
**Environmental Management Commission
Building 1805
June 1, 2017
2:30 p.m.**

Meeting Minutes

<u>Members:</u>	<u>Organization:</u>	<u>Telephone:</u>
Commissioner George Peterson	EMC/DFG	617-626-1550
Commissioner Martin Suuberg	EMC/DEP	617-292-5856
Commissioner Leo Roy	EMC/DCR	617-626-1250

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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. EMC Draft Meeting Minutes: November 3, 2016
2. Environmental Officer Update – June 2016
3. Massachusetts National Guard Current Activities
4. Proposed EPS Revisions
5. Natural Resources Update

Agenda Item #1. Welcome and Environmental Management Commission Minutes – Chair/EMC Commissioners

Commissioner Peterson convened the Environmental Management Commission (EMC) at 2:30 p.m.

The members and attendees introduced themselves.

The November 3, 2016 EMC minutes were reviewed. Commission Peterson made a motion to accept the minutes and Commissioner Roy seconded the motion. The minutes were approved unanimously.

Agenda Item #2 Environmental Officer Update – Mr. Leonard Pinaud, Environmental Management Commission Acting Environmental Officer

Mr. Pinaud gave an update on the EMC-related activities. He discussed the Echo Range Operations, Maintenance and Monitoring Plan. The plan is critical to the operation of the range, and must be approved by the EMC before the range operates. The Operations, Maintenance, and Monitoring Plan (OMMP) has been drafted and the EMC has commented on it. The Massachusetts Army National Guard (MAARNG) is finalizing the document, and EMC will submit a letter to the MAARNG for approval of the Echo Range design and the OMMP.

Mr. Pinaud reported that a tractor trailer rolled over on Frank Perkins Road recently. The tractor trailer was transporting contaminated soil from the Small Arms Ranges for reuse as daily cover at a landfill. The rollover resulted in a very minor fuel spill. The EMC and the Massachusetts Department of Environmental Protection (MassDEP) were notified immediately, and both agencies responded. He said that the communication protocol worked very well and the small spill was cleaned up quickly. Mr. Dishner asked if speed caused the spill over. Mr. Pinaud said he doesn't want to speculate because he hasn't seen the police report.

Mr. Pinaud reported that he coordinated with the US EPA on a response to comments for the US EPA Administrative Order 2 modification, which took some time.

The EMC coordinated with the MAARNG on the Juliet Range environmental bullet catcher maintenance project. Mr. Pinaud and some MassDEP staff inspected the operation: two or three days collectively of time for Mr. Pinaud and the MassDEP staff.

The MAARNG made a request to the EMC to use a theatrical type of obscurant. Normally the military would use "smoke pots" or smokes which have chemicals that are not allowed under the EPSs, those obscurants are banned under the EPSs. The MAARNG requested to use the theatrical smoke which is made up of a few glycol compounds and glycerin. There is no issue with chemical contamination with use and the MAARNG were allowed to use them. The MAARNG conducted pre and post use sampling. Nothing was found.

Mr. Pinaud said that in December 2016, the EMC sent a letter to the MAARNG extending the Pilot Period for Sierra and India ranges. There were no issues brought to the EMC that would preclude extending the pilot period.

The EMC has been coordinating with the Department of Fish and Game on the deer and turkey hunts held at Camp Edwards. There are a number of areas in the Reserve that are currently closed to deer and turkey hunting because of remediation activities or because they are close to the airfield. The EMC has been working with the MAARNG and the Department of Fish and Game to coordinate opening more areas to hunting, if possible.

Mr. Pinaud is working with the E&RC and the SAC to begin using at Camp Edwards technology that is used throughout the remediation industry. Instead of using lysimeters on the ranges, the MAARNG will take soil cores from within the back stop berm to test for different metals and contaminants.

