From: Fredericks, William (SEN)

To: <u>Diana Schindler</u>

Cc: <u>Murray, Brian - Rep. (HOU)</u>
Subject: Check Presentation

Date: Tuesday, October 4, 2022 2:12:14 PM

Good afternoon Diana,

I am writing on behalf of Senator Fattman and Representative Murray to invite you and members of the select board to a check presentation for money we secured in the state budget. This is based on the \$65,000 secured for EMS personnel and the \$40,000 secured for the Hopedale Pond dredge study.

The presentation will be held on Wednesday, October 12, 2022 at 6:00pm, at the pond, and should last no longer than 15 to 30 minutes.

Would you be able to pass this invitation along to the members of the select board, as I don't have their emails on file.

Please let us know if you will be able to attend.

Best,

Bill Fredericks | Communications Director

Office of Senator Ryan C. Fattman | Assistant Minority Leader State House Room 213-A | O: 617-722-1420

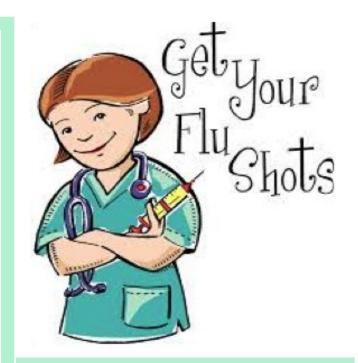
FREE HOPEDALE FLU SHOT CLINICS

Thurs. Oct. 13, 2022 4:00 pm - 6:00 pm and

Thurs. Oct. 27, 2022 4:00 pm - 6:00 pm

Hopedale High School Cafeteria

- Please bring your Health Insurance and or Medicare Cards.
- Wear a Short-Sleeved Top.
- You will be required to complete registration information at the Clinic.
- Pre-registration is not available.



Vaccines are available to individuals age *3 and older. *Please note change in minimum age.

This year, the Over 65 Vaccine will also be available.

Questions? Call the Hopedale Sr. Center at (508)634-2208.



On Sep 12, 2022, at 5:15 AM, Contact form at Town of Hopedale MA <cmsmailer@civicplus.com> wrote:

Hello bkeyes,

US Marine Thomas J Beder (tom_beder@miltoncat.com) has sent you a message via your contact form (https://www.hopedale-ma.gov/user/216/contact) at Town of Hopedale MA.

If you don't want to receive such e-mails, you can change your settings at https://www.hopedale-ma.gov/user/216/edit.

Message:

Good Day Brian, and the Select Board of Hopedale

I would like to notify the Board that on Saturday, (November 26th, 2022), the US Marines, and Toys for Tots, would like to have a Roadside Collection for spare Change, from 10:00-13:00. We will operate in the area of Rt 16, Main St., and the Cumberland Farms Store.

This will be the same routine that was successful in November of 2021.

All parking will be in the Stones Furniture parking lot. All participants will be 18yrs old or above, or will be directly Chaperoned/Supervised by an Adult, if under 18 (ie: Hopedale Scouts). No person will be in the Road or in the path of travel of any vehicle. We will be on sidewalks only. All participants will be in either Marine Corps Dress Blues, or will be wearing Red Jackets, or red reflective vests. We will be holding signs stating 'who we are'. The hours will be from 10:00-13:00. I will be directly supervising this event. I will, as in 2021, notify, and discus matters related, with the Police Chief, the Fire Chief, and I will also notify the Supervisor of Highways for his advice, prior to this Event.

I thank you in advance for your efforts, please feel free to stop by and work with us that morning, just see me...I will keep you busy.

HoHoHo, have a Great Day.

Semper Fidelis Thomas J Beder 3 Overdale Parkway Jr Vice Commandant; Detachment 144 Worcester 2022 Toys for Tots Boss - Worcester County 508.282.9310 my cell

CC: all members of Board



Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Bethany A. Card Secretary

Martin Suuberg Commissioner

September 30, 2022

Town of Hopedale Attn: Diana Schindler, Administrator PO Box 7, 78 Hopedale Street Hopedale, MA 01747

Via Electronic Mail Only dschindler@hopedale-ma.gov

<u>uschindler@nopedate-in</u>

Re PWS Town: Hopedale

PWS Name: Hopedale Water Department

PWS ID #: 2138000

Program: System Modification WS22C

Action: Approval

MassDEP Trans. #: X289366

Dear Ms. Schindler:

The Central Regional Office of the Massachusetts Department of Environmental Protection (MassDEP) Drinking Water Program (DWP) received your permit application WS22C with the results of the PFAS treatment pilot study conducted at the Greene Street Water Treatment Plant (WTP). MassDEP approved the WS21C pilot study proposal on May 28, 2021. The pilot study evaluated the effectiveness of granular activated carbon (GAC) for the removal of PFAS from the wells feeding the Greene Street WTP. The permit application was prepared and filed by Weston and Sampson Engineers, Inc., on behalf of the Hopedale Water Department.

