



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

August 10, 2022

Mr. David Barney
BRAC Environmental Coordinator
Naval Facilities Engineering Command
BRAC Program Management Office East PO Box 169
South Weymouth, MA 02190

Re: Historical Releases of PFAS Contamination at the Former NAS Brunswick Site and On-going Impacts to the Jordan Avenue Brunswick-Topsham Water District Drinking Water Source

Dear Mr. Barney:

The Navy, along with oversight by MEDEP and EPA, has been proactively evaluating historical releases of per- & polyfluoroalkyl substances (PFAS) at the former NAS Brunswick National Priorities List Site (Site). PFAS are considered pollutants and contaminants under CERCLA. Additionally, any required investigations and cleanup actions associated with Navy PFAS releases at the Site are covered by the 1990 Brunswick Naval Air Station CERCLA Federal Facility Agreement (FFA). PFAS have been confirmed in Site groundwater and other environmental media at concentrations that require the implementation of a remedial investigation (RI) to determine the nature and extent of this contamination along with an assessment of potential risks posed to human and ecological receptors.

Site RI fieldwork investigations commenced in Spring 2022 and focused on groundwater, spring water, and surface water sampling within and just beyond the northern limits of the former base. Data collection efforts were prioritized due to the proximity of known or suspected Navy PFAS-containing aqueous film-forming firefighting foam (AFFF) release areas to a Brunswick-Topsham Water District (BTWD) municipal drinking water source, known as the Jordan Ave. Wellfield, located just down-gradient of the former base's northern boundary. The Jordan Ave. Wellfield drinking water supply consists of approximately 140 individual small-diameter wells (wellpoints) that are networked between western ("upper") and eastern ("lower") wellpoint fields. BTWD services over 18,000 customers. The safe yield of this source of drinking water is over 1,000 gallons per minute (GPM) and represents approximately 25% of the total drinking water resources that the BTWD operates and manages.

PFAS analysis of Jordan Ave. "finished" (after chlorine, phosphate, and pH adjustment) drinking water was initially completed by the Navy in 2014 and has since been sampled and analyzed several times as part of ongoing Navy PFAS investigations or BTWD drinking water compliance/voluntary monitoring efforts. As late as Summer 2021, data from these sampling events confirmed that PFOA and PFOS concentrations were below EPA's 2016 Lifetime Health Advisories for these two contaminants (70 ng/l for either contaminant individually or in combination). However, in July 2021, the State of Maine passed an emergency resolution establishing an interim drinking water standard of 20 ng/l for six PFAS (PFOA, PFOS, PFHxS, PFNA, PFHpA, & PFDA), either individually or in combination. *Resolve to Protect Consumers of Public Drinking Water by Establishing Maximum Contaminant Levels for Certain Substances and Contaminants*, S.P. 64 - L.D. 129. BTWD sampled the finished water immediately after passage of these stricter Maine PFAS standards and confirmed the exceedance of 20 ng/l for the total six PFAS.

Toll Free • 1-888-372-7341

Internet Address (URL) • <http://www.epa.gov/region1>

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 30% Postconsumer)

BTWD sent a letter to its customers on January 19, 2022, notifying them of the PFAS exceedances and summarized interim actions that were being taken to ensure Jordan Ave. PFAS concentrations below the 20 ng/l limit. As of early June 2022, BTWD has been extracting and treating PFAS-contaminated groundwater from the lower wellpoint field prior to discharging it to the ground surface. Sampling conducted by BTWD indicates that current groundwater concentrations in the vicinity of the lower wellpoint field exceed 200 ng/l for the total six PFAS. BTWD has determined that extraction, treatment, and “waste” discharge of PFAS-contaminated groundwater from the lower wellpoint field is necessary to minimize the migration of this contamination to the upper wellpoint field while that portion of the drinking water system continues to be utilized to meet BTWD’s drinking water needs and ensure that this drinking water system is safe for human health. The impacts from PFAS groundwater contamination to the Jordan Ave Wellfield and interim actions being taken by BTWD to address the contamination are not sustainable and jeopardizes the long-term confidence of this water as a safe and reliable drinking water source.

Preliminary Navy groundwater data from newly installed RI monitoring wells have identified PFAS groundwater contamination at the northern boundary of the former base and directly up-gradient of the Jordan Ave lower wellpoint field. The total concentrations for the six PFAS in these Navy monitoring wells are similar to concentrations detected within the lower wellpoint field and therefore strongly suggest that historic releases of these contaminants at the Site are migrating and degrading the Jordan Ave Wellfield. These new RI data are undergoing Navy data validation and the “final” results are expected in the near future.

Navy PFAS groundwater contamination migrating from the Site to the Jordan Ave. drinking water source appears to present an unacceptable human health risk and has required BTWD to effectively manage this Navy contamination (i.e., lower wellpoint field pumping, treatment, & disposal) to prevent the upper wellpoint field from exceeding the 20 ng/l Maine PFAS limit. EPA requests that the Navy use its CERCLA removal authority to expeditiously address impacts to the Jordan Ave. Wellfield from historical PFAS releases on the former NAS Brunswick. This approach would be consistent with Chapter 11 of the FFA. Please see FFA ¶ 11.6.

In conclusion, Navy groundwater contamination has significantly limited BTWD’s use of this important drinking water source, has degraded the quality of this water, and presents potential health risks to BTWD customers who consume this water. EPA requests that the Navy conduct a removal action to address this contamination and further requests that the Navy provide a letter to EPA no later than September 12, 2022, summarizing its plan and schedule to address the ongoing impacts to the Jordan Ave. water supply. EPA is available to meet with Navy and MEDEP to further discuss this issue as needed.

Should you have any questions with this letter, please feel free to contact me at (617) 918-1386.

Sincerely,

Michael J. Daly
Remedial Project Manager
Superfund Federal Facilities & Information Management Section

cc: Todd Bober, USN-BRAC PMO
Marty McMahon, USN-Brunswick CSO
Iver McLeod, MEDEP
Finn Whiting, MEDEP
Craig Douglas, BTWD
Cayleigh Eckhardt, EPA
Anni Loughlin, EPA