

May 15, 2001



Document Processing Center (7407)
ATTN: Section 8(e) Coordinator
Office of Pollution, Prevention and Toxics
US Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

Re: TSCA 8(e) Supplemental notice for Sulfonate-based and Carboxylic-based Fluorochemicals-Docket numbers 8EHQ-1180-373; 8EHQ-1180-374; 8EHQ-0381-0394; 8EHQ-0598-373

Dear Docket Coordinator:

3M recently completed analyses of several fluorochemical compounds in individual, stored human sera. We have previously reported results of perfluorooctane sulfonate for human sera from pooled samples.^(1, 2) In the current analyses, individual samples were measured for sulfonate-based and carboxylic-based compounds. Table 1 represents samples of 599 individuals from 23 different states in the U.S. in the age span 2-12. These samples were drawn in 1995. Table 2 represents over 600 individuals from six blood banks across the United States, focusing in the age span 20-69. These samples were drawn in 2000. 3M will send a final report on these analyses to the EPA in the near future.

Table 1. Summary of Samples Drawn in 1995, Ages 2-12

Compound	Average	Median	95 th percentile	Range
PFOS $C_8F_{17}SO_3^-$	43.5 ppb ^(a)	36.7 ppb	90.2 ppb	6.7-515 ppb
PFHS $C_6F_{13}CO_2^-$	15.0 ppb	3.8 ppb	71.3 ppb	<LLOQ ^(b) -712 ppb
PFOSAA $C_8F_{17}SO_2N(C_2H_5)-CH_2CO_2^-$	4.4 ppb	3.7 ppb	10.4 ppb	<LLOQ-23.8 ppb
M570 $C_8F_{17}SO_2N(CH_3)-CH_2CO_2^-$	3.4 ppb	1.8 ppb	12.5 ppb	<LLOQ-48.0 ppb
PFOSA $C_8F_{17}SO_2N^-$	<LLOQ	<LLOQ	<LLOQ	<LLOQ
M556 $C_8F_{17}SO_2NH-CH_2CO_2^-$	3.0 ppb	2.5 ppb	7.3 ppb	<LLOQ-19.1 ppb
PFOA $C_7F_{15}CO_2^-$	5.6 ppb	5.1 ppb	10.2 ppb	<LLOQ-56.1 ppb

(a) ppb is parts per billion; (b) <LLOQ is less than the lower limit of quantification

Table 2. Summary of Blood Bank Samples Drawn in 2000, Focusing on Ages 20-69

Compound	Average	Median	95 th percentile	Range
PFOS $C_8F_{17}SO_3^-$	43.7 ppb	35.8 ppb	90.5 ppb	<LLOQ-1656 ppb
PFHS $C_6F_{13}CO_2^-$	2.9 ppb	1.6 ppb	9.6 ppb	<LLOQ-66.3 ppb
PFOSAA $C_8F_{17}SO_2N(C_2H_5)-CH_2CO_2^-$	3.0 ppb	1.4 ppb	7.6 ppb	<LLOQ-60.1 ppb
M570 $C_8F_{17}SO_2N(CH_3)-CH_2CO_2^-$	1.8 ppb	0.9 ppb	5.3 ppb	<LLOQ-19.0 ppb
PFOSA $C_8F_{17}SO_2N^-$	<LLOQ	<LLOQ	<LLOQ	<LLOQ
M556 $C_8F_{17}SO_2NH-CH_2CO_2^-$	<LLOQ	<LLOQ	<LLOQ	<LLOQ-12.9 ppb
PFOA $C_7F_{15}CO_2^-$	5.6 ppb	4.7 ppb	12.9 ppb	<LLOQ-52.3 ppb

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Please contact me at 651-733-5181 for additional questions relative to the above analyses.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Zobel MD". The signature is fluid and cursive, with the "MD" part being more distinct and written in a slightly larger, bolder script than the name.

Larry R. Zobel, MD MPH
Staff Vice President & Medical Director
3M Medical Department

- (1) Letter to TSCA 8(e) Co-ordinator, May 15, 1998
- (2) Perfluorooctane Sulfonate: Current Summary of Human Sera and Toxicology, January 21, 1999