
**Community Advisory Council to the
Environmental Management Commission
Building 1805
Camp Edwards, Massachusetts
October 25, 2017
5:30 p.m.**

Draft Meeting Minutes

CAC Members:

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EMC Staff:

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Attendees:

<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 May 25, 2017
2. Massachusetts National Guard Update
3. Natural Resources Update
4. Massachusetts Army National Guard: EPS 15.3.3 “Field Refueling” Proof of Concept

Agenda Item #1. Chairperson’s Comments

Community Advisory Council (CAC) Chair, Mr. Harding, welcomed everyone. He noted that there will not be a quorum at the meeting.

Agenda Item #2: Review of CAC Meeting Minutes

The May 25, 2017 CAC meeting minutes were reviewed. Mr. Cole noted that on the first page his email address is incorrect, the correct email is coleslawone@yahoo.com. He said that on page 4, second to bottom paragraph, there is a reference to “8 October 2017” meeting which should be “8 October 2016.” Mr. Cole asked Dr. Ciaranca on page 3, sixth paragraph, “how split core sampling is done” there may be words missing. Dr. Ciaranca stated that the “split core” sampling can be divided or not be divided.

Agenda Item #3: EMC By-Law Discussion – Mr. Leonard Pinaud, Acting Environmental Officer, EMC

Mr. Pinaud said that Ms. McConnell brought the Environmental Management Commission (EMC) By-laws to their attention at the last meeting. In 2004, the By-laws were revised and reviewed by the Science Advisory Council (SAC) and the CAC, but never voted on by the Commissioners. Mr. Pinaud said that the revisions consisted of changing the number of yearly meetings from four to two and updating the names of the Commissioner’s agencies. The By-laws drafted in 2004 need to be updated again to make additional changes. Mr. Pinaud will make the necessary updates and have the SAC and CAC review them prior to the EMC’s approval.

Ms. McConnell asked if the sitting Commissioners are aware of the By-Laws. Mr. Pinaud said that the Commissioners weren’t familiar with the By-Laws, but it is on the agenda for the EMC Meeting on November 2.

Mr. Harding stated that the CAC and SAC would review the draft By-Laws and make the recommendations to the EMC. Mr. Pinaud said that the changes will be presented to the EMC for their approval.

Mr. Pinaud said that there have been some changes to the Open Meeting Law effective October 6, 2017. He asked the CAC members to familiarize themselves with the changes of Open Meeting Law and sign and return to him the document from the Attorney General Office stating that they have read the material and agree to follow Open Meeting Law. (Action)

Mr. Pinaud stated that he has been working with the Chiefs of Staff of the Department of Fish and Game and the Secretary of Environmental Affairs and has been talking to the Governor’s office for appointments to the CAC; a number of appointments are being finalized. Ms. McConnell said that because of frustration and not hearing back, she called a person in former Governor’s Swift’s office. She said he recommended that we try to make the distinction that it’s an appointed body having no power to hire and fire or allocated funds; that could streamline the process, Ms. McConnell noted.

Mr. Pinaud stated that he passed that suggestion on to the Department of Fish and Game. He is not sure if helped get appointments moving, but the appointments are moving.

Dr. Ciaranca stated that there is a need for a SAC Ad Hoc Committee, which was proposed and the SAC was in agreement. The purpose is to help review current Small Arms Ranges environmental monitoring processes, aiding and developing the most appropriate monitoring that provides for protection of the groundwater. The SAC Ad Hoc Committee members are proposed to be SAC members Phil Gschwend, geochemist, Denis LeBlanc, USGS, Jack Duggan, geochemist, and Jay Clausen, CRREL, who is a soil scientist and metals mobility expert. The EMC may vote or appoint the members of the Ad Hoc Committee.

Dr. Ciaranca stated that an information packet is being put together on what has been done on all of the Small Arms Ranges to date, what is currently being done, and any issues. The only issue is the metal antimony has been found in pore water on some ranges. Lead and copper has been the same for years but on Juliet, Kilo, Tango, and India ranges antimony levels have been steadily increasing. Researchers have found that there is a pH issue, Dr. Ciaranca noted. The 1998 berm maintenance project washed the soil with phosphates ex-situ and in-situ, put more phosphates to bind up the lead, which made antimony mobile. The regulatory community required the MAARNG to maintain a pH that is not the natural pH by adding lime, which exasperated the antimony. Mr. Clausen took the data and came to the same conclusions. There will be a study by geochemists and Mr. Clausen on how to resolve this using column studies, soil conditions and collecting rainwater. Also, the range monitoring will be fine-tuned.

