Air Force Installation & Mission Support Center



AFCEC BRAC Former Pease AFB RAB Meeting

Chris King – USAF

Haley Plante – WSP

Jack Besse - WSP

01 November 2023





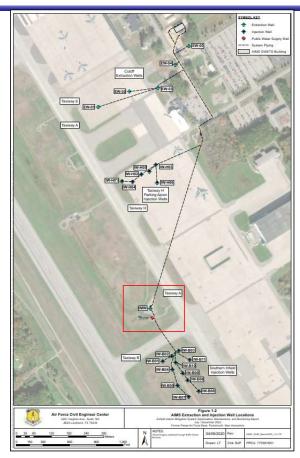
- **Technical Check** Ona Ferguson (Consensus Building Institute)
- Technical Presentations (Video recording)
 - AIMS and Site 8 IMS Updates WSP
- Welcome, Introductions, RAB Business Ona Ferguson (Consensus Building Institute)
 - Consensus Building Institute Transition
- RAB Technical Assistance Services for Communities (TASC) Contract Discussion
- Human Health Risk Assessment Update
- City of Portsmouth Update
- DoD Policy Update
- Open Discussion Time
- Public Comments
- Meeting Recap and Next Steps Consensus Building Institute
- Adjourn



IMW and Haven Well Operations



- Purpose of the Interim Mitigation Well (IMW) is to protect the Haven Well.
- Modeling during the AIMS design demonstrated that extraction above 300 gallons per minute (gpm) from the IMW/Haven Well area results in contaminants bypassing the cutoff extraction wells.
- IMW was designed to run concurrently with the Haven Well with a combined extraction rate of 300 gpm.
- Operations are coordinated between the USAF and the City of Portsmouth.





AIMS - EW-01 Replacement



- During routine maintenance in October 2021, a break in the well screen at Extraction Well 1 (EW-01) was identified.
- A temporary seal was installed to block the break to allow the well to continue running.
- Reduction in capacity since the damage was initially identified – planned replacement of EW-01 in spring of 2024.
- Iron fouling and additional screen damage identified during August 2023 routine redevelopment expedited the schedule of the replacement.









AIMS - EW-01 Replacement



- Drilling and Design of EW-01R Activities:
 - Pilot boring drilled 18 August 2023
 - Civil engineering planning
 - Ongoing coordination with the Pease Development Authority
 - Design recommendations submitted to USEPA and NHDES on 27 September 2023
- Next Steps:
 - Installation of EW-01R in November 2023
 - Well development and initial assessment of capacity
 - Engineering installing pump, water line extension through EW-01 vault, electrical connections









Site 8 Interim Mitigation System (IMS) Optimization Challenges

- Iron/metals fouling continues to be the primary limiting factor for treatment capacity. Operators increasing cleaning and maintenance frequency.
- Operators' efforts have yielded steady improvements in treatment flow and operational time, but treatment flow is approaching maximum system capacity with current configuration.

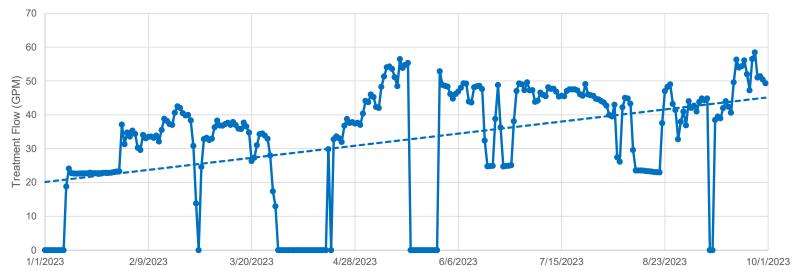






	Previous RAB (5/3/2023)	Current RAB (11/1/2023)
Treatment Flow (gallons per minute)	39 gpm	55 gpm
Number of wells running	6	10

Daily Average Site 8 Water Treatment Flow







Site 8 IMS Optimization Plans

Phase I

- Treatment resin changed from regenerative resin to single use resin on 10 April 2023.
- Single use resin is same resin used at AIMS with proven performance and is effectively removing PFAS at Site 8.
- Single use resin has allowed increased flow through the treatment process.





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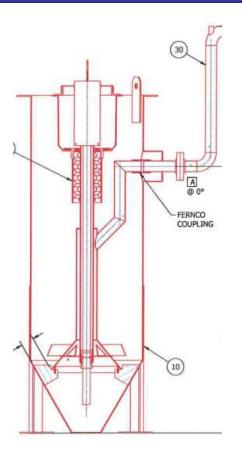
Site 8 IMS Status Update



Site 8 IMS Optimization Plans

■ Phase 1 – Future Work

- Conduct 8-week gravity sand filtration pilot test to evaluate additional filtration to improve system reliability.
- Sand filtration pilot test expected to begin winter 2023.







Site 8 IMS Optimization Plans

■ Phase II – Future Work

- Removal of resin regeneration and distillation equipment.
- Installation of additional influent solids pretreatment systems such as:
 - Sand filtration
 - Larger sludge press
 - Addition of a second liquid GAC vessel
 - Upsizing of process tanks







Site 8 IMS Waste

- Pressed sludge solids and other PFAS-impacted waste accumulated around Site 8 due to delays from new sludge transport/disposal vendor.
- New vendor conducted first waste pickups in October, majority of accumulated waste removed for offsite disposal as of 01 November 2023.
- Waste will be sent to a RCRA Subtitle C hazardous waste landfill in Belleville, Michigan.



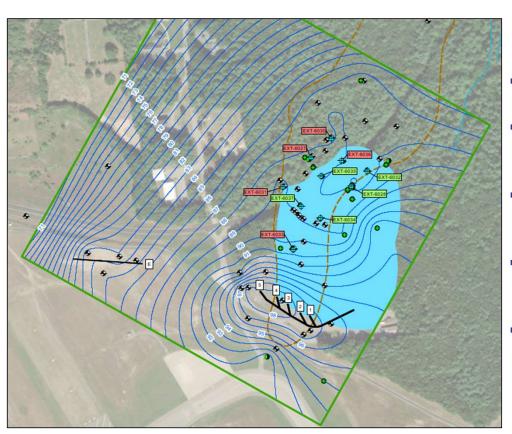






Site 8 IMS Impacts





- The IMS maintains hydraulic control, preventing the spread of PFAS-impacted groundwater
- ~70% of wells monitored within the bedrock trough (where extractions wells are located) show decreasing or probable decreasing trends in PFOS concentrations.
- Concentration of PFOS in bedrock well 08-6046 northwest of the bedrock trough reduced 0.065 ug/L pre-IMS to 0.023 ug/L in April 2022.
- Concentration of PFOS in the furthest upstream sample in Watering Spring reduced from 4.2 ug/L pre-IMS (April 2018), to 1.2 ug/L in October 2022.
- Concentration of PFOS in the furthest upstream sample in Pickering Brook reduced from 6.5 ug/L pre-IMS (March 2018), to 0.46 ug/L in 2022.



RAB Agenda



- Join us on 01 November 2023 for the RAB Meeting
- New Hampshire DES Building
 - 222 International Drive, Suite 175, Portsmouth, NH
- 4:30 pm Viewing of this presentation recording
- 5:30 pm Review of in-person poster figures
- 6:00 pm Welcome, introductions, RAB business
- 6:15 pm Open discussion
- 7:30 pm Public comments
- 8:00 pm Adjourn





Your Success is Our Mission!