



U.S. AIR FORCE

**Former Pease Air Force Base (Pease)
Virtual Pease Restoration Advisory Board (RAB) Meeting**

Wednesday December 2, 2020 – 4:00 p.m.

Via webinar only, no in-person meeting

Meeting Minutes

RAB members present: Andrea Amico (community member and co-chair), James Belanger (community member), Matt Casey (ANG standing in for Col. Pogorek), Susan Chamberlin (community member), Ted Connors (community member), Mike Daly (appointed member: USEPA), Mike Donahue (community member), Brian Goetz (appointed member: City of Portsmouth), Dennis Malloy (community member), Mark Mattson (community member), Kim McNamara (appointed member: City of Portsmouth), Mindi Messmer (community member), Peggy Lamson (community member), Russell Osgood (Portsmouth Fire Department), Jamie Paine (community member), Lulu Pickering (community member), Peter Sandin (appointed member: NHDES), Maria Stowell (appointed member: Pease Development Authority), Roger Walton (appointed member: AFCEC, DoD Chair)

Meeting support staff present: Ona Ferguson (Consensus Building Institute – RAB Facilitator), Maggie Osthues (Consensus Building Institute Support), Linda Geissinger (AFCEC Public Affairs), Dante Gulle (AGEISS), Rob Singer (Wood), Lauren Tierney (Wood), Haley Plante (Wood), Amy Quintin (Wood)

Others present: Doris Brock (community member), Scott Calkin, Peter Clark (Sen. Shaheen's office), Tige Cunningham, Val de la Fuente, Kelsey Dumville, Frank Getchell, Tim Green, Catherine Guido, Joan Hamblet, Karen Johnson, Debra MacDonald, Margaret McCarthy, Jeff McMenemy (Seacoastonline.com), Robin Mongeon, Colin Pio, Sam Quattrini, Sofia Soto Reyes, Annie Ropeik, Mikayla Rumph, Brandon Shaw, Stephen TerMaath, Justin Troiano, Sharon Vriesenga

Next meeting: March 10, 2021 – 4:00 – 6:00 p.m. via webinar, no in-person meeting.

Meeting Materials: Pease RAB meeting presentation slides are available at:

<https://www.afcec.af.mil/Home/BRAC/Pease-Archives/>

Video: The virtual meeting was recorded and posted to the City of Portsmouth YouTube page and can be found

at: <https://www.youtube.com/watch?v=cTCTUSw0TE8&feature=youtu.be>

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

- Reviewed virtual meeting technology
- Agenda reviewed
- RAB members introduced
- Summary from August 2020 RAB meeting approved
- RAB membership positions reviewed. RAB members serve 2-year terms. Ted Connors and Jamie Paine have decided to continue, Susan Chamberlin is still deciding. If Susan Chamberlin steps down there will be an available seat for people to apply. If she does not step down the next opportunity is for new members to apply is in December 2021 when the remaining members' terms expire.

Update on Private Wells and Drinking Water – Roger Walton (Air Force)

