

September 4, 2001

Samantha P. Fairchild, Director
Office of Enforcement, Compliance and
Environmental Justice
Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029
Rebecca Hanmer, Director
Water Protection Division United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Ms. Fairchild and Ms. Hanmer:

Re: DuPont Response to Letter of Mr. Robert A. Bilott dated March 6, 2001

Recently we received your letter of July 24, 2001 requesting information about the use of ammonium perfluorooctanoate (APFO) at the DuPont Washington Works Plant in Parkersburg, WV. We understand your inquiry was instigated in part by a March 6, 2001, letter from Mr. Robert A. Bilott, an attorney with the law firm of Taft, Stettinius & Hollister, addressed to several governmental agencies, to include EPA Region III. At the time the letter was sent, Mr. Bilott represented several plaintiffs in civil litigation against DuPont involving the matters in his letter. Because of that litigation, we were concerned that efforts to rebut the allegations in a non-judicial forum might raise ethical issues. Now that this case has settled we feel this is an appropriate time to clarify and correct some of the major misrepresentations in Mr. Bilott's letter.

A. APFO does not pose a health hazard at the concentrations present in the DuPont workplace, the community or the environment.

There is no evidence APFO has had or is having an adverse impact on human health. DuPont recognizes that APFO is a biopersistent compound. DuPont and other companies therefore have devoted considerable resources to examine the health of our workers. DuPont's medical surveillance of its own employees at the Washington Works Plant and epidemiological data from other companies supports DuPont's conclusion that APFO does not pose a health concern to humans or animals at levels

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present in the workplace or the environment. DuPont's findings are supported by 3M's public statement that "there have been no health effects" from APFO in its own employee population based upon 30 years of medical monitoring. (See The Washington Post, May 16, 2000)

Moreover, in his letter, Mr. Bilott said the 1993 University of Minnesota epidemiology studies on workers employed at a 3M-plant manufacturing APFO "linked APFO exposure with increased prostate cancer among human males". This is incorrect. The study concluded that the "suggested association between APFO exposure and prostate cancer must be viewed as a hypothesis generating and should not be overinterpreted. This association may be real, may have been a chance finding, or may be the result of an unrecognized environmental factor." (See March 6 Letter, Exhibit 47, p. 4). While the 1993 study found six prostate cancer deaths among 2,788 male workers and four prostate cancer deaths among the exposed workers, a subsequent investigation by 3M showed only one of the four workers with prostate cancer actually worked with APFO.

B. DuPont has provided local, state and federal agencies extensive information on its use, handling, and management of APFO.

Contrary to the allegations in Mr. Bilott's letter, DuPont has not concealed information on APFO from the local, state or federal agencies or the public. To the contrary, in the course of discovery in the litigation brought by Mr. Bilott, DuPont cited some 50 occasions between 1951-2000 that DuPont, either orally or in writing, communicated to the Lubeck Public Service District and state and federal regulatory agencies information about its handling of APFO and the presence of APFO in drinking water and ground water. We are more than willing to share this history with you.

C. There are no concentrations of APFO in drinking water sources above DuPont's Community Exposure Guidelines.

The low concentrations of APFO present in drinking water at the Washington Works site and the GE Plastics Plant and in the Lubeck Public Service District are below the DuPont Community Exposure Guidelines ("CEG"). The CEG is a level developed by DuPont's Acceptable Exposure Limit Committee. It is considered to be a very conservative guide based on the assumption that the individual is exposed to the chemical twenty-four hours per day over a lifetime. The currently available data indicates that no source of drinking water exhibits concentrations above the CEG. Moreover, Dry Run Creek has not been identified as a source of drinking water and thus references in Mr. Bilott's letter to the levels of APFO in Dry Run Creek as if they pertained to drinking water are misleading.

D. The Cattle Team's conclusions on the affects of the Dry Run landfill on the plaintiffs' livestock are well founded and continue to be supported by the Cattle Team.

