
Science Advisory Council to the Environmental Management Commission Meeting
Building 5221
Camp Edwards, Massachusetts
September 26, 2019
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. SAC Meeting Minutes for April 25, 2019
2. Environmental Officer Update
3. Massachusetts National Guard and Environmental and Readiness Center Update
4. Natural Resources Update
5. Massachusetts National Guard Multipurpose Machine Gun Range Update
6. Massachusetts National Guard Proposed Change for EPS 15.3.3 "Field Refueling"
7. Massachusetts Army National Guard Oil Spill Prevention and Contingency Plan (OSPCP) Mobile Fuel Tankers
8. Hunt Camp Edwards

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

Mr. Cavanagh thanked everyone for attending the Science Advisory Council (SAC) meeting.

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

- SAC members provided a number of comments on the minutes.
- Members discussed changing the minutes to a summary format
- Mr. Schall made a motion to accept the April 25, 2019 meeting minutes with corrections as identified by audio recording; Mr. Duggan seconded the motion and all were in favor of the minutes as written with corrections.

Agenda Item 3. Environmental Officer Update – Len Pinaud, EMC Environmental Officer

Mr. Pinaud presented an update on activities relating to the Upper Cape Water Supply Reserve.

- Mr. Jim Montgomery was appointed the interim Commissioner of the Department of Conservation and Recreation.
- The Division of Fisheries and Wildlife has posted the perimeter of the Reserve with signage, to aid in preventing trespassing, funded with money from a consent judgement against a utility company. The signage installation will be completed by the end of October. Three surveillance cameras will be installed, which will be tied into other cameras on base.
- The MAARNG placed Dura Bloc to fill two bullet pockets on India Range as an alternative management practice. It was found that the copper rounds beat up the Dura Bloc, which is made of pressed rubber.

Agenda Item 4: Ad Hoc Committee Update – Phil Gschwend, MIT Professor

Mr. Gschwend gave an update on the Ad Hoc Committee, which met in mid-July.

- The group discussed the need for the MAARNG to conduct further work to research the movement of antimony in soil and Mr. Clausen's study at the US Army Corps of Engineers Cold Regions Research and Engineering Laboratory (CRREL).
- The group discussed that the MAARNG will conduct two seasonal baseline samplings at the Small Arms Ranges, before and after the training season.
- The Ad Hoc Committee also discussed pyrotechnic use for the CAX. The group received tests for potassium perchlorate conducted in June 2019 at Tactical Training Base Kelley and concurred with their use during the CAX exercise.

Agenda Item 5. Camp Edwards Update – Dr. Michael Ciaranca, E&RC, MAARNG

Mr. Ciaranca presented information on the Eversource Switching Station.

- Silt fencing was installed at the site, parcels were transferred from the Army Corps of Engineers to easements for Eversource, 80,000 cubic yards of soil will be reused for range projects at Tango Range and KD Range.
- Eversource plans to construct a new transmission line, ROW 342, starting at the switching station, through Camp Edwards and into Barnstable. It will run along the existing right of way with minimal disturbance to natural resources. Eversource will maintain the transmission lines with mowing and chemical treatment. A link to Eversource's Vegetation Management Plan will be forwarded to SAC members.

Mr. McCumber gave an update on Natural Resources activities.

- Activities included environmental review, mitigation and strategy for the Multi Purpose Machine Gun Range and Combined Arms Exercise (CAX) support developing tools for pyrotechnics and tracer use.

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- The Integrated Natural Resource Management Plan (INRMP) update will be contracted out, and Mr. McCumber asked if SAC members would be interested in attending a stakeholder meeting.
 - He reported on surveys completed, hunting at Camp Edwards, prescribed burns conducted, restoration plans, and infrastructure.

Mr. Ciaranca and MAJ McDonough gave an update on the CAX conducted July 27-August 10 with approximately 900 soldiers, and three non-standard training requests.

- There was a Notice of Non-Conformance due to three unauthorized pyrotechnic items that were used during the training. That was self-reported as violation to the EMC's Environmental Officer.

Mr. Gschwend requested information about the material the secondary containment tarp is made of.

- *The MAARNG will forward that information. (Action)*

What are the fuel accounting procedures?

- The fuelers were given a limit and tracked by unit distribution by gallon throughout the exercise. There was a 1,500 gallon limit in the fueler.

Mr. Ciaranca gave a brief update on activities at the Smalls Arms Ranges.

