Senior Management Board
Bourne Best Western
May 28, 2008
6:30 – 8:45 p.m.

Meeting Minutes

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Carter Hunt	MassDevelopment	617-519-9857	chunt@massdevelopment.com
Phil Goddard	PCT/IART	508-759-3043	pgoddard@aol.com
David Dow	Sierra Club	508-540-7142	ddow@mercury.wh.whoi.edu
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Diana Barth	Enterprise Newspapers	508-548-4700	barth@capenews.net
Jane Gasper	Innovar Environmental	508-759-9114	jgasper@innovar-env.com

Handouts Distributed at Meeting:

1. Presentation handout: Chemical Spill 10 (CS-10) Update
2. Presentation handout: Ashumet Valley Update
3. Presentation handout: Remediation & Investigation Update
4. Presentation handout: Demolition Area 1 Groundwater Response Action Annual Update
5. Presentation handout: Camp Edwards Small Arms Ranges Update: Tango and Juliet & Kilo Ranges

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Agenda Item #1. Introductions, Approval of March 26, 2008 SMB Minutes, and Agenda Review

Ms. Grundman convened the meeting at 6:35 p.m. and the Senior Management Board (SMB) members introduced themselves. Ms. Grundman then asked if there were any additions or corrections to the March 26, 2008 SMB meeting minutes. No changes were offered and the minutes were approved as written.

Agenda Item #2. Late-Breaking News

Mr. Hunt, a member of the Massachusetts Development Finance Agency (MassDevelopment or MassDev) military initiatives division, briefed the group on MassDev's work with the Massachusetts National Guard (the Guard) at the Massachusetts Military Reservation (MMR). He noted that the work pertains to a homeland security training center and to bringing new missions to the Air National Guard at MMR.

Mr. Hunt reported that MassDev issued a Request for Proposal (RFP) and is screening various survey and engineering firms to lay out an MMR property map, based on documents collected by MassDev's real estate division, mostly from the Barnstable County Courthouse. He said that the goal is to create a map that shows the easements, boundaries, and impediments that are legally required at MMR, and then use that map to work with the Guard to determine possible sites for building. Mr. Hunt noted that MassDev has also issued an RFP for a consultant to conduct an Economic Diversification and Enhanced Use Leasing Study, funded by the Department of Defense (DoD) Office of Economic Adjustment. He explained that the consultant would look at economic diversification of the work force in the four communities surrounding MMR (Bourne, Falmouth, Mashpee, and Sandwich) as well as outlying communities such as Plymouth and the Lower Cape towns.

Mr. Hunt also noted that another part of the study is to determine whether the DoD concept of Enhanced Use Leasing (EUL) can be applied at MMR. He explained that EUL is a process by which property not currently needed by the services would be rented or leased, with the funds from the rental remaining at MMR to support the infrastructure of the installation. He further noted that part of MassDev's charter at MMR is to try to find economies and efficiencies at the installation that will allow it to help the Air National Guard find new missions.

Questions and Comments from SMB and Public

Mr. Green inquired about the renters and specific properties that would be involved in the EUL program. Mr. Hunt replied that this information is not yet known, but there could be a number of different options. He also noted that MMR is a complicated piece of property (owned by the Commonwealth and leased to the services) and MassDev is trying to determine whether it's possible to have EUL there. Mr. Green then asked if Mr. Hunt plans to keep the SMB apprised of all of MassDev's decisions, and Mr. Hunt replied that he'd be happy to do so.

Ms. Valiela concurred that MMR is a complicated piece of property, noting that there was a fairly sizable discrepancy between two past assessments of the amount of acreage that the base comprises. She also said that she thinks the MassDev mapping project is extremely basic to any subsequent decisions about land use and she's glad to see it moving forward. She also echoed Mr. Green's interest in having Mr. Hunt keep the SMB informed.

Ms. Garcia-Serrano asked if MassDev is communicating or coordinating with the Division of Capital Asset Management (DCAM), the state entity that manages buildings. Mr. Hunt replied that no building is being contemplated at this time and so MassDev is not now coordinating with DCAM. He also clarified that MassDev, although a quasi state agency, is really working as a consultant to the

Massachusetts National the Guard, which involves all the stakeholders at MMR, including the U.S. Coast Guard.

Ms. Garcia-Serrano then asked if MassDev's findings will warrant reopening or amending the existing base leases. Mr. Cowles clarified that the Massachusetts National Guard's lease goes to 2051. Mr. Hunt replied that at this point there's no contemplation of doing anything with the existing leases or the requirements of the leases.

Capt. Abel made a point of noting that MassDev has been phenomenal in terms of communicating with each of the commanding officers at MMR to understand their operation requirements and ensure that they are not compromised.

With regard to the lease portion of the discussion, Mr. Cowles said that he thinks one of the main purposes of the study is to look at the way MMR lands are licensed and leased and determine whether it's okay to bring in a compatible industry or company – and whether that would even be possible, given that property is owned by the state, leased to the services, and back to the National Guard. He also agreed that MassDev should keep the SMB apprised of its progress in this regard.

Mr. Hunt said that he'd forgotten to mention that there's a contract in place for the first phase of the Homeland Security Study. The contractor is a Washington, D.C. firm that's working with the Executive Office of Public Safety and Security (EOPSS) and the National Guard to determine the type of homeland security training center that would be possible at MMR.

Mr. Dow noted that he and Ms. Valiela had served on the Community Working Group (CWG), which saw a number of presentations on possible uses of the base. He then spoke about several messages conveyed as part of those presentations: in addition to the four surrounding towns, the people who live on the base should be consulted with respect to land use; many state-listed species areas exist in the Camp Edwards portion of the base (which the Sierra Club would like to see left in their natural state – used for compatible military training, but not developed); and the cantonment area of the base seems to have the best prospects for development. He also mentioned that the CWG was presented with the idea of using vacant housing facilities on base for people who don't have homes, but he didn't think it was a good idea since public transportation on Cape Cod isn't good and most of the potential residents would not have been able to afford their own cars.

Capt. Abel responded that as the "de facto Mayor" of "Otisville," he will ensure that, whatever happens, the residents will be allowed quiet enjoyment of their homes. He also said that there are about 500 homes and about 2,000 residents on base, and there really isn't any surplus of housing waiting to be filled. He finished by saying that he's very cognizant of the fact that both the current and future residents deserve a say in what goes on.

Mr. Hunt noted that even though his organization's name is MassDevelopment, he wants it understood that he works for the military initiatives division, whose job is to support the military mission at MMR. He said that MassDev is only at MMR to ensure that the Massachusetts Army National Guard, the Coast Guard, and the Massachusetts Air National Guard can continue their missions, and to bring more missions for them, if possible.