Mr. Pinaud explained that the EPSs state that in the Reserve there is "no refueling larger than 5 gallon containers." During construction projects, tank mounted fuel pots, limited to 100 gallons have been

allowed for contractor use. For conservation and construction purposes only, the EMC has provided exemptions to the MAARNG for refueling in limited quantities on a case by case basis.

Mr. Pinaud reported that a public comment period was held for EPS 2.7, Seasonal Road Closures. At the last meeting, the EMC gave Mr. Pinaud the authority to move forward to change EPS 2.7. Notification of the proposed change was advertised in the Massachusetts Environmental Policy Act/Environmental Monitor with a public comment period; no comments were received. Following the public comment period the EMC sent a letter to the MAARNG advising the change to EPS 2.7 should be promulgated.

Mr. Pinaud reported that he has been heavily involved in advising and reviewing the EPS 15.3 Refueling Proof of Concept.

Mr. Pinaud explained that there are munitions that the MAARNG would like to use in the Reserve; new munitions are brought to EMC for review and approval. The munitions list needs to be updated, he said.

Several years ago, a utility company payed a \$70,000 penalty that went into a trust fund to be used in the Reserve. Mr. Pinaud is coordinating with Department of Fish and Game for an inter-service agreement to transfer the fund over to the Department Fish and Game to utilize for posting signs in the Reserve. He is consulting with Jason Zimmer for the type of language for the postings needed along the Reserve border. Mr. Peterson stated that he spoke with the chief financial officer from Department of Fish and Game and the ISA language has been approved; within one to two weeks the ISA should be moving forward to release funds to Department of Fish and Game.

Mr. Pinaud working with Bob Greco and Richard Leehan, Department of Fish and Game, the Governor's office and the Executive Office of Energy and Environmental Affairs regarding new CAC appointments. The list of CAC and SAC members held by the Governor's office were not the same as the list held by the previous Environmental Officer. Mr. Pinaud said that the list is being coordinated and updated with a number of appointments confirmed on the SAC and a new appointment made to the CAC, Ernest Virgilio. A number of appointments and retirements are pending on the CAC.

Mr. Pinaud said that he has completed 61 inspections since November 2016; representing 35 individual inspection days, 44 small arms range inspections; one inspection during hunting; twelve associated with other training ranges, three natural resources inspections, and one of a prescribed burn.

Ms. Schoener inquired about the utility company penalty. Dr. Ciaranca replied that Eversource received the \$70,000 penalty because they damaged a signed wetland while conducting easement maintenance.

Agenda Item #3 Proposed Environmental Performance Standards Revisions – Dr. Mike Ciaranca, Environmental and Readiness Center, MANG

Dr. Ciaranca stated that EPS 2.7 "Seasonal Road Closures (Under: EPS 2.0 Wetlands and Surface Water Performance Standards) was proposed on 10 January 2017, approved, and revised. The SAC and CAC provided input and support of the request at the last SAC and CAC meetings. The EMC approved the revised EPS on 8 October 2017. The EPS revision was placed in the "Environmental Monitor" on 15 February 2017 and didn't receive any comments. The EPS standard was updated and published on 6 April 2017. The EPS document will be disseminated to all relevant parties and documents will be updated as they come up for review and in the State of Reservation Report.

Dr. Ciaranca discussed EPS 15.3.3: which 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."

Dr. Ciaranca stated that the MAARNG is requesting: to allow refueling of remediation contractors, resource management, and military vehicles within the Reserve/Training Area while being compatible with the intent of Chapter 47 so that habitat and groundwater remain protected. Exceptions to the standard have been made for contractor refueling as it was not practical.

Dr. Ciaranca stated that the soldiers would like to refuel in the Reserve, which is important in the tactical setting. There will be Proof of Concept to show that refueling can be conducted in the Reserve in a fashion that is compatible per Chapter 47, protecting habitat and groundwater with compatible military use.

