NYC 9/11 Public Portal Document

Summary of Outdoor Air Samples Collected at the World Trade Center Disaster Area
28 September 2001
All Results are Parts Per Billion by Volume

Analyte	75 Park Place								Parc Place at 225 Rector						140 Broadway						N Tower Plume	Outdoor Background[2]	
	Roof Above 14th Floor			10th Floor		Street			Roof Above 24th Floor			Street			Roof Above 52nd Floor			Street					
	M	A	E	M	A	M	A	E	M	A	E	M	A	E	M	A	E	M	A	E	8PM	EPA[1]	NYSDOH[2]
DICHLORODIFLUOROMETHANE	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.8	1.1	1.1	0.8	0.6	0.7	1.2	0.32 - 0.35	<0.2
CHLOROMETHANE	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	1.0 PL	2.8	1.2	1.0 PL	3.2	2.4	1.7	58	0.6 - 0.7	0.24 - 0.63
BROMOMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.9	0.05 - 3.1	<0.3
CHLOROETHANE	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	2.7	NA	<0.2
ETHYL ALCOHOL	4.7	1.9	3.6	3.5	4.1	10.1	9.6	4.7	2.6	2.1	3.8	2.1	1.3	2.0	3.7	5.0	4.3	9.6	3.7	4.6	32	NA	<0.5 - 0.9
TRICHLOROFLUOROMETHANE	0.4 PL	0.4 PL	0.4 PL	0.4 PL	0.4 PL	0.4	0.4	0.4	0.4 PL	0.4 PL	0.4 PL	0.4 PL	0.4 PL	0.4 PL	>133	>133	>133	4.8	0.6	1.6	1.7	0.19 - 0.21	<0.18
ISOPRENE	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	2.5	NA	NA
ACETONE	1.3	0.9	1.1	1.4	2.2	1.2	1.5	1.3	1.2	1.0	1.7	1.4	1.0	1.2	4.0	7.6	4.6	3.2	2.9	2.6	59	ND - 2.83	NA
METHYLENE CHLORIDE	0.6 PL	<0.6	<0.6	0.6 PL	0.6 PL	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	2.2	8.4	3.2	<0.6	0.6 PL	<0.6	0.6 PL	0.3 - 1.8	0.14 - 1.1
METHYL-tert-BUTYL ETHER	0.6 PL	0.6 PL	0.6 PL	0.6 PL	0.6 PL	1.2	0.6 PL	0.8	0.6 PL	0.6	1.4	0.6 PL	0.6 PL	0.6 PL	0.6 PL	0.6 PL	0.6 PL	0.6 PL	0.6	0.6 PL	0.6 PL	NA	<0.3
n-HEXANE	0.6 PL	<0.6	<0.6	0.6 PL	0.6 PL	0.6 PL	<0.6	2.3	0.6 PL	<0.6	0.6 PL	<0.6	<0.6	<0.6	0.6 PL	0.6 PL	<0.6	0.6 PL	0.6 PL	0.6 PL	3.7	0.63 - 2.95	0.1 - 0.5
METHYL ETHYL KETONE	<0.7	<0.7	<0.7	<0.7	0.7 PL	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	0.7 PL	<0.7	<0.7	1.0	1.3	0.8	0.7	0.7	0.7 PL	25	ND	NA
TETRAHYDROFURAN	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	0.7 PL	<0.7	<0.7	<0.7	<0.7	<0.7	3.4	NA	NA
n-HEPTANE	<0.5	<0.5	<0.5	<0.5	0.5 PL	<0.5	0.5 PL	<0.5	<0.5	<0.5	0.5 PL	<0.5	<0.5	<0.5	0.5 PL	<0.5	<0.5	0.5 PL	0.5 PL	0.5 PL	3.4	0.35 - 0.62	NA
BENZENE	0.7 PL	0.7 PL	0.7 PL	0.7 PL	0.7 PL	0.7 PL	0.7 PL	0.7 PL	0.7 PL	0.7 PL	1.0	0.7 PL	0.7 PL	0.7 PL	5.0	2.2	0.7	5.7	5.0	3.1	88	0.6 - 3.3	0.3 - 1.5
METHYLMETHACRYLATE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 PL	<0.5	<0.5	0.5 PL	0.5 PL	0.5 PL	13	NA	NA
METHYL ISOBUTYL KETONE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	NA	NA
n OCTANE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	<0.4	0.4 PL	<0.4	2.4	0.16 - 0.76	NA
TOLUENE	0.7	0.5 PL	0.5 PL	0.8	2.0	1.1	0.7	1.2	0.5 PL	0.5 PL	1.3	0.6	0.5 PL	0.5	4.0	2.7	1.2	4.2	3.7	2.5	64	0.16 - 5.21	0.3 - 1.5
TETRACHLOROETHENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	1.5	0.4 PL	<0.4	0.1 - 0.9	0.1 - 0.5
n-NONANE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	0.4 PL	0.4 PL	<0.4	3.2	0.14 - 0.61	NA
CHLOROBENZENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	0.4 PL	0.4 PL	<0.4	1.1	ND - 0.31	<0.4
ETHYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 PL	<0.5	0.5 PL	0.5	<0.5	<0.5	<0.5	3.0	0.9	0.5 PL	3.2	2.5	1.6	46	0.2 - 1.2	0.1 - 0.6
M,P-XYLENE	<0.5	<0.5	<0.5	<0.5	0.5 PL	0.5 PL	0.5 PL	0.5 PL	<0.5	0.5 PL	0.5 PL	0.5 PL	<0.5	<0.5	0.5 PL	<0.5	<0.5	0.5 PL	0.5 PL	0.5 PL	3.2	1.0 - 6.5	0.2 - 1.2
O-XYLENE	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 PL	<0.5	0.5 PL	<0.5	<0.5	0.5 PL	<0.5	<0.5	<0.5	0.5 PL	<0.5	<0.5	0.5 PL	0.5 PL	0.5 PL	6.5	0.2 - 1.5	0.2 - 1.1
STYRENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 PL	<0.5	<0.5	<0.5	1.9	0.5 PL	<0.5	1.9	1.8	1.1	75	ND - 0.31	<0.24
ALPHA-PINENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4	0.028 - 0.264	NA
ISOPROPYLBENZENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1.1	0.4 PL	<0.4	0.9	0.9	0.5	13	ND	<2.0
n-DECANE	<0.3	<0.3	<0.3	<0.3	<0.3	0.3 PL	0.3 PL	<0.3	<0.3	<0.3	<0.3	0.3 PL	<0.3	<0.3	0.3 PL	<0.3	<0.3	0.3 PL	0.3 PL	0.3 PL	2.6	0.05 - 0.68	NA
n-PROPYLBENZENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	<0.4	<0.4	<0.4	2.5	0.08 - 0.26	<2.0
1,3,5-TRIMETHYLBENZENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	2.0	0.04 - 0.51	<0.2
1,2,4-TRIMETHYLBENZENE	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	<0.4	0.4 PL	0.4 PL	<0.4	0.4 PL	0.4 PL	<0.4	2.9	0.57 - 1.51	<0.2
d-LIMONENE	<0.4	<0.4	<0.4	<0.4	<0.4	0.4 PL	<0.4	<0.4	<0.4	0.4 PL	0.4	<0.4	<0.4	<0.4	0.4	0.4	0.4 PL	<0.4	<0.4	<0.4	0.6	NA	NA
1,2,3-TRIMETHYLBENZENE	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	1.4	NA	NA
1,4-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	0.5 PL	1.0	0.5 PL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND - 0.2	0.1 - 0.6
n-UNDECANE	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3 PL	<0.3	<0.3	0.3 PL	0.3 PL	<0.3	2.9	ND - 0.62	NA
n-BUTYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	ND	<1.8
n-DODECANE	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3 PL	<0.3	<0.3	0.3 PL	0.3 PL	<0.3	3.7	ND - 0.41	NA

M - morning (~6-8AM)
A - afternoon (~2-4PM)
E - evening (~6-8PM)

NA - Not Available
ND - Not Detected

Samples were collecteted by Summa canisters (EPA Method TO-14) for a 2-hour period, the plume sample was a 25 second grab sample. Samples were analyzed by the Wadsworth Center for Labs and Research.

[1]The United States Environmental Protection Agency Volatile Organic Compounds Database (EPA) is a compilation of indoor and outdoor data from studies across the United States published in 1988.

[2]The New York State Department of Health Database (NYSDOH) is a summary of indoor and outdoor air sample results in control homes collected and analyzed by the NYSDOH from 1989 through 1996.

[3]The levels are the 25th percentile to 75th percentile, (middle half), of the data from the EPA and NYSDOH databases.

< Means less than. The number following this symbol (<) is the lowest level the laboratory test can reliably measure (detection limit). If there is a "<" before any number, then the chemical was NOT detected in the sample.

[PL] - Present, but less than the level indicated.

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

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