

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY**

**REGION III
1650 ARCH STREET
PHILADELPHIA, PA 19103**

**REGION V
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604**

IN THE MATTER OF:)	
)	ORDER ON CONSENT
)	
E. I. du Pont de Nemours)	
and Company, Incorporated)	Proceeding under section 1431(a)(1)
)	of the Safe Drinking Water Act,
)	42 U.S.C. § 300i(a)(1)
Washington Works Facility)	
Route 892)	Docket Nos. SDWA-03-2002-0019,
Washington, WV 26181)	SDWA-05-2002-____

I. STATUTORY AUTHORITY

1. This Order on Consent ("Order") is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency ("EPA") by Section 1431(a)(1) of the Safe Drinking Water Act ("SDWA"), 42 U.S.C. § 300i(a)(1).

2. The authority to issue this Order was delegated to the Regional Administrators by Delegation No. 9-17, dated May 11, 1994.

3. Under the SDWA, Congress has delegated to EPA broad authority for the protection of public water supplies and drinking water sources.

II. DEFINITIONS

4. The term "Underground Source of Drinking Water" ("USDW") means an "aquifer" or its portion which supplies a public water system ("PWS") or which contains a sufficient quantity of ground water to supply a PWS and which currently supplies drinking water for human consumption, or contains fewer than 10,000 milligrams per liter (mg/l) total dissolved solids, and is not an exempted aquifer. See 40 C.F.R. § 144.3.

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

5. E. I. du Pont de Nemours and Company, Incorporated ("DuPont"), is a corporation and is therefore a "person" within the meaning of Section 1401(12) of the SDWA, 42 U.S.C. § 300f(12).

6. DuPont owns and operates a manufacturing facility, known as the Washington Works ("Facility"), located in Washington, Wood County, West Virginia.

7. Ammonium perfluorooctanoate, CAS Number 3825-26-1 (hereafter "C-8"), is a perfluorinated surfactant that DuPont has used in its fluoropolymer-related manufacturing processes at the Facility since the early 1950s.

8. Residues containing C-8 generated by the Facility are or have been released to the air, discharged to the Ohio River, disposed of at the Facility, Dry Run and Letart landfills in West Virginia ("disposal sites") and otherwise shipped off-site for destruction and/or disposal including into unlined landfills.

9. Studies performed by DuPont and Minnesota Manufacturing and Mining Corporation (a manufacturer of C-8) ("3M") have determined that C-8 in sufficient doses, i.e., considering both amount and duration of exposure, is toxic to animals through ingestion, inhalation and dermal contact. Studies have also found that C-8 is persistent in humans and the environment. EPA is conducting a preliminary hazard assessment of C-8 under the Toxic Substances Control Act ("TSCA").

10. Recently, C-8 has been detected in the underground source of drinking water used to supply the following locations, at the following levels :

Lubeck, WV, PSD:	0.8 micrograms/liter (ug/l) (1 st quarter 2000)
Facility Production Wells:	1.99 ug/l (Well 336, 1998) 1.45 ug/l (Well 332, 1999)
Facility Drinking Water Taps:	0.213 ug/l (Building 5, 1999) 0.496 ug/l (Building 293, 1999) 0.306 ug/l (Building 231, 1999) 0.135 ug/l (Building 363, 2000)
Little Hocking, OH, PWS:	1.840 ug/l (Well 1, 12/01) 3.730 ug/l (Well 2, 12/01) 0.855 ug/l (Well 3, 12/01) 7.690 ug/l (Well 5, 12/01)
	1.720 ug/l (Well 1, 1/02) 2.970 ug/l (Well 2, 1/02) 0.744 ug/l (Well 3, 1/02)

6.220 ug/l (Well 5, 1/02)

11. Although recent sampling shows lower levels, groundwater data from Letart landfill has shown C-8 concentrations as high as:

On-site monitoring well MW1	24,000 ug/l (1998)
On-site monitoring well MW-2A	990 ug/l (1998)

Private wells near the Letart landfill when tested for C-8 in 2001 showed levels of 0.42 ug/l, 0.296 ug/l, and 0.085 ug/l; tap samples from the only well in the area of Letart landfill which is currently known to supply drinking water showed levels of 0.031 ug/l, 0.046 ug/l and 0.053 ug/l (duplicate sample).

