

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

**March 7, 2019 | 6:30-9:00 p.m.**

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

**Meeting Summary**

**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), Peggy Lamson (community member), Dennis Malloy (community member), Mark Mattson (community member), Mindi Messmer (community member), Jameson Paine (community member and Community Co-Chair), Lulu Pickering (community member), Col. John Pogorek (appointed member: ANG); Peter Sandin (appointed member: NHDES), Gene Schragger (community member), Maria Stowell (appointed member: Pease Redevelopment Authority), Roger Walton (appointed member: AFCEC, DoD Chair).

**Meeting support staff present:** Linda Geissinger (AFCEC, Public Affairs), Carri Hulet (Consensus Building Institute, RAB Facilitator), Amy Quinton (Wood), Rob Singer (Wood).

**Others attending:** Karen Anderson (community), James Belanger (community), Libby Bowen (Wood), Doris Brock (community) Matt Brock (community), Patrick Carroll (Rep. Pappas' office), Peter Clark (Sen. Shaheen's office), Mike Donahue (community), Kelsey Dumville (USEPA), Nancy Ester (community), Kyle Hay (City of Portsmouth), Scott Hilton (NHDES), Kerry Holmes (Sen Hassan Office), Brittany Hoxie (community), Margaret McCarthy (City of Portsmouth), Ann McCurry (community), Jeff McMenemy (Seacoast Online reporter), Robin Mongeon (NHDES), Melissa Paly (Conservation Law Foundation), Al Pratt (City of Portsmouth), Mike Quinlin (APTIM), Loanna Raptis (Seacoast Photographer, Jared Sheehan (PDA).

**Next meeting:** The next meeting was tentatively set for June 12, 2019, but was noted that it will most likely be changed due to conflicts.

**Action items:** See newly created action item spreadsheet.

**Welcome, Introductions and RAB Administrative Items:**

- Carri Hulet from the Consensus Building Institute (standing in for Ona Ferguson) asked for comments on the October meeting summary and meeting agenda. The summary was approved.
- Lulu Pickering asked if turnaround time for meeting minutes could be 10 business days. Roger said he could not commit to 10 days but would evaluate a reasonable achievable timeline.

**Air Force Update:**

- Roger Walton described that RAB had an open board spot but no applications were received for membership. The RAB will have another appointed seat for a member of the ANG. Roger introduced Col. John Pogorek, the new RAB appointed member from the NH Air National Guard.
- Roger committed to compiling an action item list in response to request from RAB members.
- Jamie Paine requested the Air Force video record RAB meetings. Andrea Amico offered to request that the City provide videotaping of future RAB meetings.
- Peggy Lamson expressed concern about a specific resident who spoke to field crews who may have used the resident's property for access when collecting samples in Tricky's Cove, and would like to receive results. Peggy said she will talk directly to Roger after the meeting to provide him with contact info.

This request relates to samples collected from surface water, sediment, and shellfish at Tricky's Cove and not collected from private property. Wood will review location and whether it's appropriate to provide results to private property owner.

- Peggy Lamson showed photos of fire training or fire suppression activities using AFFF in south Newington (rather than north Newington where the fire training area is located).
- Roger noted proposed dates for RAB meetings for the remainder of 2019, to be confirmed once scheduling conflicts and venue availability are checked. Jamie Paine asked if the Air Force can provide monthly updates via email or conference calls between RAB Meetings.
- Andrea Amico provided comments on Air Force's response to RAB letter. Provided a copy of Wurtsmith RAB meetings minutes and requested that Pease minutes follow similar content and format. Expressed concern about Air Force's pushback against testing other media (turkey, deer, etc.) and asked if the USEPA had plans to establish criteria or screening values for these that would require the Air Force to test. Andrea Amico would like Air Force to provide a statement on why this work will not be conducted. NHDES will report back to RAB on NHDES Fish and Game's plans; they have contacted other state regulatory agencies, specifically Michigan, which has conducted deer sampling associated with Wurtsmith AFB.
- Roger suggested that additional discussion on the letter from the RAB and response could be handled during a separate discussion. Mindy Messmer suggested that the NHDES and USEPA be included in this discussion. Roger offered a separate meeting next time he is at Pease.
- Roger Walton reviewed site activities conducted since October 2018:
  - Shellfish sampling completed in November and December 2018.
  - Surface water and groundwater sampling completed in December 2018.
  - Site 8 Groundwater Treatment system is running – initial system operation data will be presented in a report that will be available before the next RAB meeting.
  - AIMS system is under construction; anticipated start date is early April 2019.
  - Southern Well field sentry well sampling completed.
  - December 2018 and March 2019 private well sampling were completed.
  - Air Force had a public meeting related to restoration activities planned for Building 227 and volatile organic compounds (VOCs) under the existing slab.
- Roger Walton reviewed activities that will be completed before the next meeting:
  - Air Force will conduct baseline monitoring (water levels and groundwater sampling) in advance of activating the AIMS.
  - City of Portsmouth will initiate construction on Grafton Road Treatment Plant.
  - The Supplemental Site Investigation Report will be prepared (summarizing data reviewed during the October 2018 and tonight's RABs).
  - Andrea Amico asked if the RAB could have access to the private well data. Roger explained that this data (without identifying information) was shared after the October RAB meeting. He said that updated private well data could be provided. Mindy Messmer asked for trends over time, and other compounds beyond PFOS and PFOA (including all PFAS compounds, VOCs, etc). Roger clarified that private wells are only sampled for PFAS. Lulu Pickering expressed continued frustration at not being provided private well data and wants the Air Force to find a way to provide this data to the public without identifying information. Air Force reinforced that Air Force legal previously determined that private well sampling data cannot be made public.
  - Mike Daly said that the Air Force is required to give 5 Year Review of ongoing remedies being conducted at Pease. Suggested that this would be a good overview of remedies beyond PFAS impacts.

