

Subject	Meeting #8 - Barnes Air National Guard Base (ANGB) Restoration Advisory Board (RAB)		
Prepared by	Johannah Phelan /Jacobs		
Location	Westfield Athenaeum, Lang Auditorium	Date/Time	July 25, 2024, 6:00 p.m.
	Webex Meeting		
RAB Members		Additional Meeting Participants	
Col David Halasi-Kun/Barnes ANGB, Base Co-chair		Chris Brown/National Guard Bureau (NGB)	
Kathleen Hillman, Community Co-chair		Jennifer Baker/Barnes ANGB (online)	
Mary Ann Babinski (online)		Jay Hewitt/Barnes ANGB	
Chris Clark (online)		Lt. Col Sarah Sinclair/Barnes ANGB	
Kristen Mello (online)		Amy Brand/Jacobs	
Mary O'Connell		Johannah Phelan/Jacobs	
Jane Oskin		A full list of meeting attendees is provided in Attachment A.	

The Barnes ANGB RAB Meeting No. 8 was held on July 25, 2024 at 1800 at the Westfield Athenaeum and via WebEx. The following notes provide a summary of discussions during the meeting and are not intended to serve as a transcript or further explain information provided during the meeting. A copy of the presentation is attached in **Attachment B**.

- 1 The meeting began at 6:00 p.m. with the RAB facilitator, Amy Brand/Jacobs, welcoming participants. Amy presented the agenda, provided an overview of meeting guidelines and how to use the WebEx meeting platform, and then invited the Base Co-chair and Community Co-chair to provide opening remarks.
- 2 Col Halasi-Kun and Kathleen Hillman welcomed meeting participants and shared their hopes to move forward with the restoration activities at Barnes.
- 3 Jay Hewitt, public affairs for Barnes ANG Base, introduced himself.
- 4 The RAB would like to fill Nabil's position on the Board.
- 5 Amy clarified there is no minimum number of RAB members required to sustain the RAB. The maximum number of members is 12, according to the operating procedures.
- 6 The RAB agreed they preferred to allow rolling RAB applications rather than only allow applications during a specific window each year. Amy reminded the RAB to consider diversity in terms of a cross-section of the community when reviewing applications as it changes over time with members resigning and new members elected.
- 7 RAB applications should be submitted to the RAB co-chairs. Amy can send the RAB a flyer to share with potential applicants. The flyer provides information about the RAB, its responsibility, and commitment.
- 8 There were no comments on the meeting minutes for RAB Meeting #7 in April 2024; meeting minutes were approved.

Meeting #8 - Barnes Air National Guard
Base (ANGB) Restoration Advisory
Board (RAB)
July 25, 2024, 6:00 p.m.

-
- 9 Public accessibility at the Westfield Athenaeum was discussed as the elevator currently does not work well. There will be a new elevator installed but it is not known when that will occur. The RAB agreed to continue meeting at the library.
- 10 Lt Col Sinclair provided an update on the Technical Assistance for Public Participation (TAPP) grant. The University (UMASS Lowell) declined the opportunity to bid on the grant citing a conflict of interest. Other options are being considered, including the resources provided by Kristen Mello. Funding needs to be allocated by the end of the fiscal year, September 30, 2024. The grant will be awarded assuming bids are received and there is time to execute the award by 30 September.
- 11 RAB community members present voted unanimously to have Kristen lead pursuit of the next (FY25) TAPP grant.
- 12 Kristen Mello described the proposal for the project for the FY25 TAPP grant. The proposed project is to have Dr. Boutt answer remaining questions (and any new questions) regarding his initial evaluation, and to review documents related to having co-contaminated sites at Barnes, documents from the Base cleanup files, previous oil spills, the UFP-QAPP especially light of new drinking water regulations, etc. The RAB has a specific list of documents they would like to include. For FY25 TAPP grant, the RAB community members present voted unanimously on this proposal. Kathleen Hillman, community co-chair recorded the vote on the application and submitted it in person to Col. Halasi-Kun, the base co-chair.
- 13 Chris Brown, ANG Remedial Project Manager, reviewed the current status of Environmental Restoration Program Site 2, a site that is not related to per- and polyfluorinated substances (PFAS). Site 2 is currently in long-term monitoring.
- 14 Chris reviewed the current status of the PFAS Remedial Investigation (RI). Chris indicated that he sent a courtesy notification to the Natural Resources Conservation Service (NCRS) related to the Arm Brook Flood Control Dam Rehabilitation Project. The dam project goes beyond the scope of restoration project at Barnes; Chris provided information about planned environmental restoration activities and opened the door for communication. There is no official mechanism for coordination. Kristen asked whether that could be addressed at a higher level and may pursue that. The dam project is currently in the design phase. Chris said they will definitely be in contact when either project has teams in the field.
- 15 The PFAS RI Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP) should be ready for submittal to the Massachusetts Department of Environmental Protection (MassDEP) and the RAB in October 2024. Once it is approved by MassDEP, then field work can begin.
- 16 Data Quality Objectives (DQOs) are developed for the UFP-QAPP to meet the project objectives.
- 17 James Griffin/SRS reviewed the PFAS RI related slides showing where samples were collected from the Site Inspection (SI) and the Expanded Site Inspection (ESI). These data are used to select the first round of sampling locations for the RI.
- 18 Monitoring well locations have not been determined. Kristen asked what levels are being used for comparison since the PFAS screening levels have decreased since the SI and ESI were completed. Also, State levels may differ from Federal levels.

Meeting #8 - Barnes Air National Guard
Base (ANGB) Restoration Advisory
Board (RAB)
July 25, 2024, 6:00 p.m.