- Updates on process and status of providing drinking water to Newington residents using private wells – *Roger Walton and Peter Sandin (NH DES)*.
- Roger Walton began this discussion by reviewing the questions that he received after the last RAB meeting in August 2020 on how the Air Force keeps tabs on private wells in the area.
- Haley Plante from Wood E&IS provided the information that was relayed to the RAB by Roger.
 - The initial well inventory was performed in 2014 and has been refreshed at least annually since then. 105 wells have been identified in total. An inventory form was issued to each property owner. 42 wells were identified as drinking water wells. All 42 drinking water wells have been sampled for PFAS at least once. Three of these drinking water wells are no longer in use. Therefore 39 drinking water wells are in the current monitoring program. Between 2014 and 2016, 11 non-drinking water wells were sampled but were discontinued from the program when they were confirmed to be non-drinking water wells.
 - Unanswered inventory forms have been sent to four “unknown” properties in 2015, 2017, and 2020.
- Haley Plante described the annual review process. The private well inventory is updated throughout the year when new information is received and confirmed, but the annual review happens during annual reporting in December. The following are examples of refresh activities:
 - Review of the Department of Environmental Services well database for newly drilled wells,
 - Review of Portsmouth Water District public water accounts,
 - Review of Newington and Greenland Assessor’s databases for properties that have a non-drinking water well that went through a property owner change to see if the well may have changed use,
 - Review of code enforcement records for newly-built residences that may have installed a well, and
 - Evaluation of the process to make sure it is thorough and assess possible improvements.
- Of the 39 wells in the monitoring program, 8 are sampled quarterly and the rest (31) are sampled annually. Each new well that is added to the program is sampled quarterly for 8 rounds. The 31 wells sampled annually were initially sampled quarterly for 2 years and all have PFAS at low or Non-Detect levels.
- Questions regarding the Private Well Inventory and Sampling:
 - Peggy Lamson asked how many residents were reached out to. Roger Walton clarified that the well inventory is different from the surveys that were recently sent out this week. Haley’s presentation was reviewing the drinking water program.
 - Mindi Messmer asked what the compound list was for analysis. Haley Plante replied that the wells are analyzed for the 19 Pease-specific compound list using the low-level detection method. Mindi Messmer asked if the compound list was ever bigger and stepped down. Roger Walton created an action item to provide the compound list of initial sampling in 2014.
 - Andrea Amico asked if there are any property owners that are not allowing their drinking water wells to be sampled. Haley Plante replied that there have been no refusals; all confirmed drinking water wells have been sampled. There are four properties where we have not received a response to any of our surveys. Initial efforts in 2014 included door-to-door investigations. Roger Walton clarified that these four properties could be empty lots and don’t necessarily have houses on them. Andrea Amico asked if those four properties were in areas of known high PFAS contamination. She also asked if the Air Force could reach out to the Town for help getting in touch with these four property owners. Roger Walton replied that the Air Force would review the ownership information and explore further means of contact. Andrea Amico asked how the property owners were informed on the PFAS concentrations in their wells. Roger Walton replied that they are sent cover letters containing the Air Force PFAS fact sheets and Roger’s contact information for further questions, along with tables including the data. At this point they are form letters. Most property owners have been receiving them for several years.

- Michael Donahue asked if Roger could confirm what parts of Newington are part of the inventory. Roger Walton confirmed that although the Air Force began in 2014 with a 1-mile radius from the previous base boundary, over the years during annual refreshes the inventory has moved beyond the 1-mile radius and now include the whole town of Newington.
- Mindi Messmer asked if the form letters sent to property owners include the new New Hampshire Ambient Groundwater Quality Standards (NH AGQS). Roger Walton replied that this question would transition into Peter Sandin's presentation.
- Peter Sandin reviewed the timeline of the NH AGQS. The original effective date of the new NH AGQS was 9/30/2019. Peter Sandin reviewed the difference between AGQSs and Maximum Contaminant Levels (MCLs). MCLs are legal limits defining the maximum allowable concentrations of a substance in supplied drinking water. AGQS are maximum levels for regulated contaminants in groundwater which result from human operations or activities. MCLs apply to public water suppliers and represent the level below which drinking water is deemed safe to for human consumption as administered by the Safe Drinking Water Act and State Drinking Water Program. AGQS do not apply to drinking water, but are cleanup standards under the State's Waste Management Division.
- On 10/4/2019 the DES notified five residences in Newington that their private drinking water wells had at one time exceeded the AGQS for PFAS.
- On 7/23/2020 the AGQSs for PFOS, PFOA, PFNA, and PFHxS were signed into law. The DES has provided bottled water to three properties with confirmed current exceedances and is in the process of reaching out to those three residents individually to discuss connecting them to public water.