The Proof of Concept will be held 11-13 June and will be conducted at Tactical Training Base Kelley outside of the Reserve. Dr. Ciaranca stated that there are specific Army regulations and guidance include Individual task number 101-92F-1414 Perform Petroleum Tank Vehicles Operations; Sub task: Individual task number 101-92F-1413 Employ Environmental Stewardship Protection Program Measures; the drivers are licensed through the Commander's licensing program and are required to have classroom instruction, and written and driving tests. Dr. Ciaranca stated that the MAARNG will create a Camp Edwards Refueling in the Reserve SOP/Checklist for sensitive areas close to groundwater and habitat and an allowable roadways map.

Dr. Ciaranca stated the Science Advisory Council input was: concern about transporting the fuel; concern for sensitive areas: habitat, "public wells," depth to aquifer, along with no activity in Zone 2.

Dr. Ciaranca stated that SAC member Denis LeBlanc said, "Protocols should not be designed to rely on natural degradation as the first line of defense. But well designed and monitored procedures for fuel transportation and handling, when coupled with the assimilative capacity of the aquifer, should be protective of groundwater quality in the Reserve."

Dr. Ciaranca said that the Community Advisory Council input was: surprise by several members that fueling, other than 5 gallon cans, is not allowed in the Reserve; one member said that fueling is easy and safe, is very controllable and simple; and safety/environmental measures and containment are standard across the industry; using 5 gallon cans is a waste of manpower and leads to accidents, and is not training as practiced in war. Other input included: the proposed change is far from the Community Working Group's recommendations, we need to adhere to safety, and not start to erode the EPS; the public is dependent on us; making sure groundwater is protected and compatible with the Reserve; the Reserve is a special place with zones of contribution and sensitive habitat; refueling needs to be kept away from sensitive areas; provide a map with sensitive areas; and provide specs on the tanker and secondary containment; provide videos of coupling and decoupling on vehicles (Blackhawks, Humvees, etc).

Dr. Ciaranca stated there will be a videographer to capture the proof of concept.

CPT McDonough, Range Officer Camp Edwards, stated that the refueling proof of concept operations will take place in Tactical Training Base Kelley. During the procedure the unit will prepare and set up their training site with the containment system in place and the vehicle on the containment pad. Range Control will contact the EMC when the unit is to proceed with the training event so the EMC can conduct a joint inspection insuring that all the secondary containment in place. After being cleared to proceed with the exercise, the unit will start running helicopters through and conducting the refueling. CPT McDonough and Dr. Ciaranca met with the unit and reviewed the project note and expectations for the refueling operations process. The fueller would transfer the fuel to the helicopter with additional safety procedures in terms of fuel captures, bringing the secondary containment to the point of fueling. The nozzle and drip pan from the fueller will be brought to the point of issue at the helicopter.

CPT McDonough displayed a photo of an HEMTT fueller with a containment system taken in the field showing the fueling operations, a standard Army practice. Inspected by environmental personal throughout the training scenario would be a requirement at Camp Edwards. Once the fueling mission is complete Range Control would be contacted to make sure the containment system is free of any contaminants before being rolled up.

Commissioner Peterson asked how much fluid the containment system will hold. CPT McDonough replied 5,000 gallons. Commissioner Peterson said that is twice the amount the tanker could hold. CPT McDonough said that the HEMTT fueller is only 2,500 gallons.

Agenda Item #4 Natural Resources Update *Annie Curtis, NR Planner*

Ms. Curtis displayed a photo and explained that in January 2017 there was a North Atlantic Fire Science Exchange held on Camp Edwards with almost 60 fire scientists and practitioners from Virginia to Maine in attendance to learn about the fire ecology and history program at Camp Edwards.

Ms. Curtis discussed the Whip-poor-will annual survey; they have conducted mist netting for whip poor wills at one of three sites with overwintering. She said that through a legacy grant, Upland Sandpiper migration was tracked from Camp Edwards to the Amazon and back.

Ms. Curtis said that the Rusty-patched bumble bee was federally listed under the Endangered Species Act; the Natural Resource Program has been conducting surveys throughout training area; there are no records of them on Camp Edwards. One of twenty locations known for that species in the past ten years was in Harwich in 2000.