-
- 19 The RI will delineate to the Federal screening levels approved by the Office of the Secretary of Defense (OSD). If there are additional requirements that need consideration for cleanup, such as more stringent State requirements, they are evaluated during the Feasibility Study when Applicable or Relevant and Appropriate Requirements (ARARs) are established.
- 20 EPA has established revised maximum contaminant levels (MCLs). The OSD is working on guidance to address the MCLs. The sampling methods will go down to the levels they need to be able to use.
- 21 Kristen expressed concern that areas that were sampled and were above previous threshold levels will not be resampled. Is there a mechanism to re-sample areas that were previously excluded because they were not below previous threshold levels? Amanda Martin, USACE project manager, indicated that PFAS remediation is constantly changing, and if we need to go back to collect additional data due to changes, we will.
- 22 Mary Ann Babinski asked for clarification whether previous sample locations would be resampled when the federal or state levels change and areas that were previously dropped – where they did not think there was a problem - would be re-examined after being compared to lower PFAS thresholds. Chris agreed to take this question back to prepare a more thorough response.
- 23 There are potential offsite PFAS sources that may be contributing to existing contamination. Source fingerprinting could help determine sources of PFAS. Source fingerprinting will be conducted as part of the RI.
- 24 Meeting participants discussed the surface water sampling approach. Samples will be collected from the mid-point of the water column closest to potential sources because it is representative of exposures and can capture potential impacts from groundwater. Currently, there are limited data on the health effects from exposures to PFAS in foam and no consensus on how to estimate surface foam exposures to be included in a Human Health Risk Assessment (HHRA).
- 25 Kristen is very concerned that the Department of Defense (DoD) is ignoring where PFAS is likely occurring and is not sampling at those locations. There is emerging information and research about dermal contact with foam at the surface.
- 26 Kristen asked if the stormwater infrastructure would be sampled. The initial phase of the RI will focus on the most likely exposure scenarios for surface water and sediment. Stormwater infrastructure may be revisited later in the investigation. The initial part of the RI will focus on the major releases.
- 27 The RAB members indicated that Arcadis has data to support that PFAS soaks into concrete, such as in the stormwater infrastructure, and could serve as another potential source. Kristen asked why old stormwater infrastructure is not being investigated. Chris Brown reiterated that when they investigate, they start with potential source areas and then move outward following where chemicals may have moved. Stormwater is not anticipated to be a primary pathway for this site based on the current Conceptual Site Model (CSM). The typical plan is to investigate soil first, then groundwater, and then if there is reason to believe that groundwater infiltrated the stormwater system, they would investigate that. Therefore, stormwater is not part of the current sampling plan but could be in the future if needed.
- 28 Chris Clark asked if river sediment will be sampled. Yes, sediment samples will be collected at each location where surface water is sampled. The sampling locations on the

Meeting #8 - Barnes Air National Guard
Base (ANGB) Restoration Advisory
Board (RAB)
July 25, 2024, 6:00 p.m.

-
- map on Slide 27 reflect past sampling locations, not specific proposed locations, because the UFP/QAPP has not yet been approved. The RAB indicated that drainage systems should also be investigated for surface water and sediment contamination.
- 29 A public attendee reminded the team that Arm Brook today is not the same as previous years; some areas of previously high flow are now intermittent streams. Streams migrate and contaminants may remain in locations of previous stream bed activity.
- 30 The RAB will receive a copy of the UFP-QAPP to review. The April 2024 RAB included a presentation on how to review a UFP-QAPP for the worksheets that will be of the most interest to RAB members and the public.
- 31 Col Halasi-Kun and Kathleen provided final comments. Col Halasi-Kun reminded RAB members that the RI process may be slow, but it is thorough and intentional to ensure that media are thoroughly investigated and that we follow the data where it leads.

Action Items

- 1 Amy Brand will share a RAB Application Interest Flyer with the RAB to solicit interest and applications.
- Amy will distribute a flyer to RAB members with the meeting summary. The flyer is already available on the 104th FW website, along with the RAB application, RAB meeting slides, and meeting summaries at <https://www.104fw.ang.af.mil/About/Restoration-Advisory-Board/>*
- 2 Chris Brown agreed to prepare a more thorough response about whether previous locations that may have been previously dismissed after being compared to higher PFAS screening values would be resampled as a result of lower federal and/or state PFAS values.
- During development of the Remedial Investigation (RI) Quality Assurance Project Plan (QAPP), samples collected during the Site Inspection (SI) and Expanded SI (ESI) at the Barnes ANGB were re-screened against the latest DoD screening levels (i.e., EPA's November 2023 EPA regional screening levels (RSL) established in the OSD Memo). The only Area of Concern (AOC) that was eliminated during the SI was AOC 3, and the project team confirmed that the concentrations of PFAS at AOC 3 during the SI are below the current DoD screening levels.*
- Another site, AOC 2, was initially eliminated during the Preliminary Assessment (PA), because use of Aqueous film-forming foam (AFFF) containing PFAS had not been identified. During subsequent reviews and interviews, however, it was determined that AFFF containing PFAS may have been used at the site. Therefore, AOC 2 was re-evaluated as a potential source area during development of the RI QAPP. ANG will be including AOC 2 in the RI.*
- Currently, no AOCs at Barnes ANGB have been eliminated from future investigation based on old DoD screening levels that need to be reconsidered due to re-evaluation against current standards.**

Attachment A
RAB Meeting Attendees (in person and online*)

Apell	Jennifer	USACE
Babinski	Mary Ann	RAB Member
Baker	Jennifer	Barnes ANGB
Barton	Andrew	SRS Battelle JV
Barzyk	Tom	BB&E
Brand	Amy	Jacobs RAB Facilitator
Brown	Chris	National Guard Bureau Restoration Program Manager
Clark	Chris	RAB Member
David	Lisa	Jacobs
Dickerson	Mark	
Folan	Dan	USACE
Freihofer	Keith	National Guard Bureau
Glass	Col	
Greenberg	Grace	USACE
Griffin	James	SRS Battelle JV
Halisi-Kun	Col. David	Barnes ANGB Base Co-Chair
Hewitt	Jay	Barnes ANGB
Hillman	Kathleen	RAB Member Community Co-Chair
Laube	Jenna	National Guard Bureau

