

Town and County of Nantucket Select Board • County Commissioners

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C. Elizabeth Gibson
Town & County Manager

***AGENDA FOR THE MEETING OF THE
SELECT BOARD
JUNE 25, 2024 - 4:00 PM
ROOM A OF MEETING TRAILER, 131 PLEASANT STREET
AND REMOTE PARTICIPATION VIA ZOOM WEBINAR
NANTUCKET, MASSACHUSETTS***

***YOU TUBE LINK FOR VIEWING ONLY:
<https://youtube.com/live/s1gFzH758zA>***

***ZOOM WEBINAR REGISTRATION LINK TO VIRTUALLY ATTEND MEETING:
https://us06web.zoom.us/webinar/register/WN_6powfBQ9Sd2i0JNgLY2t9Q***

- I. CALL TO ORDER***
- II. JOINT MEETING WITH BOARD OF HEALTH REGARDING PFAS (PER- AND POLYFLUOROALKYL SUBSTANCES) ISSUES***
- III. ADJOURNMENT***



Agenda Item Summary

Agenda Item #	II.
Date	6/25/24

Staff

Assistant Town Manager, Manager of Strategic Projects, Acting Public Health Director

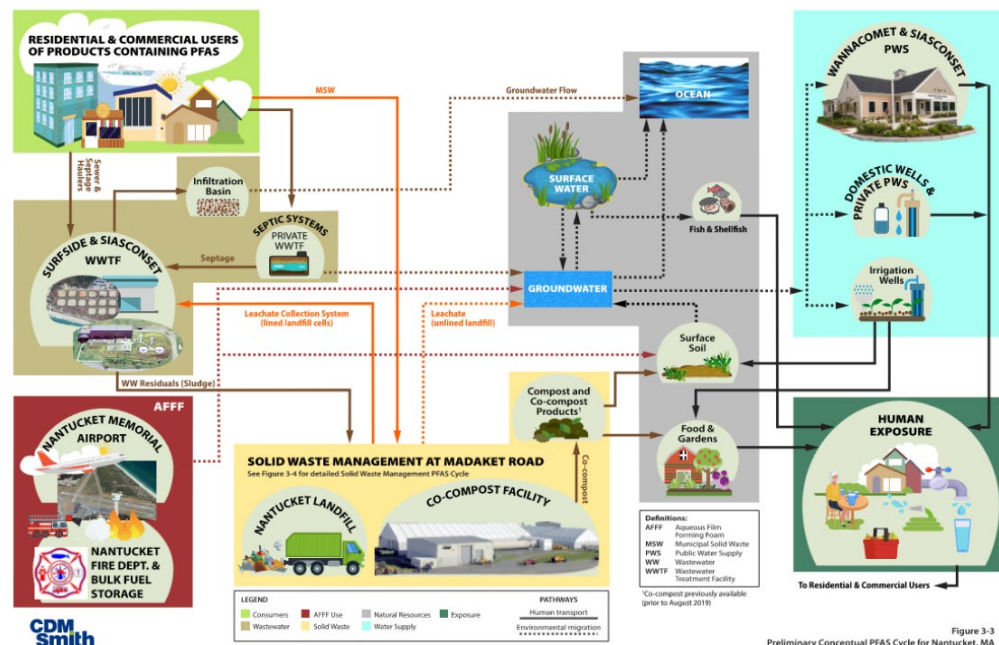
Subject

Town-Wide PFAS Projects Update

Executive Summary

This is the seventeenth (17) public update on the Town's PFAS-related efforts.

Since 2020, the Town has appropriated \$15,000,000 for PFAS-related efforts which does not include the work by the Nantucket Memorial Airport to address PFAS contamination and cleanup on property under Airport jurisdiction. Approximately \$4.7M has been expended to date through twenty (20) contracts to perform a variety of island-wide PFAS-related projects, including the water main expansion project west of Nantucket Memorial Airport begun in fall 2023 (see "Background" for details). Aside from the Landfill Groundwater PFAS Sampling Program which is being undertaken with the support of the Massachusetts Department of Environmental Protection (MADEP), these voluntary efforts are being undertaken proactively to learn more about potential PFAS issues in the community and identify short and long-term solutions. The PFAS cycle for the community of Nantucket has been developed and is being used to target the transmission pathways and contaminated materials in the environment for source reduction and control, and as a tool to guide project development:



Background/Discussion

PFAS PROJECTS STATUS SUMMARY (as of 6/25/24)

FY	ID #	Contract Description	Expiration Date	Not-To-Exceed Amount	Status (% Complete)	Total PFAS Approp. Expended	Total PFAS Approp. Remaining
FY21	1531	PFAS Island Wide Potential Source Assessment	6/30/21	\$43,400.00	100%	\$43,387.22	\$0.00
FY21	1603	PFAS Communications Strategy	11/4/20	\$140,000.00	100%	\$134,653.80	\$0.00
FY21	1606	PFAS Potential Source Assessment Add'l Svs.	2/28/21	\$43,000.00	100%	\$42,998.53	\$0.00
FY21	1751	PFAS Potential Source Assessment Phase 2A	6/30/23	\$407,500.00	100%	\$407,489.73	\$0.00
FY22	1752	Water Main SRF-PEF MADEP Application	8/31/21	\$14,000.00	100%	\$13,991.78	\$0.00
FY22	1784	Water Main System Buildout Model	11/3/21	\$147,700.00	100%	\$107,478.94	\$0.00
FY22	1889	WWTF Influent PFAS Sampling Program	12/31/23	\$151,800.00	100%	\$146,947.45	\$4,852.55
FY22	1890	PFAS Handling Protocols	6/30/25	\$42,700.00	85%	\$34,993.44	\$7,706.56
FY23	1946	Water Main Design and Engineering	12/31/23	\$299,700.00	100%	\$299,655.53	\$0.00
FY23	2089	Water Main Bidding Services	6/30/23	\$18,000.00	100%	\$17,982.84	\$0.00
FY24	2159	Landfill Groundwater PFAS Sampling Program	9/1/24	\$138,600.00	80%	\$109,225.00	\$29,375.00
FY23	2164	Water Main Design Update and Re-Bidding Svs.	8/30/23	\$47,500.00	100%	\$39,764.51	\$0.00
FY24	2191	On-Call PFAS Consulting Services	6/30/25	\$147,500.00	60%	\$83,516.80	\$36,986.83
FY24	2192	WWTF Influent PFAS Sampling Program Year 2	12/31/24	\$251,200.00	50%	\$119,320.00	\$131,880.00
FY24	2160	WWTF PFAS Destruction Foam Benchmark	12/31/24	\$140,100.00	80%	\$113,170.65	\$26,929.35
FY23	2051	SRF - F.W. Webb Water Main Material	12/31/23	\$143,659	100%	\$142,683.57	\$975.25
FY23	5052	SRF - E.J. Prescott Water Main Material	12/31/23	\$148,463	100%	\$143,257.00	\$5,206.00
FY23	2053	SRF - Ferguson Waterworks Water Main Material	12/31/23	\$682,000	100%	\$681,667.57	\$332.43
FY24	2230	SRF - EPG Water Main Construction Phase Services	7/31/25	\$810,627	75%	\$71,872.40	\$738,754.60
FY24	2206	SRF - CC Construction Water Main Construction Svs	12/31/25	\$3,547,188	85%	\$1,847,171.33	\$1,700,016.44
FY24	N/A	SRF - Police Details	N/A	N/A	Open	\$55,000.01	N/A
				\$ 7,364,637		\$4,656,228.10	\$2,683,015.01

On April 10, 2024, The US Environmental Protection Agency (EPA) announced the final National Primary Drinking Water Regulation and identified Maximum Contaminant Levels (MCLs) for six PFAS in drinking water. PFOA, PFOS, PFHxS, PFNA, and HFPO-DA as contaminants with individual MCLs, and PFAS mixtures containing at least two or more of Phys, PFNA, HFPO-DA, and PFBS using a Hazard Index MCL to account for the combined and co-occurring levels of these PFAS in drinking water. EPA also finalized health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these PFAS.

Compound	Final MCLG	Final MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (ppt) (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA (commonly known as GenX Chemicals)	10 ppt	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index

- Public water systems must monitor for these PFAS and have three years to complete initial monitoring (by 2027), followed by ongoing compliance monitoring. Water systems must also provide the public with information on the levels of these PFAS in their drinking water beginning in 2027.
- Public water systems have five years (by 2029) to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed these MCLs.
- Beginning in five years (2029), public water systems that have PFAS in drinking water which violates one or more of these MCLs must take action to reduce levels of these PFAS in their drinking water and must provide notification to the public of the violation.

