



U.S. AIR FORCE

**Former Pease Air Force Base (Pease)
Restoration Advisory Board (RAB) Meeting
Thursday December 5, 2019 – 5:00 p.m.**

New Hampshire Department of Environmental Services Building
222 International Drive, Suite 175, Portsmouth, New Hampshire

Meeting Minutes

RAB members present: Andrea Amico (community member), Susan Chamberlin (community member), Ted Connors (community member), Mike Daly (appointed member: USEPA), Brian Goetz (appointed member: City of Portsmouth), Dennis Malloy (community member), Mark Mattson (community member), Kim McNamara (community member), Jameson Paine (community member), Lulu Pickering (community member), Col. John Pogorek (appointed member: ANG), Peter Sandin (appointed member: NHDES), Gene Schrager (community member), Maria Stowell (appointed member: Pease Redevelopment Authority), Roger Walton (appointed member: Air Force Civil Engineer Center, DoD Chair)

Meeting support staff present: Ona Ferguson (Consensus Building Institute, RAB Facilitator), Linda Geissing (AFCEC, Public Affairs), Dante Gulle (AFCEC, Public Affairs Support), Rob Singer (Wood), Lauren Tierney (Wood)

Others present: Karen Anderson (community), James Belanger (community), Patrick Carroll (Rep. Pappas' office), Richard Caravati (community), Peter Clark (Senator Shaheen's office), Russell Cooke (community), Mike Donahue (community), Kelsey D. (EPA), Nancy Ester (community), Loretta Fernandez (community), Chris Higgins (Colorado School of Mines), Kerry Holmes (Senator Hasan's office), Hayley Jones (Toxics Action Center), Shaina Kasper (Toxics Action Center), Margaret McCarthy (Weston & Sampson), Jeff McMenemy (Seacoastonline.com Reporter), Robin Mongeon (NHDES), Glenn Normandeau (New Hampshire Fish and Game), Al Pratt (City of Portsmouth), Sam Quattrini (NHDES), Mike Quinlan (APTIM), Peter Somssich (NH State Representative – Portsmouth Ward 3)

Next Meeting: March 18, 2020 at New Hampshire Department of Environmental Services Building

5:00 Welcome, Introductions, RAB Business – Ona Ferguson (Consensus Building Institute)

- Ona Ferguson welcomes all attendees, reviews the agenda for the evening, and reviews the public comment cards and process.
- Ona Ferguson approves the summary from the September 2019 RAB Meeting.
- All attendees introduce themselves.
- This meeting was recorded by the City of Portsmouth and is available on their YouTube Channel:
<https://www.youtube.com/watch?v=XDvWQgVrQNI>
<https://www.youtube.com/watch?v=go9gmFTAgds>

- Ona Ferguson reviews that application process for 2020 RAB Member appointments and RAB member renewals

5:10 Air Force Clean Up Update – Roger Walton (Air Force)

