
**Science Advisory Council to the Environmental Management Commission Meeting
Building 5222
Camp Edwards, Massachusetts
May 10, 2018
5:30 p.m.**

Meeting Minutes

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Handouts Distributed at Meeting:

1. SAC Meeting Minutes for July 13, 2017 and October 19, 2017
2. Environmental Management Commission Read Ahead Spring 2018
3. Environmental Officer Update Environmental Management Commission May 2018
4. Massachusetts National Guard Environmental and Readiness Center Update; Natural Resources Update
5. Multi-Purpose Machine Gun Range at Camp Edwards May 2018

Agenda Item #1. Chairperson's Comments – Dr. Paul Cavanagh, Science Advisory Council Chair

Dr. Cavanagh thanked everyone for attending the Science Advisory Council (SAC) meeting. He welcomed Brig. Gen. Chris Faux, who replaced BG Francis Magurn as the Joint Base Cape Cod (JBCC) Executive Director. Brig. Gen. Faux noted that he will be present on JBCC a few days a week.

Agenda Item #2: Review of SAC Meeting Minutes - Science Advisory Council

Dr. Cavanagh stated that there are two SAC meeting minutes for review: July 13, 2017 and October 19, 2017.

Dr. Cavanagh stated that the July 13, 2017 SAC meeting member attendees were Mr. Schall and Mr. LeBlanc and he asked if the minutes accurately reflected the meeting. Mr. Schall made a motion to accept the July 13, 2017 SAC meeting minutes and Mr. LeBlanc seconded the motion, and the minutes were unanimously accepted as written.

Dr. Cavanagh asked if anyone had any comments on the October 19, 2017 SAC meeting minutes. Ms. Nye said that her email address is “e” after “l” in “Horsley” and Mr. Schall said that there is only one “t” in “redtop.” Mr. Schall moved to accept the October 19, 2017 SAC meeting minutes and Ms. Nye seconded the motion and all were in favor of the minutes as written with corrections.

Mr. Pinaud discussed the action items sent to SAC members via email. He asked SAC members if the action items should be a standing agenda item in the future. Dr. Cavanagh stated that the action items need to be tracked and suggested asking members during the meeting if they have comments on the action items. Mr. Pinaud stated that an alternative would be to append the action items at the end of the minutes. Dr. Cavanagh agreed that is a good idea. He said questions or comments on the action items could be addressed during the minutes review.

Mr. Pinaud said that the EMC voted to create the Ad Hoc Committee. One issue is whether the Ad Hoc Committee is subject to Open Meeting Law; he has been working with Rich Lehan, who is with the Office of Council of the Massachusetts Department of Fish and Game. Mr. Lehan determined the Ad Hoc Committee is subject to Open Meeting Law. One of the alternatives would be to have an Ad Hoc Committee meeting before the SAC meeting and provide a report during the SAC meeting, which would be on the record for the SAC meeting. Someone from the Ad Hoc Committee Meeting could articulate the bullets from the ad hoc meeting discussion for the record.

Dr. Cavanagh asked the attendees at the last Ad Hoc Committee meeting what were their thoughts. Mr. Schall said he liked the time frame for the July meeting and it was efficient having a meeting during the day or prior to a SAC meeting. Mr. LeBlanc said that he would be concerned about “piggybacking” the two meetings. The Ad Hoc Committee meeting went on for two hours with a really detailed discussion and keeping the meetings a separate event would be more efficient. Mr. Pinaud will contact Mr. Gschwend about his meeting preference. Dr. Cavanagh suspects he will prefer separate meetings for the Ad Hoc Committee to discuss topics at length. Dr. Duggan said would like to participate in the Ad Hoc Committee and would prefer a separate meeting for the Ad Hoc Committee. At the last meeting, Mr. Gschwend suggested a different location for the meeting, Dr. Duggan noted.