Agenda Item #3. SMB/Community News

SMB Membership

Mr. Mealy noted that although it hasn't yet been determined which of the Bourne selectmen will be serving on the SMB, he's representing the Town of Bourne tonight as chairman of the Board of Selectmen until the board decides on a permanent replacement for Linda Zuern, who served on the

SMB for many years. Ms. Sanderson asked Mr. Mealy to convey the group's thanks to Ms. Zuern for her many years of hard work on the board. Ms. Valiela added that the SMB would hope that whoever is chosen will be a consistent representative, and one who takes the time to learn about the history of the base programs, about the various groups currently active on base, and about "the problems themselves."

Ms. Grundman reported that newly-elected Sandwich selectman Dana Barrett, a West Point graduate with 24 years in the service, would be taking her place on the SMB. She also said that Mr. Barrett will be staying with the SMB for at least three years, and that she has very much enjoyed her time with the board.

Natural Resource Damage Assessment

Mr. Goddard noted that he is at tonight's SMB meeting as a citizen of Monument Beach, but as a member of the Plume Cleanup Team (PCT)/Impact Area Review Team (IART) he will tell the SMB that he feels that combining the teams has been a success. He also said that he thinks it would be beneficial for MassDev to review the CWG report and former Attorney General Harshbarger's report on MMR property ownership.

Mr. Goddard then read to the SMB a letter he composed and planned to mail tomorrow to Congressman Delahunt, in which he asked Mr. Delahunt for assistance in overcoming the "seemingly intractable impasse that has developed with regard to the Natural Resource Damage Assessment (NRDA) and restoration process that was initiated for the MMR." He also told Mr. Delahunt that he has been tracking the status of the NRDA as administered by the Natural Resources Trustee Council (NRTC) since its inception in 1999, is disappointed by the lack of progress that's been made, and fears that this opportunity to benefit the citizens of Cape Cod may become lost.

In addition, Mr. Goddard's letter included the following suggestions to Mr. Delahunt: to "immediately convene representatives of the trustees at the highest level to have a focused meeting that will explore the possibility of a partial or complete settlement that will return funds to the Upper Cape for use at MMR"; to use these funds "to enhance, augment, and institutionalize the many excellent best management practices that have been developed at MMR to protect human health and the environment while still performing core military missions"; to "leverage these lessons to other sites within DoD and DHS so that other communities that are located near military bases will benefit from the experience of MMR"; and to "work with the advisory teams and the environmental staffs at the various commands at MMR as well as the local communities to seek input on how a settlement could best be applied to develop sustainable uses of the reservation for the long term."

Mr. Goddard's letter also commented on Congressman Delahunt's "long-demonstrated commitment to ensuring that the cleanup at MMR is done properly" and his support of "continued use of MMR in new and different roles while protecting the environment." Mr. Goddard further noted in his letter that he believes there's potential "to make MMR a national example of how a military installation can complete its mission in a sustainable fashion," and that he considers "any settlement to be arranged for this purpose to be an investment by the trustees that would pay dividends for years to come."

Mr. Goddard then told the SMB that he's been contacting Dale Young of the Executive Office of Energy and Environmental Affairs (EOEEA) over the past year and a half with respect to this issue. He also said that his understanding is that the situation is "a quagmire of legal discussions," and he noted that when the NRTC was established in 1997 there was talk of a $95 million settlement going back to the community. He then said that he thinks an incentive is needed in order for the process to move forward, and he believes that incentive should be a reinvestment back into the base, focused on

environmental stewardship ideas. Mr. Goddard also said that he would provide copies of his letter to Ms. Wadsworth to distribute to SMB members, and would welcome their feedback.

Ms. Garcia-Serrano, who first noted that the Massachusetts Department of Environmental Protection (MassDEP) serves only in an advisory role to the NRTC, reminded the group that many of the issues associated with the NRDA process at MMR had to do with constituents that were not deemed constituents of concern (COCs) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) definition. One of those constituents was perchlorate, for which MassDEP has since promulgated a standard, which it is hoped will serve to advance the issue on the table. Ms. Garcia-Serrano also said that MassDEP welcomes Mr. Goddard's letter and is "readily available and fully engaged on the issue." She also assured Mr. Goddard that Ms. Young has been an advocate, with the NRDA process being one of her highest priorities, and added that MassDEP welcomes the opportunity to "champion the spirit" of Mr. Goddard's letter.

Mr. Goddard thanked Ms. Garcia-Serrano for the feedback. He then said that he recognizes that the military has spent hundreds of millions of dollars on the MMR cleanup, which is itself a benefit to the community, but he also thinks that an NRDA settlement could be "endowed back to the community" and benefit "the military not only here but elsewhere…"

Ms. Valiela said that she too welcomes Mr. Goddard's letter and agrees that the process "has absolutely been in the doldrums." She also said that she believes that many of the early discussions revealed a difference of opinion between the Army and the Air Force that hadn't been possible to resolve, but she thinks that some good could come out of reactivating the conversation. Ms. Valiela noted that she applauds Mr. Goddard for his effort and thinks that Congressman Delahunt is the right person to tap.

Ms. Goddard thanked Ms. Valiela for her comments and thanked all the SMB members for their time.

June 7th Dedication Ceremony for Camp Edwards Training Facilities

Capt. Shealy, Operations Officer for Camp Edwards, announced that on June 7, 2008, at 2:00 p.m., the Guard will be dedicating two of its newest training facilities to two Army National Guard soldiers killed in action. He noted that the Tactical Training Base (TTB) will be named in honor of Sgt. Michael Kelly, killed by enemy fire in Afghanistan, and the Military Operations on Urbanized Terrain (MOUT) site will be named in honor of Maj. Jeffrey Calero, killed by an improvised explosive device (IED), also in Afghanistan. He also said that the Guard is looking forward to honoring the soldiers' service, and their families, who will be attending the event.

Documents Out for Public Review/Comment

Ms. Wadsworth announced that the following documents related to Camp Edwards Small Arms Ranges are out for public comment: the draft Juliet Range Best Management Practices Operations, Maintenance and Monitoring Plan; the draft Kilo Range Soil and Water Investigation Report; the draft Juliet Range Soil and Water Investigation Report; and the Tango Range Pilot Program Interim Report/Lessons Learned document. She said that all of the documents are out for public comment until June 12, 2008 and can be found by clicking on the "Current Small Arms Ranges Documents" link on the Environmental & Readiness Center (E&RC) website (EandRC.org), visiting the local libraries, or by calling her at the E&RC office.