- Roger Walton (AFCEC) welcomes all attendees and provides an update since the last RAB meeting in September 2019.
- Roger Walton informs the RAB that the Department of Defense (DoD) is continuing their review of the NH Ambient Groundwater Quality Standards (AGQS). The DoD and General Counsel are tasked with reviewing State laws and determining how they will apply to DoD. The DoD is evaluating other proposed state regulations that will apply to all military services in order to be consistent across states and branches. At this time the Air Force is proceeding with the EPA lifetime Health Advisory (HA) of 70 ppt as the basis for any actions.
 - Jamie Paine inquires about the City of Portsmouth treatment plants and any added cost that would be associated with meeting lower NH regulations. Brian Goetz responds that the public water system will comply with the NH regulations and that the treatment systems is currently testing at non-detect.
 - Lulu Pickering asks what that will mean for Newington residents that have concentrations over the NH AGQS but below the EPA lifetime HA. Roger Walton responds that the Air Force is only authorized by DoD to respond to values over the EPA lifetime HA. Peter Sandin states that when the NH AGQS became effective on 1 October 2019, the DES reached out to 5 residents to let them know they were above the new AGQS.
- Roger Walton presents the CERCLA overview and explains how the Expanded Site Inspection (ESI) fits into the process. Roger Walton describes how the CERCLA process is not always linear and often requires stepping in and out of the process. The predominance of the other Sites and programs at Pease have moved into the last CERCLA category of Long Term Management (LTM).
- Roger Walton updates the RAB on the status of the ESI document. The report was posted to OneStop the Friday before Thanksgiving and the report is still a draft undergoing regulatory review. Regulator comments are due in mid-December, after which the report will be finalized and made public. Finalizing the ESI document is required before the Remedial Investigation (RI) process can start. There are 3 possible outcomes to the ESI document – 1. Close the Site (No further action); 2. Need for Immediate Action (at Pease this was the Administrative Order, an example of how we stepped out of the linear CERCLA process); and Need for Remedial Investigation (moving onto the next phase, this applies to Pease).
 - Kim McNamara asks about the RAB/community member input on the level of restoration/solutions and planning. Roger Walton replies that this happens during the Remedial Investigation/Feasibility Study (RI/FS) phase. There hasn't been an RI/FS at Pease in many years, so it predates this RAB. Mike Daly weighs in on the importance of including the community along the way prior to the RI/FS.
 - Jamie Paine asks if the current scope will only be looking at PFOS and PFOA and what would happen if additional compounds of concern become recognized. Roger Walton replies that there are steps along the way that would fold that in without having to start the CERCLA process all over again.
 - Mike Daly lets the RAB know of a recent EPA press release indicating the EPA will begin looking at the toxicology of 5 additional PFAS compounds.

- Roger Walton reviews the interconnected RI/FS process and discusses the diagram flow chart in the CERCLA manual with a focus on the scoping component.
 - Lulu Pickering initiates a discussion on the timeframe of different CERCLA steps and asks how long it will be until action is taken. Roger Walton responds that action has been taken in the form of two treatment plants, providing source area treatment that is helping to recharge the contaminated areas with treated water. The RI is to determine what more needs to be done and that one can't put a timeframe on it. Mike Daly mentions that environmental cleanup at Pease began in the 1980s, and 40 years later other sites have made considerable progress. However, it is unknown how long the PFAS cleanup will take given the unknowns about how PFAS behave in the environment and how they can be cleaned up. But the treatment plants have been an aggressive starting point.
- Roger Walton reviews the 4 main scoping processes in a general, non-Pease specific format. These include 1. Analyze existing data, 2. Identify likely responses, 3. Initial ARARs (applicable or relevant and appropriate requirements), and 4. Data quality objectives.
- Roger Walton reviews the creation of conceptual site models (CSM) and how they aid investigations and help develop data needs.
- Roger Walton reviews the RI Work Plan that is used to document the decisions made during scoping.
 - Lulu Pickering asks if the entire work plan has to be agreed upon and finalized prior to any action being taken. Roger Walton replies that much of the PFAS work that has been done to date at Pease was put together into smaller work plans containing focused actions that were able to be prioritized and expedited.
 - Lulu said that feedback from the RAB is that DOD's position is *totally unacceptable* because they put a whole group of people in the lurch. People have been notified there might be a hazard, and the state believes it's real, and the Air Force is the responsible party and they're doing nothing.
- Roger Walton updates the RAB on the 5-Year Review which was approved by the EPA and finalized; for which a link was provided in the November Newsletter. The Air Force has a statutory requirement to conduct a 5-Year Review whenever a remedy includes use limitations on an area. The 5-year review confirms that the site hasn't been put into a use that conflicts with the remedy and confirms that the remedy is still protective. Zones 1, 2, 3, 4, 5, and 7 were reviewed. It was found that the CERCLA remedies at present are currently protective of human health and the environment. Some specific findings:
 - Lulu Pickering initiates a discussion on the differences between "protective of human health" and "restoration." Roger Walton replies that protective doesn't necessarily mean clean and uses Landfill 5 as an example of a Site that is still contaminated, but the contaminants aren't migrating or being consumed, so human health is protected. Cutting off a pathway is being protective but there is still a requirement to clean sites up. Mike Daly agrees and adds that all sites are expected to be cleaned up. Mike Daly provides some examples of successful clean ups at various different sites at Pease, but reminds the RAB that there are still a lot of unknowns associated with PFAS that make it difficult to understand what to expect. Lulu Pickering and Ted Connors express their frustration over the slow cleanup timelines and are looking for further action.