Mr. Pinaud stated that at the last meeting, the EMC required the Environmental Officer to review the compliance history for Sierra and India ranges as the Massachusetts Army National Guard (MAARNG) has requested to terminate the Pilot Period for the ranges. There were issues with record keeping and some maintenance issues at the ranges. A December 2017 letter was sent to the MAARNG, which was provided to SAC members, laying out inspections and what the issues were. A decision was made to extend the Pilot Period for another year to give Camp Edwards time to complete maintenance and fix the internal processes for the inspection forms and inspecting the ranges. After receiving the letter, Camp Edwards stated that they would fix the maintenance issues and strive to fix the issues that caused some of the delay in maintenance. The MAARNG fixed the ranges, they were inspected, and the EMC allowed

the ranges to be used for live fire. Mr. Pinaud said he was impressed how quickly the issues were fixed. He said that Dr. Ciaranca and CPT McDonough's staff have been working on updating and rewriting some of the range inspection forms to make them more user friendly for both Range Control and the EMC.

Mr. Pinaud stated that in December Camp Edwards won an Army Community Partnership Award; one of the benefits of the Award was some funding. Mr. Pinaud stated that there are two issues that the EMC is involved in with the Army Community Partnership Program: trespassing and an outdoor exposition. He explained that there is an emergency services set committee comprising local law enforcement who would utilize the resources on the Northern 15,000 acres at Camp Edwards for training. He said in return, they may be able to have more security enforcement outside the gate for known areas of trespassing. The goal is to leverage the law enforcement training with increased enforcement. EMC Commissioner Amidon, Department of Fish and Game, has an initiative to have a Cape Cod Outdoor Exposition on Joint Base Cape Cod. Commissioner Amidon is working on advancing the JBCC Expo with the help of the EMC.

Mr. Pinaud reminded the SAC of signage planned for the Reserve funded through penalty money received from a utility company's on-base violation. There has been discussions with Jason Zimmer regarding using some of the money to produce signs and markers along the perimeter of the Reserve so people will understand it is a Water Supply Reserve and stay out. He said there will be leverage for additional cameras; Camp Edwards and the Impact Area Groundwater Study Program have installed some cameras in the Reserve.

Mr. Pinaud reported that he, along with Natural Resources staff and Range Control, attended a meeting of the Barnstable League Sportsman, some of whom hunt on JBCC, to introduce themselves. Mr. Pinaud discussed the EMC and plans on attending another meeting before hunting season.

Mr. Pinaud reported that three newly-appointed Community Advisory Council members attended an orientation session. He said that Chapter 47 of the Acts of 2002, the Environmental Performance Standards, and Massachusetts Open Meeting Law were reviewed. There also was a tour of the Reserve.

Mr. Pinaud said that the EMC asked Mr. Pinaud to update the By Laws to be current, which he did. He will provide the SAC members with both a clean copy and redline strikeout copy of the updated By Laws. There is a section that discusses remote participation. In order to take advantage of remote participation, in the meetings there has to be a vote for the By Law. Mr. Pinaud noted that comments on the updated By Laws may be forwarded to him. He hopes the By Laws will be voted on in the Fall.

Mr. Pinaud reported that as of today, he has completed 54 inspections since the last SAC meeting.

Mr. Pinaud displayed photos of the US Army Commanders Award for Civilian Service presented to Dr. Larry Cole on February 8, 2018. Dr. Cole retired from the CAC. LTC Porter stated that LTC Shawn Cody was instrumental honoring Dr. Cole with an Army Civilian Service Award. Dr. Cole has gone above and beyond in the amount of time he served, which was remarkable and deserving of the award.

Agenda Item 3: Natural Resources Update – *Mr. Jacob McCumber, Natural Resource Manager, MAARNG*

Mr. McCumber said that the Agassi Clam Shrimp Conservation Management Plan is making progress and has been submitted to Natural Heritage and will be going to Bourne Conservation Commission. The Agassi Clam Shrimp are scattered in road puddles in the training site and will be relocated to other sites. Mr. McCumber discussed the Vegetation Management Plan. In the spring, bracken fern will be removed from the frost bottoms, and honeysuckle and rose will be removed during the summer along with other invasives and cutting. The Whip poor will migration study is ongoing; they are recapturing the birds with geolocators and will replace them with GPS transmitters and recapture them next year.