**Andrea Amico from Testing for Pease gave an update on sampling of non-target compounds**

- This work was conducted in conjunction with Dr. Christopher Higgins of Colorado School of Mines.
- Testing for Pease received a grant to complete non-target sampling of untreated and partially treated samples from City of Portsmouth treatment plant.
- Study will include about 20 samples collected between October 2018 and July 2019.
- Goal is to evaluate PFAS compounds (beyond the typical 23 compounds analyzed at Pease) in raw water and also effectiveness of granular activated carbon (GAC) in removing short and long chain compounds.
- Presentation about this study was given to the City of Portsmouth City Council on October 1, 2018; this presentation is available on line at the Testing for Pease website.

**Brian Goetz from the City of Portsmouth gave an update on status of Grafton Road Treatment Plant**

- GAC carbon filters of “demonstration system” were changed in November 2018.
- City will continue to filter water from Smith and Harrison Wells for distribution as part of the municipal water system.
- Kinsmen Corporation of Hookset, NH will be the contractor for construction of the new Grafton Road Treatment Plant.
- System will include resin filtration with GAC polishing.
- City expects to break ground in Spring 2019, new GAC filters will be installed in June 2020, system will be activated in Spring 2021 (for Smith and Harrison Wells) with Haven Well activated later in the Summer of 2021.
- Mindi Messmer would like compliance monitoring data and GAC or resin change-out dates to be provided at the RAB meetings. This data is on the City website, but Mindi would like it to be included in the RAB packet if not reviewed during future meetings.
- Andrea Amico asked if there are scientific papers published on the effectiveness of the resin and whether there are other communities using this same technology. City’s consultant will provide information regarding the availability of these documents. Andrea Amico suggests that the community would prefer that GAC or resin filters are changed at any sign of breakthrough rather than at levels approaching the USEPA lifetime health advisories (HA).
- Andrea Amico expressed concern about the Haven Well being brought back on line and asked for reassurance that sufficient testing would be conducted to ensure that there is no breakthrough. Brian Goetz of the City of Portsmouth described how the aquifer and municipal well sampling will be conducted in conjunction with the Air Force’s AIMS performance monitoring program (PMP) and AIMS system monitoring. The Haven Well will not be brought back on line until AIMS system is operating and information is known about how it is impacting the aquifer.

**Amy Quintin of Wood provided an update on the Supplemental Site Investigation Activities:**

- Objective of these investigation activities was to determine whether there was risk to human health based on PFAS concentrations in non-drinking water pathways, including surface water, sediment and soils on the Newington peninsula.
- Shellfish sampling was also completed because there is commercial and recreational shell fishing in the area.
- Fall 2018 results indicated that although there were isolated exceedances of USEPA screening values in surface water only, the soil, freshwater surface water, and sediments are safe for use.
- This shellfish investigation was designed to identify target locations where the highest PFAS concentrations in shellfish would be expected based on previous surface water sample results. Samples were also collected from three reference locations; these were selected to determine whether there were background PFAS concentrations that were not likely associated with Pease.