- The STAPP™ systems on Juliet and Kilo Ranges will be dismantled upon availability of funding
- The design for rebuilding Tango Range as a copper zeroing range is at 95% completion.

Agenda Item 6: MPMG Design Status and MEPA Review – Mr. Ciaranca, E&RC, MAARNG

Mr. Ciaranca gave an update on the Multi Purpose Machine Gun Range (MPMG) including information on the environmental review. Under the National Environmental Policy Act (NEPA), a draft Environmental Assessment (EA) and draft Finding of No Significant Impact (FNSI) were sent for external review in August 2019; a 30 day public comment period will be held. Under the Massachusetts Environmental Policy Act (MEPA), a pre-filing site visit and meeting was held, a Notice of Project Change will be submitted and a 30 day public comment period will be held.

Mr. Gschwend asked what is in the copper alloy.

- *The MAARNG will forward that information. (Action)*

Agenda Item 7: Proposed Environmental Performance Standard 15.3.3 Revision – Mr. Ciaranca, E&RC, MAARNG

MAJ Alex McDonough presented information relating to the MAARNG's request to modify Environmental Performance Standard 15.3.3, Fueling in the Reserve.

Science Advisory Council members asked questions and discussed the information.

Will the fuel trucks engage in training scenarios (i.e. battle scenario)? Will there be a "range" for fueling already set up to capture any spill?

- The MAARNG replied that typically the units the MAARNG has are not in that situation, they are behind the offensive line.

Is fuel accounted for in the field? In terms of spill response, knowing what is in the truck to begin with is helpful.

- The fueler is limited to the amount they can bring in the field; the fueler itself has a counter and the soldier keeps a running log. The unit tracks distribution by the gallon.

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- The soldiers know the amount in the fueler by the gallon. They have a clipboard with the start and end amount in the fueler, which is tracked through the exercise.
 - Fuel tracking is a critical task for fuelers. It is reported in combat situation all the way up to the Support Operations officer, who is tracking it throughout entire battlefield for logistical reasons.
 - In terms of spill response, timing is everything and that information would be after those safety things are taken care of, high on list to have that.

Fuel accounting is something that would go into the Standard Operating Procedure (SOP)

- As part of any spill response, the fueler reports what was expended, and would provide that to Range Control and MassDEP as the spill response goes on.

Accidents are a concern. There should be an escort for commercial fuelers coming on base.

- No commercial fuelers are allowed in the training area, except for IAGWSP, which uses a Canal Fuel truck, but they are escorted.
- A security team escorts every commercial fueler from the JBCC gate to the gas station, and they are escorted out of JBCC.

The SAC has never seen the decision-making process used to determine the fuelers approved routes to the training areas. The map shows the approved fueling locations; what are the criteria used to identify them?

- Items considered to identify fueling locations were: receptors, distances to wetlands, level areas; locations of bivouacs, and areas away from wetlands and water supply areas.

Are travel routes identified?

- Yes, the SOP requires fuelers to use the most direct travel route; Range Control will also have an updated overlay (of the best routes)
- No secondary trails are authorized; fuelers are not allowed to go just driving around; they must use a hardball route
- The MAARNG did a road recon, removed many potential fueling locations from the ranges, applied common sense excluding criteria away from buffers, and only chose sites that meet military mission requirements

While traveling the route, is there any engagement by the fueler with opposing forces?

- The MAARNG replied it's just not meant for that and they don't think the fuelers would be put in an active engagement

How will the EMC EO be notified prior to refueling in the Reserve?

Included in the Range bulletin

Courtesy notification by Range Control or MAJ McDonough.

Mr. Gschwend feels that many sites are near water supply wells; some spots should be rethought based on where the water supply wells are.

- This would severely limit sites
- MAARNG looked at the Upper Cape water supply wells, and the Zone 2s for those, and stayed out of those areas;
- Mr. Duggan said that a release will not necessarily result in impact. Gasoline releases, when fixed quickly, have a good cleanup record. It depends on how far away the well receptor is.
 - Groundwater wells are a few miles away
 - Spills are not traveling that far even with water soluble leading-edge components
 - Part of the MAARNG's refueling operation is the response to any releases

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- In the event of a catastrophic release (ex. the fueler blows up) and the containment system is overwhelmed, that's what the environmental response is for.
 - During the truck soil spill incident, within a ½ hour Matt McKay was on site coordinating with MassDEP. The response was set and the situation was being handled. The SOP within Army Environmental guidelines is to take any action necessary to remediate the situation. Fuelers are MOS trained; they have to report it.
 - Diesel range products are much less mobile than gasoline products

What are the additives in JP8?

