



July 25, 2013

Commissioner Bob Martin  
New Jersey Department of Environmental Protection  
P.O. Box 402  
401 E. State Street, Floor 7  
Trenton, New Jersey 08625

**Re: Perfluorinated Chemicals in New Jersey Drinking Water**

Dear Commissioner Martin,

Delaware Riverkeeper Network continues to be greatly concerned about New Jersey water supply contamination caused by perfluorinated chemicals (PFCs). We have been communicating our concerns to the Department about this issue since 2006.

Important actions have been taken by the Department and New Jersey's Drinking Water Quality Institute (DWQI) since that time, notably the Occurrence Study conducted by the Department that was issued in 2007 and the establishment of a drinking water guidance level of 0.04 ppb for perfluorooctanoic acid (PFOA).

The DWQI was well into the process of developing its recommendation for a Maximum Contaminant Level (MCL) for PFOA in the State's drinking water when it was shut down after its last public meeting in the fall of 2010. We have brought to your Department's attention the problems this hiatus has created for New Jersey's residents in letters submitted in 2011 and 2012 and through our organization's public efforts since the DWQI's progress towards standard setting for PFCs and several other dangerous contaminants it was actively working on (including hexavalent chromium, perchlorate, uranium, gross alpha and radium) was halted.

We reiterate that this lack of progress to set standards that would limit the public's exposure to pollutants in drinking water is a violation of New Jersey's Safe Drinking Water Act since the DWQI and its activities are mandated by that law. As you know, the DWQI was established by the New Jersey Safe Drinking Water Act (N.J.S.A. 58:12A1 et seq., P.L. 1983, c. 443) in 1983 and is responsible for developing and recommending to NJDEP MCLs for substances of potential health concern that are found in drinking water.

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

DRN has requested through the Open Public Records Act a copy of the Occurrence Study that examines the second round of drinking water sampling for PFCs that the Department conducted in 2009. One of our OPRA requests was filed in May 2011 and in response we were informed that the report regarding the 2009 "...PFOA Occurrence Study of 30 different sampling locations collected from 29 different public community and noncommunity water systems" was underway and was expected soon after the completion of sampling. The report has never been issued, and as recently as April 2013, the Department declined DRN's request for the report due to the "deliberative" nature of the document. We are very concerned that this report and the final actions that would follow, particularly the adoption of an MCL for various PFCs, are being held back by the Department. As a result, the public and our environment is being exposed to dangerous levels of chemicals that need regulation and residents are being kept in the dark about it.

DRN has received information from the Department between July 16 and 18, 2013 in response to a recent OPRA request, including data on 10 PFCs in 33 samples taken by the Department from 32 water supplies throughout New Jersey. PFOA levels in two water supplies, Brick Township MUA (100 ng/L) and Bondie & Sons (57 ng/L) were above the New Jersey guidance level of 0.04 ppb (40 ng/L). In reviewing this data, we note several other new concerns. First, since a large suite of PFCs were included in the 2009 testing, there are some obvious red flags in the results. Some water supplies had very high levels of PFCs for which no New Jersey drinking water data was available previously, and very high levels were found in the Delaware River Watershed.

The highest groundwater levels of total PFCs were found in the water supplies for Paulsboro in Gloucester County and Bondie & Sons in Salem County, both in the lower part of the Delaware River. Paulsboro is about 2 miles from the Solvay Solexis plant ([www.solvaysolexis.com](http://www.solvaysolexis.com)) in West Deptford, and Bondie & Sons is approximately 6 miles from the DuPont Chambers Works facility ([www.nj.gov/dep/swap/reports/swar\\_1706305.pdf](http://www.nj.gov/dep/swap/reports/swar_1706305.pdf)). Other notably high total groundwater levels were found in Ridgewood, Camden City Water Department, Southeast Morris County MUA, West Milford MUA - Birch Hill and NJ American Elizabethtown-Netherwood Wellfield (all with totals of 69 ng/L or higher).

Very high levels of PFCs were also found in the surface water supplies at Doughty Pond and Kuehne Pond, reservoirs that provide Atlantic City with drinking water. Brick Township MUA surface water showed a high PFOA level along with detection of three additional PFCs. The highest total of all PFCs in the State was Atlantic City's Kuehne Pond with a total of 174 ng/L. Bondie & Sons was the second highest overall, and Atlantic City's Doughty Pond and Paulsboro followed close behind.

