January 7, 2019

The Honorable Phil Murphy
Governor, State of New Jersey
Trenton, New Jersey

Re: MCLs for PFOA and PFOS in New Jersey

Dear Governor Murphy,

Delaware Riverkeeper Network is very concerned that rulemaking has not yet begun to establish maximum contaminant levels (MCLs) for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS), based on the rigorous research and recommendations made by the NJ Drinking Water Quality Institute (DWQI) for these two perfluorinated compounds (PFCs). U.S. Environmental Protection Agency (EPA) sampling under the Unregulated Contaminant Monitoring Rule 3 (UCMR3),[1] NJ DEP's occurrence studies and follow up sampling of water supplies, and sampling conducted by other entities such as the Department of Defense and manufacturing companies (DuPont, Solvay, etc.) have established the presence of PFCs in the drinking water in New Jersey.

Substantial research and study by New Jersey DEP and the DWQI have revealed adverse health effects of these compounds and the larger class of substances known as Per- and Polyfluoroalkyl Substances (PFAS). Scientists have also established that the greater the concentration of PFOA and PFOS in the water that people drink, the greater the risk of people developing diseases linked to these compounds. Recommended MCLs have been submitted by the DWQI to DEP 22 months ago for PFOA and 7 months ago for PFOS and yet the MCLs have not been adopted; indeed, rulemaking has not even been proposed. This means people continue to drink contaminated water.

As you are most likely aware, perfluorinated compounds (PFC) surfaced as a contamination problem in New Jersey in 2005 when tap water samples taken by Delaware Riverkeeper Network in the neighborhoods close to DuPont's Chambers Works facility in Deepwater, New Jersey on the Delaware River revealed PFOA. We notified the residents and filed the information with NJDEP, setting off alarm bells. NJDEP subsequently investigated the occurrence of perfluorinated compounds throughout the state and issued a guidance level of .04 ppb (40 ppt or ng/L) for PFOA in 2007.

Unfortunately, the DWQI was shut down by the Christie Administration in 2010, just as the Institute was going to release its recommendation for an MCL for PFOA. After an expose by Delaware Riverkeeper Network of the dangerously high concentrations of another PFC which is highly toxic at very low doses,

[1] https://www.epa.gov/dwucmr/fact-sheets-about-third-unregulated-contaminant-monitoring-rule-ucmr-3

DELAWARE RIVERKEEPER NETWORK
925 Canal Street, Suite 3701
Bristol, PA 19007
Office: (215) 369-1188
fax: (215)369-1181
drn@delawareriverkeeper.org
www.delawareriverkeeper.org

perfluorononanoic acid (PFNA), in drinking water in the region around Solvay Specialty Polymers, a plastics manufacturer in West Deptford, NJ, the Institute was finally reconvened in April 2014 due to public and municipal government outcry. In June 2015, the Institute issued a recommendation to DEP for an MCL for PFNA of 13ng/L (or ppt) and DEP adopted the standard after rulemaking in August 2018. This made New Jersey the first state to add adopt an MCL for any PFAS , showing your leadership as a regulator and the admirable expertise of our state's scientists and the successful functions of the DWQI's safe drinking water process.

But inexplicably, DEP has not issued rulemaking to establish the MCLs for PFOA and PFOS, despite all the scientific and public health analysis being completed and delivered to DEP by the DWQI. Further regulatory action, promised by EPA, has languished, and cannot reasonably be expected to occur under the current anti-regulation Trump Administration. Subjected to growing public concern based on the discovery of widespread contamination of drinking water by PFOA and PFOS in many states by firefighting foams discharged to the environment primarily by military bases, EPA issued a combined drinking water health advisory for Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonate (PFOS) of .07 ppb (70 ppt) in May, 2016. EPA's health advisory, unfortunately, is too little, too late. Delaware Riverkeeper Network does not consider this level to be protective of human health considering the many scientific reports and studies that show adverse health effects at much lower concentrations. Treating drinking water only to EPA's advisory level allows the public to continue to be exposed to dangerous concentrations of PFOA and PFOS, increasing the risk of people developing disease from this exposure. And as you know, based on their scientific analysis, the DWQI and many other bodies do not recommend EPA's HAL.

It is clear that it is up to the states to fulfill their responsibilities under safe drinking water laws to establish MCLs and other regulatory measures (such as groundwater standards and hazardous substances listing, as NJDEP did for PFNA) to address the widespread contamination of our environment by PFCs. In New Jersey, we know that several PFCs have been found; the most prevalent are PFOA and PFOS. The levels are higher here than in other states and more people are exposed to these toxic compounds in their water, inescapable as the most densely populated state in the nation with an enormous legacy of pollution.

