INDOOR AIR BUILDING SURVEY
and SAMPLING FORM

Preparer's name: Tiffani Doerr Date: 3/19/09

Preparer's affiliation: Aquaterra Technologies Phone #: _____

Site Name: Philly Refinery A01-8 Case #: _____

Part I - Occupants

Building Address: _____

Property Contact: _____ Owner / Renter / other: _____

Contact's Phone: ~~home~~ facility 215 685-1784 work ( ) _____ cell ( ) _____

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults 2 per shift (occupied 24/7)

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial

Describe building: Cynder Block Year constructed: ORIGINAL STRUCTURE 1954 & Addition later date unknown

Sensitive population: day care / nursing home / hospital / school / other (specify): None

Number of floors below grade: X (full basement / crawl space / slab on grade) Crawl space under original bldg only.

Number of floors at or above grade: 1

Depth of basement below grade surface: ~4 ft. Basement size: ~969 ft²

Basement floor construction: concrete / dirt / floating / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify) _____

Basement sump present? *Yes* / *No* Sump pump? *Yes* / *No* Water in sump? *Yes* / *No* * Sometimes get water in crawl space – no pump or sump

Type of heating system (circle all that apply):

hot air circulation, hot air radiation, wood, steam radiation, heat pump, hot water radiation, kerosene heater, electric baseboard, other (specify): _____

Type of ventilation system (circle all that apply): Large fan in Kitchen

central air conditioning, mechanical fans, bathroom ventilation fans, individual air conditioning units, kitchen range hood fan, outside air intake, other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / *No*

Is there a whole house fan? *Yes / No*

Septic system? *Yes / Yes (but not used) / No*

Irrigation/private well? *Yes / Yes (but not used) / No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes / No* *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes / No*
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	**Location(s)**	**Removed** (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes* / *No* How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / *No*

If so, is a car usually parked in the garage? *Yes* / *No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes* / *No*

Do the occupants of the building have their clothes dry cleaned? *Yes* / *No*

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / *No*

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes* / *No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / No

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / *No* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / *No*

If yes, when _____ and where? _____

*have separate Storage bldg for most items although some engine parts (old water pumps) noted in Storage area of bldg.

Part VI – Sampling Information (Separate sheet.)

Sample Technician: _____ Phone number: ( ) _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: Tedlar bag / Sorbent / Stainless Steel Canister / Other (specify): _____

Analytical Method: TO-15 / TO-17 / other: _____ Cert. Laboratory: _____

Sample locations (floor, room):

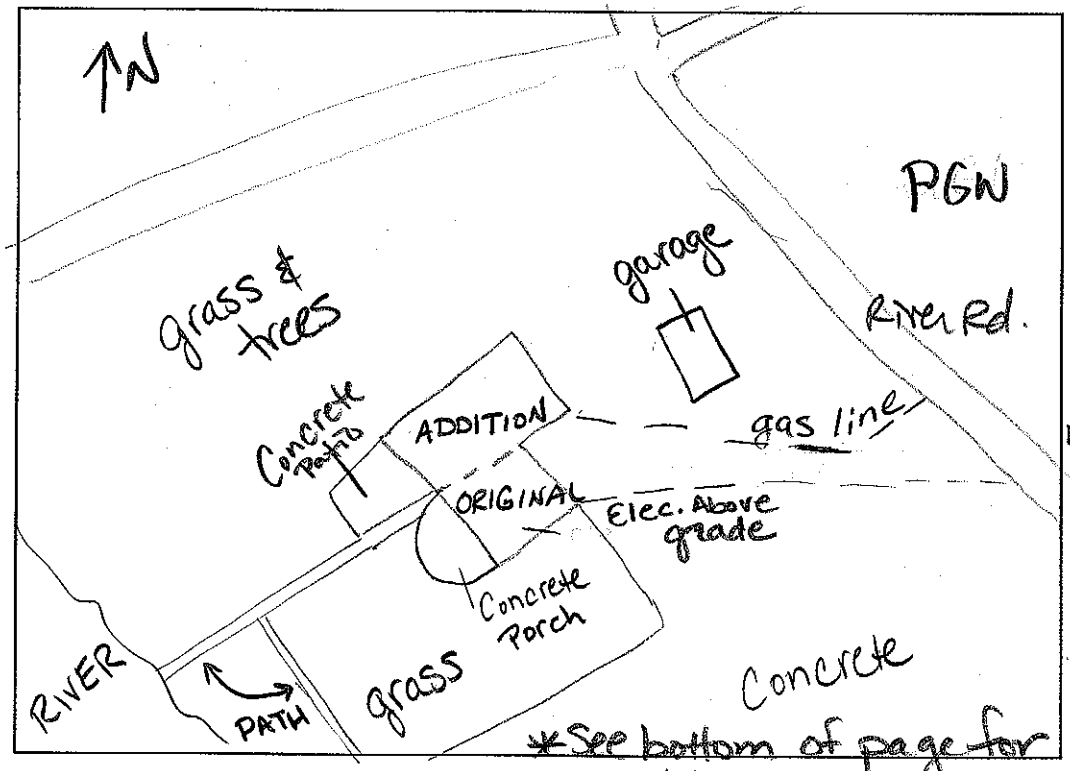
Field ID # _____ - _____ Field ID # _____ - _____

