

**Community Advisory Council to the
Environmental Management Commission
Building 1805
Camp Edwards, Massachusetts
May 4, 2016
5:30 p.m.**

Meeting Minutes

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<u>Attendees:</u>	<u>Organization:</u>	<u>Telephone:</u>	<u>E-Mail:</u>
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Handouts Distributed at Meeting:

1. Community Advisory Council Meeting Minutes for June 18, 2014
2. Community Advisory Council Meeting Minutes for November 10, 2015
3. Environmental and Readiness Center Update
4. Echo Range Update
5. Echo Range Fact Sheet

Agenda Item #1. Chairperson's Comments

Community Advisory Council (CAC) Chair Mr. Harding stated that the Bureau of Indian Affairs under the Department of Interiors accepted the recommendation and Trust Acquisition and Reservation Proclamation for 151 Acres in the City of Taunton, Massachusetts, and 170 Acres in the Town of Mashpee, Massachusetts, for the Mashpee Wampanoag Tribe in September 2015.

Agenda Item #2: Review of CAC Meeting Minutes

The November 10, 2015 CAC meeting minutes were reviewed and Mr. Dishner motioned to accept the meeting minutes and Mr. Cummings seconded the motion. The minutes were approved unanimously. The June 18, 2014 CAC meeting minutes were reviewed. Mr. Dishner motioned to accept the meeting minutes and Ms. Valiela seconded the motion and the minutes were approved unanimously.

Agenda Item #3: Members Comments

There were no members' comments.

Agenda Item #4: Echo Range and MANG Request

MAJ Bagaglio gave a brief history of Echo Ranges and stated that the Massachusetts Army National Guard (MAARNG) would like to re-activate Echo Range and is asking for the Community Advisory Council's support. The objectives are to return to live fire using lead projectiles at Echo Range in accordance with USEPA's Administrative Order 2 (A02) and the Environmental Performance Standards (EPSs) as set forth in Chapter 47, the Acts of 2002. The MAARNG will design a range that meets qualification standards, captures projectiles, leaves projectiles mostly intact, and allows projectiles to be easily harvested from the range while protecting the environment through monitoring (soils, porewater, and groundwater) and active range management (metals removal).

MAJ Bagaglio explained that two distinct pistol courses are proposed for the range. The first is Combat Pistol Qualification Course where projectiles are fired at pop-up targets. Projectiles pass through pop-up targets striking backstop berm. The second is Military Police (MP) Firearms Qualifications Course where projectiles are fired at a fixed target and strike the backstop berm. The MAARNG is proposing to use lead ammunition on Echo Range because lead-free rounds for the M9 combat pistol are currently not available within the Department of Defense inventory. Soldiers need to train using the exact weapons/ammunition they will use in combat.

MAJ Bagaglio said that Echo Range was used to train and test soldiers on the skills necessary to identify and engage infantry targets with pistols. In 2006, it was designed (2004 Army Standard) to meet the training and qualification requirements with combat pistols (i.e. M9), 9mm. The range was never completed due to a shift in focus to Juliet and Kilo ranges. There are 15 firing lanes outfitted with pop-up targetry, 7 per lane, and troop support facilities. Soldiers engage pop-up targets in sequences triggered by the range operator. The majority of the firing takes place at the firing line. For the MP course firing can occur as close as 7 meters at a fixed target.

MAJ Bagaglio said that in the past, the MAARNG force structure was approximately 15,000 versus 6,000 soldiers today with the average past use of Echo Range at 42,333 rounds/year. The anticipated future use assumes that all soldiers needing to qualify with pistols will do so every year at Camp Edwards. Including outside agency use, the Combat Pistol use is 41,601 rounds/year. The MP Firearms Qualification Course, including outside agency use is 42,500 rounds/year. Combat Pistol and MP Firearms use (includes outside agency use) is: 84,101 rounds/year. Outside Agency use is 7,601 rounds/year.