12. The C-8 discharged by the Facility is a contaminant present in or is likely to enter a PWS or an USDW through the migration from air emissions, surface water discharges or from unlined landfills, and may present an imminent and substantial endangerment at levels exceeding 14 ug/l in water used for human consumption based on "A Hazard Narrative for Perfluorooctanoate (PFOA)" a final report prepared by ENVIRON International Corporation, January 24, 2002 (hereafter "ENVIRON report") for DuPont.

13. DuPont, the West Virginia Department of Environmental Protection ("WVDEP"), and the West Virginia Department of Health and Human Resources ("WVDHHR") have entered in an agreement on consent ("WV Order"), dated November 15, 2001, attached hereto, which provides for, *inter alia*, a toxicological and human health risk assessment of C-8 to be conducted under the supervision of a C-8 Assessment of Toxicity ("CAT") Team pursuant to the WV Order, as well as ground and surface water monitoring and plume identification. DuPont, in a letter dated February 11, 2002, attached hereto, also agreed to perform sampling of private and public ground water wells within a 1-mile radius of the Little Hocking, Ohio PWS well field, following the protocol established in the WV Order. (Hereafter, the sampling required by the WV Order and the additional sampling agreed to by DuPont will be referred to as "sampling in WV/OH.")

14. C-8 is currently not a contaminant for which a national primary drinking water regulation has been established pursuant to the SDWA, however, for the purpose of this Order, DuPont and EPA agree to use the level of 14 ug/l C-8, as set forth in the ENVIRON report, as the temporary threshold level for provision of alternate water as required by paragraph 17 of this Order.

15. DuPont and EPA further agree to use the screening level for C-8 to be established by the WV Order as the threshold level for the provision of alternate water required by paragraphs 18 through 23 of this Order, in lieu of the level set forth in paragraphs 12 and 14 of this Order.

16. EPA has consulted with the WVDEP, WVDHHR, the Ohio Environmental Protection Agency ("OEPA") and the Ohio Department of Health ("ODH") to confirm that the information on which this Order is based is correct and to ascertain the action that the state and local authorities are or will be taking. WVDHHR, OEPA, and ODH have requested that EPA take this action. EPA has concluded that all requisite conditions have been satisfied for EPA action under Section 1431(a)(1) of the SDWA, 42 U.S.C. § 300i(a)(1).

IV. ORDER ON CONSENT

Pursuant to the authority issued to the EPA Administrator by Section 1431(a)(1) of the SDWA, 42 U.S.C. § 300i(a)(1), and delegated to the Regional Administrators, DuPont is ORDERED and hereby consents to the following:

Provision of Alternate Drinking Water

17. As soon as practicable, but not later than fifteen (15) days following receipt of validated sampling results performed in accordance with the WV Order for sampling in WV/ OH, DuPont shall provide a temporary alternate drinking water supply for users of any private drinking water well and PWS in West Virginia or Ohio where such results show the level of C-8 exceeds 14 ug/l. A "temporary alternate drinking water supply" shall mean connection to a PWS, connection to a new water well, adequately treated water or water from some other source, including bottled water or bulk water from a tank truck that meets the water quality requirements of 40 C.F.R. § 141 and has a level of C-8 no greater than 14 ug/l; is in sufficient quantity for all reasonable domestic uses including drinking and cooking; and is provided in a manner convenient to the users. DuPont shall continue to provide this temporary alternate drinking water supply until DuPont fully implements the Alternate Drinking Water Plan pursuant to paragraphs 18 through 23 of this Order. DuPont shall be responsible for all operation and maintenance costs of the alternate drinking water supply.

18. As soon as practicable but not later than thirty (30) days after a determination by the Groundwater Investigation Steering Team ("GIST") established pursuant to the WV Order that a private drinking water well or PWS in West Virginia or Ohio contains C-8 at levels greater than the screening level developed pursuant to the WV Order, DuPont shall submit to EPA for approval, and to WVDHHR, WVDEP and OEPA, as appropriate, for review, an Alternate Drinking Water Plan which identifies all actions necessary to enable DuPont to fully comply with the requirements of paragraph 19 through 23 of this Order. The Alternate Drinking Water Plan shall include a schedule of implementation for such actions.

