

AR 226 - 1099



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

13 PP

JUL 2 - 2002

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Mr. J.D. Dunne
The 8N Corporation
223 Carthage Street, Suite 2
Sanford, NC 27330

Dear Mr. Dunne:

On June 10, 2002, the Office of the Surgeon General referred to the Administrator of the U.S. Environmental Protection Agency (EPA) your letter of January 8, 2002 to Surgeon General Dr. David Satcher, concerning the medical monitoring of fire fighters for effects from exposure to perfluorooctyl sulfonates (PFOS) in fire fighting foam. The EPA Administrator has requested that I respond on her behalf.

Direct occupational health monitoring is not generally a function of the Office of the Surgeon General, and the Office has not implemented a medical monitoring program for fire fighters. EPA is not aware at this time of any federal medical monitoring programs for fire fighting exposures to PFOS. Were any such programs to be instituted at the federal level, the agencies most likely to be involved would be the Department of Defense, the National Institutes for Occupational Safety and Health, or the Centers For Disease Control and Prevention.

To EPA's knowledge, 3M was the only producer of PFOS-based aqueous film forming foam (AFFF), and 3M has ceased the production and sale of its PFOS-based AFFF products. Other companies produce AFFF products utilizing other fluorinated compounds similar to PFOS, including fluorinated telomer products, and EPA is continuing its investigation of these fluorinated chemistries to determine whether they may pose issues similar to those raised by PFOS. EPA's investigation is on the base chemistry rather than on fire foam products, however, because these chemicals are employed in a wide variety of products and uses. If EPA were to obtain any health monitoring information on fire fighter exposures to PFOS or to telomer-based AFFF, it would include that information in the Administrative Record for the fluorinated compounds, AR-226: PFOS, PFOA, Telomers, and Related Chemicals.

We must note that some of the information in your letter to Dr. Satcher was not correct. Although there have been deaths following exposure to PFOS in rat reproductive and monkey systemic toxicity studies, the effects you reported – including pancreatic cancer and brain tumors – were not among the effects noted in those studies. In mortality studies on manufacturing and processing workers exposed to PFOS, who have the highest blood levels that have been reported

CONTAIN NO CBI

in humans, a statistically significant risk of death from bladder cancer was reported in male employees who worked at the plant in high exposure jobs for more than 20 years. In addition, changes in thyroid levels have been reported in some workers with high PFOS exposure. However, there are several limitations to these studies, such as the small number of participants, which make interpretation of these data difficult. Additional studies are underway, and the results of those studies will be made available in AR-226 as they are submitted to the Agency. At the public meeting in March 2001, in response to a question from Joseph Wright of ARFF Technical Services, I noted that having data on firefighter blood levels would be useful as an indicator of exposure if they were available, but that the Agency did not have an answer to the question of what might be the long term effects of exposure on fire fighters.

The Agency's investigation of fluorinated compounds, including other perfluoroalkyl sulfonates, perfluorooctanoic acid and its salts, and the fluorinated telomers, will continue, and additional regulatory actions or voluntary programs may be instituted, as appropriate. This could include referral to the appropriate agency or agencies of any recommendations for monitoring or risk management activities deemed necessary to protect human health and the environment. I note that you have already subscribed to our email notification service for information on Agency actions with respect to these chemicals, so you will continue to receive EPA assessment documents and notices of EPA action as this investigation continues.

If you have any questions concerning this matter, please feel free to contact Mary Dominiak of my staff by telephone at 202-564-8104 or by email at dominiak.mary@epa.gov.

Sincerely,



Charles M. Auer, Director
Chemical Control Division

cc: Dr. Kenneth Moritsugu, Acting Surgeon General
Office of the Surgeon General
5600 Fishers Lane
Room 18-66
Rockville, MD 20857

EPA Administrative Record File AR-226



OFFICE OF THE EXECUTIVE SECRETARIAT
CONTROL SLIP

CONTROL NO: AX-0205971
FILE CODE: PO CORR 127 GENERAL CORR-PRIVATE ORGANIZATIONS (PO)

ORIG. DUE DATE: 07/05/2002

STATUS: PENDING

CORRES. DATE: 01/07/2002

RECEIVED DATE: 06/10/2002

ASSIGNED DATE: 06/20/2002

CLOSED DATE:

FROM: DUNNE J D
ORG: 8N CORPORATION THE
SALUTATION: DEAR MR. DUNNE
CONSTITUENT: MR. J D DUNNE

TO: SATCHER DAVID
TO ORG: PUBLIC HEALTH AND SCIENCE
SUBJECT: MONITORING EFFECTS OF PFOS ON FIRE FIGHTERS

ASSIGNED: OFFICE OF PREVENTION, PESTICIDES & TOXIC SUBSTANCES

COPIES OF INCOMING PROVIDED TO: AO -CAROLINE PETTI

SIGNATURE: DIRECT REPLY

INSTs: DIRECT REPLY. SEND COPY OF REPLY TO OEX.

COMMENTS:

IMS: PLW

IMT: BETTY WATKINS/DC/USEPA/US

2002 JUL 10 PM 2:18

RECEIVED
OPPT NCIC

	Assigned	Date Assigned	Code/Status	Date Completed by Assignee	Date Returned to OEX:
Lead	OPPTS	06/20/2002	ACTION	-	-

OFFICE OF THE SURGEON GENERAL
OFFICE OF PUBLIC HEALTH AND SCIENCE

SG TRACKING #: _____

REFERRAL DATE: _____

DUE DATE: _____

To:

☐ SG
☐ DSG
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☐ ASH
☐ BENNETT
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ES:

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☐ Smith
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Other: _____

Action

Instructions:

☐ SG Signature
☐ DSG Signature
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☐ ASH Signature
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☐ _____ Signature

☐ Review/
Clearance
☒ Necessary
Action
☐ For Your
Information

Special: _____

01/08/02 10:12:20 FAX 202 200 1120
FROM : K

PHONE NO. : 919 774 1047

Jan. 08 2002 12:40PM P1

BJAN02 FAX 8 PAGES TOTAL

7 January 2002

Mr. David Satcher
US Surgeon General
Department of Health and Human Services
Fax: 202-690-6960

Subject: EPA recommended medical monitoring of fire fighters for effect of PFOS exposure.

Dear Mr. Satcher:

A public meeting regarding the EPA proposed SNUR for PFOS compounds was held on March 27, 2001 in Crystal City (Arlington), VA. (Enc. 1)

In response to a question, Mr. Charles M. Auer, Director, Chemical Controls Division, USEPA, recommended that the ARFF Industry (Aircraft Rescue Fire Fighting) immediately start medical monitoring of fire fighters for effects of PFOS exposure. This would establish a base line reference for the long term effect of exposure to AFFF (a PFOS compound) and primary fire fighting agent within DOD and the industry. He did not recommend what functions to monitor, but directed us to the EPA web site for that guidance.

Has the Surgeon General's office made any effort to implement such a medical monitoring program? I would greatly appreciate any information on the matter you can supply. I don't find much impetus for such a program within the industry. I plan to use any response to educate the industry and for public benefit regarding these very serious occupational health issues. There is a need to provide proper protection for fire fighters and other personnel at the incident site. It may also be time to consider alternative safer, COMMERCIAL-OFF-THE-SHELF (COTS) solutions for these AFFF applications.

Please note the following:

1. In May, 2000 both the EPA and 3M Corporation issued a News Release (Enc. 2 & 3) about Environmental, Safety and Health risk from these persistent (PFOS) compounds. The 3M Corp. also announced it would cease production of its AFFF fire fighting agent (a PFOS compound) by the end of 2000. This is significant because the 3M Corp. is the major supplier to the US Government and Industry. It represented a significant, profitable business market, yet it was considered in the public's interest, also "it's in the best interest of all our constituencies, our employees, customers, communities and investors" to reallocate corporate resources.
2. A check of the EPA web site provides several laboratory animal exposure tests with 100% fatality rates. The dead animals showed signs of pancreatic cancer, liver cancer, and brain tumors. These appear to be obvious functions for medical monitoring, but are not the only areas of concern gleaned from the published reports to date. (Enc. 4, pg. 1)
3. In the Semiconductor Industry the PFOS compounds are handled in a controlled atmosphere (clean room) within a closed loop system, separate from the operator, and incinerated on site. Very limited quantities are used in the process. (e.g. 500 gallon per year)

4. By nature an aircraft crash fire is uncontrolled, may require a substantial quantity of AFFF agent (per ASC (Enc. 5) up to 40,000 gallons of agent for a large frame aircraft fire alone) and the effluent is discharged to the atmosphere. Even after the fire is out, rescue crews and clean-up crews are exposed and the site is effected for decades. (Note: This is what prompted the question in the March 27, 2001 meeting.)