Agenda Item 4: Natural Resources Update – *Jake McCumber, Natural Resources Manager, Massachusetts National Guard*

Mr. McCumber said wildlife work is ongoing with acoustic surveys and regional coordination. The data is being reviewed for New England Cottontail pellet searches, diet analysis, and coordination with the technical committee. There will be upcoming reports on the state listed rare moths and bumble bee surveys, nothing radical was found. There were no rusty tussock moths. He said there was an intensive survey done this past year on JBCC and no rare species were found.

Mr. McCumber stated that the Frosted Elfin was confirmed this year as a species being considered for Federal listing. The Massachusetts Division of Fisheries and Wildlife (DFW) is setting up a regional partnership with the Department of Defense (DoD). There were twenty sites surveyed but only one was found behind the Environmental & Readiness Center (E&RC). The DFW published an article “singing the praises” of DoD Conservation for all the work JBCC has done to support rare butterflies and other various species. The Associated Press cut that article with a nationwide story about butterfly conservation and the work that DoD installations in Northeastern New England and specifically called out Camp Edwards in June 2017.

Mr. McCumber stated that there are annual rare (state-listed) plant surveys, fire effects monitoring plots, seed harvesting and planting (restoration sites). Two seeds focused on this year were Big Bluestem seed and *Asclepias tuberosa* (Butterfly milkweed). There was planting on restoration sites such as Demo 1, he noted.

Mr. McCumber said that the rare species consultation projects include frost bottom plan conservation for Broad Tinker’s weed (*Triosteum perfoliatum*) and Adder’s tongue fern (*Ophioglossum pumilum*). These plants need open-canopy frost bottom depressions, but are being choked out by invasive shrubs and grasses. They have contracted a vegetation management plan and are coordinating with Natural Heritage and Endangered Species Program (NHESP), so as not to have unintended consequences when using a combination of mechanical and chemical treatment to remove the invasives.

CAPT Hudson asked if the term invasive means nonnative invasive or things you don't want growing there that could create a canopy, a plant that you don't want, and a plant that shouldn't be on the Cape. Mr. McCumber replied in the frost bottoms there are native species with invasive tendencies like pitch pine and bracken fern and non-native invasives like honeysuckle, autumn olive and bittersweet, which really significantly out-compete the native plants. It is one of the biggest challenges in the grasslands, which is fought with fire and herbicides. The native encroachment is dealt with mechanically by mowing, but exotic invasives need a more aggressive approach.

Mr. McCumber stated that there was confirmation from NHESP that state endangered Agassiz's clam shrimp (*Eulimnadia agassizii*) were found in multiple areas in trail/road puddles. He said that several road puddles are in severe condition and are requiring repair; they have contracted support to coordinate a conservation plan, mitigation, and coordination with NHESP and the Town of Bourne. A plan will be developed how to address the issue and some sites will not have impact to training; other sites will be created vernal pool sites. There will be a report, he noted.

Mr. McCumber said that prescribed burns were completed in April and June for 107 acres; approximately 50 acres were burned recently. There was annual fall fire training which consisted of four courses with 21 agencies/organizations participating. Fire partnerships through the Stafford Act for emergency response were signed with DFW; the Stafford Act signature is still required from DCR. The program is working with mutual aid. The Stafford Act is not active for any partners until all have signed (e.g. no federal partners).

Mr. McCumber said that the a wet year contributed to well established restoration efforts (non-fire) for the BP 27 and BP 28 rehabilitation; pitch pine thickets were removed and converted back to native grass/forb. He noted that in the OP 9 and 10 barrens restoration over story thinning is completed for shrub savannah. Conversion to native grass/forb is in the planning stages for BP 11; C 14 forest thinning and shrub restoration is also planned.

Mr. McCumber discussed emerging or recurring threats including the Gypsy moth. He said that the virus and fungus finally took hold in late June at the early stage of defoliation. The Southern pine bark beetle is a major concern. There is a regional meeting this winter amongst managers. They are developing proactive and reactive response plans and attempting to add response tools (e.g., burning debris). There was significant pitch pine mortality this year due to the black turpentine beetle (*Dendroctonus*) and three species of *Ips* bark beetles. MassDEP has been very helpful, he noted.

