RAB MEETING MINUTES

Date/Time: Thursday, May 8, 2025, 6:30 p.m. to 8:30 p.m.

Location: Virtual meeting via Microsoft Teams

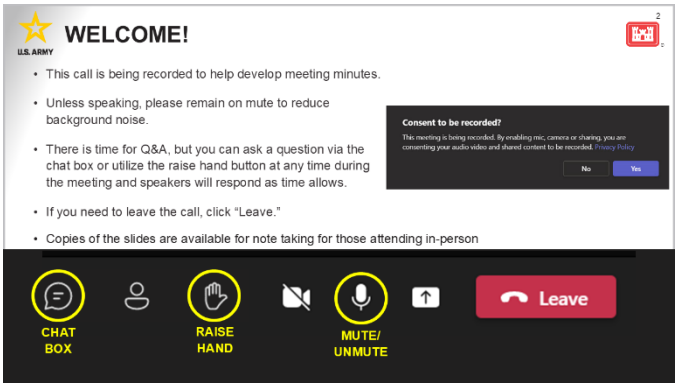
Attendees: Restoration Advisory Board (RAB) community members Julie Corenzwit, Amy McCoy, Christopher Mitchell, Alix Turner
Thomas Lineer, Samantha Velluti-Fry (U.S. Army [Army])
Penny Reddy (U.S. Army Corps of Engineers [USACE])
ZaNetta Purnell, Shawn Lowry (U.S. Environmental Protection Agency [USEPA])
Meg Delorier, Anne-Marie Dowd (Massachusetts Development Finance Agency [MassDevelopment])
Libby Levison (Harvard Board of Health)
Andy Vitolins, Steven Perry, Mark Pasquarello, Zachary Smith (SERES-Arcadis Joint Venture [S-A JV])
Jacob Solon (People of Ayer Concerned About the Environment [PACE])
Joe Cronin (Skeo)
Ralph Fehlberg, Sandra Kelly, Christine Goulet, and other attendees participating by phone or are otherwise not able to be identified (community and guests)

Slides: RAB meeting slides are available on the project website at: https://www.nae.usace.army.mil/missions/projects-topics/former-fort-devens-environmental-cleanup/.

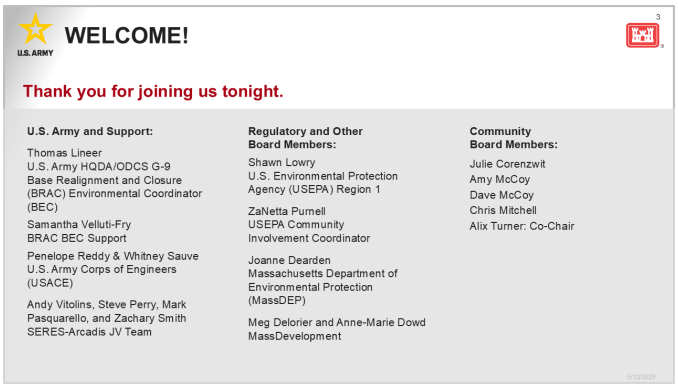
Please Note: Discussions described in these minutes have been paraphrased as needed for clarity. The invitation for this meeting is provided for reference at the end of these meeting minutes.

WELCOME & OPENING COMMENTS

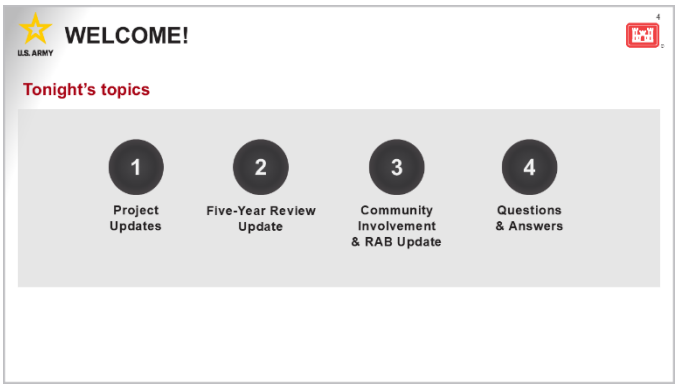
Mark Pasquarello (S-A JV Community Involvement Specialist) opened the meeting and welcomed the attendees.