Ms. Curtis said that the program has conducted surveys for Frosted elfin through training area; the Frosted elfin is under consideration for federal listing and the program is conducting a status review on that now. They are working with the US Fish and Wildlife Service on a range-wide conservation strategy for that species. There are records of it on base from 1997 to 2005. The survey confirmed that they are the in the Cantonment area. Commissioner Peterson asked what is a frosted elfin. Ms. Curtis replied that it is a butterfly found mostly in grassland and baptisia/wild indigo.

Ms. Curtis said that another species under consideration for federal listing is the spotted turtle. The program has conducted spotted turtle trapping/tracking on base.

Ms. Curtis reported that in Fall 2016, 82 acres were burned with prescribed fire along with 24 acres of grassland area. In Spring 2017, 86 acres burned in the Southwest buffer unit, with 323 more planned (4 units). She said also there is an interagency team assisting the Division of Fisheries and Wildlife with prescribed fire program development and planning.

Ms. Curtis gave an update on non-fire restoration efforts including grassland management collaborations and invasive plant management; OP 1 through OP 4 habitat improvement, and BP 27 and BP 28 rehabilitation. Pitch pines were removed for native grasses to grow, benefiting both training and the habitat. One upcoming project is over story thinning on Wood Road.

Ms. Curtis also gave an update on emerging or recurring threats including the impact of Gypsy moths on the state and the base; the Southern pine beetle has devastated pines in New Jersey and Long Island. Best management practices are tree thinning combined with prescribed fire, and proactive timber thinning with 20-foot tree spacing. The Natural Resources Program is coordinating with the National Forest Service and is planning pine barrens restoration projects.

Ms. Curtis summarized the hunting activities: the Fall 2016 deer hunt was a total of 17 days, 899 hunter days, with 45 deer harvested; 12 hunters participated in the youth hunt this spring, taking 5 turkeys, and 13 turkeys were harvested during the regular season.

Ms. Curtis stated that the Camp Edwards is hosting its Annual Grassland Bird Tours in June.

Agenda Item 5: Massachusetts National Guard Current Activities – *Dr. Mike Ciaranca, Environmental and Readiness Center, MANG*

Dr. Ciaranca said that since the last EMC meeting, COL Magurn was promoted to Brigadier General.

Dr. Ciaranca reminded the EMC of the pressure test request by National Grid Pressure that would have released water into the Reserve. Mr. Pinaud stated that he worked with National Grid over a few months to ensure their discharge was compliant with the EPSs as it would be considered an industrial waste water. The company made a business decision not to discharge the water into the Reserve, therefore, the operation never need to be permitted. Eversource trucked the discharge to a waste water treatment system. Dr. Ciaranca stated the only impact were some hay bales on the edge of the Reserve.

Dr. Ciaranca stated that Eversource plans to upgrade its switching station located in the Reserve to double its capacity. Several options were presented by Eversource; a small land transfer to them may be made, but it wouldn't impact the status of the base or Army training. There are no recent updates on the status of this project.

Dr. Ciaranca said that there is still ongoing coordination between the Monument Beach Sportsman's Club and Camp Edwards Range Control and the Impact Area Groundwater Study Office. When live fire is conducted at the Club's range it impacts training areas on Camp Edwards, which have to be shut down for safety. Remediation also is impacted.

Dr. Ciaranca stated that State of Reservation Report is complete and was disseminated. He said that suggestions for improving the document are welcome at any time.

Dr. Ciaranca said that the MAARNG submitted a request to the US Environmental Protection Agency (US EPA) requesting to modify USEPA Administrative Order 2 (AO2) to lift the prohibition on live fire and pyrotechnics. The request was submitted on 31 August 2016. A 30 day public comment period was held along with a public meeting. The US EPA response was received 15 May 2017; the primary modifications were concluding the pilot period for the STAPP ranges, recognition of the EMC as the authority for small arms range oversight, and the MAARNG must conduct five year reviews.

