



EMERGING CONTAMINANT MONITORING PROGRAM

Steven Winkley | Hydrogeologist & NYRWA Source Water Protection Specialist

In the 2018 New York State Budget enacted this April, the State Public Health Law was amended to create a new regulatory program entitled emerging contaminant monitoring. This program is intended to address chemicals the New York State that “are not subject to any other substance-specific drinking water regulation of the department that establishes a maximum contaminant, maximum residual disinfectant level, or action level.” The state’s new emerging contaminant monitoring is similar to the federal Unregulated Contaminant Monitoring Rule (UCMR) that requires systems above 10,000 population to test for up to 30 unregulated contaminants every five years. I detailed the UCMR in the most recent winter edition of *Aquafacts*.

New York State’s emerging contaminant monitoring program will require all community and non-transient non-community water systems to test at least once every 3 years for a list of emerging contaminants based upon “a schedule determined by the department through regulation.” It is likely, in my opinion, that systems with source water at the highest risk (susceptibility) of contamination will be sampled first. For groundwater, this includes wells with a high sensitivity to potential contamination and a high number of potential sources of contamination around them. For surface water supplies, highest priority sources would likely be identified based upon water body type, prevalence of potential contaminant sources, population served by the public water supply, reports of harmful algal blooms (HABs), Chlorophyll *a* concentrations, and other historical water quality monitoring data.

EMERGING CONTAMINANT LIST

The New York State Department of Health (NYSDOH) will be creating regulations that contain the list of emerging contaminants that will be monitored for. It is a requirement that the NYSDOH consider the recommendations of a drinking water quality council, a science based advisory board body that was created in the budget bill as well. The amendments to the State Public Health Law specified three contaminants to be on the emerging contaminants monitoring list: perfluorooctyl sulfonate (PFOS), perfluorooctanoic acid (PFOA), and 1,4-dioxane. It is entirely possible that some or all of the chemicals on the UCMR Third Unregulated Contaminant Monitoring Rule will end up on the emerging contaminant list. For example, there is a current bill in the State Assembly and Senate to add hexavalent chromium

(Chromium-6) to the emerging contaminant list.

The primary impetus for this new monitoring program is to address situations like the Village of Hoosick Falls and the City of Newburgh. PFOA was found in the water of Hoosick Falls, a community water system serving a population of 4,925. This compound is not regulated by the USEPA and thus was not monitored by the village based upon the testing requirements for systems less than 10,000 population under the UCMR. Rich Winters of NYRWA wrote an excellent article regarding PFOA in the spring 2016 edition of *Aquafacts*. PFOA and PFOS are both perfluorochemicals (PFCs), chemicals used to make coatings and products that resist heat, oil, stains, grease, and water. The source of PFOA in Hoosick Falls and another incident in the nearby Town of Petersburg have been attributed to plastics manufacturers.

PFOS is used in fire-fighting foam. Sampling has indicated that the PFOS detected in the City of Newburgh’s surface water supply has been traced to nearby Stewart Air National Guard Base. Groundwater contamination from past releases of foam from the base’s fire suppression system is believed to be discharging into the Base’s storm water system and then migrating off-site through local tributaries of the City’s water supply reservoir.

The chemical 1,4-dioxane has been found primarily in Long Island’s groundwater. Historically, it was used as an industrial chemical in paints, primers, varnishes, degreasers, and inks. Today, it can be found in consumer products ranging from soaps and detergents to deodorants and shampoos.

NOTIFICATION

The NYSDOH will be specifying in its regulations the notification levels for emerging contaminants that will eventually be tested for. These notification levels will take into consideration recommendations of the drinking water quality council and other available scientific information. The law states that “any notification level established shall be equal to or lower than any federal lifetime health advisory level established pursuant to the federal Safe Drinking Water Act.”

NYSDOH must be notified within 24 hours of discovery that one or more emerging contaminants has been found at concentrations at or above a notification level. NYSDOH regulations will also specify the time and manner that consumers of the public water system must be notified of such exceedances.

HARDSHIP FINANCIAL ASSISTANCE

Completing tests for chemicals like PFOA, PFOS, etc. are not inexpensive. The test for PFCs alone range up to \$600 per sample. Add potentially 20-25 or so more parameters to that and the costs will add up quickly. Fortunately, it appears that financial assistance will be available. The law states that “the department may provide financial assistance for compliance with the testing requirements to any covered public water system upon a showing that the costs associated with testing drinking water in compliance with this section would impose a financial hardship. Such regulations shall... incorporate provisions that give preference to public water systems serving less than ten thousand individuals.

FINAL THOUGHTS

As NYSDOH prepares its regulations on emerging contaminant monitoring, NYRWA will keep public water systems informed on what it all means to them. Hopefully, adequate resources will be allocated to prevent this new law from being an undue burden on smaller water systems. In addition, it is hoped that notification levels are set at sound scientific levels based upon drinking water exposure rates. Please contact me at winkley@nyruralwater.org or 1-518-828-3155, ext. 17 if you have any questions. 💧💧