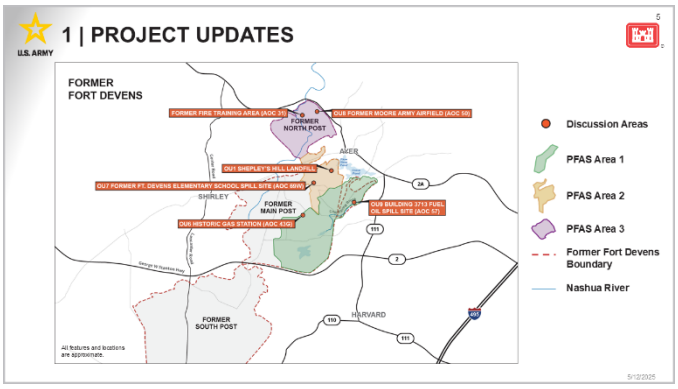
Mark Pasquarello informed attendees that the meeting was being recorded to generate minutes. He reminded everyone online that microphones will be muted to avoid background noise. He noted that attendees can use the mute/unmute button at the bottom of their screen to talk or they can enter questions in the chat box.



Mark Pasquarello led introductions for attendees. Leaders and contributors for the call included Tom Lineer (Army); Samantha Velluti-Fry (Army); Penny Reddy (USACE); Andy Vitolins (S-A JV); Steven Perry (S-A JV); Mark Pasquarello (S-A JV); Zachary Smith (S-A JV); Shawn Lowry (USEPA); ZaNetta Purnell (USEPA); Meg Delorier (MassDevelopment); Anne-Marie Dowd (MassDevelopment), and RAB members Julie Corenzwit, Amy McCoy, Chris Mitchell, and Alix Turner.



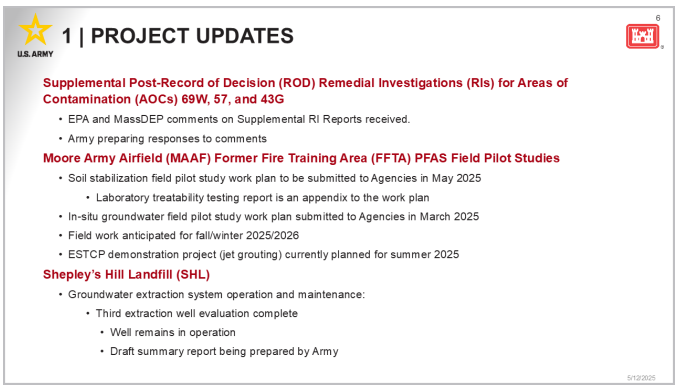
Mark Pasquarello introduced the topics for the meeting: project updates, an update of the five-year review, community involvement updates, and Q&A.



Andy Vitolins (S-A JV Project Manager) gave an overview of the site, which includes the following areas:

- Three investigation areas for per-and polyfluoroalkyl substances (PFAS): Area 3 (North Post), Area 2 (to the south, shown for context only), and Area 1 (the furthest south);
- Moore Army Airfield (MAAF) and associated former fire training area (FFTA);
- Shepley's Hill Landfill (SHL); and
- Petroleum sites (Areas of Contamination [AOCs] 69W, 57, and 43G).

He noted that there is not a lot of new information for this meeting because they have been focusing on fieldwork and reporting.



Andy Vitolins discussed the updates for the petroleum sites: AOC 69W (former Devens Elementary School/current Parker Charter School), AOC 57 (near Cold Spring Brook), and AOC 43G (former gas station). These legacy sites had petroleum spills long ago and have been addressed over the years. A few years ago, the Army conducted supplemental remedial investigations (RIs) to assess the current conditions and determine if they can be closed or transitioned to land use controls only. Fieldwork was completed, and reports were submitted to the USEPA and MassDEP. They have received comments and are in the process of responding to them. The reports are primary documents, meaning they go through a draft stage, responses to comments, a draft final stage, and then a final stage. The final report will be posted to the Army's website, and the draft final report will be sent to RAB members to review before it goes public.

Alix Turner asked where the reports were in that process. Andy replied that the Army is responding to comments now, and they are expecting to finalize the reports by summer. Alix asked if that is when the RAB members will get to see them, and Andy confirmed.