Field ID # _____ - _____ Field ID # _____ - _____

Were "Instructions for Occupants" followed? *Yes* / *No*

If not, describe modifications: _____

Provide Drawing of Sample Location(s) in Building



*Water line not known (no meter), but in bldg. where electric comes in.

*See bottom of page for bldg. measurements.

Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

(NJDEP 1997; NHDES 1998; VDOH 1998; MassDEP 2002; NYSDOH 2005; CalEPA 2005)

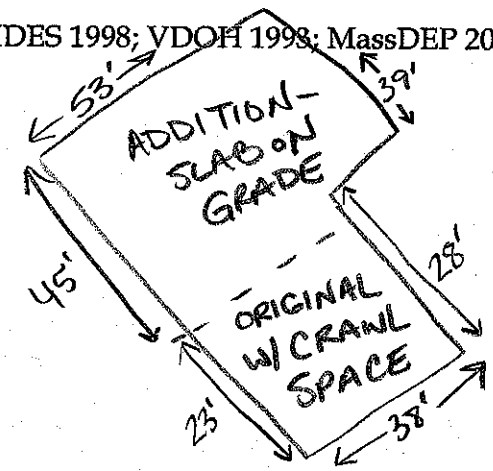


Table H-1
Summary of Soil Gas Sample Analytical Results
AOI 8 Site Characterization/Remedial Investigation Report
Sunoco Philadelphia Refinery
Philadelphia, Pennsylvania

	CAS No	PADEP Indoor Air Criteria Non-Residential MSC x100	Location ID Sample ID Sample Matrix Sample Date	SG-1 SG-1_AOI 8 Grab Air SG 4/23/2009			SG-2 SG-2_AOI 8 Grab Air SG 4/23/2009			SG-3 SG-3_AOI 8 Grab Air SG 4/23/2009			SG-4 SG-4_AOI 8 Grab Air SG 4/23/2009		
Volatile Organic Compounds			**Unit**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Naphthalene	91-20-3	0.88	mg/m^3	ND		**10**	ND		0.52	ND		0.52	ND		**1**
Methyl Tertiary Butyl Ether	1634-04-4	31	mg/m^3	ND		7.2	ND		0.36	ND		0.36	ND		0.72
Benzene	71-43-2	1.1	mg/m^3	140		**6.4**	3		0.32	0.6		0.32	4.6		0.64
1,2-Dichloroethane	107-06-2	0.31	mg/m^3	ND		**8.1**	ND		**0.4**	ND		**0.4**	ND		**0.81**
Toluene	108-88-3	120	mg/m^3	42		7.5	0.81		0.38	ND		0.38	4.1		0.75
Ethylene dibromide (EDB)	106-93-4	0.037	mg/m^3	ND		**15**	ND		**0.77**	ND		**0.77**	ND		**1.5**
Ethylbenzene	100-41-4	7.3	mg/m^3	ND		**8.7**	1		0.43	ND		0.43	ND		0.87
Cumene	98-82-8	110	mg/m^3	ND		9.8	ND		0.49	ND		0.49	ND		0.98
Xylene (Total)	1330-20-7	30	mg/m^3	ND		8.7	6.6		0.43	0.53		0.43	3.3		0.87

