

**Restoration Advisory Board (RAB) Meeting
Former Fort Devens Army Installation
PFAS Project Status Update
25 July 2019**

Location: MassDevelopment (Devens Commerce Center), 33 Andrews Pkwy, Devens, MA

Time: 6:30 PM – 8:30 PM

Attendees: see attached sign-in sheet

Introductory Remarks:

- Bob Simeone welcomed all and provided an overview of the agenda along with a summary of the CERCLA process, work completed to date and the schedule moving forward.
- All attendees gave personal introductions.

Presentation: See attached presentation slides, dated 25 July 2019, which provided updates on the following topics related to PFAS investigations at the former Fort Devens:

1. Quarterly Sampling of Town Public Water Supply Wells
2. Grove Pond Wellfield Time Critical Removal Action (TCRA)
3. Sampling of Private/Community/Non-Community Drinking Water Wells
4. Community Involvement Plan (CIP)
5. Remedial Investigation (RI)
6. Next steps

Questions during or following presentation:

- 1. Where are wells 2 through 6 on the Grove Pond Well Supply Map? (resident)**
 - a. Town of Ayer Department of Public Works (DPW) Superintendent explained that the wells continue to be numbered sequentially rather than replace the well number of the original well with the new well id. At the time, well 6 was not operational and wells 1, 7 and 8 were online. Wells are decommissioned when they get plugged with iron.
 - b. The Discussion of which wells were operational and sampled in a given year led to recommendation by Carol Keating (EPA) that future RAB meetings provide information on historical town well sampling results including trends, tables and graphs.
 - c. Town of Ayer DPW Superintendent added that samples collected from the water towers were most representative of drinking water. A resident asked why this was the case. MassDEP explained that it's more representative of drinking water because the water is mixed and has been through the treatment process at the plant.

2. **Are there any other compounds in water at the Grove Pond water supply wells that compete with PFAS in the granular activated carbon (GAC)?**
 - a. No. There are no volatiles, no pesticides, no radionuclides. (Town of Ayer DPW Superintendent)
3. **Where would MassDEP apply drinking water criteria? (Harvard Press)**
 - a. Drinking water criteria are applied to water people are drinking. (MassDEP)
 - b. The Town of Ayer also tested their storage tanks which is more representative of which people are drinking because it has been treated and blended with other supplies from within the town before it is distributed to homes. (Ayer)
4. **How much did the temporary GAC treatment system at the Town of Ayer Well 8 cost? (Harvard press)**
 - a. The system cost approximately \$750,000, which the Army paid. Changes of the GAC are approximately \$75,000, which the Army will pay. The system was rented for approximately one year. (Army)
5. **What about treatment at Spectacle Pond wells? (Harvard Press)**
 - a. The Town of Ayer will pay for treatment at Spectacle Pond wells. (Town of Ayer Utilities Manager)
6. **Is there an investigation for the source of PFAS contamination at the Spectacle Pond wells? (Harvard Press)**
 - a. MassDEP is looking for a source of contamination. (MassDEP)
7. **Jim Moore (MassDevelopment) summarized the treatment system plans for Devens wells.**
 - a. Temporary treatment at the MacPherson Well using single 10,000 gallon GAC unit as constrained by space. Planning on getting permission from MassDEP to use treated water on Monday, 7/29. MacPherson will be offline in winter since system cannot be winterized. A permanent ion exchange system is planned for MacPherson.
 - b. First set of temporary GAC vessels planned for the Shabokin Well at end of August and a second set of temporary GAC vessels online by end of September.
 - c. Temporary treatment at the Patton Well using ion exchange planned to start before winter. Testing three different media. Planning to use Patton and Shabokin in winter since MacPherson system cannot be winterized.
 - d. Permanent ion exchange system planned for the MacPherson Well to start end of 2020.
 - e. Permanent iron and manganese filtration and PFAS treatment plant for Patton and Shabokin Wells are planned to be online start 2022.
 - f. The current cost has not been tabulated.
 - g. MassDevelopment is currently paying for the PFAS treatment systems and has submitted a letter asking the Army to pay for it.
 - h. MassDev plans to end bottled water program by end of the year.
8. **How does a resident exposed to PFAS in water find out about health effects? (resident)**
 - a. The Agency for Toxic Substances and Disease Registry (ATSDR) has published information on health effects of PFAS. If individuals are worried about their personal health, they should consult their physician. The physicians can get more information about PFAS from the Massachusetts Department of Public Health. (MassDEP)