Cleanup Program Tour for PCT/IART & Community Members

Mr. Davis announced that now that the PCT and IART have combined, a late June tour of Installation Restoration Program (IRP) and IAGWSP sites is planned for team members, details of which will be

available in early June. He also noted that the base tour that's open to the entire public and hosted by E&RC is expected to occur sometime in October.

Agenda Item #4. Installation Restoration Program Updates

CS-10 Update

Mr. Davis reminded the group that there isn't yet a Record of Decision (ROD) for the Chemical Spill 10 (CS-10) plume. He then showed a map of the plume and pointed out the Southern Trench area and the North-Central Lobe of the plume's leading edge. He noted that a number of CS-10 plume treatment systems are already in place and pointed out the Sandwich Road Treatment Facility (SRTF), which was constructed in 1999, and the location of a new extraction well to address uncaptured contamination at the Southern Trench area. Mr. Davis also said that modeling indicates that the new well, which has a fairly high flow rate, will not affect the nearby U.S. Geological Survey (USGS) national toxics research site or the Ashumet Valley phosphorus plume. He further noted that monitoring will be conducted to ensure that the models are correct, and system adjustments will be made if necessary. He also explained that the pipeline from the new extraction well will run up Currier Road to Sandwich Road where it will connect to an existing pipeline to the SRTF, and that a new reinjection well will also be installed near the current wastewater treatment facility for water from the CS-10 In-Plume treatment system. Mr. Davis stated that the Southern Trench construction will be done before a ROD is in place.

Mr. Davis then told the group that in order to determine whether active treatment is needed at the North-Central Lobe of the leading edge of the CS-10 plume, MassDEP had asked the Air Force Center for Engineering and the Environment (AFCEE) to gather additional data points there. One of the data points is located along Hooppole Road and the other between Martha's Pond and Algonquin Pond. Data from the first location, which showed a maximum concentration of less than 18 parts per billion (ppb), were presented to the regulators earlier today. Data from the second location, to fill a data gap in the area near some Mashpee water supply wells and increase understanding of vertical gradients there, is expected to be available next week.

Mr. Davis also reviewed next steps for CS-10: award the construction contract for the Southern Trench area in the July/August 2008 timeframe; gather additional data at the two new locations, which is under way, and determine if the results aid in making a final remedy decision for the North-Central lobe; present the draft CS-10 Feasibility Study to the PCT/IART in the June/July 2008 timeframe; issue the CS-10 Proposed Plan, with an associated 30-day public comment period, in the September/October 2008 timeframe; and sign a ROD in the June/July 2009 timeframe.

Questions and Comments from SMB and Public

Ms. Valiela inquired about the contaminant concentration that's reached Sandwich Road. Mr. Davis reiterated that it's about 18 ppb, and pointed out the area "up in here" where concentrations are as high 100 ppb.

Ms. Sanderson reminded Mr. Davis to tell the group about the upcoming neighborhood meeting associated with the Southern Trench construction work. Mr. Davis stated that the meeting is scheduled to occur sometime at the end of June, before a construction contract is awarded, to ensure that there are no strong objections from the residents to the work being done.

Ms. Valiela asked if it's correct that the new Southern Trench extraction well will be located on town land. Mr. Davis confirmed that it will, and added that the town, and the Massachusetts Division of Fisheries and Wildlife (MDFW) (which owns the boat ramp and property right next to it) have both

agreed to the well installation. He also mentioned that a three-phased power line associated with the new DCAM facility is situated very close to the new well location.

Ashumet Valley Update

Mr. Davis reminded the SMB of the two Ashumet Valley plume alternatives that were put forth last summer: Alternative 6, AFCEE's preference, which included no active treatment in the southern part of the plume, and Alternative 7, the U.S. Environmental Protection Agency's (EPA's) preference, which included two southern extraction wells that would pump the water back to an existing treatment plant. He also noted that AFCEE and the regulators had been unable to reach consensus on a final remedy, but decided in September of last year to put a formal dispute on hold in favor of gathering more data on the plume and updating the model with the hope of answering the question of whether there's a more cost-effective option that includes active removal in the southern part of the plume.

Mr. Davis then displayed a two-panel slide showing the 2006 and 2008 perchloroethylene (PCE) plume shells, noting that PCE is the primary contaminant in the plume. He also said that the 2008 figure shows that the higher concentrations are farther south, and he pointed out the drive-point locations that tested around 50 ppb for PCE, which has a cleanup level of 5 ppb. He then showed a north/south longitudinal cross-section of the plume and pointed out the existing wells, the Town of Falmouth Ashumet Valley wellfield area that's being restored, the southern part of the plume, the location of the Falmouth Golf Course, and the higher concentration area. He noted that the plume is about 30 to 40 feet thick at the thickest part, and that about 60 feet of clean water is above the plume. He also showed another cross-section figure, which he described as "the plume coming at you" and noted that the plume discharges into the Backus River. Mr. Davis further stated that the while low-level contaminant can sometimes be detected in the surface water of the river, drilling alongside the river has shown only deep detections.

Mr. Davis then displayed a chart entitled "Ashumet Valley Total PCE Mass in Plume Shell," which showed the following estimates: 585 pounds in 2003, 473 pounds in 2005, and 376 pounds in 2007. He also showed a figure depicting concentration gradients in the southern part of the plume and pointed out the higher concentration areas along Old Barnstable Road. He then referred to the second part of the figure, a plume outline overlaying an aerial photo of the area that illustrated the level of development there. He pointed out the Backus River cranberry bog system, Route 28 to the south, Mill Pond, and the Falmouth Golf Course to the north. Mr. Davis also stated that it appears that the higher concentration areas shown in the figure would eventually discharge into Mill Pond or the southern portion of the Backus River.

Mr. Davis continued by showing a table entitled "Summary of Ashumet Valley Pre-Alternatives Supplemental Feasibility Study" and noting that it includes a new and old Alternative 6, a number of additional alternatives based on the new plume shell, flow rates, projected cleanup years, PCE mass removal amounts and mass removal percentages, and incremental costs (for construction and electricity). He also reported that the current focus is on Alternative 8, which involves one new extraction well and a mobile treatment unit (MTU) in the southern part of the plume. He further noted that new Alternative 6 has a predicted cleanup year of 2023, while the more aggressive alternatives, involving up to three southern plume extraction wells and a pumping rate as high as 950 gallons per minute (gpm), would only improve the cleanup timeframe by about four years (but would increase the percentage of mass capture).