Open Discussion – RAB members

- Andrea Amico asked the Air Force to continue to provide frequent communication with the RAB between meetings. Andrea also informed the RAB that on a visit to Adam's Point she observed foam in the river and asked if the Air Force can be aware of surface water foaming in the future and consider it as a media for testing.
- Jamie Paine followed up with Mike Daly on his email from the day before about regulatory groups reviewing what is enforceable in the Remedial Investigation (RI). Mike Daly responded that in the DERP/CERCLA process, Applicable, or Relevant and Appropriate Requirements (ARARs) are reviewed in the early stages. When a cleanup is initiated, it needs to abide by the ARARs, so they're considered from the beginning. We will be looking at AGQS as we are beginning the RI scoping. Given the evolving nature of contaminants, and that we are constantly reacting to new info, during this investigation we will have to adjust as more info is available. Jamie Paine responded that he is looking for a consistent approach that everyone can understand. Jamie Paine also asked to receive monthly updates from the Air Force again so that, as an advisory group, the RAB can provide feedback on ongoing activities not after the fact. Mike Daly responded saying anyone can call him if they have questions that arise between RAB meetings. Ona Ferguson will be sending around the RAB contact list again as a reminder.
- Mindi Messmer said that people are already drinking the water and have for decades. The EPA has regulated two compounds, New Hampshire has regulated four compounds, but Wisconsin has regulated 18 compounds. Mindi Messmer is glad that there is a community input phase of this RI process, but wanted to be involved with the ARAR evaluation process and is interested in expanding the compound testing list.
- Mindi Messmer asked if an evaluation of the chemicals in the historical foams has been performed and if there will be an investigation into the source areas that have caused the contamination. She also asked if the RI would include more groundwater investigation in addition to drinking water investigation. Roger Walton responded that some research has been done. ATSDR through historical reconstruction work has attempted the effort to determine what was in the foam, but given the proprietary nature, we can't know exactly what was in the various foams. In terms of groundwater investigation in the RI, the Air Force did recognize that AGQS are ARARs and will be including the four AGQS in the RI. The laboratory will report concentrations below those standards. Mindi Messmer asked

what list of compounds would be used in the RI. Roger Walton responded that at this point we are using the Pease list.

- Mark Mattson presented his analysis of the 2018 and 2019 surface water, sediment, and shellfish data collected as part of the Expanded Site Inspection (ESI). All media were originally collected in November 2018 but after discovering issues with the laboratory analysis of the shellfish tissue data, the shellfish tissue was re-collected in August 2019. This doesn't allow for a direct temporal comparison between the three different media, however Mark Mattson went ahead and correlated the data anyway. As shellfish live a fairly long time, they are considered chronic assays to exposure to the environment. Mark Mattson commented that the study was designed well with several locations and controls. He looked for a correlation between shellfish tissue, surface water, and sediment. He found that soft shelled clams and blue mussels had a reasonably good correlation with surface water using a simple linear relationship. American oysters did not match well with surface water but somewhat correlated with sediment. Mark invited members of the RAB to reach out to him with questions or for further explanations of his analyses.

Air Force Cleanup Update and Community Input into Remedial Investigation Scoping – Roger Walton

- Roger Walton provided an Air Force project update.
- The Relative Risk Site Evaluation (RRSE) was released in August 2020 for public comment. No public comment was received, and the comment period ended on 24 October 2020. The RAB was provided notice of the public comment period with a link to the document. The document will remain as is on the Administrative Record.
- Roger Walton provided an update on the status of Non-PFAS cleanup sites:
 - The contract with Aptim ended and a new contract with Environmental Chemical Corporation (ECC) began. ECC hit the ground running by picking up the operation of the Site 39 soil vapor extraction (SVE) with no break in service. ECC has also been conducting performance monitoring at Site 39, Site 13 (bulk fuels storage area), Site 32 (building 113), Site 49 (former building 22).
- Roger Walton provided a review of the PFAS treatment plants:
 - Site 8 – Wood has been improving the iron removal process, adjusting the wells, turning more wells on, increasing flow rates, and has treated approximately 36 million gallons as of 18 November 2020.
 - AIMS – The plant is operating at approximately 500 gpm and has treated over 328 million gallons as of 18 November 2020.
 - Andrea Amico asked how long these treatment plants will run. Roger Walton replied that it's difficult to know because we're starting from an unknown point and don't know how much contamination is out there. Influent concentrations are still high. As part of the RI we will look to see if there is something else still feeding the groundwater contamination. Roger Walton speculated that the plants will be operated for decades.
 - Jamie Belanger asked how much PFAS has been removed. Roger Walton replied that he doesn't have mass loading in front of him and will create an action item to include in the next update. Jamie Belanger asked if the removal rate is increasing or decreasing and if that would help estimate run time. Rob Singer of Wood replied that the rate of removal has stayed pretty constant on both plants and posted the mass removals in the chat window of the meeting.
 - Mindi Messmer asked if influent concentrations are increasing. Rob Singer replied that concentrations are relatively stable at both plants. Pumping rates may be increasing but concentrations are not. As pumping rates go up at Site 8, mass removal per day will increase but the concentrations will stay about the same.
 - Mike Donahue asked what the target flow at Site 8 is. Rob Singer replied approximately 100 gpm but that will depend on what the aquifer will produce. That aquifer in the area at Site 8