Mr. McCumber described habitat restoration activities including prescribed burning: only one prescribed burn was completed in the spring for 30 acres burned. Forestry management activities included clearing 80 acres at OP 9/10, 50 acres at C-14, removing pitch pine at BP-11 and plans to burn and thin BP-29/30. Southern Pine Beetles have been getting a lot more emphasis, which is the driver behind the forestry management. There is a Massachusetts Management Group which consists of Mr. McCumber and five other biologists from US Forest Service, National Seashore and others. They are working on preparedness and partnership for the Southern Pine Beetle, but a big focus is Pine Barren Restoration work which thins the forest.

Mr. McCumber stated that they are surveying road way puddles with Natural Heritage and Bourne Conservation Management working through solutions.

Mr. McCumber said that the attendance and harvest was lower at the 28 April youth turkey hunt; the spring turkey hunt runs from May 7 to May 11.

Mr. McCumber reported that the Stafford Act agreement was signed, which included all of Connecticut, Massachusetts and Rhode Island Wildland Fire Agencies with one master partnership agreement.

Mr. Pinaud ask if the Stafford Act allows additional funding or resources. Mr. McCumber replied particularly addresses that everyone holds their own liability but with everyone signed on to one agreement. He said it is more focused on emergency response; the Stafford Act is overall emergency response, but is being used for specifically fire on JBCC. The majority of the documents addresses how wildfire response will be handled. Mr. Pinaud said the plan would be for wildfire but not for prescribed fire. Mr. McCumber said that the plan covers both wildfire and prescribed fire.

Agenda Item 4: Camp Edwards Update – Dr. Michael Ciaranca, E&RC, MAARNG

Dr. Ciaranca gave an update on the pilot period for Sierra and India ranges. The MAARNG requested an end to the Pilot Period; the request was denied because the India and Sierra range berms were out of compliance. Range maintenance was requested to be done. He said that record keeping documentation wasn't being managed and as a result he met with CPT McDonough and they are integrating all of the ranges Operations, Maintenance and Monitoring Plans (OMMPs) into one plan. Dr. Ciaranca said that the new inspection forms are more user friendly and OMMP documentation will be inspected by the E&RC quarterly.

Dr. Ciaranca displayed a photo of the India Range bullet pockets that were repaired and Sierra Range auxiliary berms repair. He said that the he and Mr. Pinaud saw that the line of sight wasn't lining up and that was corrected by Range Control. Mr. Pinaud authorized a return to use at both ranges. The Pilot Period for India and Sierra Ranges was extended through December 31, 2018.

Dr. Ciaranca explained that the STAPP system was removed from Tango Range. Plans are to reconfigure the range to become an all-copper zeroing range; design work is planned to begin in 2018. All the regrind and projectile debris removed out of the STAPP system were disposed in accordance with State and Federal requirements and coordinated with the EMC EO.

Mr. Pinaud asked about Dr. Ciaranca utilized the XRF for spot checking under the STAPP system. Dr. Ciaranca replied the XRF was used to spot check areas in the system, which found non detect readings for lead and antimony was non detect.

Dr. Ciaranca discussed the Combined Arms Exercise planned for 2018 and 2019. The MAARNG plans a brigade force level, multi-echelon, multi-domain, combined arms exercise with joint elements. The purpose to build ready Army units/organizational readiness to conduct Unified Land Operations and demonstrate the capability to integrate National Defense Requirements. Dr. Ciaranca stated the 2018

exercise will involving combat support units from 6-11 June. Dr. Ciaranca stated that in 2019 will incorporate lessons learned from 2018 training.