Mr. Davis then showed modeling animations for new Alternative 6, Alternative 8, and Alternative 11 (the most aggressive, with a predicted cleanup year of 2019). He also referred to a map and pointed out the proposed location for the new extraction well associated with the leading candidate, Alternative 8.

He mentioned having met with the town engineer and noted that the location is at an intersection with utilities close by and has room for construction work. He also pointed out the property for potential location of the MTU, from which a short discharge line would run to the Backus River.

Mr. Davis noted that AFCEE would like to move the Ashumet Valley plume construction work into the same contract as the CS-10 Southern Trench work, rather than waiting to begin construction until after the final ROD. He then noted that the next step is to conduct a formal feasibility study, which involves choosing one of the alternatives with active treatment in the southern part of the plume to be fully evaluated against new Alternative 6. He further reported that AFCEE has reached consensus with the regulators that a new Ashumet Valley Proposed Plan will not be needed, although a public meeting will be held. He also said that he expects that AFCEE and the regulators will be able to reach consensus on a remedy (likely Alternative 8).

Questions and Comments from SMB and Public

Ms. Valiela asked Mr. Davis to again run through the conceptual design layout, which he did, noting that discharge would occur via a bubbler in the Backus River. He also said that the landowner is indicating a willingness to discuss allowing access to his property. Ms. Valiela asked if AFCEE has an idea for an alternative location, should the property owner deny access. Ms. Davis replied that discharge could probably still occur in the Backus River, off of a town road, and there are some other pieces of property to be considered for the MTU. Ms. Valiela advised that Mr. Davis remember that access issues can become drawn out for a very long period of time. Mr. Davis replied that he is willing to go forward with a construction contract if he gets positive feedback and the only thing left to do is finalize the easement. He also noted that AFCEE plans to have a neighborhood meeting similar to the one planned for the CS-10 Southern Trench project.

Ms. Garcia-Serrano noted that MassDEP has been clear right along that it has much more faith in the field data than in the model, while respecting the many complexities associated with the hydrology in the area. She also said that MassDEP is pleased with the outcome, and is right now working on responding to comments received during the public comment period, after which it will formalize its position. Ms. Garcia-Serrano also said that MassDEP is in favor of active treatment in the southern part of the plume and has been hoping for that for a very long time. In addition, she talked about wanting to approach the Town of Falmouth to answer any questions regarding the town's future plans for constructing a wastewater treatment system in that area, and added that MassDEP had sent a letter to the town, dated December 31, 2007, but hasn't received a response. She then asked if it would make sense to approach the town through Ms. Valiela. Ms. Valiela recommended going directly to the town manager and the wastewater treatment superintendent.

Ms. Valiela also commented that the proposed extraction well location seems too far south to interfere with the potential wastewater treatment area. Ms. Garcia-Serrano replied that "there was some nexus between a potential hydrologic imbalance between the two areas of concern" and the idea is to resolve that and ensure that there are no showstoppers. She also said that MassDEP appreciates all of AFCEE's efforts to provide the additional data needed to increase the agency's comfort level about getting the right remedy. Mr. Davis added that AFCEE is expecting any day now to see the modeling that looks at the hydrologic effect in that area based on when treated wastewater would be discharged in that area. He also mentioned that AFCEE had provided its water data to the modelers.

Mr. Dow said that he recalls having heard at a previous PCT meeting that there's some contamination that appears to be moving cross-gradient to the Ashumet Valley plume. Mr. Davis clarified that this is the upwelling that he'd mentioned when he showed the cross-section figure. He then pointed out on the figure where surface water concentrations are occasionally seen, in "this northern part." He further noted that data gathered during the data gap investigation showed only low-level concentrations at the

golf course, and therefore he'd be surprised to see the upwelling "that's been happening up there" again this year.

Mr. Dow then asked if some of the other alternatives, with treatment other than just at the toe of the plume, would impact the upwelling differently. Mr. Davis replied no, and added that options being considered would prevent or at least lessen upwelling only in the southern part of the Backus River. He also noted that at this time there are no options on the table that involve treatment in the golf course area, or north of Carriage Shop Road. Mr. Dow also asked if it's correct that any PCE concentrations detected in the Backus River would not affect the cranberries. Mr. Davis confirmed that it is, and noted that no PCE concentrations above the maximum contaminant level (MCL) had been detected there. He then clarified that above-MCL concentrations were in fact detected in 2005, after which the cranberries were tested. Since then, however, there have been no MCL exceedances of PCE in the Backus River.

Agenda Item #5. Impact Area Groundwater Study Program Updates

Robotics Technology Demonstration

Mr. Gallagher briefed the SMB on a robotics technology demonstration that the IAGWSP has been conducting with the Air Force Research Laboratories (AFRL) Robotics Group, using remotely-operated equipment to clear unexploded ordnance (UXO) on some of the ranges to see if this can be done in a safe, efficient, and cost-effective manner. The initial focus of the project was to clear 40mm grenades from L Range; however, the technology evaluation has been expanded to include several other ranges as well, including: UXO clearance in an area up to 10 acres in the Central Impact Area; clearance of munitions from target berms at the Former A Range; vegetation clearance of a 15-foot wide swath at the Former K Range (for controlled burns and for UXO density evaluations); clearance of four target berms (the 150m, 1000m, and 2000m A and B berms) at the J-1 Range; and firebreaks for controlled burns at some of the other ranges in the Southeast Ranges area. Mr. Gallagher also noted that some clearance is being conducted at the BA-1 training area, but that effort post-dates the preparation of the presentation slides.

Mr. Gallagher then showed a series of photographs of the robotics tools and equipment: the All-Purpose Remote Transport System (ARTS), equipped with a brush-cutting attachment; the AMRAD system, used to conduct geophysical surveys; an excavator with a rotary sifter bucket that retains oversized material including cobbles, root balls, and some cases, potential UXO; an excavator equipped with a large electromagnet that's hoped to remove not only surface metal but also metal from beneath the ground surface; and a control unit with joysticks to operate the equipment and two screens to watch the operations (with two cameras being attached to each piece of robotics equipment).

Mr. Gallagher reviewed the work that was done at L Range: targets were removed using the remotely-operated excavator with a thumb attachment; the vegetation was flush-cut using the ARTS system with the brush-cutter attachment; an EM-61 geophysical survey was performed over eight acres of cleared vegetation using the AMRADS tow vehicle and a multiple sensor array (MSA); and UXO clearance was performed using the ARTS with a power rake attachment, a rototiller attachment, Cherrington Beach Cleaner attachment, and a surf rake – all of which are off-the-shelf technologies. Mr. Gallagher also showed some photographs of the L Range work in progress, noting that explosive ordnance disposal (EOD) technicians inspected cleared materials for the presence of UXO. He also noted that the ARTS system is used to transport UXO to a consolidated location where they will be destroyed, and that a second EM-61 survey will be performed at L Range to evaluate the effectiveness of the removal action.

