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December 1, 2010

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

RE: NJDEP Actions Relating to Perfluorooctanoic acid (PFOA)

Dear Commissioner Martin,

The purpose of this letter is twofold: First, to bring to your attention a matter that has been before the Department for a number of years; and, second, to ask for your assistance in obtaining information relating to that issue. The matter involves the chemical perfluorooctanoic acid (PFOA), which is used by industry as a processing aid in the manufacture of a wide range of high-performance products with benefits to society that include safety, emissions reductions and communications. PFOA has been used by or is present in operations of various companies at sites around the State and is also present in some forms of fire fighting foam used by fire companies and industrial and military fire brigades in New Jersey.

Background – Drinking Water Limits

PFOA is a stable and persistent chemical present at very low levels in the environment and in the blood of the general population. Over the past five years, a number of state and foreign governments have reviewed the latest science and set health-based protective drinking water limits for PFOA between 0.3 and 0.5 ppb (see attached table).

In 2007, New Jersey DEP established a preliminary guidance value for PFOA of 0.04 parts per billion (ppb—equivalent to 40 parts per trillion), beginning the first phase of a process to establish a State drinking-water standard (Maximum Contaminant Level, or MCL) involving the Drinking Water Quality Institute (DWQI). The regulatory and scientific landscape for PFOA has evolved considerably since NJDEP calculated its preliminary guidance value based solely on toxicology studies cited in a USEPA 2005 draft risk assessment.

In 2009, USEPA issued a Provisional Health Advisory (PHA) for PFOA of 0.4 ppb (400 parts per trillion) in response to PFOA found in wastewater treatment facility sludge that had been applied to farmland near Decatur, Alabama. USEPA not only stated that this PHA is for use nationally, but also that drinking water with levels below the PHA does not require treatment. USEPA is in the process of developing a science-based permanent Health Advisory, which is expected to be completed in the spring of 2011.

Despite the preponderance of other regulatory bodies setting water limits an order of magnitude higher, in September 2010, the DWQI Health Effects Subcommittee issued a memorandum presenting health-based maximum contaminant levels for PFOA ranging from 0.01 ppb to 0.04 ppb. This range was proposed without the benefit of a completed risk assessment. DuPont believes that these levels are neither justified by nor reflective of the latest science as is demonstrated by the other recently established regulatory limits. In fact, in their draft risk assessment released just last month (October, 2010), the Canadian departments for health and the environment stated, "Based on the available information on the potential to cause harm to human health and the resulting margins of exposure, it is proposed that PFOA and its salts are not entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health." The low levels of exposure in Canada's general population are similar to those in New Jersey.

According to NJDEP, which has conducted occurrence studies, PFOA levels that exceed the NJDEP preliminary guidance value have been measured in public water systems at multiple locations in the State. These very low PFOA levels are consistent with levels found in other areas of the country. In fact, when USEPA tested public drinking water in the Alabama situation, it found levels below 0.04 ppb and stated, "Based on its current understanding, EPA believes these levels are not of concern and residents may rely upon public water systems."

DuPont Actions in New Jersey and Planned Phase-out

DuPont does not manufacture PFOA in New Jersey. We are one of a number of companies who use or may have PFOA present in their processes in some New Jersey sites either now or in the past. At the DuPont Chambers Works facility in Deepwater, PFOA occurs at trace levels as an unintended by-product in the manufacture of some fluorotelomer-based products and is used as a processing aid in small quantities for one other product line.

DuPont, in coordination with NJDEP, voluntarily conducted a private drinking water well survey and sampling program for PFOA of properties in the vicinity of the Chambers Works plant. Of more than 100 drinking water wells tested, only one well measured slightly above 0.40 ppb, the USEPA PHA for PFOA. DuPont installed and provides for maintenance of a granular activated carbon water treatment system for this homeowner.

The presence of PFOA in people's blood raises questions that are being addressed by industry through an extensive, multi-year effort under the USEPA 2010/15 PFOA Stewardship Program to reduce manufacturing emissions and product content of PFOA and related compounds. Due to these questions, as well as customer interest in product alternatives, DuPont committed to phase out the use and production of PFOA by 2015, or earlier if possible, and to develop new

products and processes that are more environmentally sustainable. As part of this effort, PFOA emissions at Chambers Works have been reduced nearly 99 percent.

You may be aware that DuPont has been involved in litigation in West Virginia, including a class action that was settled in 2005. The issues in West Virginia class action related to communities near the DuPont Washington Works facility, where PFOA was used extensively over many decades. PFOA levels in some of those communities were detected at substantially higher levels than in New Jersey. Even with those higher levels, there are no health effects known to be caused by exposure to PFOA for workers or the community.