Andy discussed the MAAF pilot studies. He mentioned that the airfield is now being called Moore Field, but they may continue using MAAF for consistency with Army documents. This site is at the North Post and is now mostly used for state police training and drone operations

by the U.S. Air Force. Much of the legacy contamination has already been remediated, and the Army's current focus is on PFAS contamination associated with the FFTA and other operations where firefighting foams were used. Andy mentioned that the water table is deep at MAAF, about 45 feet down. There are two pilot studies planned to contain or restrict PFAS from moving off the site:

- Soil stabilization: Mixing soil with certain amendments (e.g., cement-like material and specialized clay) to absorb and immobilize PFAS. When the soil is mixed with those amendments, water will move through it, but PFAS will not come out. The laboratory test showed that 99% of the PFAS did not leach out. A field-scale test is the next step, which would involve a small portion of the approximately 100-foot by 100-foot field. A work plan for this has been developed and will be submitted to agencies this month.
- Injection: Injecting granular activated carbon into the ground to prevent PFAS migration via groundwater. The work plan for this study was submitted in March, and they are starting to receive comments on it.

Once they address any comments and finalize the work plans, they should be able to start the work in the fall or winter.

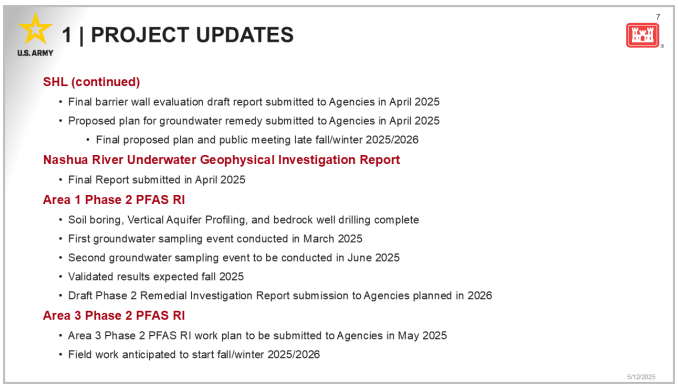
Anne Marie Dowd asked when the comments on the groundwater study were due. Andy replied that there was a 60-day review period, and comments should be coming in now. Alix asked if the data was already in. Andy explained that the documents are the work plans to do the fieldwork. The first part of the work involves the mixing or injecting, and the second part involves several years of monitoring to see how the technologies perform. Once they have the monitoring data, they will be able to make decisions based on it. If the technology works well, it could potentially be used on a larger scale. He noted that, with groundwater being 45 feet down and the extent of groundwater contamination being almost 200 feet down, they want to make sure the technology works at that scale before committing the time and resources to it. A lot of the technologies that are being used for PFAS were initially developed for other uses. Soil mixing and injection, for example, have been around for a long time. He noted that the prospects for the application of these technologies for PFAS look fairly good.

Jacob Solon asked if they were locking the PFAS in place. Andy replied that PFAS are often referred to as forever chemicals because they do not degrade and are hard to destroy. So, the goal is to stop their migration or intercept them before they reach receptors. Intercepting can happen at the source, but there are a lot of sources for PFAS that are unknown. The soil stabilization will try to stop it at the source and prevent it from getting into the groundwater. The groundwater containment will try to stop what is already in the groundwater from migrating to the Nashua River. He noted that another way to treat water for PFAS is with point-of-exposure treatment. For example, Ayer's water treatment plant now treats the water for PFAS before it goes out to receptors because PFAS are in the wells already. Jacob replied that his concern is that this approach would create issues in the future if the PFAS start to break down. Andy replied that PFAS are mixtures of chemicals and can transform into other regulated compounds under certain conditions, so remediation technologies must be carefully designed to avoid triggering those transformations. He noted it has been 10 years since the Army started investigations at Devens, but the technology still seems new because the regulations and the science change constantly. Jacob asked if the technology could be applied to other sites beyond Devens. Andy replied that these technologies are being tested nationwide and worldwide, not just by the Army but by private entities as well. Devens is one of the first Base Realignment and Closure (BRAC) sites to trial these approaches.

Steven Perry (S-A JV Community Involvement Specialist) asked if there are already enough monitoring wells in place to be able to track the effectiveness over time. Andy replied that additional monitoring wells will be installed. He noted that, since groundwater does not move fast, to monitor the effectiveness within 2 to 3 years, they have to install wells that are relatively close to the area being treated.