Mr. Gallagher then reviewed the J-1 Range robotics activities: flush-cut vegetation, using the ARTS system with brush-cutter attachment; removing UXO with the rotary sifter bucket; and transporting the

UXO to a central location where they can be destroyed. He also noted that the 150m and 1000m backstop berms have been excavated, while work on the two 2000m berms is still ongoing and expected to be completed some time next week.

Mr. Gallagher then reviewed the following preliminary observations of the robotics demonstration: the robotics have worked as expected; they were able to reduce time and manpower; they reduced worker exposure and increased safety; they were able to work in a variety of weather conditions, including snow (although it had been necessary to stop work at L Range for several days to allow weather conditions to dry out, as wet soil is not easily sifted); and the robotics tools are somewhat limited by line-of-sight to the control unit.

Mr. Gallagher concluded his presentation by going over next steps: conduct clearance studies at other ranges (with different conditions, terrain, and vegetation); test additional equipment, specifically the electromagnet and a mechanical arm that can articulate in three different directions; and determine the potential for widespread use in range operations and maintenance and munitions response. Mr. Gallagher also noted that potential uses include vegetation clearance, geophysical surveys, and UXO removal.

Questions and Comments from SMB and Public

Capt. Abel inquired about efforts to restore the vegetation, and mentioned erosion prevention. Mr. Gonser explained that the robotics approach to UXO removal (such as using the electromagnet to pull UXO through the brush) causes less impact to the root structure and the vegetation itself than the conventional approach of excavating to a depth of three feet and sifting the soil. He also noted that flush-cutting doesn't disturb the root systems, and most of the vegetation propagates quickly through the root mass. Mr. Gonser also said that the IAGWSP will look at restoration, but probably not immediately, since "these are sort of interim measures" and it's yet to be determined when no more digging will be necessary. He also noted that the clearance work isn't really being done in areas where erosion would be a big concern. Mr. Gallagher added that the vegetation at L Range that was flush-cut in late winter/early spring of this year is already beginning to recover.

Mr. Green asked if the robotics equipment is designed to handle impacts from a detonation. Mr. Gallagher replied that the AFRL Robotics Group isn't that worried about accidental detonation, but views it as one less potential injury to a human being. He also said that most of the equipment is fairly robust, although some damage would be caused if a 155m item detonated, for example.

Mr. Dow asked if any of the fine material that was sifted out was tested for the presence of COCs. Mr. Gallagher replied that right now the process is to just sieve the fines, remove the UXO, consolidate the UXO, and then destroy it – although there is a possibility that the spoils could be sampled. Mr. Dow explained that he mentioned this because the assumption has always been that it's important to locate the magnetic anomalies because they are considered to be sources of groundwater plumes, like the Central Impact Area plumes. However, he's always thought that it's possible that some things could have become dislodged from the rounds and exist as particles in the soil, and conducting some random tests of the sifted material could demonstrate whether the assumption is actually true. Mr. Gallagher said that while he wouldn't preclude lower detonation and the distribution of particulate matter, right now the focus is on removing the UXO from the ranges, but after that there is a possibility of additional soil sampling. Mr. Gregson added that the robotics work is being conducted in existing operable units where soil and groundwater investigations, which involve soil and groundwater sampling, are ongoing.

J-2 Plume Construction Status

Mr. Gregson showed a map and pointed out the J-2 Range plumes (J-2 East and J-2 North), the Forestdale neighborhood of Sandwich, the base boundary, and the multiple directions of groundwater flow due to the area being located at the top of the groundwater mound. He reminded the group that a treatment system was installed to address the J-2 North plume, which was headed toward the Upper Cape Water Cooperative's water supply well #2. That system has been in place since September 2006, is pumping 375 gpm, and is treating both RDX and perchlorate. Mr. Gregson also noted that all of the J-2 Range plumes are the result of munitions testing and disposal activities that occurred at the range.

Mr. Gregson also displayed a figure showing the layout of the treatment system currently under construction for the J-2 East plume, noting that it will be composed of three extraction wells down the center of the plume (one at the toe, near the Coast Guard transmitter station; one in the middle; and one near the source area). He also explained that the groundwater will be treated through four MTUs (one to the south, two in the middle, and one at the toe of the plume), and noted that two of the MTUs were previously used at the Demolition Area 1 (Demo 1) plume. Mr. Gregson then stated that the treatment media will be carbon and ion exchange resin, and that the treated water will be returned to the aquifer via infiltration trenches located along the edges in front of the plume. Construction began last December, and the system, which is anticipated to begin operating in late summer of this year, is expected to run for about 14 to 16 years.

Kilo Range Update

Mr. Gregson displayed a figure, pointed out the Impact Area and the Small Arms Ranges (SARs), and noted that early last year the IAGWSP began focused investigations at the Juliet and Kilo SARs with the installation of two groundwater monitoring wells at each range. The wells were sampled on five different occasions, none of which yielded any COC detections, and the investigations are now directed at soil sampling.

Mr. Gregson showed an aerial photo of the two ranges and pointed out the firing lines, the target areas, and the backstop berms. He also showed a slide of the conceptual site model (CSM) for the SARs and explained that the contaminants being sought at the firing points and the range floor (propellants such as nitroglycerin, and metals such as lead, copper, and antimony) occur as airborne particles (gun smoke) that fall on the soil. He explained that the bullets traveled downrange, through the targets, and struck the berms, where whole bullets, bullet fragments, and COCs such as lead, copper, zinc, and antimony from conventional bullets, and tungsten from "green" bullets were found. Mr. Gregson further noted that the Guard has conducted lead- and tungsten-removal programs at the berms, and therefore not a lot of metal continues to be seen at the berms themselves. Mr. Gregson said that the potentials for exposure are direct contact on the range itself (through training, construction, or maintenance activities) and groundwater contamination from particles dissolving and leaching through the soil with rainwater (although the COCs have not been detected in groundwater).

