

NYC DEP 2019 Emerging Contaminants Monitoring Project Summary, 7/10/19

Background

DEP employees closely monitor New York City's drinking water supply to ensure that our customers receive the highest quality water. We annually perform more than 240,000 tests in the upstate watersheds that feed our reservoir system, and another 400,000 tests of water in distribution pipes throughout the five boroughs. These tests continue to show that the City's drinking water is some of the best in the world, meeting or surpassing all state and federal standards. Detailed information about this testing program can be found in DEP's [Drinking Water Supply & Quality Report website](#).

New York City's reservoirs collect water from rain and melting snow throughout our watershed. As water travels over the surface of the land or underground, a variety of minerals, organic materials and other substances can dissolve into the water.

For decades, DEP scientists have regularly tested our water supply to understand the substances that could enter our reservoirs now and in the future. Modern testing techniques allow our laboratory experts to detect some substances at levels as low as one part per trillion – an amount so small that it represents one drop of water in 56 Olympic-sized swimming pools, or 1 second of time in 31,700 years.

In addition to potential contaminants that are known today, DEP also focuses on protecting our drinking water in the future. That's why we worked with the U.S. Geological Survey and the New York State Department of Health in 2009 to develop a list of 72 emerging contaminants – substances that are not regulated today but deserve further analysis. These substances primarily include pharmaceutical and personal-care products that are typically used in our homes. DEP scientists detected some of these materials, but only at levels so low that they posed no concern for the health of our customers. Reports were published and are available at DEP's [Document Portal](#).

2019 Monitoring Summary

Experts have added new substances to the list of emerging contaminants over the past decade, prompting DEP scientists to begin a new study in 2019. The latest study focuses on more than 140 materials, the vast majority of which were not detected in our reservoirs or the streams, creeks and rivers that feed them. Our latest analysis also included several perfluorinated compounds. These materials were often not detected, or they were detected at levels far below New York State's proposed standard of 10 parts per trillion, which will become the most stringent limit in the United States when it takes effect later this year. Samples from only two locations, small streams near the Westchester County Airport, measured higher.

The monitoring plan for this new project is published on DEP's [website](#). DEP will repeat this testing every three months this year and it will continue to publish the results, including a full report, after completion of the project.

Naproxen			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propylparaben			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Salicylic Acid			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sucralose	Artificial sweetener	50,000 (NYS UOC MCL)	440	ND	ND	ND	ND	ND	110	130	320	ND	130	ND
Triclocarban			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Triclosan			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Warfarin			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,7-Dimethylxanthine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetaminophen			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Albuterol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Amoxicillin (semi - quantitative)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Androstenedione			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atenolol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine	Pesticide	3,000 (NYS MCL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND
Bezafibrate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromacil			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caffeine	Coffee, tea	50,000 (NYS UOC MCL)	18	ND	15	ND	36	ND	ND	15	ND	10	ND	20
Carbadox			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbamazepine	Anti-convulsant drug	50,000 (NYS UOC MCL)	ND	ND	ND	ND	ND	ND	ND	ND	8.7	ND	ND	ND
Carisoprodol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloridazon			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorotoluron			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cimetidine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cotinine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DACT			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DEA			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DEET			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dehydronifedipine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIA			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diazepam			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dilantin			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diltiazem			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diuron			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Erythromycin			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Flumequine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoxetine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isoproterenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ketoprofen			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ketorolac			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lidocaine	Local anesthetic drug	50,000 (NYS UOC MCL)	ND	45	ND	ND	5.6	ND	ND	ND	18	ND	6.0	ND
Lincomycin			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Linuron			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lopressor			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Meclofenamic Acid			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Meprobamate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metazachlor			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metformin	Diabetes treatment drug	50,000 (NYS UOC MCL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.3	ND
Metolachlor			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nifedipine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Norethisterone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfometuron Methyl			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oxolinic acid			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentoxifylline			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenazone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Primidone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Progesterone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Propazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Quinoline	Manufacture of dyes	50,000 (NYS UOC MCL)	7.8	5.8	ND	ND	6.2	ND	ND	5.4	5.0	ND	8.2	ND
Simazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfachloropyridazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfadiazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfadimethoxine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfamerazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfamethazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfamethoxazole			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfamethizole			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sulfathiazole			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCEP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TCPP	Tris(2-chloroethyl) phosphate (flame retardant)	50,000 (NYS UOC MCL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150
TDCPP			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Testosterone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Theobromine	Chocolate, cocoa	50,000 (NYS UOC MCL)	ND	ND	170	ND	ND	ND	ND	ND	ND	ND	23	ND
Theophylline			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thiabendazole	Food preservative	50,000 (NYS UOC MCL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	ND
Trimethoprim			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RADIONUCLIDE SUITE														
Radium 226 (pC/L)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Radium 228 (pC/L)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha, Gross (adjusted counts) (pC/L)	Natural or man-made sources	15 (NYS MCL)	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6	ND	ND
Beta, Gross (pC/L)	Natural or man-made sources	4 mrem/year (MCL)	ND	ND	ND	ND	ND	ND	3.5	ND	ND	3.8	4.2	4.9

Uranium (pC/L)				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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* ND = not detected

** NYS UOC MCL = New York State Unregulated Organic Contaminant Maximum Contaminant Level