Notes:
PADEP - Pennsylvania Department of Environmental Protection
mg/kg - milligram per kilogram
MSC - PADEP's Medium Specific Concentration for Soil
RL - Reporting Limit
ND - Not Detected

Qualifiers:
Q - Qualifier

Exceedance Summary:
10 - RL exceeds the PADEP Non-Residential Soil MSC
10 - Concentration cxceeds the PADEP Non-Residential Soil MSC

Table H-2
Summary of Indoor Air Sample Analytical Results
AOI 8 (Firehouse Bldg.)
Sunoco Philadelphia Refinery
Philadelphia, Pennsylvania

TO-15 Volatile Organic Compounds	CAS Number	PADEP Nonresidential Indoor Air MSC (mg/m3)	Sample ID	Firehouse Ambient #420				Firehouse Indoor #413			
			Sample Date	6/5/2009				6/5/2009			
			Sample Matrix	Air				Air			
			Unit	Result	Q	MDL	RL	Result	Q	MDL	RL
Ethylbenzene	100-41-4	0.073	mg/m3	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043
Styrene (Monomer)	100-42-5	2.9	mg/m3	ND	U	0.00085	0.0043	ND	U	0.00085	0.0043
cis-1,3-Dichloropropene	10061-01-5	NS	mg/m3	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045
trans-1,3-Dichloropropene	10061-02-6	NS	mg/m3	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045
1,4-Dichlorobenzene	106-46-7	0.013	mg/m3	ND	U	0.0012	0.006	***0.039***		0.0012	0.006
Ethylene dibromide (EDB)	106-93-4	0.00037	mg/m3	ND	U	0.0015	**0.0077**	ND	U	0.0015	**0.0077**
1,3-Butadiene	106-99-0	0.0026	mg/m3	ND	U	0.0011	**0.0044**	ND	U	0.0011	**0.0044**
Acrolein	107-02-8	0.000058	mg/m3	ND	U	0.0011	**0.0046**	ND	U	0.0011	**0.0046**
3-Chloropropene	107-05-1	0.0029	mg/m3	ND	U	0.00063	**0.0031**	ND	U	0.00063	**0.0031**
1,2-Dichloroethane	107-06-2	0.0031	mg/m3	ND	U	0.00081	**0.004**	ND	U	0.00081	**0.004**
Acrylonitrile	107-13-1	0.0012	mg/m3	ND	U	0.0011	**0.0043**	ND	U	0.0011	**0.0043**
Vinyl Acetate	108-05-4	0.58	mg/m3	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035
4-Methyl-2-pentanone	108-10-1	0.2	mg/m3	ND	U	0.002	0.0082	ND	U	0.002	0.0082
1,3,5-Trimethylbenzene	108-67-8	0.017	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
Bromobenzene	108-86-1	NS	mg/m3	ND	U	0.0013	0.0064	ND	U	0.0013	0.0064
Toluene	108-88-3	1.2	mg/m3	ND	U	0.00075	0.0038	ND	U	0.00075	0.0038
Chlorobenzene	108-90-7	0.051	mg/m3	ND	U	0.00092	0.0046	ND	U	0.00092	0.0046
Pentane	109-66-0	NS	mg/m3	0.0059		0.00059	0.003	0.0045		0.00059	0.003
Hexane	110-54-3	0.58	mg/m3	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035
Octane	111-65-9	NS	mg/m3	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047
Propylene (Propene)	115-07-1	NS	mg/m3	0.0026		0.00034	0.0017	0.0041		0.00034	0.0017
1,2,4-Trichlorobenzene	120-82-1	0.079	mg/m3	ND	U	0.0037	0.015	ND	U	0.0037	0.015