19. The Alternate Drinking Water Plan shall provide that:

a. DuPont shall assure the provision of an alternate supply of drinking water to all users of any PWS and any private drinking water well in West Virginia or Ohio, identified pursuant to sampling in WV/OH, where, and for so long as, the level of C-8 exceeds the screening level developed pursuant to the WV Order.

b. Such levels shall be determined by monitoring performed using a test procedure established by the GIST pursuant to the WV Order. Such alternate supply of drinking water is to be provided at no cost to the users of such PWS or private drinking water wells, except for usual service fees incurred by users of a PWS.

c. DuPont will provide notice to all users of such PWS and private drinking water wells of the availability of the alternate supply of drinking water.

d. An "alternate supply of drinking water" shall mean connection to a PWS, connection to new water well, adequately treated water or water from some other source, acceptable to EPA, that meets the water quality requirements of 40 C.F.R. § 141 and has a level of C-8 no greater than the screening level established pursuant to the WV Order; is in sufficient quantity for all reasonable domestic uses including drinking and cooking; and is provided in a manner convenient to the users. DuPont shall be responsible for all operation and maintenance costs of the alternate supply of drinking water for the duration of operation pursuant to this Order, unless the alternate supply of drinking water is provided by connection to a PWS.

20. Following the initial submittal of the Alternate Drinking Water Plan by DuPont, if EPA, in consultation with WVDHHR, WVDEP, and OEPA, as appropriate, determines that modifications are necessary to DuPont's Alternate Drinking Water Plan, DuPont shall make such modifications as EPA may specify to satisfy the requirements of this Order and submit a revised Alternate Drinking Water Plan within forty-five (45) calendar days of notification by EPA.

21. Upon EPA's approval of the Alternate Drinking Water Plan (or revised Alternate Drinking Water Plan, as the case may be), DuPont shall implement, in accordance with the approved schedule, any and all actions necessary to comply with the requirements of paragraphs 18-20.

22. Within thirty (30) calendar days of EPA's approval of the Alternate Drinking Water Plan (or revised Alternate Drinking Water Plan, as the case may be), and quarterly thereafter, DuPont shall submit to EPA, WVDHHR, WVDEP, and OEPA, written reports summarizing all actions taken in accordance with this Order ("progress reports"). DuPont shall continue to submit progress reports until such time as EPA provides written notice that the reports are no longer necessary, or this Order is terminated.

All progress reports required by this paragraph shall contain the following certification, which shall be signed by a responsible corporate officer:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

For purposes of this Order, a responsible corporate officer shall be (i) a president, secretary, treasurer, or vice-president of DuPont in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for DuPont, or (ii) the manager of the Facility, if the Facility employs more than 250 persons or has gross annual sales or

expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been delegated to the manager in accordance with corporate procedures.

23. All submittals, including reports, required under this Order shall be submitted to the following addresses:

As to EPA:

Roger Reinhart (3WP82)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-9099

Kelley Moore (WG-15J)
U.S. EPA Region V
77 West Jackson Boulevard
Chicago, IL 60604

As to WVDHHR:

Victor Wilford
Division of Environmental Engineering
Office of Environmental Health Services
Department of Health and Human Resources
815 Quarrier Street, Suite 418
Charleston, WV 25301

As to WVDEP:

David Watkins
Ground Water Protection Section
Division of Water Resources
West Virginia Department of Environmental Protection
1201 Greenbrier Street
Charleston WV 25301

As to OEPA:

Michael Baker
Division of Drinking & Ground Waters
Ohio Environmental Protection Agency
122 South Front Street
Columbus, OH 43215

V. GENERAL PROVISIONS

24. DuPont admits the jurisdictional allegations set forth herein and waives any defenses it might have as to jurisdiction and venue and agrees not to contest any of the findings of fact or conclusions of law herein in any action to enforce this Order. Except as to any proceeding brought by EPA to enforce this Order, in agreeing to this Order DuPont makes no admission of fact or law and reserves all rights and defenses available regarding liability or responsibility in any other legal proceeding related to the subject matter of this Order.

