

October 12, 2020

Catherine R. McCabe, Commissioner
New Jersey Department of Environmental Protection
401 E. State St.
7th Floor, East Wing
P.O. Box 402
Trenton, NJ 08625-0402

Dear Commissioner McCabe:

Subject: Follow up to our letter of July 1, 2020 and Emerging Chlorinated Polyfluorinated Polyether Compounds Impacting the Waters of Southwestern New Jersey Identified by Use of Nontargeted Analysis. *Environmental Science & Technology*, McCord et al. (2020)¹

The Delaware Riverkeeper Network, Clean Water Action, Environment New Jersey, and the Sierra Club New Jersey Chapter wrote a letter to you on July 1, 2020 (attached). We shared our deep concern about the reporting in a peer-reviewed scientific article that was published in *Science*² about poly/perfluorinated alkyl substances (PFAS) congeners that seem to be associated with Solvay's replacement chemical for PFNA being found in New Jersey's environment. We have received no response from you or the Department regarding our letter, despite the time sensitive nature of this contamination issue.

We have read a second peer-reviewed scientific article on the same subject with additional information that was published September 22, 2020 by the same authors, which again include two coauthors, Erica L. Bergman and Sandra M. Goodrow with the New Jersey Department of Environmental Protection (NJDEP) Site Remediation and Waste Management Program and the Division of Science and Research, respectively. We congratulate the Department on this exceptional work by its professional staff. However, we are disturbed that we have not heard back from the Department regarding the questions we posed in our July letter. It is our position that the public has a right to know what is in the air we breathe and the water we drink and how the presence in our environment of chloro perfluoro polyether carboxylate (CIPFPECA), the compound registered to the Solvay Specialty Polymers to replace PFNA, could affect New Jerseyans' health.

In the new report, the collaboration between scientists from NJ Department of Environmental Protection and the US EPA Office of Research and Development was further explained, documenting the collection of water samples for the study. It was reported that non-targeted analysis of the samples was conducted to determine the presence of emerging PFAS

¹ <https://pubs.acs.org/doi/10.1021/acs.estlett.0c00640>

² J.W. Washington et al., Nontargeted mass-spectral detection of chloroperfluoropolyether carboxylates in New Jersey soils, *Science*, June 5, 2020, Vol. 368, Issue 6495, pp. 1103-1107, <https://science.sciencemag.org/content/368/6495/1103.abstract-aff-3>

compounds in this region that are not detected by standard analytical methods. The water samples were collected from surface water in Gloucester and Salem Counties, groundwater from well locations where PFNA and/or PFOA had previously been found above NJ water quality standards and in groundwater in six private drinking water wells. Sampling results showed evidence of the presence of CIPFPECA, the Solvay replacement.

All of our prior questions remain regarding the soil sample results reported in the *Science* article and we again request those questions be answered by the Department. Additional questions have arisen from the new report:

SOLVAY –

1. Has Solvay confirmed the release into the environment, specifically water, of CIPFPECA?
2. If confirmed:
 - a. Has Solvay provided information about how much of the compound and related compounds have been released?
 - b. When did Solvay start using the replacement compound?
 - c. How was the replacement compound released – air, water, waste materials, direct discharge to surface water or groundwater, in the product? What are the proportions of the compound released in various media and the timeframe of these releases?
 - d. Is Solvay sampling for CIPFPECA in their releases, on the Solvay site in all media, and/or in off-site environmental media, including drinking water?
 - e. Is Solvay taking any actions to eliminate or reduce their releases/emissions?
 - f. Is Solvay considering eliminating the use of CIPFPECA?
 - g. Has Solvay assessed the toxicity and/or environmental properties of CIPFPECA?
 - h. Will you share with us any of the information provided by Solvay?