6:15 New Hampshire Fish and Game Update – Glenn Normandeau (NH F&G)

- Glenn Normandeau, executive director of the New Hampshire Fish and Game Department, provides the RAB with a summary of the PFAS deer testing that was conducted at the Great Bay Wildlife Refuge. Deer hunting takes place each year at the Refuge. This past hunting season there was a request from the Town of Newington and several individuals to conduct PFAS testing on venison. The NH F&G collected liver and tissue samples from 15 deer that were killed on the Refuge by hunters. Samples were sent to University of Connecticut for PFAS analysis and they expect to receive the results within the next couple of weeks. Glenn Normandeau expressed to the RAB that without standards to compare the results to, there won't be a way to interpret what results mean and he isn't sure what value will be placed on the results. However, results will be made public once they are received.
- Glenn Normandeau informed the RAB that the NH F&G does not make determinations as to what is or isn't safe for human consumption. NH F&G mission is to promote wildlife and will act as an agent to collect samples but does not have the expertise or responsibility to interpret or make decisions based on the results.
 - Jamie Paine asked whether or not there are any background PFAS venison samples that have been collected or could be collected in other parts of New Hampshire to be used as a comparison. Glenn Normandeau replied that the only other samples NH F&G has been asked to collect are fish samples for mercury analysis, but they are capable and willing to help out the NHDES or other agencies with future sampling.
 - Mark Mattson asked if any PFAS testing had been conducted at oyster growing facilities. Glenn Normandeau replied that oyster growing facilities are regulated by Health and Human Services. NH F&G licenses aquaculture sites but doesn't test the shellfish. If testing is done is generally relates to bacteria and viruses.
 - Gene Schragger asked about sampling deer from other parts of the state for comparison. Glenn Normandeau replies that the NH F&G could do that, but to sample in a widespread manor could become expensive. The 15 deer that were killed by hunters on the Wildlife Refuge and sampled cost NH F&G \$20,000. There is a significant cost to have staff out collecting the samples and to have the lab analyze them.
 - Glenn Normandeau informs the RAB that it would be up to NHDES and Health and Human Services to dictate when there should be signage posted. Consumption numbers are entirely different from drinking water numbers and they haven't been assigned for most compounds yet. There's no handbook for the public to use to interpret the PFAS results.
 - Lulu Pickering commended NH DES and NH Fish & Game for taking this issue seriously when DoD refused to do so. She asks if non-definitive, informative signage can be posted on her property for hunters to use their own judgement.
 - Andrea Amico asks how the results of the deer testing will be communicated to the public. Glenn Normandeau doesn't know the specifics yet, but they will talk to NHDES about how to make them public. Jamie Paine asks Peter Sandin to circulate the results to the RAB when they become available.
 - Andrea Amico asks Glenn Normandeau if he is familiar with the "do not eat" deer advisory issued in Michigan after PFAS venison testing was performed. Glenn

Normandeau replied that he had heard that out of 200 deer that were tested, all samples were below detection limits except for one sample that tested “off the charts”. Glenn Normandeau said he did not know their quality assurance process and wasn’t in a position to judge. However NH F&G did coordinate with Michigan prior to sampling to get information on where to send tissue samples for analysis. He is unaware of any other wildlife PFAS testing.