* Not all online participants can be or choose to be identified

Lawrence	Larissa	ANG
Magdinec	Elaine	ANG
Martin	Amanda	USACE
Mello	Kristen	RAB Member
Morecraft	Maj Brian	Barnes ANGB
O'Connell	Mary	RAB Member
Okscin	Jane	RAB Member
Phelan	Johannah	Jacobs
Shaw	Caprice	Massachusetts Department of Environmental Protection
Sinclair	Col Sarah	Barnes ANGB
Williams	Wendell	ANG
Unknown		Unidentified call-in participant
Unknown		Unidentified call-in participant

* Not all online participants can be or choose to be identified



Barnes Air National Guard (ANG) Base Restoration Advisory Board Meeting #8 July 25, 2024

FINAL



Agenda



- 6:00 PM Agenda Review and Hybrid Meeting Logistics
- 6:05 PM Welcome and Introductions
- 6:10 PM RAB Business
- 6:25 PM Environmental Restoration Program Status Update
- 7:10 PM Public Questions and Comments
- 7:25 PM Closing Remarks
- 7:30 PM Adjourn



Hybrid Meeting Logistics

Amy Brand

Jacobs

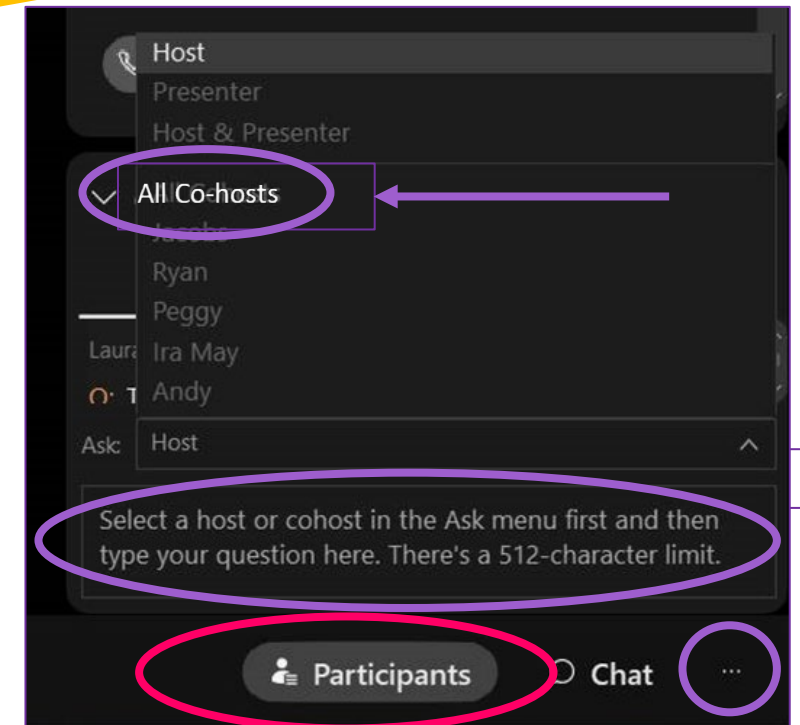
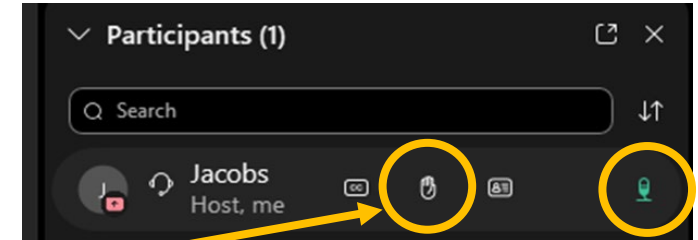
RAB Facilitator



Webex Basics – Computer



- Video – OFF except for presenters
- Open participants list
- To ask a question:
 - RAB Members - Raise hand to be called on to speak
 - Scroll over your name in the participant list and click on hand symbol
 - Unmute yourself when called on
 - Public participants - Type a question to “all co-hosts” in the Q&A panel
 - Click on 3 dots in lower right corner, choose Q&A
 - Select “all co-hosts” and type question
 - Questions will be answered at the end of the meeting





Webex Basics – Telephone Participants



- Follow along on slide presentation (emailed or download from 104th Fighter Wing website at <https://www.104fw.ang.af.mil/About/Restoration-Advisory-Board/>)
- Use your phone mute button when not speaking.
- Dial *3 to raise hand to be called on to speak after the presentation
 - Host will unmute you after seeing the raised hand
 - You will then receive a prompt to dial *6 on the phone to unmute yourself
 - Unmute and identify yourself when asking a question or making a comment.



Meeting Guidelines



- RAB Members
 - Ask questions at the end of each topic
 - Raise hand to be called on to speak
 - Introduce yourself so that everyone (in room and online) knows who is speaking
 - Please observe a 2-minute limit to enable other RAB members to participate.
- Public Participants
 - Submit questions in writing addressed to “all co-hosts”
 - Questions will be read and addressed at the end of the meeting
 - Public questions by phone may be asked verbally at the end of the meeting by pressing *3 to raise your hand



Welcome and Introductions

Col. David Halasi-kun

Kathleen Hillman



Welcome and Introductions



Air National Guard Team

Col. David Halasi-kun (Base Co-Chair)

Christopher Brown, National Guard Bureau

Jennifer Baker, 104th FW Environmental Coordinator

Contractors: BB&E, Jacobs (Amy Brand, RAB facilitator)

Community RAB Members

Kathleen Hillman, Community Co-Chair

Mary Ann Babinski

Chris Clark

~~Nabil Hannoush~~

Kristen Mello

Mary O'Connell

Jane Okscin

Representative Kelly Pease

Dawn Thomas

Senator John Velis

Regulatory Contact

Caprice Shaw, Massachusetts Department of Environmental Protection (MassDEP)



Welcome and Introductions



U.S. Army Corps of Engineers (USACE) Team

Amanda Martin, Project Manager/ Technical Lead

Grace Greenberg, Risk Assessor

Jennifer Apell, PhD, Project Chemist

Mike Narcisi, Wetland Ecologist/Soil Scientist

Dan Folan, PhD, PG, LSP, Geologist/Hydrogeologist

SRS-Battelle JV Team (USACE Contractor)

