impacts of the project, including truck traffic, air quality (dust), noise, and construction waste. Mitigation measures to address these impacts include: erosion and sedimentation control, dust suppression, noise mitigation measures, and implementation of Best Management Practices (BMPs). The Expanded NPC indicated the Proponent will evaluate participation in MassDEP's Clean Air Construction Initiative (CACI) and the MassDEP Diesel Retrofit Program to mitigate the construction-period impacts of diesel emissions to the maximum extent feasible. If oil and/or hazardous materials and/or unexploded ordinance (UXO) are found during construction, the Proponent should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.00). The Proponent should coordinate with MassDEP and the EMC to protect or relocate any existing groundwater quality monitoring wells currently located within the project site.

Conclusion

Based on review of the Expanded NPC, consultation with State Agencies and review of comment letters, I have determined that the Proponent may submit a Single Supplemental EIR. The Single EIR should be prepared in accordance with the following Scope.

## SCOPE

General

The Single EIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Scope. Additional recommendations provided in this Certificate may result in a modified design that enhances the project's ability to avoid, minimize, and mitigate Damage to the Environment. The Single EIR should discuss the steps the Proponent has taken to further reduce the impacts since the filing of the Expanded NPC, or, if certain measures are infeasible, the Single EIR should discuss why these measures will not be adopted.

Project Description and Permitting

The Single EIR should include an updated description of the proposed project and describe any changes to the project since the filing of the Expanded NPC. The Single EIR should identify, describe, and assess the environmental impacts of any changes in the project that have occurred between the preparation of the Expanded NPC and Single EIR. The Single EIR should include updated site plans for existing and post-development conditions at a legible scale. The Single EIR should provide a brief description and analysis of applicable statutory and regulatory standards and requirements, and describe how the project will meet those standards. It should include a list of required State Permits, Financial Assistance, or other State approvals and provide an update on the status of each of these pending actions.

The Single EIR should elaborate on how the project (specifically the extension of the two 1,500-m lanes) will facilitate management of the scrub oak shrublands located north of the KD Range. It should also describe how construction of the 1,500-m lanes and associated grading and access roads will occur to minimize and/or reduce impacts to scrub oak shrubland. The Single

EIR should report on the timeframe for updating the INRMP and should describe the specific mechanisms by which the commitments to preserve and manage forest and grasslands, which are separate from outright land transfers to DFW, will be enforced over time and ensured in perpetuity. It should provide an update to the GHG analysis showing any additional mitigation measures that will be implemented to reduce construction-period GHG emissions. The MA ARNG should continue to consult with MassDEP and the EMC to develop a plan for measuring and mitigating (if necessary) noise produced by construction and operation of the MPMG Range. The Single EIR should include an update on this consultation and should identify mitigation measures that could be implemented if warranted by monitoring results.

The Single EIR should identify any existing groundwater quality monitoring wells within the project site that may need to be relocated. It should address how groundwater will be monitored to determine whether operation of the MPMG Range will adversely impact the aquifer, and what remediation measures will be taken if warranted by monitoring results. The Single EIR should address whether the project requires review by the EPA pursuant to the Sole Source Aquifer program. I refer the Proponent to MassDEP's comment letter for additional guidance on these issues.

Construction Period

Construction period impacts and mitigation measures should be described in the Single EIR, including impacts associated with noise, dust and traffic. Measures that will be taken to minimize and mitigate construction period impacts should be detailed. This should include specific mitigation measures that will be implemented to ensure compliance with MassDEP's Noise Regulations at 310 CMR 7.10. The Single EIR should describe how construction activities will comply with M.G.L. c. 21E, including any applicable land use controls. The Single EIR should confirm that the Proponent will require its construction contractors to use Ultra Low Sulfur Diesel fuel, and discuss the use of after-engine emissions controls, such as oxidation catalysts or diesel particulate filters. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). All construction should be undertaken in compliance with the conditions of all applicable State and local permits.

Response to Comments

The Single EIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the Single EIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the scope of the Single EIR beyond what has been expressly identified in this certificate.

Mitigation/Draft Section 61 Findings

The Single EIR should include a separate chapter summarizing proposed mitigation measures. This should incorporate any additional measures that have been adopted since the Expanded NPC was filed. The Expanded NPC included draft Section 61 Findings for NHESP. It did not provide them for other Agencies which will take Agency Action on the project, including the EMC and MA ARNG. The Single EIR should include revised draft Section 61 Findings for each anticipated Agency Action by NHESP, EMC, and MA ARNG. The Single EIR should

contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and a schedule for implementation.

In order to ensure that all GHG emissions reduction measures adopted by the Proponent in the Preferred Alternative are actually constructed or performed, I require proponents to provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their equivalent, have been completed. Specifically, I will require, as a condition of my Certificate on the Single EIR, that following completion of construction the Proponent provide a certification to the MEPA Office signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) indicating that the all of the mitigation measures proposed in the Single EIR have been incorporated into the project. Alternatively, the Proponent may certify that equivalent emissions reduction measures that collectively are designed to reduce GHG emissions by the same percentage as the measures outlined in the Single EIR, based on the same modeling assumptions, have been adopted. The certification should be supported by plans that clearly illustrate where GHG mitigation measures have been incorporated. The commitment to provide this self-certification in the manner outlined above should be incorporated into the draft Section 61 Findings included in the Single EIR.

Circulation

The Proponent should circulate the Single Supplemental EIR to those parties who commented on the Expanded NPC, to any State Agencies from which the Proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. A copy of the Single EIR should be made available for public review at Bourne, Falmouth, Mashpee, and Sandwich public libraries.

March 19, 2020
Date

K. Theoharides
Kathleen A. Theoharides

Comments received:

03/10/2020 Division of Marine Fisheries (DMF)
03/12/2020 Environmental Management Commission (EMC)
03/12/2020 Department of Environmental Protection (MassDEP)
03/12/2020 Natural Heritage and Endangered Species Program (NHESP)
03/12/2020 Cape Cod Commission (CCC)

KAT/PRC /prc