- is dependent on rainfall. Eventually we will dewater the aquifer and our groundwater model says we should reach equilibrium at approximately 90 gpm.
- Jamie Belanger clarified that the treatment plants were injecting water back into the aquifer and Rob confirmed. Jamie Belanger asked if mass removal will decrease as the aquifer starts to clean up. Rob Singer replied that yes, that would happen, but we aren't there yet.
 - Mike Daly asked what the influent concentrations were. Rob Singer replied that for PFOS+PFOA, at AIMS they are in 2-3 ppb range and at AIMS they are in the 40 ppb range.
 - Roger Walton provided an overview of the Remedial Investigation / Feasibility Study (RI/FS) process.
 - Roger Walton reviewed CERCLA RI/FS process with flow diagrams.
 - Amy Quintin of Wood reviewed the existing data being used in to write the RI Work Plan. Some initial work is being conducted this fall 2020 to help build the RI work plan by refining the conceptual site model (CSM) and groundwater model. These activities are tailored to help us figure out where we should sample during the RI.
 - Identifying springs
 - Assessing groundwater levels
 - Performing PFAS sampling at Site 13
 - Reviewing extraction permits outside of Pease to understand groundwater flow
 - Reviewing storm water system details
 - Performing geophysical logging
 - Performing geochemical sampling at Site 8
 - Amy Quintin described a figure showing the areas where we are sending questionnaires out to the public.
 - This is the second phase of questionnaires that have been sent out. In the initial survey in 2014 the Air Force was looking at drinking water exposure, but now that we have a good handle on that, we are looking for other exposure pathways for the RI including non-potable use of groundwater with particular interest in consumption pathway (ex. irrigating gardens, watering chickens and then consuming eggs, etc.). Two sets of surveys are being sent out to residents in Newington and Greenland.
 - Set A – property with confirmed private wells
 - Set B – properties that we know do not have drinking water wells but we don't know if they might have a non-drinking water well that they might be using for other purposes.
 - As of yesterday, 1 December 2020, over 500 questionnaires with pre-stamped envelopes and online submission links have been mailed.
 - The Air Force would like to hold a technical session open to any RAB members interested in joining. This will not be a RAB meeting but a review of the RI scoping process, a chance to discuss investigating different media and pathways, discuss how we will be making decisions and where we hope to be at the end of the process. Roger Walton said he would prefer to bring everyone into a big room and spread maps out on tables and have a conversation, the meeting will have to be virtual. He is still trying to find a way to hold this meeting virtually and is open to any suggestions. This is the forum to bring issues forward. There will be no promises on what will or won't be sampled, but this will cast a wide net to confirm we're covering all pathways. It will be informal and an opportunity for people to bring questions forward.
 - Amy Quintin provided a preview of the next steps:
 - The information gathered from the questionnaires will be reviewed, we will hold a working/brainstorming session, over the next few months we will be working on the RI work plan, submit it to the EPA and DES for the 45-day review period, and present the results to the RAB, and once the work plan is final, we can begin sampling.
 - The Pease hotline phone number and email to submit information or request information about the RI was noted: phone (978) 614-0329 email: Pease.RI@woodplc.com.

