Per and Polyfluoroalkyl Substances (PFAS)

What are Per-and Polyfluoroalkyl Substances (PFAS)?
Per and polyfluoroalkyl substances (PFAS) are a class of man-made chemicals used in common product applications such as waterproof and stain proof fabrics, nonstick cookware, some food packaging materials and fire suppression foam. The PFAS chemicals have been manufactured and used by a broad range of industries since the 1940s due to their unique physical properties such as resistance to high and low temperatures, resistance to degradation and nonstick characteristics. PFAS chemicals have been detected worldwide in the air, soil and water.

Are Per-and Polyfluoroalkyl Substances (PFAS) in my drinking water?
Per-and Polyfluoroalkyl Substances have been detected in our untreated and in some cases our treated drinking water. The concentrations of these compounds are very low and expressed in parts per trillion, which is equivalent to one single drop of water in twenty olympic-sized swimming pools.

PFAS Limits in Drinking Water Update:
On April 10, 2024, EPA announced the final drinking water standards or Maximum Contaminant Levels (MCLs) to limit six PFAS compounds in drinking water. Those limits are as follows: PFOA - 4 ppt (ng/L) PFOS - 4 ppt (ng/L), GenX chemicals (HFPO-DA) - 10 ppt (ng/L), PFNA - 10 ppt (ng/L), PFHxS - 10 ppt (ng/L) and the rule also regulates mixtures of GenX chemicals, PFNA, PFHxS and PFBS through the use of a Hazard Index calculation to determine if the combined levels of these PFAS pose a potential risk to human health. Public water systems such as the Graham-Mebane Water Plant will have five years to meet the new standards.

How is the City of Graham moving toward meeting the new regulations for PFAS?
The City of Graham is currently undergoing an engineering study of enhanced treatment options in order to be prepared to meet the new regulations by the 2029 deadline. The City of Graham's Water Plant staff will continue to be vigilant in staying informed of all the new regulations for the PFAS chemicals and will strive to meet all requirements that are forth coming.

If you have any questions or concerns, please contact the Graham-Mebane Water Plant at 336-578-3264.

PFAS RESULTS (ng/L)

Sample Matrix	Sample Collection Date	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	ADONA	PFBS	PFHxS	PFHpS	PFOS	PFPeS	HFPO-DA	9Cl-PF3ONS	11Cl-PF3OUdS	4:2 FTS	6:2 FTS	8:2 FTS	NFDHA	PFMPA	PFMBA	PFEESA	NEtFOSAA	NMeFOSAA	PFTA	PFTrDA
Distribution Water @ Entry Point	11/13/2023	ND	3.4	3.5	ND	7.6	ND	ND	ND	ND	ND	10.6	ND	ND	7.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Raw Water	1/31/2024	2.9	ND	ND	ND	3.5	ND	ND	ND	ND	ND	6.0	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Finished Water	1/31/2024	1.8	ND	ND	ND	2.8	ND	ND	ND	ND	ND	3.9	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Distribution Water @ Entry Point	2/13/2024																										ND	ND	ND	ND
Distribution Water @ Entry Point	3/13/2024	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	6.4	ND	ND	4.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Raw Water	3/28/2024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Raw Water	4/25/2024	ND	ND	ND	ND	4.04	ND	ND	ND	ND	ND	5.96	ND	ND	4.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Distribution Water @ Entry Point	5/13/2024	ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	7.1	ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Samples analyzed by a commercial laboratory by the EPA 533 Method unless otherwise noted.
NEtFOSAA, NMeFOSAA, PFTA and PFTrDA analyzed by a commercial laboratory by the EPA 537.1 Method.
PFOA analyzed by a commercial laboratory by Isotope Dilution Method (BLT).