Mr. Gregson then referred to the Kilo Range soil investigation results and reported that nitroglycerin (NG), a propellant component, was detected at the two firing lines, at concentrations in the 40 to 50 part per million (ppm) range. He noted that these are relatively high levels, consistent with those seen at Juliet and Tango Ranges. He also noted that lead was detected behind the berms at around 900 ppm, which, based on work done at Tango Range, should not cause concern about leaching to groundwater. Mr. Gregson reminded the group that the Kilo Range Remedial Investigation Report is undergoing a 15-day public comment period that begins tomorrow and runs through June 12, 2008. He noted that information about how to obtain a copy of the document can be found on the IAGWSP and E&RC websites.

Questions and Comments from SMB and Public

Ms. Valiela asked if the NG leaches through the soil and into groundwater. Mr. Gregson replied that it does not, and noted that soil samples collected six inches below the 40-to-50 ppm detections tested nondetect for NG. Ms. Valiela then asked whether the SARs are checked for contaminants before the robotics equipment is brought in. Mr. Gregson clarified that the robotics equipment would not be used on these ranges, which are part of a separate investigation, and where there are no munitions or UXO. Mr. Gonser added that the soil at L Range was sampled previously and found to have very little soil contamination. He also said that generally speaking, areas that have UXO don't necessarily have a lot of soil contamination. The soil contamination at the SARs is mostly propellants, which are "kind of powdered down into the ground."

Mr. Dow informed the group that all six isomers of dinitrotoluene (DNT) were found in a groundwater plume that had migrated off base from the Badger Army Ammunition Plant in Wisconsin. Consequently the Wisconsin Department of Public Health (DPH) developed a provisional groundwater standard of 0.05 ppb, which is 100 times less than the concentrations of most of the explosive and propellant contaminants being detected by the IAGWSP. He then asked if the IAGWSP has tested for all six DNT isomers, or just for 2,4-DNT and 2,6-DNT. Mr. Gregson replied that he thinks testing has been done just for 2,4-DNT and 2,6-DNT. Mr. Dow then suggested that the IAGWSP measure for the other four isomers as well.

Ms. Garcia-Serrano, who noted that MassDEP has promulgated GW-1 standards for 2,4-DNT and 2,6-DNT, said that she would follow up on Mr. Dow's question about testing for all six DNT isomers. Mr. Gregson commented that it would be helpful for the IAGWSP to know this kind of information.

Nitroglycerin Fate & Transport Studies Update

Mr. Gregson reminded the group that NG is consistently being found in soil samples from firing lines; however, a database search that he conducted a few weeks ago showed that of the 17,000 groundwater samples analyzed for NG, only two showed detections, and those "probably have an explanation." He then reported that based on the presence of NG and 2,4-DNT in soil and some of the initial modeling that was done using standard adsorption/desorption parameters, the indication is that these compounds should be in the groundwater by now. Since they're not being seen, however, the IAGWSP has undertaken a study to try to answer the following questions: Why aren't NG and 2,4-DNT being seen in groundwater? What levels in the soil would result in groundwater contamination above risk-based levels? If NG or 2,4-DNT will get into groundwater, how long will it take?

Mr. Gregson noted that the IAGWSP conducted batch tests, the purpose of which is to look at how NG and 2,4-DNT attach to soil, such as whether they bind easily or have difficulty coming off of soil. The NG batch tests were done using lab-grade NG that was dissolved in water and mixed with Camp Edwards' soil. Mr. Gregson reported that some of the initial findings were that a portion of the NG and 2,4-DNT were irreversibly bound to soil. He also explained that the Kd value (a co-efficient on how well a compound sorbs to soil), which is what's being measured, varies with depth because of the changes in organic matter and clay content. Mr. Gregson further noted that biodegradation may play a very important role in destroying dissolved NG and 2,4-DNT present in the soil, and it's thought that this is probably why these contaminants don't seem to be migrating to groundwater. He also mentioned that NG is bound up with nitrocellulose fibers and isn't readily released from the matrix.

Mr. Gregson then reported that batch tests done with actual fired propellants are under way, using propellant residue collected at Tango Range a few weeks ago. He also noted that next steps are: to conduct column tests, in which water containing the contaminants is dripped through a tube of soil;

and to conduct a rate-of-release study, in which water is dripped on some of the fired propellant as though it were being rained on at the range.

Questions and Comments from SMB and Public

Mr. Dow asked if mega-fauna would be present in the soil used for the column tests. Mr. Gregson replied yes, some of the columns would have natural bacteria remaining in them, while a biocide would be used on the others in order to see what the differences would be. Mr. Dow explained that he was thinking of something slightly larger than bacteria, such as termites and other types of insects that have protozoa in their digestive tracks, which would allow to them to digest cellulose, thereby releasing the NG and making it more available to bacteria – which raises the question of whether the bacteria can degrade the NG as quickly as it's released, "by a biological process as opposed to soil adsorption."

Mr. Gregson said that the soil is a complicated environment in itself, with both a mineral component and ecological component. He also noted that the soil samples being collected for the tests are taken from the field to the lab, which presumes a somewhat representative sampling of the faunal community. He also said that at this time there are no specific studies being done on the types of fauna present in the soil, but the process of comparing soil columns with and without biocide treatment is a kind of first step toward looking at the effect of biodegradation. Mr. Dow replied that he thinks this is a good first step, but suggested that the IAGWSP might also want to consider "some of these other processes that operate in the real world that may not be simulated in soil columns."

Demolition Area 1 Plume System Performance Monitoring

Mr. Gregson displayed a map and pointed out the Demo 1 groundwater plume and its source area, a topographic depression located south of the Impact Area, where explosives training and munitions disposal activities occurred. He noted that the Demo 1 plume contains perchlorate and RDX contamination and is migrating west, almost to the base boundary, upgradient of a couple of ponds at the Otis Gun Club.

Mr. Gregson said that a comprehensive Demo 1 plume treatment system is now in place, but treatment began with a Rapid Response Action (RRA) system involving one extraction well and one MTU at Pew Road and two extraction wells and three MTUs at Frank Perkins Road. He noted that the comprehensive system involves five extraction wells and four reinjection wells, an MTU at Pew Road, and a permanent treatment facility at Frank Perkins Road. He further noted that a faulty reinjection well had to be replaced and is now working fine, the system is currently pumping at 911 gpm, and the first six months of operation data indicate that the system is working as designed.

Mr. Gregson then showed a schematic view of the treatment system layout, noting that pink represents perchlorate contamination, yellow represents RDX contamination, and the health advisory for perchlorate is 2 ppb and the risk-based level for RDX is 0.6 ppb. He also pointed out the Pew Road extraction well, pumping and treating through carbon and ion exchange resin and reinjecting to the south and north, and the four other extraction wells, pumping and treating through the new treatment plant and discharging off to the edges of the plume, which offers some hydraulic control. Mr. Gregson also showed cross-section figures and pointed out the source area, the water table, bedrock, and the perchlorate contamination, which he noted leaches more quickly to groundwater and so is a little bit ahead of the RDX contamination.