Andy reminded the group about the presentation 1 year ago by a researcher from University of Texas who is doing a project as part of the Environmental Security Technology Certification Program (ESTCP), which the Department of Defense uses to give grants to researchers developing remediation technologies. The researchers at the University of Texas are testing jet grouting to stabilize soil and contain PFAS instead of treating the whole area (which would be a lot of soil to treat in the case of MAAF). They will use jet grouting to put a layer of an amendment (similar to the soil amendment) below the PFAS to act as a filter and block the PFAS from coming out, which may be a more cost-effective option. The project has had some delays, but the ESTCP board has approved their plan, and they would like to move forward with it. They will be sending the Army their plan so the regulators can look at it to see if there are any concerns. It is not funded by the USACE or the Army specifically; it is a wider Department of Defense program. Devens will be used as a demonstration site to test the technology. The study will happen in a separate part of the FFTA and will not inhibit the Army's plans for the pilot studies.

Andy discussed the updates at SHL next. He noted the groundwater extraction system at this site remains operational, and the Army continues to perform regular maintenance. A study was conducted to evaluate the benefits of adding a third extraction well to the system, and that well remains in operation. A report summarizing the monitoring for that well is currently being prepared and will be submitted.



Andy Vitolins continued discussing the updates for SHL. He noted that the Army conducted a performance evaluation of the barrier wall at SHL. This evaluation involved sediment and groundwater sampling and assessing the wall itself to determine if it is functioning as designed. The draft report has been submitted to the agencies and is currently under review. Associated with these evaluations, the Army conducted a focused feasibility study (FFS) to explore alternatives to the current groundwater remedy, which is the extraction and treatment system. The findings of the FFS were compiled into a proposed plan that was submitted to the regulatory agencies for review. It will go through several stages of comments and revisions during the summer and into early fall. After the regulatory review is completed, the Army will present the proposed plan to the public in a formal meeting, which is expected to take place in late fall or early winter. The public will have the opportunity to provide comments on the plan. This process will result in an amendment to the Record of Decision (ROD) for SHL, which will reflect any adjustments to the groundwater remedy.

Alix Turner asked if the data or the draft proposed plan was available for the RAB to review. Andy replied that it is still being reviewed and that he will need to check if the draft final version will go to the RAB. However, the data that the plan is based on is from the FFS report, which has already been posted online (https://www.nae.usace.army.mil/Portals/74/docs/Topics/FTDevens/Documents/Final-Shepleys-Hill-Landfill-Focused-Feasiblity-Study.pdf). Steven Perry added that at one of the RAB meetings last year, they went through an overview of the FFS, and those meeting minutes and slides are available as well. Andy added that the studies of the third extraction well and barrier wall will also guide the remedy. Those reports will be finalized this year and will serve as additional data sources.

Anne Marie Dowd asked when something is considered an amendment to the ROD and not an explanation of significant differences (ESD). Andy replied that an ESD usually involves a change to a condition or an assumption that could impact the remedy. An amendment is a change to a remedy. Shawn Lowry added that a ROD amendment is a more fundamental change. Andy noted that there have been ESDs for Devens. For example, there was an ESD for SHL to formalize land use controls because the previous ROD referred to them but did not formalize them. Anne Marie noted there was also an ESD for the Devens contributor sites. Andy agreed and noted that the remedy did not change for that. Shawn commented that for USEPA the differentiation is similar, and there are examples in their guidance for what constitutes a significant versus a fundamental difference. Andy added that a change in a cleanup goal can be an ESD if it does not result in a change to the remedy.

Julie Corenzwit asked about the status of the sparging experiment. Andy replied that the sparging pilot test was performed a couple of years ago and was evaluated as part of the FFS. Julie asked if it was considered a success or a failure. Andy replied that it worked pretty well in shallow areas but not as well in deeper areas because it is difficult to inject anything, including air, that deep. It was generally seen to be effective though and has been effective at other sites as well. He noted that the third well evaluation showed that the third well was also working too. Julie asked if it is still in the mix of potential remedies. Andy agreed and noted they should stay tuned for the proposed plan.

Penny Reddy discussed the Nashua River underwater geophysical investigation report, which has been added to the website. She noted the report covers the geophysical investigation in the Nashua River, which used a geophysical instrument to survey the riverbed. This equipment was towed behind a boat and sent waves down to the bottom of the river to identify items. However, there were challenges with this technology because of obstructions in the river, like trees, and the accumulation of sediment on the riverbed. After encountering difficulties with the geophysical survey, they shifted to using divers and an analog survey method to get a better understanding of the river bottom. During this phase, divers located some items located in areas of potential investigation. These areas will be revisited in July.