Dr. Ciaranca reported on the Proof of Concept III: EPS 15.3.3: Reserve Training Area Refueling. The purpose is to illustrate that field refueling can be conducted in a safe and environmentally protective manner. There's a need to refuel vehicles for remediation, range construction, and training area and habitat management in a cost effective, efficient, and environmentally protective manner. Critically, there is a need for MAARNG Soldiers to train effectively with refueling, a primary training task for many MAARNG Soldiers, he said.

Dr. Ciaranca stated that the Environmental Performance Standard (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."

Dr. Ciaranca stated that three Proof of Concepts have been conducted: Helicopter Hot fueling: 13 June 2017; Vehicle Fueling: 3 March and 5 May 2018. They were coordinated and observed by EMC EO, Range Control, and the Environmental & Readiness Center. Dr. Ciaranca stated that the Proof of Concepts will help develop the Standard Operating Procedures (SOPs) best management practices. Dr. Ciaranca stated that the next steps are: finish developing the SOP and map; and develop EPS language in coordination with the EMC.

Mr. Pinaud stated that he attended the 3 March training exercise and the soldiers were very well trained and very eager to demonstrate. He said for the Combined Arms Exercise, because the EPS hasn't been changed, the MAARNG will need to get a waiver from the EMC.

Agenda Item 5: Multipurpose Machine Gun Range (MPMG) – LTC Shawn Cody, MAARNG, CPT Alex McDonough, MAARNG, Jacob McCumber, Natural Resource Manager, MAARNG

CPT McDonough explained that the Multipurpose Machine Gun Range (MPMG) is similar to the Sierra Range 350 meter rifle range, and is used to qualify soldiers on weapons, primarily, the M249 and M240 (5.56 and 7.62 mm) and .50 caliber. He said for the project that has been submitted consists of eight lanes, 800 meters long for M249 and M240 Bravo.

CPT McDonough explained that there was an exclusionary process where the geography in the training area was analyzed; all ranges were excluded on the western side of the base because of the topography. It was narrowed down to two locations: the current KD Range and Sierra Range. The analysis takes into account that you don't want to tear down a functional range. He noted that KD Range was the best option. The other analysis point for the range was the possible extension to 50 cal. should we develop the ability to fire that type of round on Camp Edwards.

CPT McDonough said that funding process is that Camp Edwards submits a Range Complex Masterplan developed by him with assistance from the Base Commander, G3 and CFMO taking an analysis of the training needs of the units at Camp Edwards. There is a program called the Army Range Requirements Model (ARRM) that takes all the units identified for training at Camp Edwards and breaks down the training requirements according to the document called STRAC which is types of qualifications requirements, equipment personnel in each unit and trade off documents to identify the training requirements. It breaks down all the ranges in the inventory and the range day requirement the Army has for 173 range day requirements of availability for all the ranges. Based on how many soldiers are trained, for example, 50 range days are required. He noted that if a range isn't available the soldiers training at the installation are missing out on an opportunity to meet the requirement.

CPT McDonough stated the ranges for the inventory that need to be built are based on the training requirements and inventory. For an MPMG not all soldiers fire the weapon; it is not the standard weapon for soldiers. Currently, soldiers train in Vermont and Fort Drum to meet the training requirement. The

training requirements are becoming a lot more stringent. The Army National Guard is competing with the active Army and the Reserve for funding for ranges. The MPMG was selected in 2012-2013 and was put in for funding in 2020, he said. The Range construction piece is \$9.67 million for construction and \$1.8 million for targetry for eight lanes.

CPT McDonough stated that the kick off meeting for the environmental review was held the first week of May 2018. The planned construction start date is 2020 with the range completed in 2022.

The range will be similar to Sierra Range with a series of buildings, a tower and an ammo storage building, an operation storage building and classroom. There are eight firing lanes all the targets are fully automated and programmable through the range computer. There are three main types of targets: infantry, stationary infantry, moving infantry, and stationary targets.

