SUPPLEMENT TO
Annual Drinking Water Quality Report for 2023
Town of Bethlehem Water District No. 1
445 Delaware Avenue, Delmar, NY 12054
(Public Water Supply ID# NY0100191)

INTRODUCTION

This supplement to the 2023 Annual Water Quality Report (AWQR) for the Town of Bethlehem has been prepared in accordance with New York State regulations. The purpose of the supplement is to provide analytical results for samples of sources of water supply that are not required as part of the traditional AWQR process.

Current drinking water regulations require sampling and reporting on certain perfluoroalkyl substances, commonly referred to as PFAS. The three contaminants that were regulated in 2023 were PFOA, PFOS, and 1,4-dioxane. The compliance data for these three compounds can be found in the published 2022 AWQR. However, in 2023, the Town of Bethlehem decided to continue to do additional sampling for unregulated perfluoroalkyl substances at each of the wells that provide raw water to the Clapper Road WTP.

WHAT DOES THIS INFORMATION MEAN?

In 2022, we found that two wells had concentrations that were high enough that we decided to take them off-line and not use them as drinking water sources. We continue to monitor these wells for PFAS compounds and will adjust operations as needed to comply with all applicable drinking water standards.

SUPPLEMENTAL TABLE
TOWN OF BETHLEHEM WATER DISTRIC No.1: CLAPPER ROAD WTP
UNREGULATED PERFLUOROALKYL SUBSTANCES
Public Water Supply Identification Number NY0100191

Contaminant	Violation Y/N	Date of Sample	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Synthetic Organic Compounds (AW-Angle Well, V-Vertical Well)							
PFBA (Well #1 AW)	N	3/20/23	2.5	ng/l	N/A	10[1,2,3]	Released into the environment from widespread use in commercial and industrial applications.
PFOA			2.3				
PFOA		6/29/23	2.3				
PFBA			1.7				
PFOS			1.7				
PFOA		9/20/23	2.4				
PFOS			2.1				
PFOS			1.9				
PFOA		12/8/23	1.4				
PFOS			1.3				
PFBA			1.2				
PFPeA			1.0				
PFHxA			1.0				
PFBA (Well #2 AW)	N	3/20/23	2.2				
PFOA			2.2				
PFOA		6/29/23	3.2				
PFOS			2.7				
PFBA			1.9				
PFPeA			1.7				
PFOS		9/20/23	2.7				
PFOA			2.1				
PFBA (Well #3 AW)	N	3/20/23	2.7				
PFOA			1.9				
PFOA		6/29/23	2.1				
PFBA			1.7				
PFOS			1.7				
PFOA		9/20/23	1.8				
PFOA		12/8/23	1.6				
PFOS			1.4				
PFBA			1.2				
PFPeA			0.9				
PFBA (Well #4 AW)	N	3/20/23	3.1				
PFOA			1.9				
PFOA		6/29/23	1.8				
PFOS		9/20/23	2.6				
PFOA			2.2				
PFBA			1.8				
PFOA		12/8/23	1.3				
PFBA			.97				
PFOA (Well #5 AW)	N	3/20/23	3.5				
PFBA			3.1				
PFOS			2.1				
PFOA		6/29/23	2.4				
PFOS			1.9				
PFBA			1.7				
PFPeA			1.6				
PFOA		9/20/23	2.8				
PFBA			2.4				
PFOS			2.0				
PFOA		12/8/23	4.0				
PFBA			1.9				
PFOS			1.8				
PFPeA			1.2				
PFHxA			0.9				
PFBA (Well #2 V)	N	3/20/23	2.6				
PFOS			2.5				
PFOA			2.5				
PFOS		6/29/23	2.1				
PFOA			1.9				
PFOS		9/20/23	1.8				
PFOA		12/8/23	2.0				
PFHxS			2.0				
PFOS			1.8				
PFBA			1.3				
PFHxA			1.1				
PFPeA			1.0				
PFOA (Well#3-V)	N	6/29/23	2.7				
PFOS			2.4				
PFPeA			2.2				
PFBA			1.9				
PFHxA			1.9				
PFOA		9/20/23	2.2				
PFOA		12/8/23	1.8				
PFOS			1.3				
PFHxA			1.2				
PFPeA			1.2				
PFBA			0.9				
PFBA (Well#4-V)	N	12/8/23	2.0				
PFOA			1.4				
PFOS			1.3				
PFPeA			1.2				
PFOA (Well#5-V)	N	3/20/23	2.8				
PFOS			2.4				
PFHxA			2.3				
PFBA			2.1				
PFOS		6/29/23	2.6				

PFOA				2.5				
PFOS			9/20/23	2.6				
PFHxS				2.1				
PFOA				2.1				
PFHxS			12/8/23	2.9				
PFOS				2.6				
PFOA				2.1				
PFBA				1.9				
PFPeA				1.9				
PFHxA				1.7				
PFBS				1.0				
PFOS	(Well#6-V)	N	3/20/23	2.5				
PFOA				2.5				
PFBA				2.3				
PFOS			6/29/23	2.4				
PFOA				2.1				
PFBA				1.7				
PFOS			9/20/23	3.2				
PFOA				2.7				
PFPeA				2.2				
PFBA				1.8				
PFOS			12/8/23	2.5				
PFOA				2.1				
PFPeA				1.6				
PFHxA				1.4				
PFBA				1.3				
PFHxS	(Well#7-V)	N	6/29/23	82.4				
PFOS		**Y**		**44.0**				
PFHxA				5.9				
PFOA				5.0				
PFPeS				4.5				
PFBS				4.0				
PFBA				2.9				
PFPeA				2.0				
PFHxS			9/20/23	54.0				
PFOS		**Y**		**35.0**				
PFHxA				4.0				
PFOA				3.5				
PFBA				2.7				
PFPeS				2.6				
PFHxS			12/8/23	59.0				
PFNA				28.0				
PFHxA				4.2				
PFPeS				3.7				
PFBS				3.3				
PFOS				2.9				
PFPeA				1.6				
PFBA				2.4				

FOOTNOTES-

1. Only PFOA and PFOS have a regulatory limit of 10 ng/l each.
2. All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 0.05 mg/L.
3. USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available. PFBS and HFPO-DA also have Health Advisory Levels.

Glossary of Terms Used in Data Tables

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or Micrograms per liter (µg/l)- one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Parts per trillion (ppt) (ng/l) corresponds to one part of liquid to one trillion parts of liquid
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
90th Percentile Value- The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system
Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT) -A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.