Jacob Solon asked if any of the items were removed. Penny replied that a few items found at the surface were removed, but the primary focus is still on identifying the extent of what remains.

Alix asked if the report that was submitted is the final report since tasks are still ongoing. Penny explained that it is the final report for the first technology they used; they will use a different technology for the investigation in July. Andy asked if they would dive again during that time, and Penny replied that they would.

Anne Marie asked if the expectation is that the materials, once they are identified, will be removed. Penny replied they are working on a plan for it.

Andy continued with a discussion of the Area 1 Phase 2 PFAS RI. He noted that fieldwork for this investigation began in April of last year. Recently, they completed the installation of the last bedrock monitoring wells. They are conducting the first round of comprehensive groundwater sampling, which includes over 100 wells, spanning various depths in both the overburden and bedrock. This is the first time bedrock wells have been included in an investigation on the former installation boundaries as well as off-site, in Harvard. The first sampling round will be completed in a few weeks. A second round of sampling is planned for June. Once samples are collected, the data will be sent to a chemist to validate them through a process set by USEPA and other regulatory agencies. Validated data are needed before moving

forward with decisions or reporting. They anticipate receiving validated data in the fall. After they have had a chance to discuss it with the regulators, the Army will compile a report next year to summarize findings from the investigation.

Alix asked when the validated data would be available. Andy replied that the data would be available with the report when it is ready. This is because PFAS regulations keep changing. USEPA released maximum contaminant limits, and MassDEP has had their own PFAS 6 standards, which are now defunct because the USEPA's limits are more stringent. USEPA also has risk-based screening levels that are updated multiple times per year. So, the screening levels that they compare to the data will be the ones that are in use when the report is written.

Chris Mitchell asked what happens if they find a significant concentration of PFAS near the boundary or off-site, close to a Harvard resident and how that would be communicated quickly to protect human health. Andy replied that if data shows an immediate risk to human health or the environment, they report that information and take action immediately. He noted an example of taking action would be the changes that have been made at Ayer's water treatment plant to treat for PFAS while the investigation is ongoing.

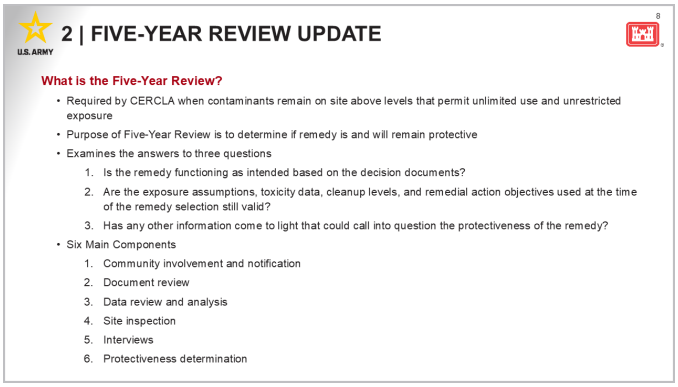
Jacob Solon asked if they do continuous sampling, or if they pick a sample out of the well at a single point. Andy explained that there are protocols for how to sample the wells, but it is not continuous. The samples are grab samples that are collected after a certain amount of water has been removed from the well. This process ensures that the sample reflects water coming from the area outside the well, not water that has been sitting in the well itself. They measure geochemical parameters like pH, temperature, and turbidity, which are used to ensure stabilization before the sample is collected. He noted that they may have another site walk at some point where people could see the process firsthand. There are also protocols for how samples are stored and how long they can be stored. For PFAS, it is easier because these chemicals do not break down in the environment. For other contaminants, sometimes you have to analyze them within 24 hours.

Libby Levison (Harvard Board of Health) asked via the chat if they were able to install all the wells they wanted to install. Andy replied that they got permission to install the wells in the public rights-of-way in Harvard. However, there were a few locations on private property where the Army could not obtain access from the property owner. Alix asked if they were able to compensate for the wells they could not install. Andy replied that, for some areas on the opposite side of Cold Spring Brook, there is no public access. Julie asked if the property owners objected to the installation of wells on their land or they objected to the Army crossing their property to install a well somewhere else. Andy replied that the Army requested access to those properties, but the requests were not granted. There were not any locations where they would have need to cross private property to put a well on public property. Libby asked how long the monitoring wells will remain in place. Andy replied that the wells will remain in place until a remedy is established for the site.