Andrew Barton, Battelle, Project Manager

James Griffin, SRS, Alternate Project Manager



RAB Business

Amy Brand

Jacobs

RAB Facilitator



Meeting Summaries

- Draft meeting summary from RAB Meeting #7 (April 2024)
 - Emailed to the RAB July 5 – any comments?
 - Draft posted on the 104th FW website:
<https://www.104fw.ang.af.mil/About/Restoration-Advisory-Board/>



Upcoming Meetings

- Dates
 - Agreed on fourth Thursday of the month, every 3 months: January, April, July, October
 - Adjustments to be made when needed
 - Upcoming meetings: October 24, 2024
 January 30, 2025
 April 24, 2025
- Meeting location
 - Westfield Athenaeum accessibility



Technical Assistance for Public Participation (TAPP) Grant

- FY24 TAPP Grant
 - RAB members voted by majority to pursue a TAPP focused on potential human health impacts
 - Funding approved, working acquisition package with award in September



RAB Member Discussion



- Please raise your hands and unmute yourself when recognized.
- Introduce yourself at the beginning of your question or comment.
- Please limit questions to 2 minutes to give other RAB members an opportunity to participate.



Environmental Restoration Program Status Update

Christopher Brown
National Guard Bureau

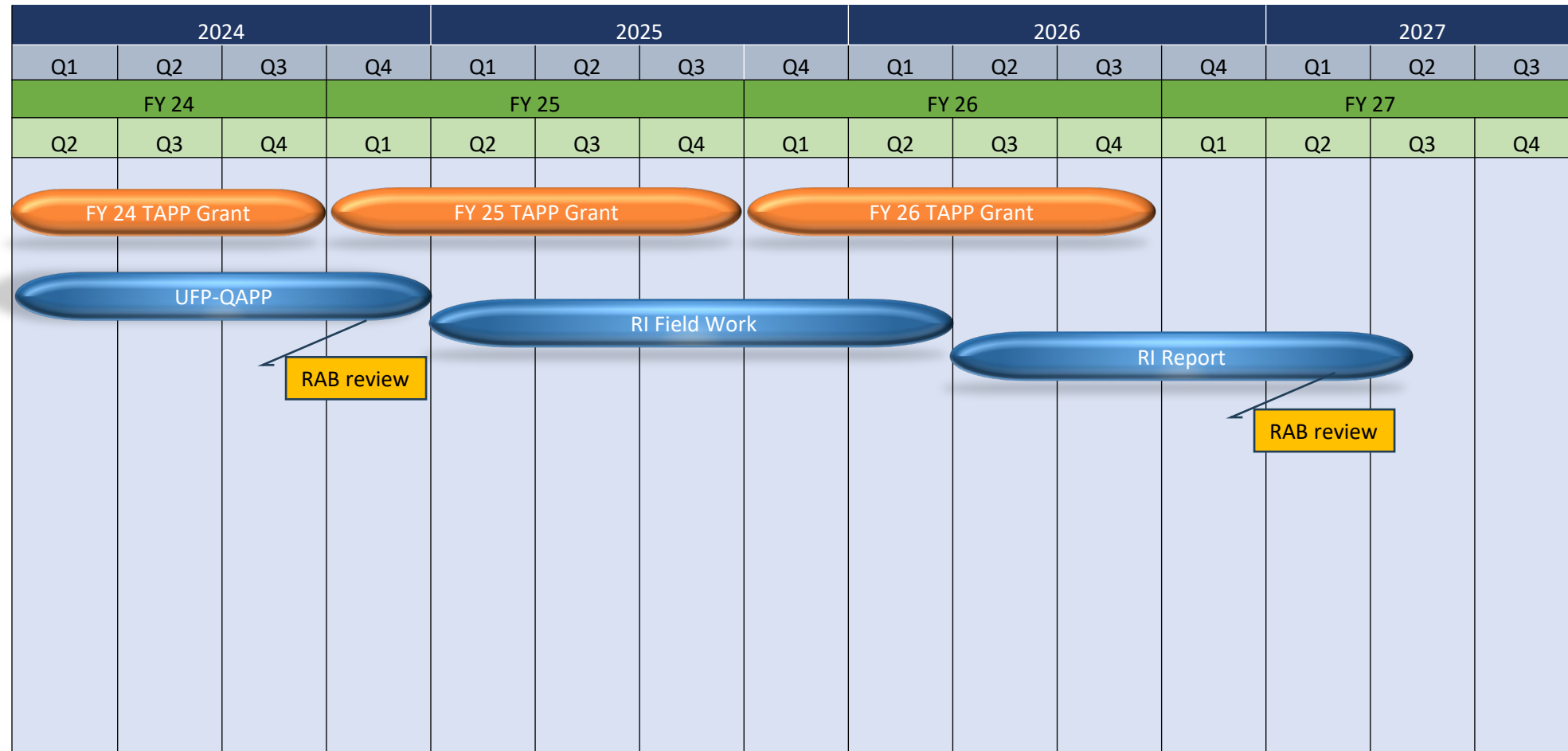


Environmental Restoration Program



- Site 2 Current Status
 - Long term monitoring, working towards a Permanent Solution Statement (PSS)
 - A Lease Amendment will be required to incorporate conditions
- PFAS Remedial Investigation (RI)
 - Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP), Late Fall 2024
 - Start of field sampling activities, Late Fall 2024
 - Courtesy notification sent to NCRS in relation to Arm Brook Rehabilitation Project







PFAS Remedial Investigation (RI) Data Quality Objectives (DQOs)



- The primary objective of the PFAS RI is to define the extent of DoD-related PFAS, identify potential exposure pathways, and assess associated risks to determine if a remedial action is required.
- Project data quality objectives (DQOs) are established in the RI planning document, the Unified Federal Policy Quality Assurance Project Plan (UFP-QAPP), to document the systematic planning process for collecting data to meet the overall objectives.
- The DQOs will dictate the RI field sampling approach to ensure the appropriate medium-specific samples are collected to satisfy the DQOs.