Dr. Ciaranca explained that the STAPP systems on Juliet, Kilo and Tango ranges are designed to hold a certain amount of bullets. A standard was developed in the Operations, Maintenance and Monitoring Plan SOP that the traps would be cleaned out every 600,000 rounds; when there are 450,000 rounds in the trap, the MAARNG must notify regulatory agencies that systems will be contracted and cleaned out. Metals removal has been completed on Juliet Range, and the top cover and lane maintenance are in process. Dr. Ciaranca reported that approximately 4,160 lbs. of projectiles were fired into system. The weight of the projectiles removed from the system is estimated at 3,800 lbs. The MAARNG will provide the final weight when it's received.

Dr. Ciaranca displayed a photo of the STAPP system, which is filled with 24 inches of granular rubber material. The line in the photo shows demarcation of rounds penetrating the granular rubber material—approximately 8 inches to 12 inches in depth. Sampling was done with results within the state's Maximum Contaminant Level (MCL) for any kind of contaminant.

Dr. Ciaranca reported that construction is complete on Echo Range, the combat pistol/military police qualification range. The draft Operations, Maintenance, and Monitoring Plan is complete. Final approval from the EMC is forthcoming.

Dr. Ciaranca stated that the MAARNG is moving to sample the small arms ranges using split core sampling: 25 centimeter increments down to 270 centimeters, and each depth gets combined by multi increment sampling. He said that metals mobility through soil with depth is the concern with the aquifer. Some STAPP system lysimeter areas have sampled high for antimony. In 1998, there was berm maintenance at Camp Edwards small arms ranges where the soil was washed to immobilize lead with a phosphate-based amendment. Soil was removed from the ranges and when put back there was more phosphate based amendment; phosphate makes antimony mobile. Split core samples will be taken from the STAPP system lysimeter areas, Echo Range backstop berm and range floors as determined through surface soil sampling. Sampling will begin this Training Year.

Dr. Ciaranca stated the MAARNG will begin a review and update of all the Operation Maintenance, and Monitoring Plans: Juliet, Kilo, Tango Ranges, Sierra and India Ranges, Echo Range, and Lima Range.

Dr. Ciaranca said that the MAARNG would like to start using a Theatrical Fog Machines in training. The MAARNG conducted a Proof of Concept during the 2017 Best Warrior Competition to demonstrate and evaluate theatrical fog generators for training use. Its overall effectiveness as obscurant is best for fixed position scenarios only. Sampling was done pre and post use for Propylene glycol and triethylene glycol; results were estimated values and non detect. The sampling result post-use, there was no detection (raining). The training use scenarios will be evaluated to determine whether it's appropriate for use.

Ms. McConnell reminded everyone why they are there, how the group was formed and what led to the Master Plan on base going back to Governor Weld's administration, which created the Community Working Group for the Master Plan. The first mandate was primarily to protect the environment and the Sagamore lens and future water supply. The second mandate was to review the military training to see if it could be compatible with the environmental protection. Chapter 47 was created for environmental protection which is followed today.

Ms. McConnell asked that today, is refueling on base compatible, even with the safeguards? She said should there be any refueling in the Reserve, and said couldn't the MAARNG use space outside of the Reserve in the future for the refueling training (coupling, decoupling) so that there is no risk put on the Reserve. She is concerned that some of the respect for the military will be lost if this refueling were to take place; even with so many safeguards, refueling accidents do happen. Ms. McConnell recommends that if there's a good alternative area for refueling other than the Reserve that it be used.

Mr. Dishner stated that the CAC has asked the MAARNG for more information, such as drawings to visualize (inaudible), and the specs of containment. He was surprised that 5 gallon cans were being used, spills can occur. Could there be another area for refueling, he asked.