- 9. Are you sure homes were sampled in Shirley as this was not mentioned at the last RAB? (resident)**
- a. Yes, 9 private wells in Shirley were sampled north and west of airfield near Walker Road. It may have been confusing at the last RAB because several different types of well sampling were discussed including groundwater monitoring wells.
- 10. When did you find out about contamination (resident)?**
- a. In 2016, when the public wells were tested and have been investigating since the PFAS was detected (Army)
 - b. MassDEP explained that the first time the sampling was required for systems serving populations over 10,000 was in 2015/2106 as part of the unregulated contaminant monitoring rule, which allows for collection of data for contaminants that are suspected to present in drinking water but do not have health based standards.
- 11. How was it determined which private wells in Harvard would be sampled?**
- a. The Harvard Board of Health supplied the Army with a list of wells they wanted sampled. (Army)
- 12. Will the results of the private well sampling be shared?**
- a. Yes, the results will be shared with the well owners, the Harvard Board of Health, EPA, and MassDEP. (Army)
- 13. Is MassDEP investigating the source of contamination along Ayer Road (Specifically, Ayer Rd Properties) and is MassDEP aware that a machine shop was previously located in this area? (Harvard Press)**
- a. No. MassDEP's position is that the likely source is the Army but if historical knowledge regarding a potential source exists, then it should be provided to Army. The Army is investigating it along with EPA. (MassDEP)
- 14. A Harvard resident living on Old Mill Road indicated she had her well tested privately and the sum of PFOA and PFHxS was close to 20 ppt.**
- 15. How much confidence is there in the groundwater flow direction arrows on the maps presented? (Harvard Board of Health [BOH])**
- a. Groundwater flow directions at the former Fort Devens are well understood overall, although the ongoing Remedial Investigation will improve that understanding at the specific AOCs. (Army)
- 16. How fast does PFAS travel? (Harvard Press)**
- a. PFAS is highly soluble, with little sorption to soil, and therefore moves with groundwater flow. Groundwater flow rates vary in different areas. (Army, EPA)
- 17. Will sampling data from the area of the Patton and Shabokin wells be available on the Army's website? (Harvard BOH)**
- a. The project website, ftdevens.org, has data available for review for samples collected during the RI program. The recent data for samples in the Area of the Patton and Shabokin wells will be available on the website in August 2019. (Army)
 - b. The Town of Ayer's website also has data available for review from sampling of Ayer's water supply wells, along with other weekly updates and presentation materials. (Ayer)
- 18. What is the source of PFAS contamination at the Patton well? (Harvard Press)**
- a. The source is suspected to be associated with a former Army dump site located approximately 600 feet to the east, called AOC 40. The Army previously cleaned up AOC

40 (excavated soil and debris); however, the work predated any PFAS investigations. (Army)

19. What is the source of PFAS contamination at the Shabokin well? (Harvard Press)

- a. Unknown at this time. (Army)

20. Since PFAS concentrations in groundwater can change over time, will the Army retest the vertical profile locations being conducted in the RI? (Harvard Press)

- a. Due to the drilling method used, groundwater vertical profiles are a one-time sampling. However, based on the results of the vertical profiles, the Army will be installing permanent groundwater monitoring wells in key locations which can be sampled periodically in order to evaluate changes in PFAS concentrations over time. (Army)

21. What were the results of the Town of Ayer's testing of household filters? (Army)

- a. Ayer tested two different household tap filters for PFAS removal and had mixed results. The timeframe for effective removal was highly variable as PFAS tended to break through the filters fairly quickly. Chlorine concentrations in the water also affected the filter effectiveness. The filters also tended to clog quickly. Although perhaps better than no filter, the town does not have a recommendation for use of these filters for household taps. (Ayer)

22. Are there any recommendations for treatment systems that can be installed in households, particularly for the removal of both PFAS and radionuclides and in what order? (Harvard BOH)

- a. Although we cannot recommend a specific vendor, there are many companies available that can install household filtration/treatment systems. (Army, MassDEP)
- b. The State has not developed a list of certified vendors for this type of work. (MassDEP)

Announcement:

The next RAB meeting will be held on 17 October 2019, at 6:30 PM, at the Ayer town Hall.

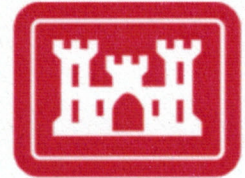
Note:

Questions and responses were paraphrased where appropriate for the sake of clarity.



SIGN-IN SHEET

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Restoration Advisory Board (RAB) Meeting
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