1,4-Dioxane	123-91-1	0.011	mg/m3	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036
Chlorodibromomethane	124-48-1	0.003	mg/m3	ND	U	0.0017	**0.0085**	ND	U	0.0017	**0.0085**
Tetrachloroethene	127-18-4	0.14	mg/m3	ND	U	0.0014	0.0068	ND	U	0.0014	0.0068
Ethyl Acrylate	140-88-5	0.006	mg/m3	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041
Ethyl Acetate	141-78-6	9.2	mg/m3	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036
N-Heptane	142-82-5	NS	mg/m3	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041
cis-1,2-Dichloroethene	156-59-2	0.1	mg/m3	ND	U	0.00079	0.004	ND	U	0.00079	0.004
trans-1,2-Dichloroethene	156-60-5	0.2	mg/m3	ND	U	0.00079	0.004	ND	U	0.00079	0.004
Methyl Tertiary Butyl Ether	1634-04-4	0.31	mg/m3	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036
m/p-Xylene	179601-23-1	NS	mg/m3	0.0046		0.00087	0.0043	ND	U	0.00087	0.0043
2,2,4-Trimethylpentane	540-84-1	NS	mg/m3	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047
M-Dichlorobenzene	541-73-1	NS	mg/m3	ND	U	0.0012	0.006	ND	U	0.0012	0.006
Carbon Tetrachloride	56-23-5	0.0055	mg/m3	ND	U	0.0013	**0.0063**	ND	U	0.0013	**0.0063**
Methyl N-Butyl Ketone	591-78-6	NS	mg/m3	ND	U	0.002	0.0082	ND	U	0.002	0.0082
4-Ethyltoluene	622-96-8	NS	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
1,1,1,2-Tetrachlorroethane	630-20-6	0.011	mg/m3	ND	U	0.0014	0.0069	ND	U	0.0014	0.0069
Acetone	67-64-1	91	mg/m3	0.013		0.0012	0.0048	0.044		0.0012	0.0048
Chloroform	67-66-3	0.00092	mg/m3	ND	U	0.00098	**0.0049**	ND	U	0.00098	**0.0049**
Hexachloroethane	67-72-1	NS	mg/m3	ND	U	0.0019	0.0097	ND	U	0.0019	0.0097
Benzene	71-43-2	0.011	mg/m3	ND	U	0.00064	0.0032	ND	U	0.00064	0.0032
1,1,1-Trichloroethane	71-55-6	6.1	mg/m3	ND	U	0.0011	0.0055	ND	U	0.0011	0.0055
Methane	74-82-8	NS	mg/m3	ND	U	1.3	6.6	ND	U	1.3	6.6
Bromomethane	74-83-9	0.014	mg/m3	ND	U	0.00078	0.0039	ND	U	0.00078	0.0039
Chloromethane	74-87-3	0.045	mg/m3	ND	U	0.00041	0.0021	ND	U	0.00041	0.0021
Methyl Iodide	74-88-4	NS	mg/m3	ND	U	0.0012	0.0058	ND	U	0.0012	0.0058
Dibromomethane	74-95-3	0.1	mg/m3	ND	U	0.0014	0.0071	ND	U	0.0014	0.0071
Chloroethane	75-00-3	0.099	mg/m3	ND	U	0.00053	0.0026	ND	U	0.00053	0.0026
Vinyl chloride	75-01-4	0.0095	mg/m3	ND	U	0.00051	0.0026	ND	U	0.00051	0.0026
Acetonitrile	75-05-8	0.17	mg/m3	ND	U	0.00084	0.0034	ND	U	0.00084	0.0034
Dichloromethane	75-09-2	0.17	mg/m3	ND	U	0.00069	0.0035	0.015		0.00069	0.0035
Carbon Disulfide	75-15-0	2	mg/m3	ND	U	0.00062	0.0031	ND	U	0.00062	0.0031
Tribomomethane	75-25-2	0.074	mg/m3	ND	U	0.0021	0.01	ND	U	0.0021	0.01
Bromodichloromethane	75-27-4	0.0022	mg/m3	ND	U	0.0013	**0.0067**	ND	U	0.0013	**0.0067**