If the issue of this specific medical monitoring of fire fighters for occupational health exposure is not the responsibility of your activity; I would greatly appreciate your direction to the appropriate activity. I will follow-up on any lead you provide.

Please contact me if you need more information to respond to my inquiry and I will try to be helpful.

I appreciate your consideration of my request for status information.

Very truly yours,



J.D. Dunne
The 8N Corporation
223 Carthage St., Suite 2
Sanford, NC 27330
Phone: 919-774-1187
Fax: 919-774-1047

ENC-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 26 2001

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Dear Meeting Participant:

Enclosed with this letter is a copy of the summary of the PFOS Proposed SNUR Public Meeting, which took place on March 27, 2001 in Crystal City, Virginia. A copy of the attendee list is also enclosed. These documents have been entered into the docket file for the proposed Significant New Use Rule (SNUR) on perfluorooctyl sulfonates (PFOS), Docket OPPTS-50639, and will form part of the official record for this rulemaking proceeding.

Several attendees at the meeting expressed willingness to provide additional information to the docket in the weeks immediately following the meeting. These submissions will also be entered into the docket record.

If you would like to obtain copies of comments or other information from Docket OPPTS-50639, the rulemaking record for the proposed PFOS SNUR, or from AR-226, the public administrative record for non-rulemaking activity on PFOS, PFOA, the telomers, and related chemicals, please contact the TSCA Non-Confidential Information Center by email at oppt.ncic@epa.gov, or by calling 202-260-7099 between noon and 4:00 PM Eastern time, Monday through Friday.

If you have any questions concerning these materials, please contact Mary Dominiak. Her telephone number is 202-260-7768, her facsimile number is 202-260-1096, and her email address is dominiak.mary@epa.gov.

I would like to thank you again for your participation in this meeting. We look forward to continuing to work with all of you on the complex issues presented by PFOS.

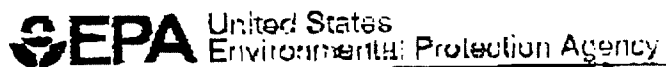
Sincerely,

for Charles M. Auer, Director
Chemical Control Division

Enclosures



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ENC - 2**Headquarters Press Release**

Washington, DC

Date: 05/16/2000
Published:
Title: EPA and 3M

FOR RELEASE: TUESDAY, MAY 16, 2000

Following negotiations between EPA and 3M, the company today announced that it will voluntarily phase out and find substitutes for perfluorooctanyl sulfonate (PFOS) chemistry used to produce a range of products, including some of their Scotchgard lines. 3M data supplied to EPA indicated that these chemicals are very persistent in the environment, have a strong tendency to accumulate in human and animal tissues and could potentially pose a risk to human health and the environment over the long term. EPA supports the company's plans to phase out and develop substitutes by year's end for the production of their involved products.

"Today's phaseout announcement by 3M will ensure that future exposure to these chemicals will be eliminated, and public health and the environment will be protected," said EPA Administrator Carol M. Browner. "EPA will work with the company on the development of substitutes to ensure that those chemicals are safe for the environment. 3M deserves great credit for identifying this problem and coming forward voluntarily."

PFOS chemicals are used to produce a range of products from fire fighting foams, coatings for fabrics, leather, and some paper products, to industrial uses such as mist suppressants in acid baths. The company is continuing a major research effort on these chemicals to enhance the understanding of any potential risks that may be associated with this class of chemicals. EPA will also be evaluating the chemicals to determine how individuals and the environment are exposed and what potential adverse effects may exist. If future regulatory actions are required, EPA will take them.

At present, 3M is the only US manufacturer of PFOS. EPA will be contacting foreign governments and other chemical manufacturers, both domestically and internationally, to seek their support for a voluntary phaseout of PFOS and related chemicals.