Mr. Gregson stated that the RRA treatment system has concluded its operation and the IAGWSP has issued a report on its performance that looks at three different plume zones: Zone 1, upgradient; Zone 2, the middle; and Zone 3, downgradient. He also noted that the report looks at three different aspects:

hydraulic monitoring, treatment system monitoring, and plume monitoring. He then stated that at the time the report was written, the RRA system had removed 46.3 pounds of perchlorate and 12 pounds of RDX, or about 43% of the perchlorate mass and about 23% of the RDX mass. He also reminded the group that the greatest mass capture is achieved when treatment systems first begin operating, with diminishing effectiveness occurring "as things start to dilute out."

Mr. Gregson then reviewed some highlights of the RRA report: for Zone 1 – the perchlorate contamination has detached from the source area and RDX concentrations at the source are decreasing, indicating that the 2004 source removal action conducted in 2004 was successful, and the plume has narrowed in this zone; for Zone 2 – a marked increase in concentrations was seen in monitoring well 210 (MW-210), but will be captured by the downgradient extraction well, and the plume has narrowed farther downgradient in Zone 2; and for Zone 3 (the part of the plume that's anticipated to naturally attenuate before reaching the base boundary) – a small increase in concentration was seen in MW-225 (from about 10 ppb to 20 ppb), but this is within the parameters of the model and isn't expected to trigger the need for a significant change to the treatment system. Mr. Gregson also showed a perchlorate cross-section and an RDX cross-section and pointed out features that illustrated the observations he'd just reviewed.

Mr. Gregson then displayed a figure showing the plume outline in 2007 (startup conditions) and modeled plume outlines for 2012 and 2017. He noted that if all goes according to plan, there should be only a small amount of perchlorate left by 2017. He also stated that based on the system performance monitoring, the recommendation is that no significant operational changes are needed at this time. Mr. Gregson then told the group that in response to a low-level perchlorate detection (about 0.6 ppb) beyond the 2-ppb plume contour, the IAGWSP has proposed some drive-point work to determine whether it's time to install some permanent monitoring wells in that area to track the perchlorate concentrations. He also clarified that this is just a precautionary measure, to "make sure there aren't any surprises down there."

Questions and Comments from SMB and Public

Ms. Valiela asked if the leading part of the plume is expected to attenuate before crossing the base boundary. Mr. Gregson clarified that nothing above 2 ppb is expected to cross the base boundary. Ms. Valiela asked if it's correct that the Town of Bourne has water supply wells on the other side of the base boundary. Mr. Gregson pointed out the location of Bourne's Monument Beach wellfield and its wells #2 and #5, none of which are in the path of the Demo 1 plume. Ms. Valiela still advised that the IAGWSP keep a close watch that the plume does not cross the base boundary, as that would very much change the scenario and the community's reaction. Mr. Gregson agreed and acknowledged that it's much easier to conduct cleanup work within the base boundary.

Ms. Garcia-Serrano asked Mr. Gregson to remind her of the criteria that would trigger the installation of an active remedy for the downgradient portion of the plume. Mr. Gregson explained that part of the Demo 1 plume decision document is a contingent remedy to prevent concentrations above 2 ppb from getting off base. He also said that he believes the wording was that the contingent remedy would be put in place "if monitoring or modeling indicate that concentrations above 2 bb would get across the base boundary." Mr. Green asked if it's correct that the contingent remedy would be triggered if the plume crosses the base boundary. Mr. Gregson clarified that the contingent remedy would be triggered if modeling predicts that perchlorate concentrations above 2 ppb will cross the boundary, or if increasing concentrations are seen in a monitoring well that would indicate that the plume will cross the boundary.

Ms. Garcia-Serrano asked Ms. Sanderson if she and EPA's Bryan Olson had discussed the fast rate of groundwater travel in that area, especially with respect to the drive-point results from December 2007.

Ms. Sanderson replied yes, and mentioned the importance of the monitoring data to provide early warning, as experience has shown many reasons for not waiting for a trigger to happen. She also spoke about the importance of the drive-point work in terms of gathering the additional data needed to answer the question of whether monitoring well locations exist where they're needed and if they're being sampled at the right intervals.

Ms. Valiela asked if the IAGWSP has projected where the front of the plume should be located based on when the original source was used. Mr. Gregson replied that he thinks that the current plume depiction is consistent with what's known about the age of the release and when perchlorate came into use. Ms. Sanderson said that she thought the toe of the plume had traveled a little farther than expected. Ms. Garcia-Serrano added that a map that Len Pinaud had provided yesterday showed the plume to be "a little farther along." Ms. Valiela explained that she's asking this question in part because it's been found that groundwater flow rates are faster in some cases than originally thought. She also mentioned that the Landfill 1 (LF-1) plume turned out to be much farther downgradient than originally believed (having reached Red Brook Harbor), but just hadn't been found yet. Ms. Valiela further noted, however, that she feels certain that the IAGWSP will explore the extent of the Demo 1 plume carefully.

Mr. Gonser noted that it's his understanding that the latest detection by the pond actually occurred later than the model had predicted. Ms. Sanderson said, "One I thought was a little later and one was a little earlier…" Mr. Gonser said that he was informed by his staff that the model had predicted that the latest low-level detections would have been there some time ago, but are just being seen now. Therefore it's thought that the plume is not moving as fast as the model had predicted in that area. Ms. Sanderson suggested that Mr. Gonser believes the model to be conservative then, and Mr. Gonser confirmed that he does.

Ms. Garcia-Serrano noted that although MassDEP does not have any formal guidance regarding monitored natural attenuation (MNA), it uses EPA's MNA guidance, "which is an excellent document." She also said that MNA, which involves lines of evidence, oftentimes is not a cheap alternative, but takes a great deal of effort in terms of having a significant number of wells to attain the comfort and confidence to know that a plume is indeed shrinking. She then asked Mr. Gregson to talk about the level of field data to support the IAGWSP's argument for MNA versus an active remedy.

Mr. Gregson replied that MNA remedies often take a comprehensive look at biological monitors such as bacterial communities and breakdown products, in cases relying on biodegradation. In this case, however, reliance is on the physical processes of dispersion and dilution – as the plume is cut off at the extraction well, not enough mass remains to support the plume and so eventually it will disperse to nondetectable levels. He also noted that the purpose of the monitoring program in the downgradient part of the plume is really to ensure that the plume is dispersing in the aquifer and matching model predictions.

