



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
2890 WOODBRIDGE AVENUE
EDISON, NEW JERSEY 08837-3679

September 24, 2002

BLOCK 706 LOT 8.02

Re: Soil Gas Results

BLOCK 706 LOT 8.02

Enclosed please find the sampling results for the soil gas samples collected from your property by the U.S. Environmental Protection Agency (EPA). The soil gas was collected from your property as part of an investigation of tetrachloroethene (PCE) contamination in the soil, groundwater and the indoor air.

The enclosed sampling results contain the name of all the volatile organic compounds included in the analysis and the numerical values that were detected on your property. All the analytical data is reported in micrograms per cubic meter - $\mu\text{g}/\text{m}^3$ (millionths of a gram in each cubic meter of air). If no number is listed in the sampling results column, then that compound was not detected at or above the laboratory's detection limit.

Please note the "Location" of the sample listed in the heading information of the analytical results. The following description details where the sample was collected on your property by referencing the "Location":

Exterior Soil Gas Southwest: Soil gas collected underground from a point located 5 feet east of the western fence line and 2 feet north of the southern fence line.

Exterior Soil Gas Southeast: Soil gas collected underground from a point located 10 feet west of the eastern fence line and 2 feet north of the southern fence line.

Exterior Soil Gas Northwest 1: Soil gas collected underground from a point located 15 feet south of the southern side of the house and 1 feet east of the western fence line.

Exterior Soil Gas Northwest 2: Soil gas collected underground from a point located 12 feet west of the northwest corner of the house.

All of the soil gas results are being used to help characterize the contamination within the study area. A comprehensive review of the soil gas results by EPA has not yet been completed. Therefore, no evaluation of your soil gas results can be included at this time. Please note that the compounds reported in your soil gas results are generally higher than those reported in your indoor air results for certain compounds. This is expected in a situation, such as this one, when

the source of these compounds are in the ground (groundwater and soil gas) and are largely inhibited from entering the indoor air by the physical barriers imposed by your house. In fact, the concentrations of these compounds are often present in the soil gas at concentrations 100 to 1000 times greater than what is found in the indoor air. The indoor air results are, by far, the most important values for the evaluation of the health implications that are being conducted by the New Jersey Department of Health and Human Services (NJDHHS) and the Agency for Toxic Substances and Disease Registry (ATSDR).

Thank you for your cooperation and time in addressing this issue. Should you have any questions or require additional information, please feel free to contact Ms. Cecilia Echols or myself at your convenience.

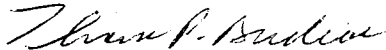
Thomas P. Budroe
On-Scene Coordinator-USEPA
2890 Woodbridge Avenue
Edison, NJ 08837
(732) 906-6191

or

Cecilia Echols
Public Outreach Branch
EPA-Communications Div.
(212) 637-3678
or (800) 346-5009

Thank you for your continued support in this effort.