The MAARNG will provide the constituents of JP8.

Is this compatible military training? If there is a spill, does it get contained, does it get to a well, and does it get to some other sensitive receptor, like a wetland? If it is not going to get to groundwater with the procedures put in place that is compatible.

Mr. Pinaud said:

- The map was scrubbed of locations adjacent to wetlands; any release won't immediately go into a wetland.
- In general, responses to releases on JBCC have been very quick and good. The cleanups are done in a short period of time. A fuel oil spill, if cleaned quickly, is not going to travel to groundwater.
- The modification to EPS 15.3.3 was modeled after EP 19 (Small Arms Ranges), where you build a range for certain performance standards but the details are in the SOP, which is a living document. A lot of the detail, such as escort, training conflict and spill response are all designed to be in the SOP.

How many refueling sites would be in use at any one time?

- One, maybe two. The MAARNG has a distribution company with two fuelers, and Army Aviation generally doesn't go into the training area. The odds of them going at the same time in the training area are extremely low. During the CAX exercise, one fueler was in Demo 2 and one was at Tactical Training Base Kelley.

What is the upper limit for gallons carried by the refueler.

- 1,500 gallons is the limit set that will be set in the SOP. (Not in EPS 15.3.3)
- The SOP will cover many things: tactical engagement, escort, how many HMTTS in the Reserve at one time, etc. The SOP can be changed depending on how well it is going or not. That gives the Environmental Officer more control.

It would have been useful to see the process "scrubbing" the map. .

- MAARNG will change the map to show the sensitive receptors, groundwater flow, etc.

Mr. Gschwend suggested a permanent containment area be constructed at refueling locations: "a backup plan behind the backup plan."

- Driving into a permanent fixture will not provide soldiers the training they need.
 - Mr. Gschwend suggested an underlying foundation under the soil could be constructed: "tertiary containment"
 - Refueling pads in the TTB have failed, becoming more of an issue with residues left on the concrete.

The SAC cannot hold a binding vote on the EPS 15.3.3 modification, but can do an informal motion of support. It was suggested to hold off on an informal vote until there's more information available and it

is considered a little more, looking at contingencies. A motion of support can be held in the future, when there is a better comfort level.

MAJ McDonough asked SAC members where they stand on modifying EPS 15.3.3.

- Mr. Gschwend abstained.
- Mr. Cavanagh relies on the three groundwater experts on the SAC; when Mr. Gschwend expresses a concern and feels additional information would help, Mr. Cavanagh listens to that. If Mr. Gschwend comes back and says he has considered that additional information and everything looks fine, Mr. Cavanagh's comfort level goes way up.
- Mr. Schall would like to see a larger picture of where the wells and wetlands are and how the fueling sites were selected.

Mr. Duggan stated for the record:

- If the locations have been identified to be protective of sensitive receptors like wetlands and other sorts of localized locations, and if the public water supplies are in the order of miles (away) and if in the emergency spill response SOPs under substance spilled and amount, it specifies based on the fuelers log on site then I would be support of the change. The caveat is that there aren't any individual constituents that present a public healthy safety issue / and that mobility is different than the JP8.

Mr. Cavanagh said that given the information presented, it may be appropriate to modify EPS 15.3.3, but more information is needed. There was deliberation, a lot of discussion, and although the SAC supports much of what is being proposed, there is not complete a sense of comfort that we have done due diligence.

The MAARNG will provide the following information to the SAC: a revision of the map with overlays of all the exclusion criteria and which sites were removed; the constituents in JP8; and a general statement of what is in commercial diesel.

Agenda Item 8. Public Comment – *Paul Cavanagh, SAC Chair*

There was no public comment.

Agenda Item 9: Adjourn

The meeting was adjourned at 9:00 p.m.

Action Items

- The MAARNG will forward information about the material the secondary containment tarp is made of to Mr. Gschwend.
- The MAARNG will forward information to Mr. Gschwend on what is in the copper ammunition alloy.
- A link to Eversource's Vegetation Management Plan will be forwarded to SAC members.
- The MAARNG will provide the following information to the SAC: a revision of the map with overlays of all the exclusion criteria and which sites were removed; the constituents in JP8; and a general statement of what is in commercial diesel.