Note: This is currently the first phase of the RI. Additional data collection is anticipated and will be scoped based on the findings of the initial results.

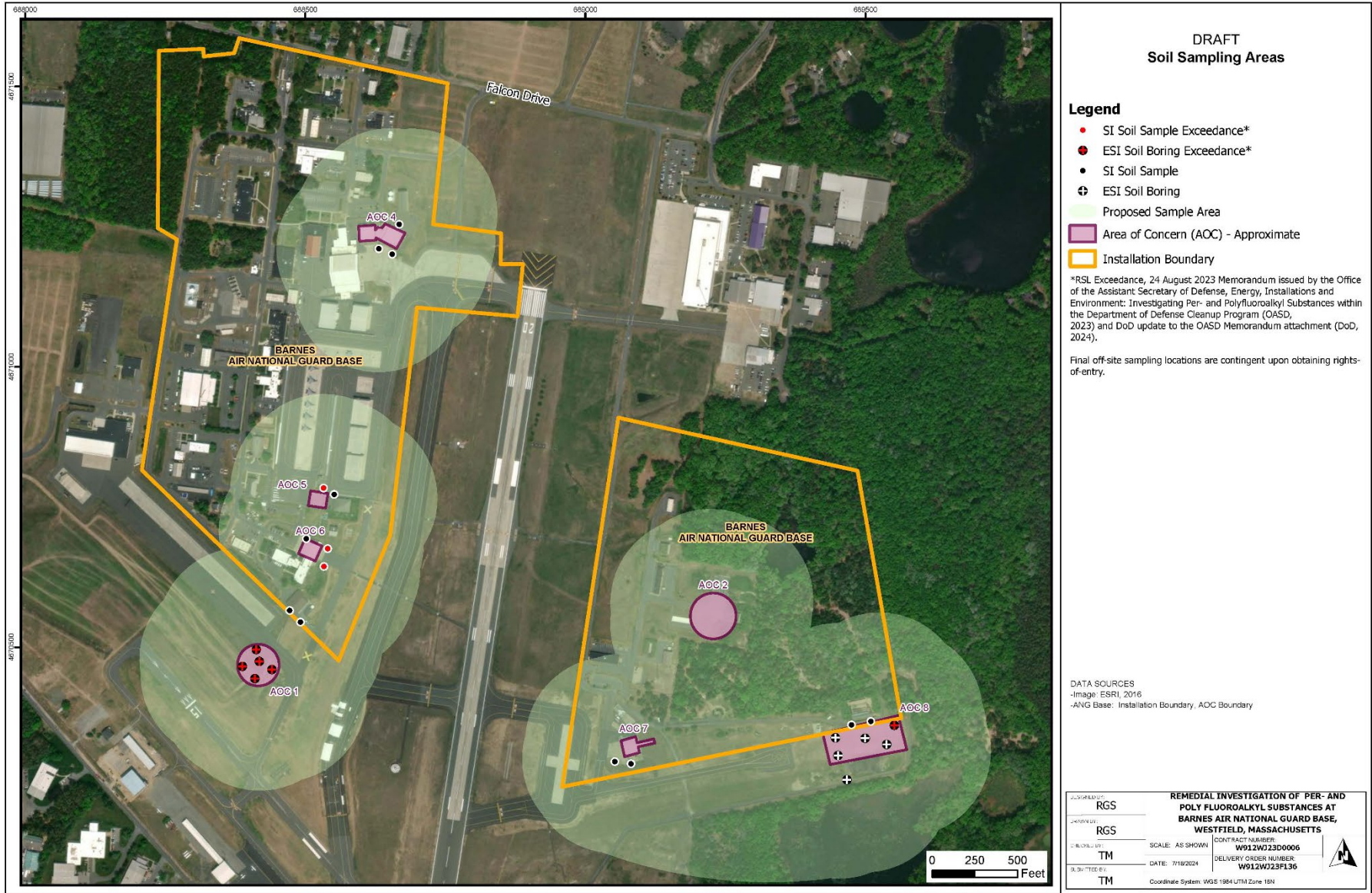


PFAS RI DQOs for Soil Sampling

- DQOs have been established and data will be collected to answer the following questions associated with risk from exposure to PFAS in soil:
 - **Q1:** What is the spatial and vertical extent of Barnes ANGB related PFAS contamination in soil at the AOCs?
 - **Q2:** Are PFAS in soil at the Site contributing to groundwater concentrations of PFAS beneath the Site?
- Answers to the first two questions will assist in answering the following question:
 - **Q3:** How much Barnes-related PFAS are potential receptors (primarily human receptors – commercial/industrial and construction workers) exposed to in soil at the Site?



