## Unregulated Contaminant Monitoring Rule (UCMR4)¹

Metals	Year	Amount	Range of Detections (lowest – highest)	TypicalSource
	Sampled	Detected (average)		
Germanium	2018	(average) <0.3 μg/L	<0.3 μg/L	Naturally-occurring element; commercially available in combination with other elements and minerals; a byproduct of zinc ore processing; used in infrared optics, fiber-optic systems, electronics and solar applications
Manganese	2018	0.57 μg/L	0.46 – 1.83 μg/L	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient
Pesticides and Pesticide Manufacturing Byproduct	Year Sampled	Amount Detected	Range of Detections	TypicalSource
alpha-Hexachlorocyclohexane	2018	<0.01 μg/L	<0.01 μg/L	Component of benzene hexachloride (BHC); formerly used as an insecticide
Atrazine	2017	0.046 μg/L	0.00-0.046	Used as an herbicide
Chlorpyrifos	2018	<0.03 μg/L	<0.03 μg/L	Organophosphate; used as an insecticide, acaricide and miticide
Dimethipin	2018	<0.2 μg/L	<0.2 μg/L	Used as a herbicide and plant growth regulator
Ethoprop	2018	<0.03 μg/L	<0.03 μg/L	Used as an insecticide
Oxyfluorfen	2018	<0.05 μg/L	<0.05 μg/L	Used as an herbicide
Metolachlor (DUAL)	2017	0.013 μg/L	0.00-0.013	Used as an herbicide
Profenofos	2018	<0.3 μg/L	<0.3 μg/L	Used as an insecticide and acaricide
Tebuconazole	2018	<0.2 μg/L	<0.2 μg/L	Used as a fungicide
total Permethrin (cis- & trans-)	2018	<0.04 μg/L	<0.04 μg/L	Used as an insecticide
Tribufos	2018	<0.07 μg/L	<0.07 μg/L	Used as an insecticide and cotton defoliant
Butylated – Hydroxyanisol	2018	<0.03 μg/L	<0.03μg/L	Used as a food additive (antioxidant)
o-Toluidine	2018	<0.007μg/L	<0.007μg/L	Used in the production of dyes, rubber, pharmaceuticals, hair preparations, and skin lotions
Quinoline	2018	<0.002 μg/L	<0.002 μg/L	Used as a pharmaceutical (antimarlarial), flavoring agent, produced as a chemical intermediate, a component of coal

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Alcohols	Year Sampled		Range of Detections	TypicalSource
1-butanol	2018	<0.2.0 μg/L	<2.0 μg/L	Used as a solvent, food additive and in production of other chemicals
2-methoxyethanol	2018	<0.4 μg/L		Used in a number of consumer products, such as synthetic cosmetics, perfumes, fragrances, hair preparations and skin lotions
2-propen-1-ol	2018	<0.5 μg/L	<0.5 μg/L	Used in the production flavorings, perfumes and other chemicals

Disinfection Byproducts	Year Sampled	Amount Detected average	Range of Detections (lowest – highest)	TypicalSource
Total Haloacetic Acids (HAA5) Summation of dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid	2018	19.4 μg/L	13.8 – 24.7 μg/L	Byproduct of drinking water disinfection
Total Brominated Haloacetic Acids (HAA6Br) bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, chlorodibromoacetic acid, monobromoacetic acid, tribromoacetic acid	2018	2.7 μg/L	2.3 – 5.7 μg/L	Byproduct of drinking water disinfection
Total Haloacetic Acids (HAA9) Summation of bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, and trichloroacetic acid.	2018	22.1 μg/L	16.1 – 27.4μg/L	Byproduct of drinking water disinfection

<sup>&</sup>lt;sup>1</sup>Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.