Mr. Mealy asked how often the models are updated to catch up with the field data. Mr. Gregson replied that groundwater samples are collected either once or twice a year, with results reported on a six-month and annual basis. If the chemical and groundwater flow data collected in the field match perfectly with the model, the model doesn't require any revising or updating. However, if there are significant changes, the model is updated as needed on a six-month or one-year cycle.

Agenda Item #5. Camp Edwards Small Arms Ranges Update

COL FitzPatrick reminded the group that the Guard received Environmental Management Commission (EMC) and EPA approval on a 17-month trial period for use of lead ammunition at Tango Range. He noted that so far approximately 41,000 rounds have been fired downrange, and over all the STAPP

bullet-catcher system has been operating as expected. He also said that the primary management approach at Tango Range is daily and weekly observations of actual soldier training followed up by inspections of the STAPP system, including the frames, sandboxes, membrane, plywood, and so forth. The secondary aspect of managing the range is scientific – that is, monitoring of the soil, groundwater, and soil pore water. COL FitzPatrick then noted that although Tango Range soil sampling wasn't scheduled until October of this year, it was conducted earlier in order to have results to evaluate with respect to moving forward with the process to return to firing of lead ammunition at Juliet and Kilo Ranges. He reported that soil sampling results at Tango Range were all significantly below action levels, groundwater monitoring results were again nondetect, and filtered samples from the soil pore water also tested nondetect.

COL FitzPatrick stated that background samples were taken when lysimeters (for soil pore water sampling) were first installed along the base of the STAPP system, after which some additional lysimeters were installed. He also reported that a plywood wall was situated on top of the system in order to determine how many bullets might be either ricocheting through or over the system; so far, there are about 25 to 27 holes in the plywood, or about 0.2% of the bullets fired downrange, which indicates a "pretty successful capture rate." COL FitzPatrick further noted that a valve was installed at the base of STAPP water collection system so that it can be checked on a weekly basis and the water pumped out as necessary.

COL FitzPatrick also showed a slide pertaining to the various Tango Range reports being generated: quarterly reports were submitted in September 2007, December 2007, and March 2008; the Operations, Maintenance, and Monitoring Plan (OMMP), a living document, was updated in December 2007 and distributed in January 2008; the OMMP Periodic Review Report was completed in February 2008; and an Interim Pilot Program/Lessons Learned Report was completed in May 2008. COL FitzPatrick then noted that the Interim Pilot Program/Lessons Learned Report will be used as a supporting document as the Guard moves forward with the Juliet and Kilo Range process.

COL FitzPatrick also showed a slide entitled "Tango Range Best Management Practices: OMMP Performance Assessment," which noted the following: The Tango Range OMMP is an effective living document to manage the training activities on Tango with STAPP; the Massachusetts National Guard is satisfied with the performance of STAPP on Tango; based on the experience gained from July 2006 through July 2007 and the observed training from August 2007 through May 2008, the STAPP bullet catcher system is a positive environmental tool; and STAPP is an effective system for Tango, Juliet, and Kilo Ranges. In addition, COL FitzPatrick showed a photograph of NG residue being collected for the ongoing NG studies that Mr. Gregson had mentioned.

COL FitzPatrick continued his presentation by reminding the SMB that because of the Department of Army/National Guard Bureau mission change for deploying soldiers, the Guard decided to make Juliet and Kilo Ranges (rifle ranges) its next priority rather than Echo Range (a pistol range), because all soldiers have a rifle, but not all soldiers have a pistol. He also mentioned the need to obligate congressional FY'07 funds for containment systems at Camp Edwards and reported that the plan is to manage Juliet and Kilo Ranges like Tango Range, with STAPP systems.

COL FitzPatrick showed an aerial view of Juliet and Kilo Ranges and noted that the Guard had gotten approval to move the berm at Kilo Range to be in line with the berm at Juliet Range so that the ranges could be operated more safely side-by-side. He also noted that the STAPP systems at these ranges would be built so that base of the system is below the range floor; therefore, boxes like those used to protect the base of Tango Range STAPP system may not be necessary. He further noted that soil and soil pore water sampling will be conducted at these ranges, and that groundwater monitoring wells are already in place.

COL FitzPatrick informed the group that the Guard filed another Notice of Project Change (NPC) after deciding to go after Juliet and Kilo Ranges at this time, rather than Echo Range. He also mentioned a number of past and future events for information outreach associated with the process to obtain approval to fire lead at Juliet and Kilo Ranges, which include Command Group Meetings, EMC meetings, SMB meetings, EMC's Community Advisory Council meetings, Small Arms Range Update public meetings, EMC's Science Advisory Council meetings, PCT/IART meetings, Tango Small Arms Range tours, and various articles published in the Cape Cod Times and Enterprise newspapers. He also noted that the Guard's petition requests to EPA and the EMC will be out later this summer, and there will also be a public meeting strictly on Juliet and Kilo Ranges.

COL FitzPatrick concluded his presentation by showing a slide entitled "Juliet and Kilo Ranges Construction/Operational Timeline" and noting the following: today's EMC vote allows the Guard to move forward; the investigation and any potential remediation will be completed in June 2008; berm construction and STAPP installation will occur in July 2008; the Guard's petitions to EPA and EMC for approval to fire will be submitted in July/August 2008; EPA will conduct a public comment period on the Guard's request to modify Administrative Order #2, including a public meeting, in August 2008; and approval to train with lead ammunition on Juliet and Kilo Ranges with the installed capture systems is anticipated to occur in September 2008.

Questions and Comments from SMB and Public

Ms. Sanderson mentioned the importance of public involvement, said that she appreciates the Guard's efforts to allow time for public comment periods, and encouraged the Guard to ensure that public involvement opportunities remain in the schedule. Ms. Garcia-Serrano echoed Ms. Sanderson's remarks on behalf of MassDEP.

Agenda Item #6. SMB Meeting Schedule and Adjourn

Ms. Wadsworth noted that the E&RC would be querying SMB members via email about the possibility of cancelling the July meeting, if there are no objections. Ms. Valiela mentioned that her only concern would be whether a meeting was needed to cover the Ashumet Valley issue. Ms. Wadsworth then recommended that at the next SMB planning meeting the group discuss scheduling a joint PCT/IART/SMB meeting. Ms. Sanderson said that she thinks it might make sense to have a joint meeting in July or September. Ms. Wadsworth noted that the E&RC would keep tabs on this and keep everyone informed.

Ms. Grundman adjourned the meeting at 9:04 p.m.