The highest level of perfluorononanoic acid (PFNA) was found at Paulsboro on the Delaware River, near the Solvay Solexis plant ([www.solvaysolexis.com](http://www.solvaysolexis.com)) at 96 ng/L. Fluorocarbons and fluoropolymers are made at this plant (<http://www.epa.gov/region02/waste/fsausimo.htm>). DRN and a Coalition of partner groups brought PFOA sampling results taken from the drinking water system serving Thorofare and West Deptford near the Solvay Solexis plant to the attention of the Department in May 2007. In the Department's subsequent sampling of Paulsboro nearby, the PFNA levels are startling, considering the known toxicity of PFNA.

Water sampling performed by the Delaware River Basin Commission (DRBC) from 2007 to 2009 found several PFCs in the Delaware River between River Miles 50 and 131 in the lower portion of the river. The highest levels by far were for PFNA; the highest locations were between River Mile 50 and 88. PFNA was elevated starting at River Mile 88/90 and was extremely high at River Mile 80. In fact, PFNA showed the highest concentrations of any PFC sampled for. PFOA and PFHxA were the other PFCs present at the highest levels, and New Jersey's PFOA drinking water guidance level was exceeded at River Mile 60 and 58. Fish flesh analysis found PFCs between River Mile 58 and 128 with the highest concentrations at River Mile 80 and 91 for PFNA and PFUnA. These results raise grave concerns about the potential for harmful impacts to Delaware River water quality, public health, and fish life.

<http://www.state.nj.us/drbc/library/documents/contaminants-of-emerging-concernJuly2012.pdf>)

The Department provided DRN through OPRA with copies of letters that were sent to water suppliers in 2010 with lab results of the PFC sampling conducted between 2009 and 2010. While some water suppliers such as New Jersey American have taken action to address PFC contamination (see [http://www.waterworld.com/topics/device/mobile/t/59381157/design-build-contract-awarded-for-ranney-station-water-treatment-plant.htm?m\\_n=true](http://www.waterworld.com/topics/device/mobile/t/59381157/design-build-contract-awarded-for-ranney-station-water-treatment-plant.htm?m_n=true)), it is unknown if the water supplies included in the DEP Occurrence Study who were notified in 2010 took action to meet the guidance level for PFOA. As far as DRN is aware, there has been no public discussion of the presence of PFCs in local water supplies with customers as a result of these notifications.

DRN has several requests of the Department at this time. These requested actions are urgently needed to provide safe drinking water to New Jersey communities.

- The Department should conduct additional sampling of water supplies beyond those tested for the second (2009) PFC occurrence study. Due to the sampling results conducted for that study, it is apparent that contamination can move for some distance from PFC sources. DRBC data also shows that surface water can also be affected over long distances. For instance, there are many water supplies that can be affected in the Lower Delaware River region where very high levels of PFCs were found. We recommend that ground water sampling be conducted within a 10 mile radius of both Solexis Solvay in Thorofare/West Deptford and Dupont Chambers Works in Deepwater.

We also recommend that the Department conduct sampling for surface water supplies at locations that are downstream or within the reach of potential PFC sources such as water intakes in the tidal Delaware River and surface water that feeds the Brick Township MUA.

We also recommend that the source(s) of contamination for both ground and surface waters be identified so that the releases can be stopped. For instance, the Atlantic City reservoir contamination may be caused by firefighting foams in runoff from the Atlantic City Airport and that source must be accurately identified to put in action the measures needed to stop the release of PFCs. The source of groundwater contamination for Camden, Ridgewood, West Milford, the Netherwood Wellfield and other supplies that show PFCs need to be traced and addressed.

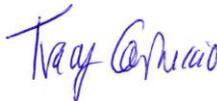
- The Department should evaluate the health significance of other PFCs discovered in New Jersey's drinking water in addition to PFOA. Water suppliers need the Department's expert advice about how to address the presence of these PFCs.
- The Department should complete its deliberations of the second (2009) PFC occurrence study and publicly issue the report. To continue to conceal the findings of this report is unfair to the public and is a cloak of secrecy that does not further the Department's goals of serving the public's interest.
- The Department should reconvene the Drinking Water Quality Institute so its important work can continue. The first order of business should be to develop and recommend safe drinking water standards for PFCs and the other contaminants under evaluation, which include hexavalent chromium, perchlorate, uranium, gross alpha and radium. Since it is going on almost three years since the Institute has met, appointments to empty Board seats should be made of independent and knowledgeable experts. We strongly oppose the addition of industry representatives and other proposed changes to the Institute that are contained in pending legislation (A2123, [http://www.nileg.state.nj.us/2012/Bills/A2500/2123\\_R2.PDF](http://www.nileg.state.nj.us/2012/Bills/A2500/2123_R2.PDF))

We urge immediate action by the Department. Thank you for your consideration of these pressing matters.

Sincerely,



Maya van Rossum  
the Delaware Riverkeeper



Tracy Carluccio  
Deputy Director