25. This Order shall apply to and be binding upon DuPont and its agents, successors, and assigns.

26. This Order may be modified only upon written consent of all parties.

27. Nothing in this Order shall be construed as prohibiting, altering or in any way eliminating the ability of EPA to seek any other remedies or sanctions available by virtue of DuPont's violations of this Order or of the statutes and regulations upon which this Order is based or for DuPont's violation of any applicable provision of law.

28. This Order shall not relieve DuPont of its obligation to comply with all applicable provisions of federal, state or local law, nor shall it be construed to be a ruling on, or determination of, any issue related to any federal, state or local permit.

29. Nothing in this Order is intended to nor shall be construed to operate in any way to resolve any criminal liability of DuPont. Compliance with this Order shall not be a defense to any actions subsequently commenced for any violation of federal laws and regulations administered by EPA, and it is the responsibility of DuPont to comply with such laws and regulations. EPA reserves the right to undertake action against any person, including DuPont, in response to any condition which EPA determines may present an imminent and substantial endangerment to the public health, public welfare or the environment.

30. The undersigned representative of DuPont certifies that he is fully authorized by DuPont to enter into the terms and conditions of this Order and to execute and legally bind that party to it.

31. Pursuant to Section 1481(b) of the SDWA, 42 U.S.C. § 300i(b), violation of any term of this Order, or failure or refusal to comply with this Order, may subject DuPont to a civil penalty of up to \$15,000 per day per violation for each such day in which a violation occurs or failure to comply continues, as assessed by an appropriate United States District Court.

32. When DuPont knows or should have known, by the exercise of due diligence, of an event that might delay completion of any requirement of this Order, DuPont shall provide notice to EPA, in writing, within ten (10) business days after DuPont first knew, or in the exercise of due diligence, should have known, of such event. The notice shall describe in detail the basis for the delay, including whether it is a Force Majeure event, and describe the length of, precise cause(s) of, and measures to be taken to prevent or minimize such delay. If EPA agrees that such event constitutes Force Majeure, EPA shall extend the time for performance of such requirement, in

writing, to compensate for the delay caused by the Force Majeure event. DuPont's failure to notify EPA in accordance with this paragraph shall render this paragraph void and of no effect. For purposes of this Order, Force Majeure is defined as an event arising from the causes beyond the control of DuPont, and any entity controlled by DuPont, which delays or prevents the performance of any obligation under this Order. Unanticipated or increased costs or expenses associated with the implementation of this Order and changed financial circumstances, failure to apply for a required permit or approval or to provide in a timely manner all information to obtain a permit or approval or to obtain or approve contracts, shall not, in any event, constitute Force Majeure events. DuPont reserves what ever rights it may have to dispute EPA's determination that a particular event does not constitute Force Majeure in any action to enforce this Order.

33. This Order shall be effective upon execution by all parties. This Order shall remain in effect until DuPont fulfills its obligations pursuant to paragraphs 17 through 23 herein, submits a written request to EPA to terminate this Order, and EPA approves such termination request.

34. This Consent Order may be executed in any number of counterpart originals, each of which shall be deemed to constitute an original agreement, and all of which shall constitute one agreement. The execution of one counterpart by any party shall have the same force and effect as if that party had signed all other counterparts.

35. All of the terms and conditions of this Order together comprise one agreement, and each of the terms and conditions is in consideration of all of the other terms and conditions. In the event that this Order, or one or more of its terms and conditions, is held invalid, or is not executed by all of the signatories in identical form, or is not approved in such identical form by the Regional Administrators, then the entire Order shall be null and void.

SO ORDERED:

Donald S. Welsh
Regional Administrator
U.S. Environmental Protection Agency, Region III

Date: _____



Thomas V. Skinner
Regional Administrator
U.S. Environmental Protection Agency, Region V

Date: 3.7.02

AGREED TO:

Paul G. Bossert

Paul Bossert

Plant Manager, Washington Works Facility

E. I. du Pont de Nemours and Company, Incorporated

Date: March 4, 2002