The Town is actively following these initiatives and will be positioned to implement once finalized (pending funding).

FUNDING: \$15,000,000 in funding commitments from the Town to support PFAS-related efforts:

PFAS PROJECTS STATUS SUMMARY (as of 6/25/24)			
PFAS FUNDING SOURCES:		Appropriated	Remaining
2020 ATM Article 8 (Free Cash)		\$750,000.00	\$ -
2021 ATM Article 10 – PFAS Groundwater Soil Investigations (Borrowing)		\$750,000.00	\$ 61,210
2022 ATM Article 18 – PFAS Soil Investigation (Borrowing)		\$2,000,000.00	\$ 1,797,163
2022 ATM Article 22 – WWTF PFAS Removal Pilot Program (Borrowing)		\$2,500,000.00	\$ 2,386,829
		\$6,000,000.00	\$ 4,245,203
SRF WATER MAIN EXPANSION FUNDING:		Appropriated	Remaining
\$9,000,000 – 2022 ATM Article 10 – New Water Main West of Airport <i>(Debt exclusion, \$8.3 MADEP SRF Loan awarded for project)</i>		\$9,000,000.00	\$6,058,348.12
\$9,000,000 – 2022 ATE Ballot Question 1 (approved 1,738 Yes, 496 No, 140 Blank) <i>(Debt exclusion, \$8.3M DEP SRF Loan awarded for project)</i>			

CURRENT PFAS-RELATED PROJECTS:

- **PFAS Impacted Materials Management and Protocols for Handling**
(Consultant: CDM Smith, Inc.)

This project developed protocols and procedures for Town employees to follow when working in or adjacent to areas of known or suspected PFAS contamination. This scope of work focuses on how to manage the material and how to handle it during construction, health and safety considerations, procedural steps, and requirements for managing excess soils that includes stockpiling, sampling and material transportation and disposal. Material management and disposal plans for *excess material* from known or suspected PFAS-contaminated areas are evolving and site-specific, require guidance from a Licensed Site

Professional (LSP) and/or MADEP, and are therefore developed as needed for each individual project.

- **Landfill Groundwater PFAS Sampling Program**

(Consultant: CDM Smith, Inc.)

In 2021, MADEP suggested the need for a landfill site assessment due to PFAS detections in co-compost. In response, on December 3, 2021, the Town submitted a work plan (MADEP SW-22) for groundwater and surface water sampling of PFAS at existing monitoring stations. This program is an initial screening effort to determine if the landfill and/or its operations are a potential source of PFAS impacts to the environment. MADEP approved the plan in September 2023, two rounds of sampling have been completed, analysis is being performed and a final report will be submitted in August 2024.

- **On-Call PFAS Consulting Services**

(Consultant: CDM Smith, Inc.)

This program provides professional support for the Town's goal of furthering the development and implementation of various PFAS reduction and control strategies. These services have included such items as: review and comment on Massachusetts Contingency Plan (MCP) matters related to the Nantucket Memorial Airport; responding to public inquiries regarding PFAS study efforts; preparation of public outreach materials including infographics, fact sheets and FAQs; attendance at public meetings and Select Board updates related to PFAS activities; assisting the Town in coordination of PFAS issues between Town Departments; addressing technical matters that arise; and participation in weekly PFAS call updates with Town personnel.

- **WWTF Influent Sampling Plan (Year 2)**

(Consultant: CDM Smith, Inc.)

This project continues a voluntary, yet comprehensive, sampling program to identify and assess PFAS sources being received at the Surfside Wastewater Treatment Facility (WWTF), as well as to understand the PFAS concentrations in the wastewater influent. This elective sampling program will provide an initial set of information as to the PFAS compounds present in the wastewater, give insights to PFAS source reduction and control and provide a baseline of PFAS concentrations in the Town's wastewater and related solids.

- **WWTF PFAS Destruction Foam Benchmark**

(Consultant: CDM Smith, Inc.)

