Sample Date	Huron River at Barton Pond	
	Total Chromium (ppb)	*Hexavalent Chromium (ppb)*
08/14/22		<10.[1]
08/13/22		<10.[1]
08/12/22		<10.[1]
08/11/22	<1.0 [2]	<5.0 [3]
08/10/22	<1.0 [2]	<5.0 [3]
08/09/22	<1.0 [2]	<10.[1]
08/08/22	<1.0 [2]	<10.[1]
08/07/22	<1.0 [2]	<10.[1]
08/06/22	<1.0 [2]	<10.[1]
08/05/22	<1.0 [2]	---
08/04/22	---	<10.[1]
08/02/22	<1.0 [2]	<1.0

What do these numbers mean?

Sample data in the above table represent concentrations of total chromium and hexavalent chromium in the Huron River drinking water. The City's treatment process does not add any chemicals that contain chromium, therefore the drinking water would have no more chromium than is measured at the City's intake.

The health-based drinking water standard for total chromium is 100 ppb.

When reviewing the data in the table above you will notice that there are different detection limits for total chromium and hexavalent chromium. The reason for this is that the City sends the total chromium analyses to a contract lab and is measuring the hexavalent chromium with a test kit in order to obtain immediate results. A higher detection limit does not indicate that the concentrations in the water are higher. Total chromium results include hexavalent chromium, so the hexavalent chromium concentrations in the samples can be no greater than the total chromium concentrations. It is reasonable to conclude that for any given sample date where both analyses are non-detect, the hexavalent chromium can be assumed to be less than the detection limit for total chromium. If the City were to have a detection of total chromium above the detection limit, we would then send the sample to our contract lab in order to analyze for hexavalent chromium at a lower detection limit than our test kit can provide.

Abbreviations

ppb = parts per billion, equivalent to micrograms per liter

1. Analyzed by Hach method 8023 adapted from SM 3500 Cr B
2. Analyzed by EPA 200.8 Rev 5.4
3. Analyzed by SM 3500-Cr B-11