Sincerely Yours,



Thomas P. Budroe
On-Scene Coordinator

AIR/SOIL GAS SAMPLING ANALYTICAL RESULTS

Sample Date: 4/15/02

Address

BLOCK 706 LOT 8.02

Sample ID: L2DR013

Location: Exterior Soil Gas Southwest

Compound	Sampling Results ug/m3
1,1 Dichloroethane	
1,1,1 - Trichloroethane	
1,1,2 - Trichloroethane	
1,1,2,2 - Tetrachloroethane	
1,1 - Dichloroethene	
1,2 - Dichloroethane	
1,2 - Dichloropropane	
1,2,4 - Trichlorobenzene	
1,2,4 - Trimethylbenzene	1.14
1,2 - Dibromoethane	
1,3,5 - Trimethylbenzene	
1,3 - Butadiene	6.00
Acetonitrile	
Acetylene	17.42
Acrylonitrile	
Benzene	3.83
Bromochloromethane	
Bromodichloromethane	
Bromoform	
Bromomethane	
Carbon Tetrachloride	
Chlorobenzene	
Chloroethane	
Chloroform	
Chloromethane	0.47
Chloromethylbenzene	
Chloroprene	
cis - 1,3 - Dichloropropene	
cis - 1,2 - Dichloroethylene	
Dibromochloromethane	
Dichlorodifluoromethane	
Dichlorotetrafluoroethane	
Ethyl Acrylate	
Ethyl tert-Butyl Ether	
Ethylbenzene	1.61
Hexachloro - 1,3 - Butadiene	
m - Dichlorobenzene	
m,p - Xylene	4.07
Methyl Ethyl Ketone	42.21
Methyl Isobutyl Ketone	3.90
Methyl Methacrylate	
Methyl tert-Butyl Ether	1.05
Methylene Chloride	0.62
N - Octane	4.55
o - Dichlorobenzene	
o - Xylene	1.33
p - Dichlorobenzene	
Propylene	37.63
Styrene	
tert-Amyl Methyl Ether	
Tetrachloroethylene	307.66
Toluene	18.39
trans - 1,2 - Dichloroethylene	
trans - 1,3 - Dichloropropene	
Trichloroethylene	
Trichlorofluoromethane	1.90
Trichlorotrifluoroethane	1.04
Vinyl Chloride	

Notes

1) blank space = compound not detected

2) U = reported value is estimated

3) ug/m3 = micrograms per cubic meter

AIR/SOIL GAS SAMPLING ANALYTICAL RESULTS

Sample Date: 4/15/02

Address:

BLOCK 706 LOT 8.02

Sample ID: L2DR012

Location: Exterior Soil Gas Southeast

Compound	Sampling Results ug/m3
1,1 - Dichloroethane	
1,1,1 - Trichloroethane	
1,1,2 - Trichloroethane	
1,1,2,2 - Tetrachloroethane	
1,1-Dichloroethene	
1,2 - Dichloroethane	
1,2 - Dichloropropane	
1,2,4-Trichlorobenzene	
1,2,4-Trimethylbenzene	2.58
1,2-Dibromoethane	
1,3,5-Trimethylbenzene	
1,3-Butadiene	3.56
Acetonitrile	
Acetylene	8.34
Acrylonitrile	
Benzene	2.21
Bromochloromethane	
Bromodichloromethane	
Bromoform	
Bromomethane	
Carbon Tetrachloride	.43
Chlorobenzene	
Chloroethane	
Chloroform	
Chloromethane	1.29
Chloromethylbenzene	
Chloroprene	
cis -1,3 - Dichloropropene	
cis-1,2-Dichloroethylene	
Dibromochloromethane	
Dichlorodifluoromethane	3.02
Dichlorotetrafluoroethane	
Ethyl Acrylate	
Ethyl tert-Butyl Ether	
Ethylbenzene	1.31
Hexachloro-1,3-Butadiene	
m - Dichlorobenzene	
m,p - Xylene	6.44
Methyl Ethyl Ketone	24.83
Methyl Isobutyl Ketone	8.55
Methyl Methacrylate	
Methyl tert-Butyl Ether	107.61
Methylene Chloride	
N-Octane	1.20
o - Dichlorobenzene	
o - Xylene	1.61
p - Dichlorobenzene	
Propylene	20.80
Styrene	
tert-Amyl Methyl Ether	
Tetrachloroethylene	16.62
Toluene	7.06
trans - 1,2 - Dichloroethylene	
trans - 1,3 - Dichloropropene	
Trichloroethylene	
Trichlorofluoromethane	1.36
Trichlorotrifluoroethane	.60
Vinyl Chloride	

Notes

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- 2) U = reported value is estimated.
- 3) ug/m3 = micrograms per cubic meter.

