Wolfsville Elementary School

In April 2024, the U.S. Environmental Protection Agency (EPA), announced finalized regulations for per- and polyfluoroalkyl substances (PFAS) in drinking water. All public water systems under these regulations will be required to begin monitoring for PFAS by 2027 with requirements to be in full compliance by 2029. To help prepare for these new regulations, the Maryland Department of the Environment (MDE) sampled the Wolfsville Elementary water system sources to assess any PFAS contamination that may be in the water.

PFAS compounds were detected at the concentrations listed below. Under each PFAS compound are the individual Maximum Contaminant Levels (MCL) or Health Based Water Concentrations (HBWC) in which the EPA regulations are based.

Sample	PFOA	PFOS	PFBS	PFHxS	PFNA	HFPO- DA (GenX)	Hazard Index ^a
	MCL – 4.0 ppt	MCL – 4.0 ppt	HBWC - 2000 ppt	MCL - 10 ppt	MCL - 10 ppt	MCL - 10 ppt	HI - 1.0
WL 01	6.72	31.6	<rl< td=""><td><rl< td=""><td>5.43</td><td><rl< td=""><td>_</td></rl<></td></rl<></td></rl<>	<rl< td=""><td>5.43</td><td><rl< td=""><td>_</td></rl<></td></rl<>	5.43	<rl< td=""><td>_</td></rl<>	_
WL 03	<rl< td=""><td><rl< td=""><td><rl< td=""><td><rl< td=""><td><rl< td=""><td><rl< td=""><td>_</td></rl<></td></rl<></td></rl<></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td><rl< td=""><td><rl< td=""><td><rl< td=""><td>_</td></rl<></td></rl<></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td><rl< td=""><td><rl< td=""><td>_</td></rl<></td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td><rl< td=""><td>_</td></rl<></td></rl<></td></rl<>	<rl< td=""><td><rl< td=""><td>_</td></rl<></td></rl<>	<rl< td=""><td>_</td></rl<>	_

Results in red show concentrations that exceed EPA's regulations. <RL = Reporting Limit

Hazard Index (HI): The Hazard Index is a long-established approach the EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration. A Hazard Index greater than 1 is generally regarded as an indicator of adverse health risks associated with a specific level of exposure to the mixture; a Hazard Index less than or equal to 1 is generally regarded as not being associated with any appreciable risk (USEPA, 1986; USEPA,1991b; USEPA, 2000a).

In this case, no value is listed for the Hazard Index (HI) because in order to calculate it, there must be 2 or more HI compounds (PFBS, PFHxS, PFNA, HFPO-DA) with results above the Reporting Limit (RL). Since the sample for WL 01 only had results above the RL for PFNA, the Hazard Index is not calculated.