MAJ Bagaglio explained that during the 1998 Berm Maintenance Project, soil at 16 small arms ranges was treated with MAECTITE to chemically fixate leachable lead in the soil. At Echo Range, 1,694 cubic yards of soil was excavated, removed and treated. There was no in-situ processing and the berm was not rebuilt, i.e. no MAECTITE (phosphate) is on the range.

MAJ Bagaglio displayed a photo of the sampling locations for soil and groundwater.

MAJ Bagaglio discussed the series line of site analyses and test fires the MANG conducted to evaluate several concepts to help determine a range design that will be in compliance with regulatory requirements and be protective of the environment. The MANG has a range design that provides for a 95% plus projectile capture rate. The range will be constructed so that it utilizes a backstop berm as the primary projectile capture area. The backstop berm will be constructed of 6 inch minus core material (native), have landscape fabric as a demarcation line, and a projectile capture medium that would be 1/8th minus sand (road sand), capped with top soil that slows projectiles and would allow for vegetation and slope stabilization. The Single Individual Target (SIT) frontal berms would be designed for extreme low shot projectiles. The SIT concrete coffer will be covered with sand and capped with top soil. The SIT target mechanism will be protected with Dura-Blok™. The range floor will have large rocks removed, and will be graded and covered with 8 inches of top soil.

MAJ Bagaglio explained that the MANG will conduct soil, pore-water and groundwater sampling as part of the OMMP for Echo Range. The MANG will conduct baseline soil and groundwater sampling on the range prior to and after construction to establish baseline conditions.

MAJ Bagaglio said that the range would follow current OMMPs for standard range operations such as safety, responsibilities, inspections and the like. Camp Edwards will work with the EMC and EPA to identify requirements for the periodic removal of metals from small arms range soils. Projectile (metals) removal requirements will be based on factors such as the results of monitoring, numbers of rounds fired, the period in which they were fired. During periodic projectile removal, an assessment of the effectiveness of bullet containment and removal would be undertaken, i.e., compare weight of projectiles fired vs. projectiles (metals) recovered.

MAJ Bagaglio said that there are two possible approaches that could be taken for the proposed metals removal requirement: 1) remove projectiles from the range after the first year of operations to determine projectile density that will aid in determining a required timeline for periodic metals removal, or 2) projectiles will be removed from a different lane after the first, second, and third years of operation. The second option would provide a sense of projectile loading within the backstop berm and allow for the refinement of the projectile removal process. During the third year projectile removal work will also occur at three high use SIT frontal berms. The three SITs with the highest document use will be selected. After the third year of removal the MAARNG will discuss the results of the projectile removals and develop a plan for full range projectile removal in coordination with the SARWG (MassDEP/EMC/USEPA).

MAJ Bagaglio discussed compliance actions with EPA Administrative Order and the EPS 19 such as use of bullet traps and munitions-capturing material, development of guidance for the operation and maintenance of the ranges, and preventing or minimizing releases of metals or other compounds related to the normal and approved operation of each small arms range.

MAJ Bagaglio reiterated key points: the MANG has proven shortfall and need for this type of range based on its force structure; the range is appropriate and necessary to complete required training for MANG Soldiers; the range design will meet the requirements of the EPS and the EPAs Administrative Order 2; the pistols have a maximum muzzle velocity of 1,200 to 1,300ft/second that aids in significantly reducing fragmentation: test firing has shown that projectiles can be contained and recovered to a high degree 95%+; the geochemistry of the soil serves to retard metals migration, i.e., slow mobility; and the presence

of lead in groundwater from small arms activity has not been found to occur and in the context of small arms range activity at Camp Edwards, lead does not represent a significant threat to the drinking water.

MAJ Bagaglio reported that the Echo Range presentation was given to the SAC on April 27, 2016. The SAC members discussed the need for early warning system that is more effective than lysimeters such as using a split tube sampler for core sampling. Members felt the management plan as presented is very protective, and a sand berm will provide easier projectile removal and environmental sampling (coring).

The SAC voted to recommend that the Environmental Management Commission permit the return to live fire using lead projectiles at Echo Range in accordance with the US Environmental Protection Agency Administrative Order 2 and the Environmental Performance Standards as set forth in Chapter 47 of the Acts of 2002.