When concerns about the health of the cattle owned by Mr. Bilott's clients were alleged several years ago, at DuPont's suggestion DuPont and EPA Region 3 each appointed three veterinarians to examine the cattle. This "cattle team" reported, unanimously, that any illnesses in the cattle were clearly linked to nutritional deficiency and known diseases, not chemicals. Mr. Bilott attacks these findings because the veterinarians were not informed of the levels of APFO in the Dry Run stream. He also states, without any evidence, that APFO was responsible for the death of several hundred head of cattle. The cattle team members were informed of the chemicals at the landfill and based their conclusions on their evaluation of this and other information. Rather than engaging in an extended dialogue about Mr. Bilott's allegations, we are willing to make Dr. Peter Moisan and Dr. Greg Sykes, two of the DuPont selected cattle team members, available to answer any questions you have about the cattle study, or if you prefer, we urge you to talk to the EPA selected team members, such as Dr. Perry Habecker who headed up the cattle team.

E. Perfluorooctanyl sulfonate ("PFOS"), rather than APFO, was the focus of 3M's phaseout of its perfluorooctanyl chemistry product line.

Mr. Bilott's letter suggests that 3M elected to withdraw from all of its perfluorinated chemicals, including APFO, because of its concerns about the environmental impact of the chemicals and concerns about health. This statement is incorrect. Although 3M will discontinue making APFO using electrochemical fluorination, its wholly owned subsidiary Dyneon does and will continue to manufacture APFO. Mr. Bilott completely mischaracterizes a statement by an EPA representative that APFO has "sailed under the agency regulatory radar screen." This statement was made by EPA's Mr. Charles Auer in reference to PFOS, not APFO. There are considerable differences in the toxicity of PFOS and APFO.

F. DuPont has significantly reduced its discharges of APFO and has implemented a program to regenerate recovered APFO.

DuPont has invested, and continues to invest, in developing technology to contain and recover APFO. Additionally, recently DuPont implemented a program at Washington Works to regenerate APFO recovered in the air pollution control devices. Presently DuPont is the only company that recovers and regenerates APFO. We have told EPA representatives in Washington that we are willing to make our technology available license free to our competitors to allow them to also recover and reuse APFO. Similarly, with respect to aqueous phase discharges, DuPont has evaluated several wastewater treatment technologies suitable for APFO removal. DuPont determined that carbon bed filtration was the best suited in terms of effectiveness for treating the wastewater discharges at Washington Works. DuPont commenced operation of filtration units on certain APFO containing discharge streams at Washington Works in 2001. These units have significantly reduced the APFO discharges into the Ohio River from Washington Works. In total, DuPont has invested more than \$15 million in capital and technology development to reduce APFO emissions since 1988 and DuPont plans to invest an additional \$8 million over the next three years to further reduce APFO

emissions and increase APFO recovery and recycle.

G. Despite extensive research on APFO alternatives, DuPont has failed to discover a technically feasible replacement for APFO.

Since 1979, DuPont has evaluated over 40 in-kind alternatives to APFO (i.e., fluorinated, anionic surfactants). However, despite this extensive evaluation, DuPont has not identified an alternative to APFO that provides the required functionality for fluoropolymer products as well as superior environmental and toxicological properties. Additionally, DuPont's efforts to identify not-in-kind alternatives (i.e., cationic and/or non-fluorinated) have been unsuccessful. DuPont, individually, and as part of the Fluoroproducts Manufacturing Group (FMG) of the Society of the Plastics Industry, discussed in some detail with EPA representatives in Washington the industry's efforts to find a replacement and the fact that the industry would be unable to manufacture a number of products without this chemical. For environmental and economic reasons, DuPont would certainly prefer to use a less biopersistent and expensive chemical. However, until a technically feasible alternative is identified, DuPont intends to continue to use APFO in its manufacturing processes, with ever tighter environmental controls.

We hope that this letter provides you basic information refuting major allegations in Mr. Bilott's letter. We offer you the opportunity to hear more about our industry's commitment to contain and recover APFO, the benefits that fluoropolymers bring to society, and share any information that we have already provided to EPA representatives in Washington on these subjects. Our response to your July 24, 2001 letter will further address these issues.

In the event there are specific issues that we have not addressed in the Bilott letter or any issues or questions you have about human health and the environment that you wish more information on, or which you wish us to address at our meeting, please let me know. My phone number is 302-999-2415.

Very truly yours,

David M. Rurak
Global Business Manager-Fluoromonomers