Mr. Prohett, Bourne Water Commissioner, stated that he spoke with Dan Mahoney, the chairman of board for Upper Cape Regional Water Supply District, and they don't want to send troops into combat not knowing how to refuel. However, the issue is the water supply; the base could have multiple sites with full containment, so if something were to happen, the water supply would not be in jeopardy and the military could still do their training. He said that he doesn't remember any spills from the back of a pickup truck, but he does remember spills on the Otis Rotary with tanker trucks tipping over. He said that as absurd as moving gas in 5 gallon cans is, that is not the spill looking we're looking to contain, it's the big spills because it contaminates the entire water supply. It would take a huge amount of fuel to do that. He said drips are a concern, but there are options to refuel; they are supportive of the base refueling, but there are certainly ways that we could do it together.

Mr. Cody stated that refueling has been an issue for 17 years. He said that there will be professionals who will be refueling and he feels confident that the refueling is very protective of the water supply that the military installed for the Upper Cape Water Supply Cooperative. There is a convoy plan with specific attention to roads they can go down, to go around the wells, and to go around the water supply zones. They will be directed where they can go. He said the MAARNG does not want to limit the commanders; we want them to tell us what they think is the best way to go; they go out and do a route recon for the best route, taking into consideration the terrain. The unit commander approves the plan which is then sent to CPT McDonough at Range Control, who will approve or disapprove it. Mr. Cody said that we want to talk about it more over the next year, and we want the advisory groups to feel confident about it. Mr. Cody said he is confident that the groups will see why the MAARNG needs to be out in the environment training; they will see the professionals the MAARNG has and the safeguards that will be instilled.

Dr. Ciaranca stated that there will be very few areas in the training area where refueling will be allowed because the terrain doesn't allow for refueling on top of the sensitive areas. Refueling areas will be very well defined. Refueling will be in a tactical setting or a joint exercise. A max limit of fuel was discussed as 1,500 gallons in a 2,500 gallon vehicle with containment for 2,500 gallons. Dr. Ciaranca said the MAARNG wants to take this very slow and build it so that we can prove that it's not a threat. He feels that an agreement can be reached with safeguards in place that are protective of the community resources.

Commissioner Peterson stated that the comments from the SAC and CAC were very good and one was discussing the environmentally sensitive areas. The entire base will not be used for refueling. There will be small areas outside the water supply zones and taking terrain factors into consideration. The environmental map with the sensitive areas to show what areas would be available is a critical piece that he would like to see; how much space is open to refueling and look at the other information available. He said the MAARNG seems to be "headed down the right road" with refueling but the concerns are being heard.

Mr. Dishner stated that tankers do roll over and wants to ensure that the MAARNG takes all the steps. He asked where is the map of the sensitive areas.

Mr. Cody stated that the steps taken are the most environmentally safe in the country, the MAARNG wants its ranges that way, Range Control is run that way, and the MAARNG wants to hear all these comments. The MAARNG doesn't want to have a roll over.

BG Magurn stated that when Administrative Order 2 was lifted, he was contacted by the Cape Cod Times and asked what does this mean for National Guard training? He said, after almost two decades, the real story is the involvement of the EMC, CAC, SAC and the Military Civilian Community Council that brought us to the success point generating the trust in the public that built on the transparent functioning body who can deliberate and reconcile what's best for all. There is time to be very deliberative and calculating in determining the area of refueling. There are reasons for pursuing this, BG Magurn explained, we are reconfiguring our approach to readiness with the US Army and throughout the DoD. As emerging threats are evaluated we are being directed to focus on "old-school" ground combat--full spectrum warfare—with a fair amount of urgency, that's the design we're pursuing, and that's why after 15 years, we're looking for this ability to (inaudible) training. The most important thing is to retain the faith and relationship with the EMC; we're not going to do anything to damage that, aquifer protection is most important.

Agenda Item #5 Public Comment

There was no public comment.

Agenda Item #6 Adjourn

The meeting adjourned at 4:00 p.m.