PFAS RI AOCs and Soil Sampling Areas





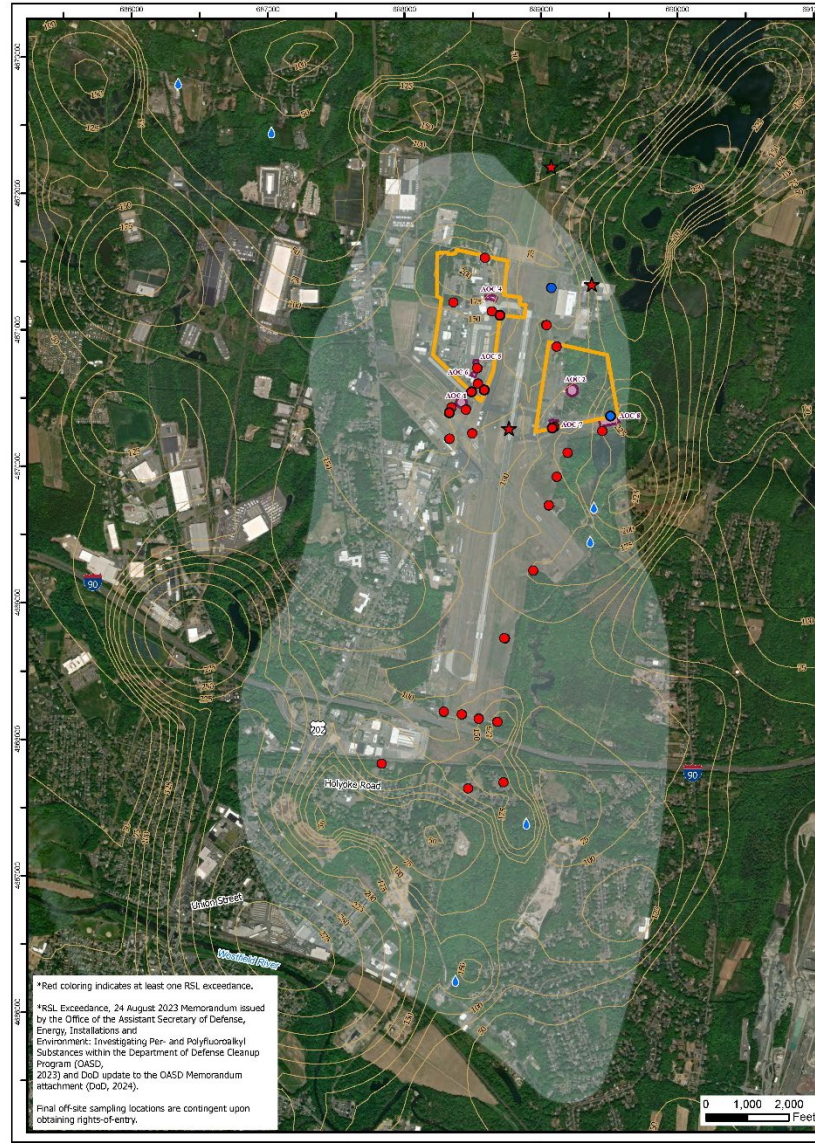
PFAS RI DQOs for Groundwater Sampling



- DQOs have been established and data will be collected to answer the following questions associated with risk from exposure to PFAS in surface water:
 - **Q1:** What is the spatial and vertical extent of Barnes ANGB related PFAS contamination in groundwater?
 - **Q2:** Are PFAS in groundwater contributing to surface water concentrations of PFAS in the surface water bodies near the Site?
 - **Q3:** Are PFAS sources not related to Barnes ANGB contributing to concentrations in groundwater upgradient, adjacent to, and downgradient of the Site?
- Answers to the first three questions will assist in answering the following question:
 - **Q4:** How much Barnes-related PFAS are potential receptors (human receptors – hypothetical on-Site and off-Site residents) exposed to in groundwater?



PFAS RI Groundwater Sampling Areas



DRAFT Groundwater Sampling Areas

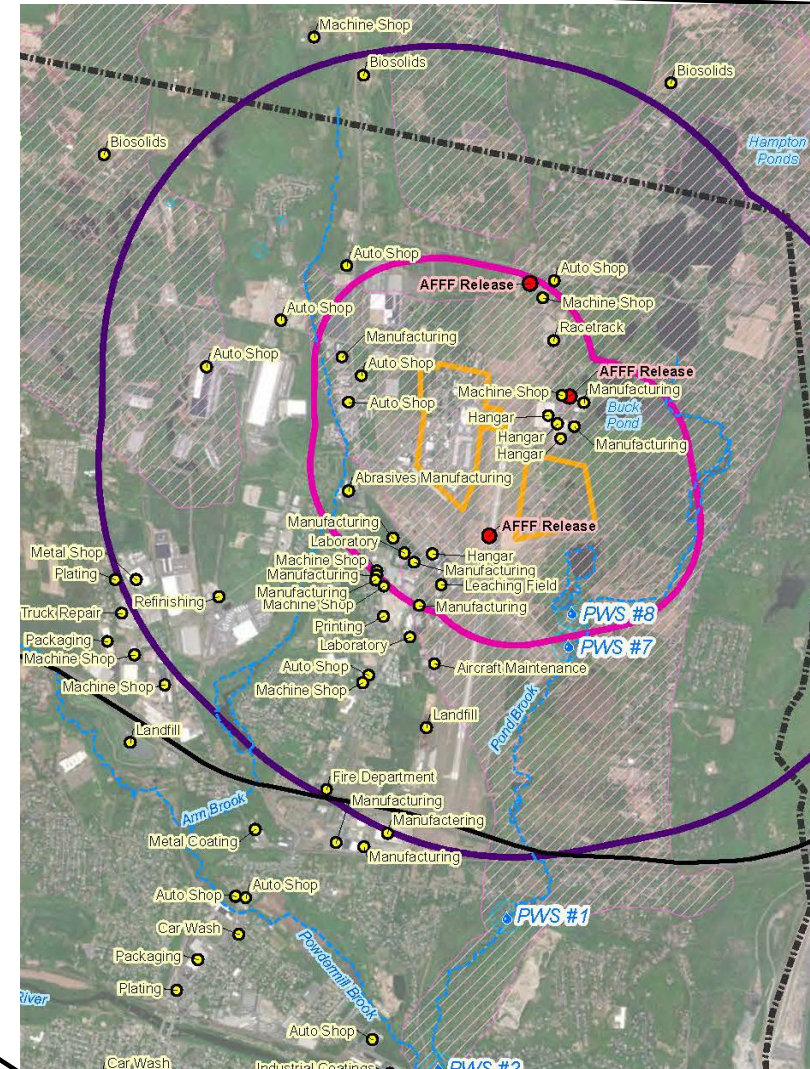
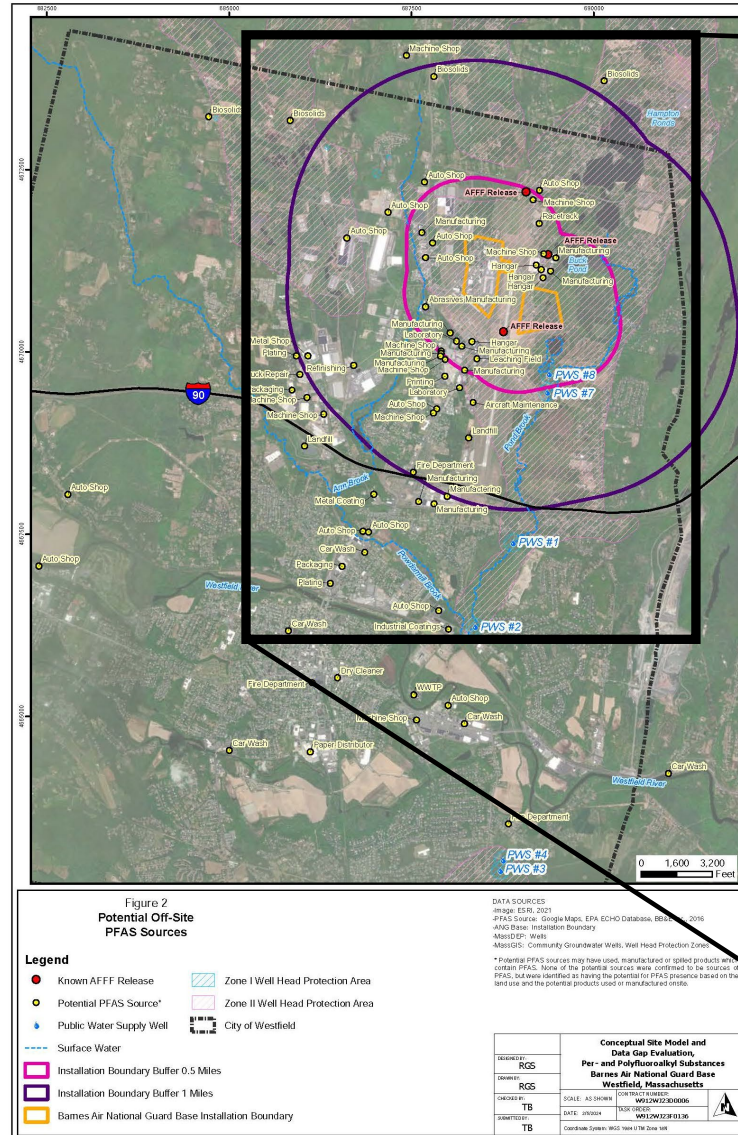