6:35 Open RAB Discussion Time

- Kim McNamara asks Roger Walton if, throughout history at Pease, contaminated media has been treated onsite to destruction or if it has been consolidated and shipped offsite. Roger Walton replies that many of the historical treatment systems that have been implemented have involved using granular activated carbon (GAC) remedies which consolidate contaminants. These contaminants ultimately get destroyed when the GAC is thermally regenerated offsite and recycled for future treatment system use. Mike Daly adds that, with the support of the community, most contaminated soils were historically consolidated onsite, however some contaminated media has been shipped offsite. McNamara asks if the RAB can get a commitment that in the future contaminated media will be destroyed and not just consolidate or moved offsite. Roger Walton replies that the Air Force cannot make that commitment prior to going through the RI scoping process.
- Kim McNamara asks Roger Walton about Senate Bill 257 signed by the NH Governor stating that in NH fire-fighting foam can’t be sold after a certain date, but there are some exceptions which might include the Air Force. Roger Walton responds that he is not familiar with the operational Air Force side, and most of the operational Air Force at Pease is at the National Guard, which the BRAC division is not involved with. Col. John Pogorek informs the RAB that military departments are switching out fire-fighting foams with foams that do not contain PFOS or PFOA that will be available for emergency fire-fighting response.
- Mark Mattson requests that the data from the shellfish recollection be made available in excel format. Roger Walton confirmed the data could be delivered in an excel file.
- Jamie Paine expressed that he believes the lowest available standards, the NH standards, should be met for cleanup sites where the NH DES is involved in managing a site.
- Lulu Pickering asked Mike Daly if PFAS has been observed leaching out of any of the landfills. Mike Daly and Peter Sandin reply that the Air Force has collected groundwater samples from monitoring wells surrounding Pease landfills and these areas will be further evaluated during the RI scoping process. Mike Daly points out that, at Landfill 5, quite a bit of effort was put into designing the landfill to put the material *above* the water table and the Air Force made a point of digging up large portions of the landfill and reconfiguring it prior to capping the landfill. Landfills 2 and 4 were part of this consolidation effort and all post closure data has shown a remarkable improvement in groundwater and there should be minimal impact due to the material being above the water table.
- Andrea Amico asked about what sites were reviewed as part of the 5-Year Review. Roger Walton replied that the Executive Summary includes a table. There are 83 sites in total, some were petroleum sites only and are therefore not covered under CERCLA. There are approximately 46 CERCLA sites around Pease, some have been closed completely.
- Andrea Amico asked Mike Daly if there are any updates when the EPA would have toxicity information on more compounds. Mike Daly replied that the EPA recently issued a press release presenting the

process for the evaluation of 5 additional PFAS compounds as part of the PFAS Action Plan. Mike Daly doesn't know the timeline for the toxicity information on these 5 compounds.

- Jamie Paine asks if more locations are being added to the approximately 46 CERCLA sites. Roger Walton responds that there is a process to adding sites but that it doesn't occur during the 5-Year Review process. Site 8 is now a PFOS/PFOA site, but also historical contaminants too. They are looking into adding another PFOS/PFOA site that included everything around the airfield that became the AIMS and included the studies performed in the Southern Well Field. This was loosely defined but met the definitions of the program for a "Site" definition and therefore enabled the funding for work to be performed.

6:50 Break

7:00 Community Co-Chair Discussion

- Ona Ferguson reviews the open RAB Co-Chair position. It is a 1-year term where the Co-Chair acts as the liaison between the community members and the Air Force. The Co-chairs jointly develop the meeting agendas. Ona Ferguson asks if there are any RAB members interested in the position. Andrea Amico is interested, and the RAB members vote in favor of her becoming the next Co-Chair.