AIR/SOIL GAS SAMPLING ANALYTICAL RESULTS

Sample Date: 4/15/02

Address: BLOCK 706 LOT 8.02

Sample ID: L2DR010

Location: Exterior Soil Gas Northwest 1

Compound	Sampling Results ug/m3
1,1 Dichloroethane	
1,1,1 - Trichloroethane	
1,1,2 - Trichloroethane	
1,1,2,2 - Tetrachloroethane	
1,1 - Dichloroethene	
1,2 - Dichloroethane	
1,2 - Dichloropropane	
1,2,4 - Trichlorobenzene	
1,2,4 - Trimethylbenzene	1.79
1,2 - Dibromoethane	
1,3,5 - Trimethylbenzene	0.52
1,3 - Butadiene	5.62
Acetonitrile	
Acetylene	22.07
Acrylonitrile	
Benzene	4.32
Bromochloromethane	
Bromodichloromethane	
Bromoform	
Bromomethane	
Carbon Tetrachloride	0.49
Chlorobenzene	
Chloroethane	
Chloroform	
Chloromethane	1.25
Chloromethylbenzene	
Chloroprene	
cis - 1,3 - Dichloropropene	
cis - 1,2 - Dichloroethylene	
Dibromochloromethane	
Dichlorodifluoromethane	2.90
Dichlorotetrafluoroethane	
Ethyl Acrylate	
Ethyl tert-Butyl Ether	
Ethylbenzene	2.96
Hexachloro - 1,3 - Butadiene	
m - Dichlorobenzene	
m,p - Xylene	12.60
Methyl Ethyl Ketone	65.51
Methyl Isobutyl Ketone	
Methyl Methacrylate	
Methyl tert-Butyl Ether	3.54
Methylene Chloride	
N - Octane	5.31
o - Dichlorobenzene	
o - Xylene	4.11
p - Dichlorobenzene	
Propylene	66.22
Styrene	
tert-Amyl Methyl Ether	
Tetrachloroethylene	630.92
Toluene	202.32
trans - 1,2 - Dichloroethylene	
trans - 1,3 - Dichloropropene	
Trichloroethylene	0.67
Trichlorofluoromethane	1.23
Trichlorotrifluoroethane	
Vinyl Chloride	

Notes

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2) U = reported value is estimated

3) ug/m3 = micrograms per cubic meter

AIR/SOIL GAS SAMPLING ANALYTICAL RESULTS

Sample Date: 4/15/02

Address: BLOCK 706 LOT 8.02

Sample ID: L2DR011

Location: Exterior Soil Gas Northwest 2

Compound	Sampling Results ug/m3
1,1 Dichloroethane	
1,1,1 - Trichloroethane	0.85
1,1,2 - Trichloroethane	
1,1,2,2 - Tetrachloroethane	
1,1 - Dichloroethene	
1,2 - Dichloroethane	
1,2 - Dichloropropane	
1,2,4 - Trichlorobenzene	
1,2,4 - Trimethylbenzene	0.75
1,2 - Dibromoethane	
1,3,5 - Trimethylbenzene	
1,3 - Butadiene	29.32
Acetonitrile	
Acetylene	39.50
Acrylonitrile	
Benzene	7.85
Bromochloromethane	
Bromodichloromethane	
Bromoform	
Bromomethane	
Carbon Tetrachloride	
Chlorobenzene	
Chloroethane	
Chloroform	
Chloromethane	
Chloromethylbenzene	
Chloroprene	
cis - 1,3 - Dichloropropene	
cis - 1,2 - Dichloroethylene	
Dibromochloromethane	
Dichlorodifluoromethane	
Dichlorotetrafluoroethane	
Ethyl Acrylate	
Ethyl tert-Butyl Ether	
Ethylbenzene	5.73
Hexachloro - 1,3 - Butadiene	
m - Dichlorobenzene	
m,p - Xylene	7.03
Methyl Ethyl Ketone	57.91
Methyl Isobutyl Ketone	
Methyl Methacrylate	
Methyl tert-Butyl Ether	1.71
Methylene Chloride	
N - Octane	4.00
o - Dichlorobenzene	
o - Xylene	2.60
p - Dichlorobenzene	
Propylene	179.22
Styrene	1.23
tert-Amyl Methyl Ether	
Tetrachloroethylene	8467.43
Toluene	121.80
trans - 1,2 - Dichloroethylene	
trans - 1,3 - Dichloropropene	
Trichloroethylene	15.23
Trichlorofluoromethane	1.68
Trichlorotrifluoroethane	1.34
Vinyl Chloride	

Notes

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- 3) ug/m3 = micrograms per cubic meter