FURTHER RESEARCH –

3. Is the NJDEP planning further research and/or analysis to determine:
 - a. Other locations and drinking water supplies in New Jersey where CIPFPECA may be present?
 - b. The mode of transport of CIPFPECA into the environment to assess the need for regulatory actions that require further controls such as air filtration systems and additional wastewater treatments?
 - c. Presence and levels of CIPFPECA in fish, aquatic life, birds, or land species, especially considering the confirmation of its presence in water?
 - d. The presence of CIPFPECA in human blood of Solvay workers and New Jersey residents who have been exposed to drinking water contaminated with CIPFPECA?
 - e. Has the Department or any other New Jersey entity assessed the effectiveness of currently employed treatment systems that remove PFAS to remove CIPFPECA, considering the finding reported in the referenced paper that POET systems

installed on individual wells in the region surrounding Solvay removed PFAS by 90%?

- f. Will the Department be undertaking work on groundwater migration of CIPFPECA, considering that the authors of the referenced paper noted that need?
- g. Is the Department aware of other studies of the congeners associated with PFAS compounds and/or CIPFPECA by other U.S. or international bodies? Is the Department using or considering employing any data or information regarding these compounds from studies performed by others outside of the scientists who wrote the referenced papers?

DEPARTMENT ACTION –

- 4. Will the Department consider requiring the cessation of use by Solvay (or others, if applicable) of CIPFPECA?
- 5. Will the Department consider any further regulatory controls on CIPFPECA and other PFAS replacements?
- 6. When will the public be informed and will there be a public process associated with a Department response?

SPILL ACT -

- 7. Will CIPFPECA be added to the investigations related to the Spill Act Directives on Solvay?

NATURAL RESOURCE DAMAGE -

- 8. Will CIPFPECA be added to the investigations related to New Jersey's natural resource claims against Solvay and will there be a natural resource damage claim against Solvay?

As previously stated in our July letter, we consider Solvay's release of PFNA into the regional environment and the contamination of people's water supplies to be unconscionable and a tremendous burden for the impacted communities. The results of blood studies in the region around Solvay show that residents have higher levels of PFNA in their blood than the general population. This increases their risk of developing adverse health effects or diseases linked to PFNA exposure.

After tremendous effort and expense was invested in cleaning up their water supplies, these reports reveal the startling finding that many of these same people may have been subjected to another highly dangerous contaminant, one that was supposed to safely replace PFNA. This an outrageous and unacceptable situation that has caused a new water crisis of which people must be made aware and that the Department must address as soon as possible.

Thank you for your consideration and immediate attention to this issue.

Sincerely,

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network

Jeff Tittel
Director
New Jersey Sierra Club

Doug O'Malley
Director
Environment New Jersey

Amy Goldsmith
New Jersey State Director
Clean Water Action

cc: Shawn LaTourette, Deputy Commissioner & Chief of Staff NJ DEP

July 1, 20120

Catherine R. McCabe, Commissioner
New Jersey Department of Environmental Protection
401 E. State St.
7th Floor, East Wing
P.O. Box 402
Trenton, NJ 08625-0402

Dear Commissioner McCabe:

Subject: J.W. Washington et al., Nontargeted mass-spectral detection of chloroperfluoropolyether carboxylates in New Jersey soils, *Science*, June 5, 2020, Vol. 368, Issue 6495, pp. 1103-1107, <https://science.sciencemag.org/content/368/6495/1103.abstract> - aff-3

The Delaware Riverkeeper Network, Clean Water Action, Environment New Jersey, and the Sierra Club New Jersey Chapter share a common mission of ensuring a clean, healthy and sustainable environment. To this end, we read with great interest the subject peer-reviewed scientific article for which two coauthors, Erica L. Bergman and Sandra M. Goodrow, are with the New Jersey Department of Environmental Protection (NJDEP) Site Remediation and Waste Management Program and the Division of Science and Research, respectively.

The authors indicate that soil contaminants near the Solvay facility in West Deptford, Gloucester County, included congeners related to poly/perfluorinated alkyl substances (PFAS) that had not been reported previously. The authors speculate that these congeners may be associated with a replacement for historical PFAS's that were voluntarily phased out by Solvay and other companies in the United States.