The Town has initiated steps to proactively identify and evaluate potential opportunities to reduce PFAS entering and passing through the Surfside WWTF. Based on preliminary review of the sampling data collected under the WWTF Influent Sampling Plan (Year 1) and observations of the Surfside WWTF processes, the aeration tank foam and landfill leachate appear to be excellent candidates for foam fractionation treatment. Surface Active Foam Fractionation (SAFF®) is a technology developed by OPEC that separates PFAS from aqueous matrices by using bubble-formation to concentrate PFAS in a foam, producing a smaller, highly concentrated PFAS waste stream that can then be treated further via additional technologies more efficiently than more dilute sources. The PFAS compounds

detected in the Madaket Road landfill leachate during the wastewater sampling program suggest that the leachate will likely aerate efficiently, opening the door to potential treatment technologies, such as SAFF.

- **Water Main Expansion West of Nantucket Memorial Airport**

(Contractor: CC Construction, Construction Oversight: EPG, Inc.)

In the fall of 2023, the Town began expansion of public water service as part of the Town's voluntary efforts to address potential contamination in private wells west of the Airport. The Town was awarded a \$8.3M zero interest loan from the Commonwealth of Massachusetts through the State Revolving Fund (SRF) Loan program to expedite water service extensions to the local area residents. Design plans were prepared by CDM Smith to provide public water to approximately 80 existing homes. The project includes 15,200 linear feet of new 8" and 12" water main pipes, hydrants, water services, and other appurtenances to expand the water distribution system. As of May 2024, the project is 85% complete, all water mains are operational, and will resume in fall of 2024 with punch list items and paving. Additionally, Tom's Way was added to the project in late 2023 with the approval of MADEP to utilize the same SRF funding to keep costs lower while expediting service to this area.

- **Private Well Regulations Update (by BOH)**

Effective January 1, 2024, the Nantucket Board of Health's amendment to its Private Well Regulation Chapter 386 went into effect. These regulations are modeled after MADEP Model Private Well Regulations which will require PFAS sampling in specific situations, including the transfer of property and/or a new modification to an existing private well. Samples must be submitted to an EPA or State certified lab and use Method 537 for PFAS testing. Implementation, outreach needs, and oversight of these changes are being reviewed.

POTENTIAL FUTURE PFAS-RELATED PROJECTS: Significant potential upcoming projects include:

- **PFAS Assessment Phase 2B Sampling Program**
(TBD – based on outcome(s) of on-going assessment and Select Board and Board of Health)
- **Expanded Landfill Groundwater and Surface Water Testing (per MADEP SW-22)**
(TBD – sampling protocols and plan being developed for submission to MADEP in August)
- **WWTP Effluent Sampling and Testing – (Round 3)**
(TBD – Round 2 testing is not yet complete, updated report and recommendations forthcoming)
- **Foam Fractionation Pilot Project**
(TBD – based on outcome of current PFAS Destruction Foam Benchmark study)
(TBD – proposal being developed with CDMS)
- **MADEP PFAS investigation and private well testing follow up**
(TBD – to be determined by MADEP)

Impact: Environmental

☒

Fiscal

☒

Community

☒

Other

☒

Other: Public Health

Board/Commission Recommendation
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N/A

Public Outreach

The Town's PFAS-related projects have been updated to the public on 17 occasions since July 2020. This does not include Airport outreach.

- 7/22/20 Select Board Meeting
- 10/28/20 Select Board Meeting
- 12/8/20 Joint SB-BoH Meeting
- 2/10/21 Select Board Meeting
- 5/12/21 Select Board Meeting
- 7/7/21 Select Board (Water Main specific)
- 8/4/21 Select Board (Water Main specific)
- 11/3/21 Select Board
- 3/16/22 Select Board
- 5/2/22 Select Board (Article 10 2022 ATM)
- 7/13/22 Select Board
- 10-5-22 Select Board
- 10/12/22 Select Board (Water Main specific)
- 12/8/22 Water Main Public Outreach Session
- 3/22/23 Select Board
- 5-3-23 Select Board
- 6-25-24 Joint SB-BoH Meeting

Information on all Town-sponsored PFAS-related efforts can be found on the Town's PFAS project page: <https://www.nantucket-ma.gov/1574/PFAS>

Attachments

N/A