MAJ Bagaglio said that the next steps are to petition the EMC at an upcoming meeting for range-specific design approval and approval of the OMMP. The MANG will also petition the EPA to modify Administrative Order 2. The MANG will consult with the Natural Heritage and Endangered Species Program if necessary.

MAJ Bagaglio stated in summary: adaptive and active range management has been and is critical to Small Arms Range and mission sustainability, human health and safety and environmental protection at Camp Edwards. He said the Environmental Performance Standards, specifically EPS 19, as set for in Chapter 47 the Acts of 2002, provides for external oversight and authority for range development and operations on Camp Edwards.

He said the MAARNG would like to move forward with Echo Range and is asking for the CAC's support of this effort for this critically important and required range for Soldier training.

Ms. McConnell stated that she has a lot of faith in the SAC and as a citizen she doesn't see anything wrong with Echo Range and asked if the EMC will be meeting soon. MAJ Bagaglio replied that the EMC will be meeting on June 8.

Mr. Vitacco asked if lead contamination is found in the soil what will be the protocol. MAJ Bagaglio replied that firing will stop with early warning monitoring.

Ms. McConnell asked about what was spent to bring Echo Range into fruition. MAJ Bagaglio replied that there was funding for the construction and there has not been an issue with monitoring.

Mr. Cole stated that in the diagram the berm is the "green ridge at the top." MAJ Bagaglio replied the berm will be built in the area he pointed out on the diagram of Echo Range. Mr. Cole asked what is the structure in the diagram. MAJ Bagaglio replied that is the backstop wall that is used for the test fires to find bullets there is a piece of berm behind. Mr. Cole stated that the recovery process involves sifting the dirt and asked about the Dura-Blok in front of the targets. MAJ Bagaglio replied that Dura-blok is a piece of rubber 8 by 8 by 16 inches and is placed in front of the target systems to stop the bullets and capture them, they will be disposed of based on how the number of rounds fired into them and will be replaced. many hits will be disposed of and replaced. He displayed a photo of the Dura-blok in front of the target. Mr. Cole stated that the capture rate is 95% and said that some of the other 5% could be in Dura-blok. MAJ Bagaglio replied that all 5% are in the Dura-blok.

Mr. Cole stated that in subsequent years recovery behind a single lane entry will be through the berm vertically. MAJ Bagaglio stated they will take the face of the runoff into that berm, remove 8 to 11 inches of the soil with the bullets, sift and replace and reseed. Mr. Cole said that first year the berm is monitored to determine the penetration depth. The SAC commented that process is the least expensive way to do the capture. MAJ Bagaglio said to do the monitoring of and capture effective for maintenance and easier to maintain more often. The SAC gave more cost effective ways to do the monitoring than with lysimeters. Mr. Cole asked if there was plastic sheeting under the berm. MAJ Bagaglio replied there is not.

Capt. Clyburn asked what is the cost and timeline. MAJ Bagaglio replied with all the approvals the berm construction is approximately \$630,000. The proposed timeline is to award construction in July-August 2016. At the earliest, training could begin in spring 2017.

Ms. Rooney asked what would trigger a consultation with Natural Heritage. MAJ Bagaglio replied that it's priority habitat; ¾ acre is pitch pine, which will be mitigated, making it a simple approval through MEPA. Ms. Rooney said that there may be mitigation for the additional clearing for the project. MAJ Bagaglio replied yes that is correct. Ms. Rooney said that the STAPP was more her concern. The water supply is adequately being protected with safeguards but there are additional plans to return other ranges back into service. The potential impacts with habitat disturbance she is not sure is addressed in the EPSs, therefore, will Natural Heritage be involved with future range proposals. MAJ Bagaglio replied yes, there is always a MEPA review to determine mitigation for any project.