We have the following questions:

SOLVAY -

1. Has the NJDEP contacted Solvay Specialty Polymers USA, LLC in West Deptford, Solvay USA, and/or the parent company Solvay S.A. regarding the findings reported in this study?
2. Has Solvay confirmed their use of a replacement for the historical, phased-out PFAS's or any other chemical at their West Deptford facility that would account for the contamination?
3. If confirmed:
 - a. Has Solvay provided to you any chemical identification, properties, environmental fate, and toxicity data or other information that would support the safety of these congeners?
 - b. Has Solvay provided information about the use and emissions of these congeners?
 - c. Is Solvay taking any actions to reduce their emissions?

- d. Has Solvay assessed the environmental and health risks associated with the potential exposure levels as found in the subject study?
- e. Can you share with us any of the information provided by Solvay?

FURTHER RESEARCH –

4. Is the NJDEP planning further research and/or analysis to determine:
 - a. The occurrence of these congeners in other locations in New Jersey?
 - b. The presence and concentrations of these congeners in other environmental media such as groundwater, surface water and air?
 - c. The presence and levels in the aquatic and terrestrial biota near the facility or in other locations?
 - d. The presence and concentrations of these congeners in the drinking water supplies for water systems in the contaminated area and other New Jersey locations, including surface and water well sources?
 - e. The presence and levels in the blood of the Solvay facility workers and nearby residents and those, anywhere in the state, who may be drinking water contaminated with these congeners?
 - f. The environmental fate and persistence in the environment of the congeners?
 - g. The human health and environmental toxicological properties of the congeners?
 - h. The release of these congeners by any other discharger/user?
5. Are you aware of any other research or studies being performed by EPA or agencies or scientists in other nations on the aspects of the congeners listed under #4 above?
6. Is Solvay collaborating with the EPA and/or NJDEP on any further research, or is Solvay planning any research on their own in these areas? If Solvay is planning to conduct research on their own, will you be able to review and to comment on their plans? Will the public have the opportunity to review new information as it emerges?
7. Can you make available any research plans by the NJDEP, USEPA and/or Solvay?
8. Will Solvay financially support any research planned by the EPA and/or NJDEP, with no-strings-attached?
9. If any of the above actions are being taken, when will the public be informed and will there be a public process associated with a government response?

RISK ASSESSMENT -

10. Are you or the EPA in possession of any information on the chemical properties, environmental fate and/or toxicity of these congeners, including any modeling data based on their chemical structures? Can you share any of this information?
11. What are the current health and environmental risks associated with the potential exposure to these contaminants, based on available information including any environmental and health modeling data?

SPILL ACT -

12. What is the status of the Spill Act Directives on Solvay? Will DEP require Solvay to come up with testing, a ground water remediation plan, and a full cleanup plan for the site?

NATURAL RESOURCE DAMAGE -

13. Given the extent of soil and groundwater contamination and protection impact to wildlife, is DEP moving forward with filing for natural resource claims against Solvay?

We would very much appreciate your response. As you know, Solvay was responsible for the release of PFNA into the environment in West Deptford and, as a result, the water supplies for people in the region were contaminated. These residents have been shown to have higher levels of PFNA in their blood, increasing their risk of developing an adverse health effect or disease linked to PFNA exposure. This water crisis has been traumatic and has impacted many lives. Now many of those same people may be exposed to another harmful compound.

We recognize that New Jersey was the first state to take action to regulate any PFAS compound with the adoption of the maximum contaminant level (MCL) for PFNA. NJDEP scientists and the Drinking Water Quality Institute carried out nationally recognized research and analyses as they developed the recommendations for the state. New Jersey made further history with the subsequent adoption of MCLs for PFOA and PFOS. We are requesting that the state step up once again as a national leader to protect New Jerseyans and the environment by investigating and taking action to address the revelations of the Science article with the urgency it requires.

Thank you for your consideration and immediate attention to this issue.

Sincerely,

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network

Mark Fukayama, Ph.D.
Toxics Issues Coordinator
Sierra Club New Jersey Chapter

Jeff Tittel
Director
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