Dr. Ciaranca discussed the environmental review process. The MAARNG has hired AECOM to complete the MEPA/NEPA process. NEPA will take about 13 months to complete and will be concurrent with the MEPA process. A lot has already been done for the MEPA process, supporting documents have been gathered for AECOM to sort through. Mr. Pinaud will attend the next meeting and the SAC will be briefed. Dr. Ciaranca reminded the SAC that there reduced MEPA thresholds apply to the Training Area. This project trips those thresholds. The project has been discussed already during past MEPA reviews.

Dr. Ciaranca discussed the EMC's environmental review process. EPS 19 relates to small arms ranges at Camp Edwards. The EMC's Environmental Officer will grant design and OMMP approvals.

CPT McDonough discussed the work to date. A noise study was conducted in 2015, which confirmed the noise model. Sensors were placed with in Camp Edwards, at the boundary and within the community to validate it. The noise EPS follow the Army guidelines. A model is provided and no public health threat must be proven.

Mr. Pinaud said that the during the 2015 noise study, MassDEP and USEPA took a noise meter into the neighborhoods near KD range and found that it average 45 decibels during firing. Spikes on the noise meter were from lawn mowers and UPS trucks. He said that during firing, the sound in the neighborhood was subdued, there were no sharp noises from firing. Mr. Pinaud said that when the noise study report was available, he forwarded it to MassDEP noise experts. They said that study was well done. The expert said there is an exemption to noise requirements for military training. MassDEP would become involved if the noise became a nuisance condition. The expert suggested that after the range is built, another noise study be conducted to verify the model.

Ms. Nye asked if there's a chance there will be more noise from the range once the area is burned and the vegetation is reduced. Mr. McCumber said that the noise model assumed no vegetation. Mr. Pinaud said that the model looks at the "worst case" scenario. However, it could be validated with another noise study after the range is constructed.

Dr. Ciaranca discussed the ECOB; soil was removed from the range by the Impact Area Groundwater Study Program and the surface of the range was cleared of UXO. An archeology survey was conducted along with flora and fauna studies. Mr. McCumber said that extensive bat work was done in the project site; generally bats are not found in Pitch pine/scrub oak. The area was survey for listed species, including the Rusty patch bumble bee; none were found.

CPT McDonough said that the MEPA process has begun; one question for the NEPA process is whether to stay with the original project number, 5834, from the FEIR or initiate a new project (filing).

Ms. Nye asked where is KD Range? CPT McDonough replied that the range complex is split in half and a 300 meter range is not tenable on the one side of the range complex. The goal is to use an existing footprint for a new range, he said.

Mr. Pinaud noted that the photographs showing targetry were conceptual photos to give an idea of what the targets on the range may look like; they haven't been designed yet. Before the range is designed, a line of site analysis will have to be conducted to develop the berms or capture system for the range in

order to satisfy EPS 19. That will be provided to the designer; the design will be reviewed and guidance provided.

Mr. Schall said that he wanted to go on record as being on contract with AECOM. He is not involved in the contract for the MPMG range. He will recuse himself if there is any conflict of interest or appearance of conflict of interest.

Agenda Item 6: Public Comment – *Dr. Paul Cavanagh, SAC Chair*

There was no public comment.

Agenda Item 7: Computer Aided MPMG Simulation and Participatory Demonstration – *Camp Edwards Staff*

SPC Hill gave an explanation of the how the simulator works and the steps a soldier must take before they are ready to use a real weapon on an MPMG range; using a weapon in the simulator is one of those steps. CPT McDonough described the gunnery program and explained that one of the reasons NGB funded the MPMG at Camp Edwards is that there are not many of these ranges, it's a necessity for training and it's important that soldiers' time be spent training rather than traveling long distances to train elsewhere.

The MPMG simulation was demonstrated.

Agenda Item 8. Adjourn

The meeting was adjourned at 7:53 p.m.