Legend

- ★ Known AFFF Release
- Existing Groundwater Monitoring Well
- Existing Groundwater Monitoring Well with Historical Exceedance* to be Resampled
- Community Groundwater Well
- Bedrock Contours - 25 ft Interval (Feet below ground surface)
- Proposed Vertical Aquifer Sample Area
- Installation Boundary
- Area of Concern (AOC) - Approximate



Potential Off-Site PFAS Sources





PFAS RI DQOs for Surface Water Sampling



- DQOs have been established and data will be collected to answer the following questions associated with risk from exposure to PFAS in surface water:
 - **Q1:** Are PFAS in groundwater contributing to surface water concentrations of PFAS in the surface water bodies near the Site?
 - **Q2:** What is the extent of Barnes ANGB related PFAS contamination in the various surface water bodies?
 - **Q3:** Are PFAS sources not related to Barnes ANGB contributing to concentrations in surface water bodies upstream, adjacent to and downstream of the Site?
- Answers to the first three questions will assist in answering the following question:
 - **Q4:** How much Barnes-related PFAS are potential receptors (primarily human receptors – recreators and trespassers) exposed to in surface water bodies adjacent to and downstream of the Site?



Surface Water Sampling/Monitoring Approach



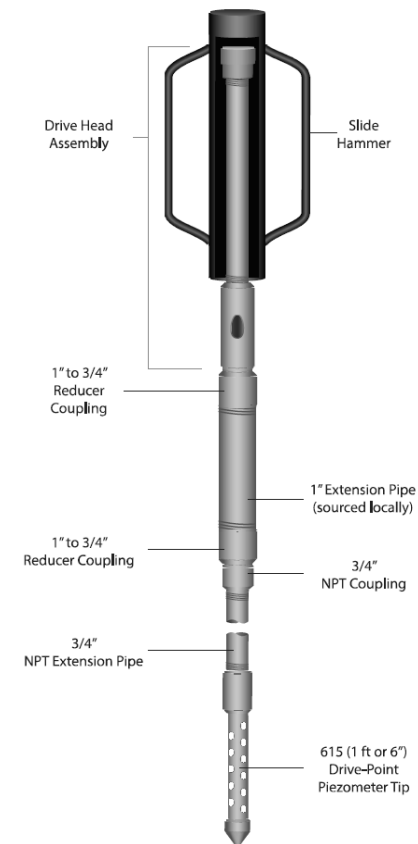
- Surface water samples will be collected from the midpoint of the water column, on the side of the surface water body closest to known/suspected PFAS sources, based on the following rationale:
 - Flowing water bodies, like those present near Barnes ANGB, are generally well mixed
 - A water-surface PFAS microlayer is negligible, and any potential affect of such a layer (if it exists) cannot be measured with current analytical precision
 - The midpoint of the surface water column at the edge of the surface water body is the most representative human (and fish) exposure point
 - The edge of the surface water body closest to known/suspected PFAS sources is where PFAS-impacted groundwater could potentially discharge
- Surface water samples will be collected upstream, downstream and adjacent to known/suspected Barnes ANGB PFAS sources to delineate the extent of PFAS in surface water and determine whether PFAS is originating at Barnes and/or other off-Site (non-DoD) sources



Surface Water Sampling/Monitoring Approach (cont.)