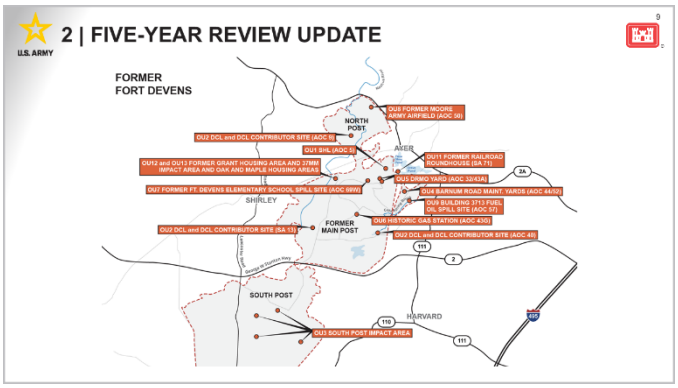
Chris asked if the data are not sufficient to give the full extent of contamination, what the next phase would be and how it would work. Andy replied that if there are gaps in the data, there will be another phase of investigation, which will be coordinated between MassDEP, USEPA, and the Army. Typically, the extent is determined based on screening levels, but for PFAS the levels keep changing. Four years ago, the level was 70 parts per trillion; now, it is 4 ppt. So, the boundary of the extent is changing based on those changing numbers.

Andy continued the discussion with an update on the Area 3 Phase 2 PFAS RI. Area 3 is MAAF and the areas adjacent to it, including the area near the Devens water treatment plant and the Nashua River. The work plan for that area will look similar to the work plan for Area 1, with some differences based on things learned in Area 1. The work plan will be submitted to the agencies this month for review. Once the review process is complete, fieldwork for Area 3 will begin later this year. Following that, a work plan will be produced for Area 2.

Chris asked where Area 2 is located. Andy explained the boundaries of Area 2 are roughly Devens' fire department, SHL, the areas near SHL, and the charter school all the way down to Route 2A and across to the McPherson water supply well. Chris asked if there are PFAS impacts in Area 3 and if there are plans to investigate it. Andy replied that there are PFAS impacts in Area 3, and the work plan for that area is the one being submitted this month. The Area 2 work plan will follow later this year or early next year.



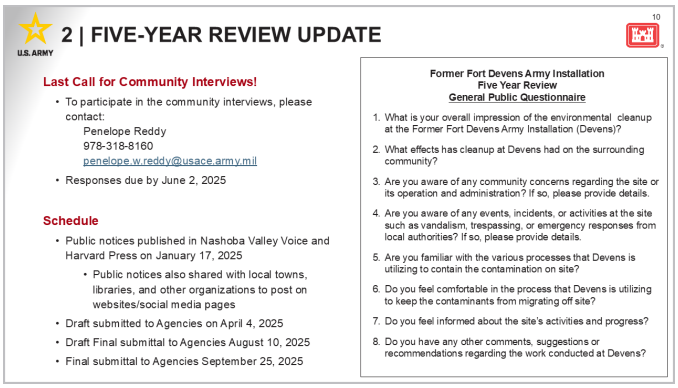
Andy Vitolins discussed the status of the five-year review. For all USEPA remedies, there is a review every 5 years while contamination remains to assess whether the remedy is still protective of human health and the environment. This process evaluates the protectiveness of the remedy based on current conditions, including any changes to cleanup levels, receptors, or assumptions made in the original decision. The five-year review is prepared by the lead agency (in this case the Army), and it is reviewed by the regulators. The components include community involvement and notification, document reviews, new data evaluations, site inspections to evaluate conditions, interviews, and ultimately a determination for each site regarding the protectiveness of its remedy. This is the sixth five-year review for the Devens sites. The first one was conducted in 2000. The review will look at the RODs for 12 operable units at Devens. Even though there is no remedy in place yet for PFAS, a new requirement is to include the status of the PFAS investigations in the review as well.



Andy Vitolins explained the map of all the sites at Devens included in the five-year review. Most of the sites are familiar to the RAB, but some sites, like Devens Consolidation Landfill, are not discussed often at the RAB meetings because their remedies are essentially complete. However, these are still monitored and included in the review. South Post is also part of this five-year review, even though it is considered a separate site from the Main Post and North Post.