R-69 ###

file:///C:/My Documents/Abel/epa aff.htm

05/22/2000

PHONE NO. : 919 774 1047

Jan. 08 2002 12:42PM P5

FROM : <

Mr. David K. Kellum, 940 From Product Development, Fax: 610-861-2890, Voice: 610-861-2860 To: JOE DUNNE
Box 3M Phasing Out Some of its Specialty Materials

Page 2 of 3 Wednesday, May 17, 2000 9:52:40 AM
File:///C:/mspccco/att/att/fluorochem.

ENC - 3

FOR IMMEDIATE RELEASE

3M Phasing Out Some of its Specialty Materials

ST. PAUL, Minnesota – May 16, 2000 – 3M today announced it is phasing out of the perfluorooctanyl chemistry used to produce certain repellents and surfactant products.

The affected product lines represent about two percent of 3M's nearly \$16 billion in annual sales. These include many Scotchgard products, such as soil, oil and water repellent products; coatings used for oil and grease resistance on paper packaging; fire-fighting foams; and specialty components for other products. 3M said it plans to substantially phase out production by the end of the year and will work with customers to accomplish a smooth transition. "Our decision anticipates increasing attention to the appropriate use and management of persistent materials," said Dr. Charles Reich, executive vice president, Specialty Material Markets. "While this chemistry has been used effectively for more than 40 years and our products are safe, our decision to phase out production is based on our principles of responsible environmental management."

"We're reallocating resources to accelerate innovation in more sustainable opportunities and technologies. This decision is not only in the public interest, it's in the best interests of all our constituencies ... our employees, customers, communities and investors," Reich said.

Sophisticated testing capabilities – some developed in only the last few years – show that this persistent compound, like other materials in the environment, can be detected broadly at extremely low levels in the environment and in people. All existing scientific knowledge indicates that the presence of these materials at these very low levels does not pose a human health or environmental risk. 3M expects to meet consensus earnings estimates for the rest of 2000. This excludes a one-time charge on the order of \$200 million, that will be taken sometime this year.

"Our growth engines are more powerful than ever and we're confident in our ability to continue delivering on expectations," said L.D. DeSimone, chairman and CEO. "Many of our new technology platforms directly address the fastest-growing segments of the new economy such as electronics, telecommunications and flat-panel displays." "We expect the positive momentum in our financial performance to continue into 2001 with earnings somewhat above current analyst estimates," DeSimone said.

3M is a leading manufacturer of innovative products for industrial, consumer, transportation, safety, health care and other markets, with operations in more than 60 countries worldwide. The company is well known for its "Pollution Prevention Pays" environmental initiative, and its emission reduction programs including water-based replacement of solvents in manufacturing and replacements for ozone-depleting chlorofluorocarbons (CFCs).

Forward-Looking Statements Certain portions of this news release that do not relate to historical financial information constitute forward-looking statements. These forward-looking statements are subject to certain risks and uncertainties. Actual future results and trends may differ materially from historical results or those expected depending on a variety of factors, including: (1) worldwide economic conditions; (2) foreign exchange rates and fluctuations in those rates; (3) the timing and acceptance of new product offerings; (4) raw materials, including shortages and increases in the costs of key raw materials; and (5) legal proceedings.

Scotchgard is a trademark of 3M company.

From:

3M Public Relations
3M Center, Building 225-1S-15
St. Paul, MN 55144-1000
Phone: (651) 733-8605
E-mail: www.3m.com

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<http://www.epa.gov/fedrgstr/EPA-TOX/2000/October/Day-18/26751.htm>



Federal Register
Environmental Documents

Related Material

- Other Related Documents

[Federal Register: October 18, 2000 (Volume 65, Number 202)]
[Proposed Rules]
[Page 62319-62333]
>From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr18oc00-23]