Mr. Cole stated that the outside agencies such as police would be firing different weapons than the standard military issue. MAJ Bagaglio replied that the military doesn't have to allow the outside agencies to utilize the ranges; it is not a priority, training soldiers is. Mr. Cole said that muzzle velocities may be different with the penetration. MAJ Bagaglio said correct, the OMMP would have stipulation about range use.

CPT McDonough stated that there are clauses about approval of non-approved rounds built in to all existing OMMPs. The process is Range Control requests fire on non-standard rounds forwarded to Mr. Pinaud to review and after review of components of the round will either be approved or denied.

Ms. Valiela stated that she is pleased to see that the berm will be on three sides. What is the depth to groundwater. Mr. Pinaud replied it is 90 to 100 feet.

Ms. McConnell asked if there are any other agency users besides the police. CPT McDonough replied that local police departments and security contractors use the ranges.

Mr. O'Hara asked if the maintenance of the berm is a once a year project. MAJ Bagaglio replied it could be once a year or less depending on approval through the SARWG, EMC, EPA and the MANG.

Mr. Pinaud stated that the number of rounds fired would be monitored along with the condition of the berms and based on those factors, if one of the lanes needed to be taken apart that would be done.

Mr. O'Hara asked if anyone knows what period of time it takes for lead to leach into the soil. Mr. Pinaud replied that it's hundreds of years. Mr. O'Hara said that there is no leaching that takes place within the first year. Mr. Pinaud said that it's over 40, 50, 60 years of use.

Mr. Prohett asked how often will the groundwater well be sampled. MAJ Bagaglio replied annually, but with the lysimeters and other methods proposed there will be earlier warning.

Mr. Pinaud stated that the monitoring sampling goes through the EMC and Advisory Councils, IAGWSP, EPA, and MassDEP.

Mr. Harding would like to move forward with the Echo Range vote asking for the Community Advisory Council's support in this effort and critically important required range for soldier training and suggest to move forward with the Science Advisory Council recommendation to add in the CAC's recommendation. Mr. Cummings motioned to accept the recommendation and Mr. Dishner seconded the motion and all the CAC members were in favor.

Agenda Item #5: Massachusetts Army National Guard Updates – MAJ John Bagaglio, Environmental and Readiness Center, MANG

MAJ Bagaglio discussed personnel changes since the SAC last met on 4 November 2015. He updated the CAC on Community Involvement including the Military Civilian Community Council meeting in

February 2016; and the Best Warrior Competition hosted by Camp Edwards in April (State) and in June (National).

Dr. Ciaranca reported that the State of the Reservation Report final report was issued on 11 February 2016. Comments are being accepted and will be incorporated in next year's report.

MAJ Bagaglio stated that there is ongoing trespass reduction on the base. There are gates, cameras, signage and combined effort with Environmental Police on base impacts. MAJ Bagaglio discussed continuing trespassing issues; there have been initiatives by Camp Edwards and the Impact Area Groundwater Study Program (IAGWSP) to protect their infrastructure and an Eversource/NSTAR project on base which provided \$70,000 in funding for Department of Defense required signage, improved gates with extensions, and cameras for monitoring access points.

MAJ Bagaglio reported a violation of the Environmental Performance Standards (EPS) on 7 November 2015, which involved paintball use without prior authorization at the individual movement technique (IMT) lane (non-live fire). CPT McDonough noted that the unit lost a training day due to the EPS violation.

MAJ Bagaglio gave a brief small arms range update including the US Environmental Protection Agency (EPA) inspection of Juliet, Kilo, and Tango ranges with no major findings. The Massachusetts Army National Guard submitted a draft Pilot Period Close Out Report and request to modify EPA Administrative Order 2 to allow for the continued use of Juliet, Kilo, and Tango ranges and to recognize Environmental Management Commission (EMC) as the oversight body for small arms range activity and development at Camp Edwards.

MAJ Bagaglio said that the toe berm boxes will be installed on Juliet Range soon; the boxes on Kilo Range need to be placed. A scope of work for periodic metals removal is being contracted for Juliet Range. Tango Range is the least used STAPP range and decommissioning is being planned. MAJ Bagaglio discussed a non-standard training use proposed for Sierra Range: Individual Movement Technique (IMT) when one unit engages a target and the other unit moves. The Operations, Maintenance and Monitoring Plan for the range will be updated to reflect IMT as a standard use.