The scientific literature and the data gleaned from health studies show that PFCs, including PFOA and PFOS, are linked to serious disease, including cancers, and detrimental human health conditions.[2] Fetuses, infants, and children are the most vulnerable populations due to negative developmental impacts, which also affects pregnant women, women of child bearing age and women who are breastfeeding. The court-ordered C8 Health Panel and the C8 Health Project in West Virginia, related to the DuPont facility there concluded after their multi-year study of human subjects and their blood and scientific reports, that PFOA is correlated with Kidney Cancer, Testicular Cancer, Thyroid Disease, High Cholesterol, Pregnancy-Induced Hypertension/Preeclampsia, and Ulcerative Colitis.[3] In addition to the six diseases with probable links, science reveals probable links to decreased birth weight and decreased response to vaccines. A report reviewing all of the studies on low birth weight concluded that PFOA reduces human birth weight[4].

The DWQI's extensive reports on PFOA and PFOS contain the most comprehensive, up to date and relevant scientific literature. For PFOA, for instance, the Institute developed a health-based MCL for PFOA "…using a risk assessment approach intended to protect for chronic (lifetime) drinking water exposure."[5] Citing the known health effects of PFOA, its biological persistence and bioaccumulation in humans from drinking water, the conclusion that it is "likely carcinogenic" by EPA's Science Advisory Board, "possibly

---

[2] https://www.epa.gov/sites/production/files/2015-09/ucmr-3-occurrence-data.zip
[3] http://www.c8sciencepanel.org/newsletter10.html
[4] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4181929/pdf/ehp.1307893.pdf
[5] http://www.nj.gov/dep/watersupply/pdf/pfoa-hb--mcl-public-review-draftwithappendices.pdf, Abstract.

carcinogenic" by the International Agency for Research on Cancer and as "suggestive evidence of carcinogenic potential" by EPA's Office of Water, as well as several non-carcinogenic adverse health effects, the Institute has recommended a much stricter standard than EPA's HAL. Delaware Riverkeeper Network recommended an even stricter standard based on expert analyses by an independent toxicologist for both PFOA and PFOS[6].

The scientific studies on PFOA and PFOS make it very clear that low levels of exposure to PFOA build up in the body over time because the compound is not broken down by the body and takes years to excrete. That means that even very low drinking water exposure increases blood levels over the levels found in the general population, risking disease and adverse health effects. Infants are exposed through breast milk and also through formula that uses contaminated water. Since infants and children are susceptible to developmental effects, the impact is even greater than on adults. These facts show us that extremely vulnerable fetuses, infants, and children are being exposed to the risk of disease and developmental abnormalities from ingesting even low levels of PFOA. Millions of New Jerseyans every day are still drinking water contaminated with these two PFAS compounds, which are known to be associated with several diseases, including cancer.[7] This constitutes a health emergency and requires DEP to take regulatory action now.

Since the DWQI issued its recommendations in March 2017 for PFOA (22 months ago) and in June 2018 for PFOS (7 months ago), other states and regulatory entities are moving ahead to regulate these compounds and scientific bodies are providing more important information that begs for action: New York's Drinking Water Advisory Council has recommended MCLs of 10 ppt for these two chemicals; California is using NJ's MCLs as an action level; the Michigan Science Advisory Board has recommended that EPA's HAL of 70 ppt may not be sufficiently protective of human health, especially children; ATSDR has adopted a reference dose or minimal risk level for these chemicals which would correlate to MCLs of 21 and 14 ppt as protective of children, for exposure of up to one year (not lifetime or chronic exposure as NJ's MCL); the European Food Safety Authority has recommended levels even lower than ATSDR's.

The country is moving towards regulation of PFAS; New Jersey was leading the way in most respects. But progress towards requiring the removal of PFOA and PFOS from our drinking water, cleanup of contaminated ground and surface waters through the establishment of standards, and better management as hazardous substances is apparently stalled here. Delaware Riverkeeper Network must express our frustration to you, as Governor, and make clear that we consider each day that passes in which another New Jerseyan is exposed to the risk of detrimental harm from PFOA and PFOS represents the concomitant failure of the state to properly and prudently regulate these highly toxic compounds and is an abrogation of the State's duty and responsibility. We request that New Jersey move ahead on urgent footing to adopt protective MCLs for PFOA and PFOS.

Thank you for your consideration.

Sincerely,

Maya K. van Rossum
the Delaware Riverkeeper

Tracy Carluccio
Deputy Director

[6] https://bit.ly/2C9NMOt and https://bit.ly/2o7nMuX
[7] http://www.c8sciencepanel.org/index.html