7:10 Portsmouth Water District Update - Brian Goetz (City of Portsmouth)

- Brian Goetz reviews the Grafton Road Water Treatment System, designed to treat 12,000 gallons per minute from the Harrison, Smith, and Haven wells. Brian Goetz shows photos of the ongoing construction. The system is scheduled to treat groundwater with a combination of resin and carbon starting in Spring 2021 and the Haven well is anticipated to start up a little while later.
- The City of Portsmouth is proposing additional piloting of the Haven well by using the IMW well in the AIMS treatment building. The additional pilot testing will help to determine when to expect breakthrough in the resin and define the operating parameters for when to perform resin changeouts.
- Dennis Malloy asks why, if after being off for a total of 7 years come Spring 2021, the City would turn the Haven well back on at all. Brian Goetz replies that since the Haven well has been shut off, the City has been borrowing water from the Portsmouth system to supply the Pease system, but they need the extra water provided by the Haven well for long-term supply. The City has had a hard time meeting the water demand, specifically in the 2016 drought. Today, the City supplies approximately 400,000 gallons of water per day, but in the summer, the demand is for over 1 million gallons of water a day and they are not able to produce that with the Smith and Harrison wells alone.
- Jamie Paine asks if the City has considered looking in Greenland to install new wells. Brian Goetz says that a well in the Greenland system was replaced 2 years ago but they are not looking to install any new wells there. The City is looking at replacing the Collins well due to mechanical inefficiencies.
- Lulu Pickering asks what would be involved in taking Newington residents off the Pease system and putting them onto the Madbury system. Brian Goetz replies that both the Pease system water meets all drinking water standards and that the Town of Newington didn't have enough

pressure for the sprinkler system in the library to remain on the Madbury line. He also said that putting Newington residents on the Madbury water system was as simple as turning a valve.

7:20 Public Comment

- James Belanger of Newington asks why, when deciding between the State and Federal PFAS standards, the Air Force wouldn't go with the cleanest option. Roger Walton replied that the decision is out of his hands and that they are waiting for direction from the DoD.
- James Belanger asks what would happen if there was an earthquake in Newington, how would it change the contaminant pathways, and how would the Air Force change their approach. Roger Walton agrees to follow up about that specific question after the meeting.
- James Belanger asks about ways to warn potential homebuyers and developers in Newington that properties may be within areas of concern. Roger Walton replies that he cannot make a recommendation to the Newington Planning Board and that the Air Force doesn't get involved with town zoning but will follow up with Jamie Belanger after the meeting.
- A general discussion begins related to realtors, sellers, and property disclosure processes.

7:20 Open RAB Comment

- Lulu Pickering inquired about a specific compound detected in the spring water on her property as an agenda topic.
- Andrea Amico relayed her disappointment that the Air Force hasn't had any action for the 5 Newington residents whose private wells are above the proposed NH standards. Peter Sandin informed her that the NHDES notified those homeowners about the updated standards but are not in a position to take interim actions and was directed that the NHDES would not be providing any bottled water in this instance.
- Andrea Amico asked if there is anything in place that would require municipalities to inform future property buyers of potential contaminants. Peter Sandin is not aware of any, but a groundwater management zone (GMZ) is designed to protect this and would be attached to a property's deed, which would be found during the title search while trying to buy property. Kim McNamara informed the RAB that the public can look at local environmental files in the town records.
- Jamie Paine asked if the RAB could make a formal recommendation to provide bottled water to the 5 Newington homes above State standards.
- Roger Walton handed out DVDs containing monitoring well locations associated with the Site 8 IMS and the AIMS treatment systems, as well as all monitoring wells throughout Pease. This was an action item from last RAB meeting in September. Lulu Pickering asked what the plan was to decommission old wells. Roger Walton replied that there was no current plan for decommissioning. Andrea Amico asked if there was a way for this information to be shared online. Lulu Pickering asked if that could be made an action item. Roger Walton replied that the Air Force cannot put data on web-based sharing systems.
- Ona Ferguson reviewed the action items and common themes from the meeting and reminded the RAB and present community members that RAB membership is open for 2020. Dates will be set for 2020 quarterly meetings.