Project Description and Background

The Hopedale Water Department (HWD) has 6 active wells; Mill Street Tubular Wellfield 01G, Green Street Gravel Packed Wells 02G, 03G, 04G, and Green Street Bedrock Wells 05G, and 06G. Wells 5G and 06G were determined to be Groundwater Under the Influence of Surface Water (GWUI). All wells are pumped into a pre-equalization tank and then into the Greene Street Water Treatment Facility for treatment via coagulation and greensand filtration for removal of iron and manganese and surface water treatment, and ultraviolet and chlorination disinfection, and pH adjustment. Initial sampling of the six wells for PFAS6 contaminants in October and November 2020 noted elevated levels of PFAS6 at Well 05G at concentrations of 37 nanograms/liter (ng/l) and 34 ng/l, above the Maximum Contaminant Level (MCL) of 20 ng/l. Well-02G and 03G had the next highest PFAS6 concentrations ranging from 16 to 18 ng/L. All other wells had PFAS6 concentrations below 10 ng/L. Currently, blended PFAS concentrations to the WTP are approximately 8 ng/L. As result, the decision was made to pilot GAC to see it if was sufficient to remove PFAS6 from all incoming wells to the Greene Street WTP. And eventually design and install full scale treatment for PFAS6.

A pilot-scale contactor containing Calgon Filtrasorb 400 GAC was installed in the WTP after the full-scale Greensand filters and prior to the UV disinfection system. This is where the proposed treatment will be located. Greensand filter effluent was de-chlorinated using sodium thiosulfate prior to the pilot-scale contactor. The contactor contained 94" of media but was operated at 1.5 gpm (7.5 gpm/sf) to mimic the velocity through 120" of GAC (and an EBCT of 10 minutes). The 94" of GAC media was split between three contactors that operated in series. The first contactor contained 14" of media and the following two contactors each contained 40" of GAC media. Contactor differential pressure, flow, volume of water treated, and water quality were monitored during pilot testing. The Greene Street WTP operated continuously during pilot testing (which was from 6/17 to 7/1/2021 – 14 days) and therefore the pilot equipment was able to operate continuously throughout the pilot testing. PFAS sampling was completed on the blended raw water, GAC 14" effluent, and GAC final effluent and analyzed using EPA Method 537.1. GAC 14" effluent represented treatment through the first contactor containing 14" of GAC media. GAC final effluent represented treatment through all three contactors for a total of 94" of GAC media.

The pilot contactor was operated for approximately 2,700 EBVs without any substantial headloss development. A linear regression performed on the contactor differential pressure over time indicated a headloss development of 0.0701 psi/day. The pilot was operated for 14 days, so the long-term fouling, headloss development, and contaminant breakthrough was not determined by this study. Nor was the dosage of sodium thiosulfate optimized during the pilot. Post pilot media sampling suggested an increase of total aluminum and iron on the GAC media at the conclusion of the study.

Raw water PFAS6 levels during the pilot (beginning, during, end) event were 8.8 ng/L, 8.63 ng/L, 9.23 ng/L respectively. The table below shows the PFAS6 sample results during the pilot.

Source:	Raw			GAC 14"		GAC FINAL					
Laboratory Report #:	L2133146	L2134859	L2135594	L2135010	L2135594	L2133146	L2133473	L2133958	L2134595	L2134859	L2135594
Sampling Date:	6/18/21	6/28/21	7/1/21	6/28/21	7/1/21	6/18/21	6/21/21	6/23/21	6/25/21	6/28/21	7/1/21
Sampling Time:	9:00	8:33	8:35	11:26	8:45	8:55	9:50	10:35	9:39	8:55	8:50
Method:	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1	537.1
Parameter	SE-A	SE-E	SE-F	SE-E	SE-F	SE-A	SE-B	SE-C	SE-D	SE-E	SE-F
Perfluoroheptanoic Acid [PFHpA] (ng/L)	ND (<2.39)	ND (<1.82)	ND (<1.82)	ND (<1.85)	ND (<1.87)	ND (<1.92)	ND (<1.85)	ND (<1.88)	ND (<1.86)	ND (<1.85)	ND (<1.85)
Perfluorohexanesulfonic Acid [PFHxS] (ng/L)	ND (<2.39)	ND (<1.82)	ND (<1.82)	ND (<1.85)	ND (<1.87)	ND (<1.92)	ND (<1.85)	ND (<1.88)	ND (<1.86)	ND (<1.85)	ND (<1.85)
Perfluorooctanoic Acid [PFOA] (ng/L)	5.07	5.17	5.25	4.70	4.63	ND (<1.92)	ND (<1.85)	ND (<1.88)	ND (<1.86)	ND (<1.85)	ND (<1.85)
Perfluorononanoic Acid [PFNA] (ng/L)	ND (<2.39)	ND (<1.82)	ND (<1.82)	ND (<1.85)	ND (<1.87)	ND (<1.92)	ND (<1.85)	ND (<1.88)	ND (<1.86)	ND (<1.85)	ND (<1.85)
Perfluorooctanesulfonic Acid [PFOS] (ng/L)	3.73	3.46	3.98	3.00	3.06	ND (<1.92)	ND (<1.85)	ND (<1.88)	ND (<1.86)	ND (<1.85)	ND (<1.85)
Perfluorodecanoic Acid [PFDA] (ng/L)	ND (<2.39)	ND (<1.82)	ND (<1.82)	ND (<1.85)	ND (<1.87)	ND (<1.92)	ND (<1.85)	ND (<1.88)	ND (<1.86)	ND (<1.85)	ND (<1.85)
PFAS6, Total (ng/L)	8.80	8.63	9.23	7.70	7.69	0.00	0.00	0.00	0.00	0.00	0.00