MAJ Bagaglio gave a summary of the Percussion Activated Neutralizer (PAN) at Camp Edwards. The PAN is used to disrupt explosive devices with emphasis on improvised explosive devices (IEDs). The proposed use is in a training environment only (no live IEDs). Only blanks or water can be used for training with the PAN at Camp Edwards. Dr. Ciaranca explained that the pan uses MK34-1000FT Pyrotechnic lead as an initiator and wire leads for .50 caliber. Both leads are initiated with D80/ESI. The typical PAN usage will be up to 180 shots/year for Massachusetts soldiers. There's the potential for up to 250 shots/year including out of state soldiers. The MK34 "Shock Tube" is internally coated with HMX. Each 1,000 foot roll contains 0.011429lbs of HMX internal coating. In general, each shot uses 100 feet of Shock Tube, which is equivalent to .0011429lbs HMX/Shot.

MAJ Bagaglio said that the PAN will be used in the Cantonment Area adjacent to the Explosive Ordnance Device building and at Mobile Operation on Urban Terrain Site Calero and in the Reserve on the Soldier Validation Lane.

Blank ammunition for small arms and simulated munitions may be used in areas outside of the small arms ranges, using only blank ammunition and simulated munitions identified on an approved list of munitions. Joint review and approval for inclusion on the list shall be through the Environmental and Readiness Center (E&RC) and the EMC.

MAJ Bagaglio provided the CAC with an update on the Natural Resources Program. The program has completed projects including intensive New England Cottontail pellet searches and trapping (low success), a camera trap effort and owl surveys. They completed restoration work on Demo-2 and BP-1 and established a RAWs weather station to inform fire planning, range use and wildlife research. Ongoing projects are rabbit monitoring, bat surveys and vernal pool surveys. MAJ Bagaglio said that in-house acoustic monitoring of bats has been conducted since February. Mist netting/roost searching is contracted for summer and fall, and the program organized and hosted the New England bat coordination meeting with agencies and non-governmental organizations. The program is also conducting breeding bird surveys and rare moth surveys. They are targeting 50 acres of the southwest Impact Area buffer for treatment with prescribed fire, which is a high-priority burn for New England Cottontail habitat.

Ms. Valiela asked how many times a Fisher has tripped the camera trap. MAJ Bagaglio replied the camera has been tripped five or six times with different animals. The effort is to catch the rabbits but the Fisher population has gone up.

Mr. Cole asked how the PAN works. MAJ Bagaglio replied it's a remote device with a blank at the end of the arm, which is placed in proximity of the explosive device to be neutralized. The tube can be rolled out to a distance and detonated remotely.

Mr. Harding asked if the Best Warrior Competition will be publicized. MAJ Bagaglio replied there should be a public press release. Mr. Harding asked if the event could be made public. MAJ Bagaglio replied he is not certain about the public attendance.

Agenda Item #6. Public Comment and Other Business

There was no public comment.

Mr. Pinaud discussed the status of appointments to the advisory councils and the need to reach quorums. There were a number recommended appointments made to the Governor's office but the paperwork is still in process. A few appointments should be made in the near future. The CAC members made a few recommendations at the meeting.

Col. LeFavor stated that he is retiring. Mr. Cole stated that he has resigned but still an active member.

Mr. Pinaud stated that recommendations for two at-large positions are needed.

Ms. McConnell recommended Susan Rohrbach. Mr. Cole and the other members seconded the recommendation.

Mr. Harding recommended Mark Forest as an appointed member of the CAC.

Mr. O'Hara stated that his paperwork hasn't been finalized but is in process with the town of Mashpee.

Mr. Vitacco inquired about his appointment; Mr. Pinaud replied that is in process with the town of Sandwich.

Agenda Item #7: Adjourn

The meeting adjourned at 6:35 p.m.