Mr. McCumber said that the youth deer hunt was held on September 30, with 16 hunters and six deer taken. Upcoming deer hunts include the paraplegic sportsmen's hunt, and Archery, Shotgun, and Muzzleloader seasons. There will be a military-members only hunt December 1-2.

Mr. Cole asked if there has been any instructions from the Federal agencies about relaxing environmental protection or decreases in funding that has threatened programs. Mr. McCumber replied that he has not received any, which is the great thing about doing DoD conservation with specific regulations like the Sikes Act that directly appropriate the need for long-term sustainability of military sites with the express goal of having sites for soldiers to train in perpetuity. The strong conservation drivers are actually set with the goal of maintaining training lands for soldiers, he said. The DoD is one of the only Federal agencies directly addressing climate change and that won't change because it is a direct threat to training lands. Mr. McCumber said that funding is better than last year.

Agenda Item #5: Combined Arms Exercise Update – Dr. Mike Ciaranca, Deputy Director, Environmental and Readiness Center, Massachusetts National Guard

Dr. Ciaranca stated that the Combined Arms Exercise in 2018 and 2019 is a brigade force level, multi-echelon, multi-domain, combined arms exercise with joint elements (multiple units and scenarios with different levels conducting training as a joint force). The purpose is to build ready army units and organizational readiness to conduct Unified Land Operations and to demonstrate the capability to integrate National Defense requirements.

Dr. Ciaranca stated the primary goals are to take collective units tasks and incorporate them into a training scenario to meet training requirements. The Units include: Infantry, Artillery, Engineers, Military Police, Chemical Signal, Cyber Aviation, Intelligence, Close Air Support, Brigade Support Battalion, Explosive Ordnance Disposal, and Transportation.

Dr. Ciaranca stated that in 2018, the MAARNG would like to conduct an exercise involving combat support units. The primary area of operation will be Dig Site 3 near Tactical Training Base Kelley and Connery Avenue. Dr. Ciaranca stated there are plans to conduct a simulated retrograde movement of troops hit with a chemical attack, with the soldiers pulling back to decontaminate.

Dr. Ciaranca stated that the exercise in 2019 will build on the scenario and incorporate relevant lessons learned from the 2018 training. He noted it will include more integrated units within the scenarios.

LTC Cody stated the Army operating concept has changed. He said that the training exercise helps get everyone back out in the field living in the bivouacs that Mr. McCumber has helped restore and work collectively together before we deploy and the Combined Arms Exercise will accomplish that.

Agenda Item #6: Small Arms Ranges – Dr. Michael Ciaranca, E&RC, MAARNG

Dr. Ciaranca stated that during the July 13 SAC meeting, they reviewed the environmental monitoring for the small arms ranges.

Dr. Ciaranca stated that Echo Range is a pistol range, which is not yet operational. They are installing range markers and an ammunition supply shed. He noted he will inform Mr. Pinaud when Echo Range is going live.

Dr. Ciaranca stated that the Tango Range STAPP™ system is being removed and the range reconfigured. There is a contract but the start date is not available. The STAPP™ liner, materials, rubber granular and lead will be removed off post by an environmental company. Tango Range will become a copper-only range. Currently, Tango Range is a 15 lane range; a standard range is 32 lanes, therefore, Tango Range will be expanded to 32 lanes when funding is available. The berm and firing line will move north 20-25 meters and lanes will extend to either side.

Mr. Harding asked which range had the first STAPP™ system. Dr. Ciaranca replied Tango Range had the first STAPP™ system in 2007. Mr. Harding asked if the all the STAPP™ system material will be decommissioned and removed. Dr. Ciaranca replied yes, but the material cannot be reused on another STAPP™ system.

Dr. Ciaranca stated that Sierra and India ranges are copper ammunition-only ranges. He noted that in 2012 and 2013 respectively, a two-year Pilot Period for Sierra and India Ranges was approved. In 2014, the EMC extended the pilot period for India and Sierra Ranges through December 31, 2016. It was extended so that further soil, pore water and groundwater monitoring data could be collected. In 2016, the MAARNG requested that Mr. Pinaud extend the Pilot Period through December 31, 2017.