- Andrea Amico asked how this working group will look and feel. Amy Quintin replied that we are still figuring that out but if anyone has particular insight to share. Roger Walton stated that most of the material and information that will be used in the meetings will be taken from the ESI report available on the Administrative Record and OneStop.
- Kim McNamara asked if exposure pathways are important for immediate action or to limit cleanup. Amy Quintin replied that exposure pathways are needed to build the risk assessment. They need to understand what exposures could potentially be a risk and look at them cumulatively, for example groundwater plus dermal exposure plus vegetables to understand the total exposure and therefore the risk.
- Mindi Messmer asked if in developing the CSM more offsite groundwater monitoring wells would be installed/sampled. Roger Walton replied that there are some existing wells and that we are sampling some now to help build the work plan but that will be looked at in the RI WP. We are scoped to install more if needed to evaluate nature and extent of PFAS offsite.
- Lulu Pickering asked questions about the priorities of the RI in 2021. Roger Walton replied that, since the ESI was finalized in spring 2020 and the RI contract was awarded in late July 2020, we haven't moved very far into the RI yet as far as determining priorities. Priority in sequencing hasn't been established yet, and will rely on the information returned in questionnaires and the outcome of community feedback. There are no pre-determined priorities.
- Lulu Pickering expressed her concern that the questionnaires may not be capturing every property owner's situation. Amy Quintin replied that the questionnaires have extra space on that back to describe other conditions or information they may think is pertinent. Additionally, they welcome people to reach out via the hotline or email if they think their information doesn't fit the form. Roger Walton replied that passive water (ponded water) uses and other edits were included in the survey after receiving Lulu Pickering's comments.
- Mike Daly also reminded the RAB members that if people have information that they think doesn't fit the survey there are other avenues of reporting the information – hotline, email, community meeting, RAB member liaisons, etc.
- Mike Donahue asked about the investigation into springs along the western boundary of Pease. Roger Walton clarified that field reconnaissance was done inside the Fish and Wildlife Refuge area and that LiDAR and aerial imagery was used to assess the areas in Newington.
- Brian Goetz provided an update on the construction of the Pease Water Treatment Facility:
 - 3 carbon filters were installed and brought online in April 2020.
 - There has been ongoing periodic sampling through the Granular Activated Carbon vessels since 2016, all results have been non-detect for the four regulated compounds.
 - Resin filters have been installed and are getting piped into the system.
 - Expect to start up the resin filters on the Harrison and Smith wells in spring 2021.
 - There will be additional performance testing of the resins on the Haven well water. Prior to turning on the Haven well to the public drinking water system, it will be sampled for a full suite of all regulated drinking water contaminants, not just PFAS.
 - Expect the Haven well to come back online summer 2021. This has been the 7th summer without the Haven well, and it has been difficult meeting supply during this past drought without it.
 - Additional information and data is posted on the City of Portsmouth website. Brian Goetz is hoping to have some sort of opening ceremony and site tour once it is safe to happen in person and will coordinate with the RAB and Air Force prior to any of that happening.

Public Comments

- No participants signed-up for public comment.

Meeting Recap and Next Steps - Ona Ferguson

- Ona Ferguson reviewed the action items established during the meeting. The next RAB meeting will be on March 10, 2021.
- RAB members were given the opportunity to provide final thoughts.
- Lulu Pickering conveyed her appreciation for the work that everyone has done and said that although the RAB is only an advisory board, we need to keep working together and that it's in everyone's best interest to listen carefully.
- Mark Mattson reminded the RAB to reach out if they had any questions on the analysis that he performed on the shellfish data.
- Peggy Lamson thanked everyone and stated that she wanted to talk to Haley Plante more about the well inventory and that the December community meeting would be the cart before the horse.
- Michael Donahue informed the RAB that the Newington E-News newsletter will not be able to include the mid December working group in the next issue and asked if it could be postponed until January.
- Ted Connors offered to have large maps printed and put in Newington town hall in advance of the meeting so that people could come and take a look at them before the meeting.
- Susan Chamberlin said that she believed the government groups have a better angle on residential exposure compared to Tradeport business exposure and that it sounds like a hotline, paper survey, and email address, is a good outreach approach.
- Andrea Amico asked Brian Goetz if it was really necessary to turn the Haven well back on after going 7 years without it. She conveyed that the community is concerned and shocked that it will be turned back on. Andrea Amico asked Brian Goetz if he could share what will be tested before the well gets turned back on. Andrea Amico also extended a thank you to DES for providing clean water to homes in Newington with drinking water over the AGQS. She also encouraged the RAB members to keep making their voices heard and not to let varying levels of expectations cause people to get frustrated or turn away.
- Brian Goetz responded that the whole reason we want to sample the Haven well before it goes into any drinking water is to understand its baseline and they intend to share results with this group and the public, as a requirement. Our concern is in line with the RAB.
- Peter Sandin thanked all for participating and wants to hear more of people's concerns during the technical community session that is being scheduled.
- Mike Daly understands that the regulators and community will not always see eye-to-eye but that this RAB is a great group and we can make great progress together. Dialog is good and it is important to keep talking.
- Roger Walton thanked everyone for coming and conveyed that he wants value from the community meeting, not just speed, and will consider having the meeting in January.

Adjourn