PFOA Health Studies

Based on extensive health and toxicological studies, DuPont believes that PFOA exposure does not pose a health risk to the general public. Human studies have evaluated many health end points across a wide range of exposed populations. While some associations have been reported, no human health effects are known to be caused by PFOA. A considerable number of human health studies have been conducted over the years and are ongoing. Ongoing study includes work being conducted by an independent panel of scientists established in 2005 as a result of the settlement in West Virginia. The panel is charged with evaluating whether there is a probable link between PFOA and any human disease. The Science Panel is conducting a series of eleven studies, as well as performing its evaluation of the body of available scientific evidence. The Science Panel is expected to deliver its findings on whether or not a probable link exists between PFOA exposure and human disease starting next year.

Information Request

On a number of occasions DuPont has urged the Department to follow an open, transparent and accountable process regarding the regulation of PFOA. Confidence in that process has been shaken by what appeared to be influence on PFOA-related regulatory matters by outside parties, including some of those involved in ongoing litigation in New Jersey against DuPont. As a result of these communications and the closed-door process undertaken by DWQI, DuPont was compelled to serve a series of Open Public Records Act (OPRA) and Right to Know Requests to the NJDEP.

These requests have been the only means of obtaining public information that should have been readily available to all stakeholders in the regulatory process. These requests simply asked for communications, research and studies, memoranda, and data pertaining to, among other things, the basis on which NJDEP developed its preliminary guidance value for PFOA, the on-going NJDEP risk assessment for PFOA, and the information and science being considered by DWQI in the context of considering an MCL for PFOA. In their recent letter to you, the Chemistry Council of New Jersey expressed concern about the apparent lack of scientific integrity and transparency in the DWQI standard setting process. We share this concern and hope DWQI's procedures improve with the appointment of new leadership. An open approach by definition assumes that NJDEP and DWQI will consider all available scientific views and the submissions of all stakeholders in the process.

While the DWQI approach has been opaque, at least the OPRA requests made by DuPont in September 2009, December 2009, and March 2010 were responded to by NJDEP. However, NJDEP has completely refused to respond to the most recent set of requests submitted in August 2010, even though (a) they are exactly the same as previously submitted requests, (b) NJDEP fully responded to all of those requests, and (c) the former and presently pending requests were/are specifically limited in time and scope.

We have been impressed by Governor Christie's commitment to regulatory reform and to ensuring scientific integrity in the regulatory process. In addition, your leadership in transforming the Department and engaging stakeholders throughout the process, as well as utilizing the newly established Scientific Advisory Board to review and advise on science-based proposals, will serve to improve standard-setting and will ultimately result in a better method by which to protect the citizens of New Jersey.

As with any transformation, it takes time for change to occur. The denial of DuPont's OPRA request runs counter to the Governor's commitment, as well as your emphasis on the importance of an open and transparent regulatory process and standard setting based on sound science. I urge you to review this matter, and I hope that the Department will reconsider its denial of our information request.

I also encourage you and your new leadership team to review the PFOA issue in general and to particularly examine the process by which water standards are being developed by NJDEP and the DWQI for PFOA to ensure a fair, open process and an ultimate standard reasonably justified by the science.

Thank you for your consideration of this important issue. I would be pleased to answer any questions you might have as a result of your review. Please feel free to contact me at the number above.

Sincerely,

A handwritten signature in black ink, appearing to read "David W. Boothe". The signature is fluid and cursive, with the first name "David" and last name "Boothe" clearly distinguishable.

David W. Boothe

Attachment

cc: Irene Kropp, NJDEP
John Plonski, NJDEP

Table 1. PFOA Regulatory Drinking Water Guidance Levels*

State or Country	Drinking Water Guidance Level	Description
United States	0.4 ppb	Provisional Health Advisory; U.S. Environmental Protection Agency Office of Water (2009)
Minnesota	0.3 ppb	Health Risk Limit; Minnesota Department of Health (2009)
West Virginia	0.4 ppb	Precautionary site-specific action level; US EPA SDWA Order on Consent (2009)
Germany	0.1 ppb 0.3 ppb 0.5 ppb	Health-based precautionary value, Tolerable maximum value-life time exposure, Precautionary action value-infants; German Drinking Water Commission (2006)
United Kingdom	0.3 ppb 10 ppb 90 ppb	Sampling/monitoring trigger, Wholesomeness trigger for reduction measures-lifetime exposure basis, Consult with health authorities-action to reduce exposure within 7 days; United Kingdom Drinking Water Inspectorate (2007)

*Water levels were developed using science-based risk assessments to evaluate chronic exposure.