Dr. Ciaranca discussed the requirements for range operation in the approval letter, one of which is to operate the ranges in accordance with the EPSs and all other applicable regulations and law. There are two EPSs: a general EPS that states the MAARNG will protect the environment and not pollute, and mitigate any type of metals mobility to the greatest extent practical. EPS 19 is specific with Operation, Maintenance and Monitoring Plans and range design, etc. He said the MAARNG has been in compliance. Another requirement is that the ranges shall be clearly posted as copper-only ranges. Signs are posted on Sierra and India Ranges. As for environmental monitoring: sampling of the groundwater and soil have shown no level of metals that

exceed regulatory limits. Porewater on India Range has shown antimony concentrations above the Operation, Maintenance and Monitoring Plan action level of 6ppb.

Dr. Ciaranca stated the primary lesson learned concerned soil screening size and repair timing of the bullet pockets in the auxiliary berms; and that the use of legacy range soils impacts environmental monitoring.

Dr. Ciaranca said that the MANG requests that the EMC authorize its Acting Environmental Officer (Len Pinaud) to close out the Pilot Period for India and Sierra Ranges and allow the MANG to continue to operate the ranges in accordance with EPSs and the Operations, Maintenance, and Monitoring Plans (OMMPs) for these ranges.

Mr. Pinaud stated that the next step, the MANG will ask the EMC to allow the Environmental Officer to determine whether they can be released from the Pilot Period. The pilot period was designed to ensure the MAARNG and EMC knew where the projectiles were going and there wasn't anything found that wasn't anticipated in terms of soil contamination. There are five years of data from the Pilot Period. Mr. Pinaud said he is comfortable with why the Pilot Program is in place and the reasons to release the MANG from the Pilot Period. Data will be still collected and the MAARNG is obligated to maintain the ranges and funding. There will be reports in the State of the Reservation Report and presentations at meetings. The SAC was concerned that there may be a loss of information or ability to get the information if released from the Pilot Period and he doesn't believe there is a concern. The OMMP is a living document reflecting improvements with monitoring, he noted.

Agenda Item #7: EPS 15.3.3 “Field Refueling” Proof of Concept Review, Discussion, and Next Steps – CPT Alex McDonough, MAARNG

Dr. Ciaranca said that EPS 15.3.3 states “No storage or movement of fuels for supporting field activities, other than in vehicle fuel tanks, will be permitted except in approved containers no greater than five gallons in capacity.” He said that implementing EPS 15.3.3 has been a user concern through the existence of the EPSs. There have been regular exceptions to the standard granted.

Dr. Ciaranca stated that the purpose is to illustrate that field refueling can be conducted in a safe and environmentally protective manner. Dr. Ciaranca stated that there is a need to be able to refuel vehicles in the field for remediation, range construction, and training area and habitat management in a cost effective, efficient, and most importantly, an environmentally protective manner. Dr. Ciaranca stated that there is a need for MANG Soldiers to be able to train effectively in the field in a collective manner.

Dr. Ciaranca said that in May 2017 the SAC and CAC requested further information and agreed that a Proof of Concept be conducted. Dr. Ciaranca stated that on 8 June 2017, the EMC concurred. Dr. Ciaranca stated that Proof of Concept was conducted 13 June 2017, which was conducted at TTB Kelley.

Dr. Ciaranca stated that the Advisory Councils had action items to be addressed for EPS 15.3.3 Proof of Concept. The action items were summarized:

1. *Provide a map, Go/NO go areas, guidance should be very specific (speed limits, roads, etc.), show sensitive areas, consider habitat (wells, water, and habitat), and refueling location will be selected to ensure emergency response vehicles can access the site.* Dr. Ciaranca said the map will be presented to the groups before there is any change to the EPS.
2. *Movies of the training: showing coupling and decoupling, fueling on various items (Blackhawk, Humvee, etc.)* Dr. Ciaranca said that he will show photographs and video of the refueling.
3. *Specs on the HEMTT: Heavy expanded mobility tactical truck (HEMTT).* Dr. Ciaranca showed an image with the specs for the HEMTT. He said that fuel capacity is 2500 gallons.
4. *Specs on the secondary containment: Secondary containment for the HEMTT is designed to contain up to 10% more than the max capacity of the vehicle and is rated for solvents and fuels.*