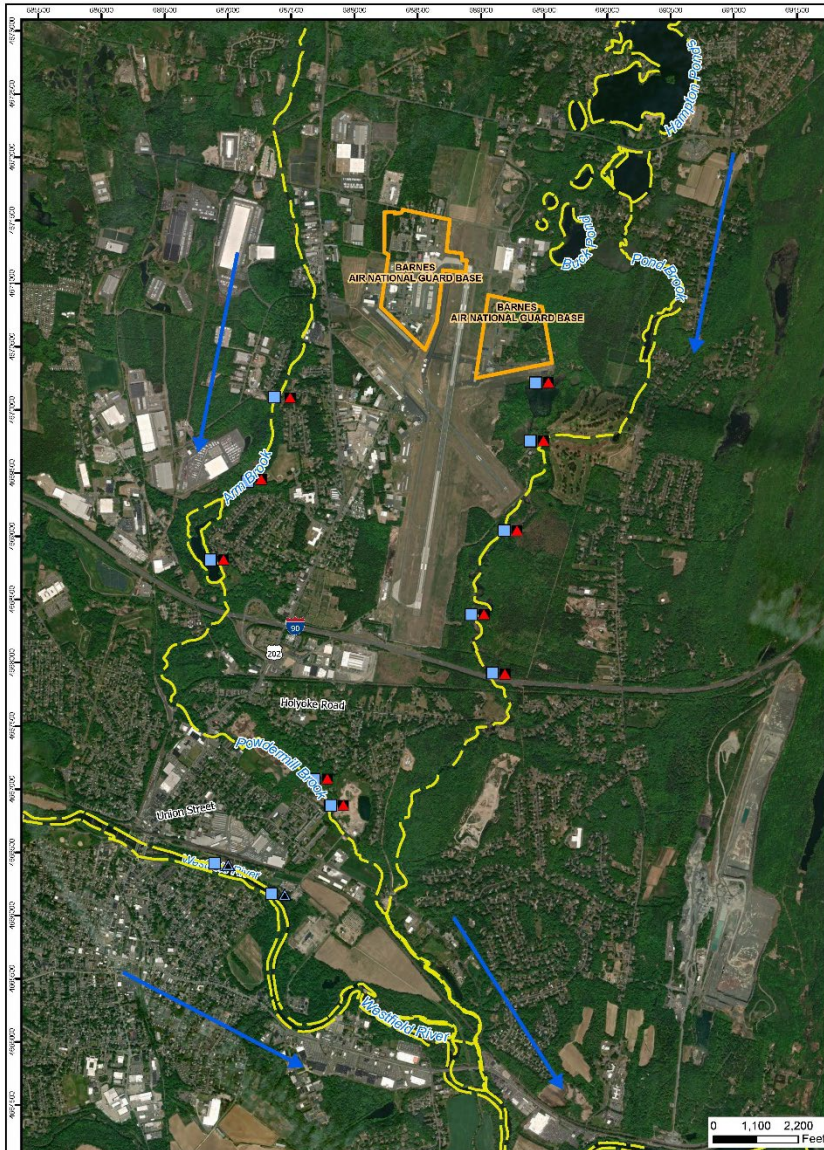


- Piezometers will be installed and monitored to determine whether groundwater is discharging to surface water or vice versa
- At those PFAS sampling locations where the surface water is visibly flowing, flow measurements will be collected





Surface Water Sampling Areas



DRAFT Sediment and Surface Water Sampling

Legend

- Surface Water Sample Exceedance*
- ESI Sediment Sample
- ▲ ESI Surface Water
- Proposed Surface Water for Sampling
- ➔ Surface Water Flow Direction
- ▭ Installation Boundary

*RSL Exceedance, 24 August 2023 Memorandum issued by the Office of the Assistant Secretary of Defense, Energy, Installations and Environment: Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program (OASD, 2023) and DoD update to the OASD Memorandum attachment (DoD, 2024).

Final off-site sampling locations are contingent upon obtaining rights-of-entry.



RAB Member Discussion



- Please raise your hands and unmute yourself when recognized.
- Introduce yourself at the beginning of your question or comment.
- Please limit questions to 2 minutes to give other RAB members an opportunity to participate.



Public Questions and Comments



In person: Raise hand to be recognized

Online: Submit questions using the written Q&A feature



Contact Information



104th Fighter Wing, Barnes Air National Guard Base

Base Co-Chair
Commander
Col. David Halasi-kun

Environmental Manager
Jennifer Baker

Public Affairs Manager
Jay Hewitt
(413) 568-9151 x 698-1229
jerry.j.hewitt@us.af.mil

Community Co-Chair

Kathleen Hillman khillman179@gmail.com

National Guard Bureau

Program Manager
Christopher Brown
(240) 612-7275
christopher.brown.261@us.af.mil

Massachusetts Department of Environmental Protection

Caprice Shaw
(413) 540-6253
Caprice.shaw@mass.gov



Websites for More Information



Environmental Restoration Program at 104th Fighter Wing

- General and Links to PFOS/PFOA Information: <https://www.104fw.ang.af.mil/About/Environmental/>
- Restoration Advisory Board: <https://www.104fw.ang.af.mil/About/Restoration-Advisory-Board/>

Relative Risk Site Evaluation (RRSE)

- Barnes RRSE: https://www.104fw.ang.af.mil/Portals/5/Barnes_RRSE%20Fact%20Sheet%20and%20Scoring%20Summaries_211215.pdf
- RRSE Primer: https://www.denix.osd.mil/references/dod/policy-guidance/relative-risk-site-evaluation-primer/RRSE_Primer_Summer1997.pdf

104th Fighter Wing Environmental Administrative Record

- <https://ar.afcec-cloud.af.mil/Search.aspx> (Select ANG radio button, select Barnes, and click on search)

MassDEP PFAS Information

- <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>

Westfield Water Department PFAS Information

- <https://www.cityofwestfield.org/672/PFCs-Information-Updates>

RAB Rule Handbook and Information on Technical Assistance for Public Participation

- <https://www.denix.osd.mil/rab/home/>

Air Force Response to PFOS and PFOA

- <https://www.afcec.af.mil/WhatWeDo/Environment/Perfluorinated-Compounds/>



Closing Remarks

Kathleen Hillman
Col. David Halasi-kun



Adjourn