Results show PFAS6 breakthrough of the initial 14" column on day 11 of the 14-day pilot. PFAS6 sample results for the finished water were ND for the duration of the pilot showing the filter is capable of proper removal. Again, this pilot simulated a single vessel with a mimicked EBCT of 10 minutes. During the pilot, there was one non-PFAS6 compound detected in the raw water, Perfluorohexanoic Acid (PFHxA). The compound mirrored the PFAS6 compounds with breakthrough of the initial 14" column at the same time as PFAS6 and was ND in the finished water for the entire pilot duration. While not part of the pilot study, it was noted that the filter

column did show removal of total organic carbon (TOC) and UV254. TOC and UV254 levels were ND in the finished water, but did show break through before the end of the pilot.

Permit Review and Approval

MassDEP reviewed the permit application and supporting documentation, and hereby issues this approval of the pilot study and proposed use of Calgon Filtrasorb 400 GAC for removal of PFAS6 at the Greene Street WTP. This Permit does not convey property rights of any sort or any exclusive privilege. Pursuant to MassDEP's authority under 310 CMR 22.04(7) to require that each supplier of water operate and maintain its system in a manner that ensures the delivery of safe drinking water to consumers, this permit is made subject to the conditions set forth below.

General Conditions

- 1. <u>Compliance with Permit Approvals</u> The Supplier of Water shall conduct activities in accordance with the approved plans, reports, and other submissions, except as may be modified by the conditions set forth in this approval. No material changes in the design or activities described in the approved documents shall be performed without prior written MassDEP approval.
- 2. <u>Compliance with Other Approvals</u> The activities at this Public Water System shall be performed in compliance with all other applicable local, state and federal laws and regulations. This approval does not relieve the owner or operator of this Public Water System from complying with all other applicable local, state and federal requirements, licenses and permits.
- 3. <u>Duty to Mitigate</u> The Supplier of Water shall remedy and shall act to prevent all potential and actual adverse impacts to public health or the environment resulting from noncompliance with the terms or conditions of this approval.
- 4. <u>Duty to Provide Information</u> The Supplier of Water shall furnish to MassDEP, within a reasonable time, any information MassDEP may request, and which is deemed by MassDEP to be relevant in determining compliance with permits, regulations, guidelines and policies.

Specific Permit Conditions

- Treatment Plant Permit A WS25 Treatment Facility Modification permit shall be submitted for the design of the Calgon Filtrasorb 400 GAC treatment system. MassDEP suggests a 30% and 60% design be submitted (no transmittal needed) prior to proceeding with the full design of the final submission.
- 2. <u>Treatment Plant Design</u> The Design shall include provisions for backwashing the filters and disposal of backwash water. The design shall also include optimization of sodium thiosulfate addition as this was not evaluated in the study. As this is a surface water treatment plant, minimum disinfection contact time (CT) must be maintained.

- 3. Lead and Copper Sampling The change in treatment process has the potential to impact the effectiveness of Corrosion Control Treatment, and therefore warrants more frequent lead and copper monitoring in accordance with 310 CMR 22.06B(2)(b)3.c. If your system is currently on reduced monitoring for lead and copper, you will need to go back to standard monitoring. Prior to activation, please submit to MassDEP a revised lead and copper sampling plan reflecting standard monitoring for your system.
- 4. Treatment Parameters The pilot study showed that the proposed treatment can treat incoming PFAS6 contaminants down to non-detect post treatment. The treatment system shall be designed for equivalent removal capability.

Thank you, and if you should have any questions or comments regarding this matter, please feel free to contact Randy Swigor of the Drinking Water Program at randy.swigor@mass.gov.

Sincerely,

Robert A. Bostwick

Section Chief

Drinking Water Program

Robert a. Bostonik

ecc: Drinking Water Program, BWR, MassDEP-Boston

MassDEP-CERO

Tim Watson, Hopedale Water & Sewer, twatson@hopedale-ma.gov

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Allie Goldberg, Weston & Sampson, goldberg.allie@wseinc.com