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5. *How often will the training be conducted:* Dr. Ciaranca said there will be approximately 30 days per calendar year where this training could occur, although it will not necessarily pump fuel on all those days.
 6. *Define what type of training the HEMTT is used for:* Refueling of military equipment. This type of training is standard and required. Tactical (section, company, and battalion certification) and combined training events.
 7. *Max limit of fuel to be carried:* 1,500 gallons maximum and it would be limited to the amount needed for the training event. Total fuel distributed will be reported within the State of the Reservation Report.
 8. *How much fuel is carried in a civilian-type tanker vs. the HEMTT fueler:* Civilian Fuel Tanker ranges from 5,500 to 11,600 gallons. Home fuel delivery trucks are 3,000 gallons. The HEMTT is 2,500 gallons.
 9. *What is the actual impact from a 1,500 (or max amount) gallon spill:* Response time – Fire Department can be on scene within minutes, MAARNG has its own compliance staff to ensure 24 hour spill emergency response. MAARNG has environmental contractors on call for spill emergency response. MAARNG will, if required, close the area for efficient spill response. Contractors can usually be on scene within an hour or less of notification. Dr. Ciaranca said that when there was a recent truck rollover; within 55 minutes the fire department, MAARNG compliance, MassDEP and contractor was on scene.
 10. *How fast fuel moves through the soil to groundwater:* Dependent on residence time (how long the fuel sits there) and soil type. fuel and soil types. (In general the fuel would move through our soils at a rate of approximately .../...).
 11. *What type of fuels would be carried in a HEMTT:* Civilian fuels: Diesel and gasoline for remediation and habitat restoration. HEMTTs would carry Aviation Fuel (F24 or JET A) an ultra-clean diesel). Jet A (F24) is a kerosene-based fuel used by commercial airlines. Jet A is similar to JP-8 except that it doesn't contain the additive package required for JP-8: i.e. static dissipater (SDA), fuel system icing-inhibitor (FSII), and corrosion inhibitor/lubricity improver (CI/LI).
 12. *How much soil would have to be removed, etc.* In general the volume of soil to be removed is residence time dependent.
 13. *Spill Prevention Plan:* The MAARNG has a state-wide Spill Prevention Control and Counter Measures Plan. All spills on Camp Edwards no matter the size are reported and are reported within the State of the Reservation Report. Any spill that meets or exceeds regulatory statues will be reported as required.

Ms. McConnell asked if there is integration between the refueling issues and the Superfund. Dr. Ciaranca replied Mr. Pinaud is a MassDEP superfund consultant; this is not an EPA concern because doesn't fall under their Administrative Orders. Mr. Pinaud asked if Ms. McConnell's concern is that the locations chosen would interfere with the cleanup program. Ms. McConnell replied in effect, yes, and she would want to know about the use of fuel considering what they are engaged in. LTC Cody replied that he manages the Army side of the cleanup, which would be anywhere that the activity takes place. They are well aware of operations. Mr. Pinaud said that the type of training wouldn't impact the cleanup, unless it was right next to the cleanup treatment systems and there could be problems with vapors. He asked if there is a vapor caption system on the refueler? Dr. Ciaranca replied yes. LTC Cody said that every week a range bulletin is distributed that lists the time and location of anyone using the Reserve, so there are no conflicts. He noted that every user must go through Range Control. Dr. Ciaranca said that EPA is aware of the current activities.

Mr. Cole asked if the HEMTT only carries aviation fuel. Dr. Ciaranca said that there is one fuel used for all military equipment; additives are used in the different motors depending on the vehicle.

Dr. Ciaranca displayed photos and footage of refueling using secondary containment. Fueling activity and coupling was displayed in a photo/video.

LTC Cody stated that in the refueling photo, it shows that every fuel tank has a ground guide in front and back of the vehicle. Dr. Ciaranca stated there are water jugs to hold down the secondary containment; there is an eye washer on the outside of the refueler and an extinguisher. There is also an emergency shut off. The soldier tasked with refueling operates at the back of the HEMTT and has a kill switch so if anything goes wrong, it's let go and shuts the fuel flow off.

Dr. Ciaranca said that the future steps are: prepare further information as needed and requested, develop BMP/SOPs and a Go/No Go Map, language for the proposed EPS, and propose the EPS 15.3.3 change to the EMC.

Agenda Item #8: Public Comment

There was no public comment.

Agenda Item #9. Adjourn

The meeting adjourned at 7:05 p.m.