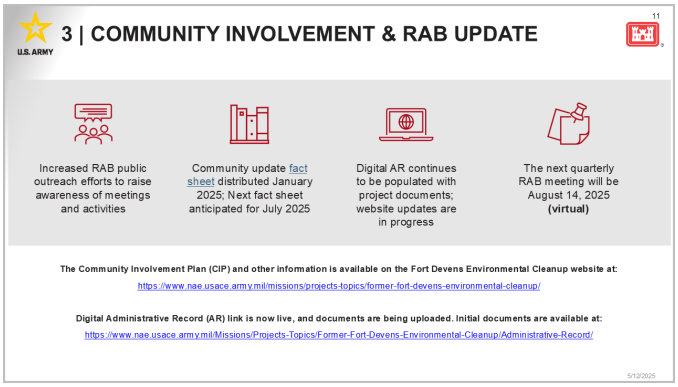
Alix Turner asked where the South Post is discussed. Andy replied that South Post has its own monitoring programs, which are conducted by the Army. Penny Reddy added that they have annual reports for South Post that are published separately.

Chris Mitchell asked if South Post part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, or if it is excluded because it is an active post. Andy replied that it is outside of the BRAC process, but it is still part of the CERCLA process.



Andy Vitolins discussed the community interviews for the five-year review. The Army is actively seeking input from the public, and public notices have been issued via websites, social media, town notifications, and other channels. The five-year review has to be signed and completed by the end of the federal fiscal year. The draft report has already been submitted to the agencies with the interviews that have been done to date, but there is still time for additional input. If anyone would like to participate, there is a form to fill out, which includes basic questions about observations and concerns regarding the remedies. The last date for additional input is June 2. He noted that a lot of people here have already contributed, but if others want to contribute, they can fill out the form or contact Penny to schedule a conversation.

Julie Corenzwit commented that the questions are open-ended, and she is not sure how to answer them. Andy agreed and added that some responses have come in from people that have not been involved in the RAB and that it is good to see their perspective too.



Mark Pasquarello discussed the community involvement and RAB updates. He noted that, at the November open house, they advertised the RAB, and there was some interest from a few people about joining. He reminded attendees that this opportunity is always available for anyone who wants to get more involved. Everyone is welcome at the quarterly RAB meetings, but becoming a member allows people to get a more in-depth analysis and to provide input on what is covered in the meetings.

He noted that there are printed copies of the latest fact sheet available. The link to presentation slides, which has a link to the fact sheet in it, will be sent out. The link to the fact sheet was also distributed via email. The fact sheet is posted at the local town libraries as well. The topic for the next fact sheet topic is being discussed, but it is anticipated to be released in July.

The document upload process for the administrative record is ongoing. The most recent document was uploaded to the website this week, and the notification was sent out on Tuesday or Wednesday.

The next quarterly meeting will be virtual only, and will be held on August 14, which is the second Thursday of the month.

Shawn Lowry mentioned the PACE technical assistance grant. He had talked to one of the grant managers who reminded him that PACE needs to put in the paperwork for continuing that work. Julie Corenzwit replied that she was going to call him but has not yet. Jacob Solon commented that they [PACE] have a meeting at the end of May, so they can discuss that.

All questions were addressed during the presentation.

Mark Pasquarello reminded everyone that the next RAB meeting will be on August 14.

Question	Answer
N/A	N/A

RAB MEETING INVITE

Former Fort Devens Army Installation Notification

Please join us for the next Former Fort Devens RAB Meeting, Thursday, May 8, 2025, at 6:30 p.m.

Our next RAB meeting will be held in-person and via Microsoft Teams. The meeting will be held at the Mass Development Offices in the Vicksburg Conference Room at 33 Andrews Pkwy, Devens, MA 01434 or you may join by clicking this link:

Click here to join the meeting

Or you can call in to hear the audio only:
+1 213-379-9608
Phone Conference ID:
935 760 625#

We hope you will join us to actively discuss the following topics and share your ideas:

- Welcome to Existing Members and New Participants!
- Project Updates & Upcoming Work
- Five-Year Review Update
- Community Involvement & RAB Board Updates
- Questions & Answers
- Next Steps & Meeting

Bring your thoughts about the RAB and questions about the project. This meeting will be recorded and a meeting summary will be posted on the project website at: https://www.nae.usace.army.mil/missions/projects-topics/former-fort-devens-environmental-cleanup/

If you have any questions, please send an email to:
FormerFortDevensRAB@arcadis.com