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 721

OPPTS-50639; FRL-6745-5
RIN 2070-AD43

Perfluorooctyl Sulfonates; Proposed Significant New Use Rule

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing a significant new use rule (SNUR) under section 5(a)(2) of the Toxic Substances Control Act (TSCA) for the following chemical substances: Perfluorooctanesulfonic acid (PFOSA) and certain of its salts (PFOSS), perfluorooctanesulfonyl fluoride (PFOSF), certain higher and lower homologues of PFOSA and PFOSF, and certain other chemical substances, including polymers, that contain PFOSA and its homologues as substructures. All of these chemical substances are referred to collectively in this proposed rule as perfluorooctyl sulfonates, or PFOS. This proposed rule would require manufacturers and importers to notify EPA at least 90 days before commencing the manufacture or import of these chemical substances for the significant new uses described in this document. EPA believes that this action is

11/8/2000

FROM : <

PHONE NO. : 919 774 1047

Jan. 08 2002 12:44PM P1



DEPARTMENT OF THE AIR FORCE
AERONAUTICAL SYSTEMS CENTER (AFSC)
WRIGHT PATTEN AIR FORCE BASE, FLORIDA

ENC. 5

Pg. 1 of 2



8 8 MAR 1994

MEMORANDUM FOR FIRE PROTECTION CONFERENCE ATTENDEES

FROM: ASC/TOC
314 W. Choctawhatchee Ave., Sta 104
Eglin AFB FL 32542-5717

SUBJECT: FY92, FY93, and FY94 Commercial Technology Exploitation (CTE)

We are providing the current FY92, FY93, and FY94 CTE listing. For questions or concerns, contact Mr. Bob Rettie, ASC/TOC, OSA 872-4697, or Mr. Paul Sutphin, BDPSC, at ONS 523-4556.

BOB RETTIE
Program Manager

COMMERCIAL TECHNOLOGY EXPLOITATION INITIATIVES 1994 ENC - 5

pg 2 of 2

RAPID RESUPPLY OF AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES (ARFFV):

1. ASC/TOC will identify for test purposes, equipment, and procedures to rapidly resupply ARFF vehicles with fire fighting agents while on scene at an aircraft fire or incident. On average, today's large frame equipped fire department responds with two P-20, one P-15, one P-26, and/or P-18 depending on manpower availability, and a varied assortment of structural pumping apparatus. With the vehicles and manpower available, and under the best possible conditions, the agent on-board comes to 16,500 gallons for initial attack. The majority of large frame aircraft fires have required over 40,000 gallons of agent for extinguishment. The initial attack capability is only 41% of the amount required to extinguish the fire. It is obvious the need for rapid resupply is paramount to bringing the incident to a satisfactory conclusion. Additional vehicles will not satisfy as there is insufficient manpower to operate them. (ASC/TOC, Mr Rattie, DSW 872-4697, \$29K)

700
note
LARGE FRAME AIRCRAFT FIRE TEST - 18,000 FT²
FAA & DOD APPLICATION RATE 0.13 GPM/FS/FT²
 $18,000 \text{ FT}^2 \times 0.13 \text{ GPM/FS/FT}^2 = 2340 \text{ GAL/FS}$
HOW LARGE WAS ACTUAL FIRE?

PER AF/ASC

ACTUALLY NEEDED TO EXTINGUISH THE FIRES - 40,000 GALLONS (MIN) THIS IS 325,000 LBS - OVER 160 TONS -
HOW DO YOU CARRY 160 TONS OF AGENT (FS) TO THE SITE?

RESUPPLY - NOT COST EFFECTIVE - NEEDS TOO MUCH EQUIPMENT & MANPOWER

1997 WE SUGGEST

INCREASE INITIAL ATTACK CAPACITY [IAC]. TFS SYSTEM TECHNOLOGY WILL INCREASE [IAC] 300-500% USING EXISTING PLATFORMS.

NOTE.

DOD & FAA DATA ON ACTUAL LARGE FRAME AIRCRAFT FIRES [18,000 FT²] NEED 7610 TONS THE FAA REQUIRED APPLICATION RATE TO EXISTING SYSTEMS] 2



FAX TRANSMISSION
OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH
OFFICE OF PUBLIC HEALTH AND SCIENCE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
200 Independence Avenue, S.W., Room 716G
Washington, D.C. 20201
202-690-7694
Fax: 202-690-6960

To: *Dr. Satcher* Date: *1/8/02*
Fax#: Pages: *10*, including this cover sheet
From: *Betty James*
Subject:
Comments: *FAX came in for you.*

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL: 202-690-7694