- Sample locations were selected based on the criteria as noted in the slide presentation and with input from Chris Nash of the NHDES.
- Individual samples represent a composite of 10 animals (mussels, clams, or oysters) at each location.
- Screening values used for comparison were based on ingestion by a child recreator, assumed to eat 6g/day, 350 days per year, for 6 years (estimated to be approximately 2 to 3 meals per month).
- PFOA and PFBS were not detected in any of the samples. PFOS was detected in one sample at a concentration above the childhood screening value (screening values are set at 10% of the safe exposure level). Taken as a whole, PFOS, PFOA, and PFBS in shellfish do not pose an unacceptable risk.
- PFAS concentrations in all estuarine surface water and sediment samples co-located with shellfish samples were below the child recreator screening values.
- 18 additional surface water and sediment samples were collected to fill data gaps identified based on initial site investigation/exposure assessment activities. PFBS concentrations were below screening values in all samples. Sediment concentrations were below screening levels in all samples. Several locations have PFOS in surface water at concentrations above child swimming screening values, but the majority of those are locations where swimming is unlikely (based on limited access, insufficient depth, etc.).
- Screening values for surface water are based on ingestion of water, not based on dermal contact.
- Mindi Messmer asked when the full data set will be available to the public (beyond PFOS, PFOA and PFBA displayed during the RAB meeting). Samples were analyzed for the list of 13 compounds; although screening values are available only for the compounds reviewed during the meeting, the full data tables will be available when the Supplemental Site Investigation Report is available. Mindi Messmer would like this data prior to publication of the SSI Report. Roger said this is not typical process, but will evaluate whether he can provide this earlier.
- Mindi Messmer asked where the exposure assumptions used to calculate the screening values came from. Mike Daly said he can provide a link to this information. She also asked that samples be analyzed for a larger list of compounds. NHDES specified that samples at Pease were previously sampled for 23 compounds but 10 compounds were eliminated because they were not detected in a minimum of 5% of the samples.
- Dr. Mattson asked for some clarification on lab results and detection limits. There will be some discussion following the meeting, but he will follow up with additional questions after reviewing the SSI Report.
- Andrea Amico requested that additional results be provided before the SSI Report is available. She asked how it was determined that migratory fish should not be included in this investigation. This determination was made after consultation with NH Fish and Game, interviews with local residents, etc. Because the objective of this investigation is to determine potential PFAS uptake associated with Pease, it did not make sense to include migratory fish.
- Jamie Paine asked if there was an interim report that could be provided. Amy clarified that this was the preliminary Exposure Assessment information that was included in the Supplemental SSI Workplan.
- Lulu Pickering asked if the posters presented in this meeting could be provided with the RAB Meeting minutes. Roger Walton agreed that these can be provided.
- Lulu Pickering had concerns about the approach for shellfish collection (compositing the individual specimens into one sample) because it means that one animal could have PFAS concentrations significantly above the screening value. Amy Quintin of Wood clarified that this approach is typical for shellfish collection because people generally ingest more than one animal when eating shellfish.
- Lulu Pickering asked if there was an explanation for the presence of PFAS in Paul's Brook. USEPA said that it was likely the result of groundwater discharging to surface water, but there are other potential sources on the base. NHDES added that although many of the individual IRP sites had some preliminary sampling for PFAS as part of the SI, additional characterization is still required to evaluate other

potential sources. The more intensive PFAS sampling effort to-date has been directed at protecting drinking water receptors.

**Public Comment:**

- James Belanger asked if there was reason to collect lobster for this same evaluation. Lobster were not included in this study, but it is not known if lobster are any more likely to bioaccumulate PFAS compounds. They were not included in this investigation but could be included in further study.
- Brittany Hoxie, former resident of 14 Captains Landing, expressed concerns about other impacts to groundwater/well water beyond PFAS and Air Force impacts.
- Ann McCurry expressed concern about historical impacts to the drinking water wells, specifically the TCE in the Haven Well. She presented excerpts from the original CERCLA Preliminary Assessment that identified potential contaminated sites at Pease. This is the document that started the CERCLA cleanup program at Pease.

**Additional RAB Comments:**

- Mindi Messmer expressed concerns about other compounds that may have been used or released at the former base and whether they are being evaluated. Mike Daly of USEPA said that the site has been investigated and remediated for years, other compounds have been evaluated and a lot of the potential sources have been identified and are known. Data related to historical site activities is available online and at Air Force administrative record.
- Mindi Messmer asked for clarification on why it was significant that concentrations were different in different sized animals. Amy clarified that at Dr. Mattson's recommendation we separately composited shellfish >3" to determine whether PFAS concentrations were higher in larger/older animals. Our results did not show higher concentrations of PFAS in larger vs. smaller specimens.
- Mindi Messmer asked about the sampling frequency of sampling at the Grafton Road plant and whether sampling frequency is increased when PFAS compounds begin to break through the initial carbon vessel. The City specified that sampling is completed bi-weekly and that frequency has not been modified during operation to date.
- Lulu Pickering said that there are additional action item requests that RAB members will provide to Roger in email or a future meeting.