1,1-Dichloroethane	75-34-3	0.05	mg/m3	ND	U	0.00081	0.004	ND	U	0.00081	0.004
1,1-Dichloroethylene	75-35-4	0.58	mg/m3	ND	U	0.00079	0.004	ND	U	0.00079	0.004
Dichloromonofluoromethane	75-43-4	NS	mg/m3	ND	U	0.00084	0.0042	ND	U	0.00084	0.0042
Chlorodifluoromethane	75-45-6	140	mg/m3	ND	U	0.00071	0.0035	0.02		0.00071	0.0035
Tert-Butyl Alcohol	75-65-0	NS	mg/m3	ND	U	0.00061	0.003	ND	U	0.00061	0.003
CFC-11	75-69-4	2	mg/m3	ND	U	0.0011	0.0056	ND	U	0.0011	0.0056
CFC-12	75-71-8	0.51	mg/m3	ND	U	0.00099	0.0049	ND	U	0.00099	0.0049
Chlorinated Fluocarbon (Freon 113)	76-13-1	88	mg/m3	ND	U	0.0038	0.015	ND	U	0.0038	0.015
1,2-114 Dichlorotetrafluoroethane; Fluorocarbon 114	76-14-2	NS	mg/m3	ND	U	0.0014	0.007	ND	U	0.0014	0.007
1,2-Dichloropropane	78-87-5	0.0079	mg/m3	ND	U	0.00092	0.0046	ND	U	0.00092	0.0046
2-Butanone	78-93-3	2.9	mg/m3	ND	U	0.0015	0.0059	0.015		0.0015	0.0059
1,1,2-Trichloroethane	79-00-5	0.0051	mg/m3	ND	U	0.0011	**0.0055**	ND	U	0.0011	**0.0055**
Trichloroethylene	79-01-6	0.048	mg/m3	ND	U	0.0011	0.0054	ND	U	0.0011	0.0054
1,1,2,2-Tetrachloroethane	79-34-5	0.0014	mg/m3	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**
Methyl Methacrylate	80-62-6	2	mg/m3	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041
Hexachloro-1,3-Butadiene	87-68-3	NS	mg/m3	ND	U	0.0053	0.021	ND	U	0.0053	0.021
o-Xylene	95-47-6	NS	mg/m3	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043
1,2-Dichlorobenzene	95-50-1	0.41	mg/m3	ND	U	0.0012	0.006	ND	U	0.0012	0.006
1,2,4-Trimethylbenzene	95-63-6	0.017	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
1,2,3-Trichloropropane	96-18-4	0.000041	mg/m3	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**
Methyl Acrylate	96-33-3	0.31	mg/m3	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035
Ethyl Methacrylate	97-63-2	0.92	mg/m3	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047
Cumene	98-82-8	1.1	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
Alpha Methyl Styrene	98-83-9	0.1	mg/m3	ND	U	0.00097	0.0048	ND	U	0.00097	0.0048

Notes:
PADEP - Pennsylvania Department of Environmental Protection
mg/m3 - milligram per cubic meter
MSC - PADEP's Medium Specific Concentration for Air
RL - Reporting Limit
ND - Not Detected

Qualifiers:
Q - Qualifier
U - Undetected

Exceedance Summary:
10 - MDL exceeds the PADEP Non-Residential Indoor Air MSC
10 - RL exceeds the PADEP Non-Residential Indoor Air MSC
10 - Concentration exceeds the PADEP Non-Residential Indoor Air MSC

Table H-3
Summary of Air Sample Analytical Results
AOI 8 (Jackson St. Sewer)
Sunoco Philadelphia Refinery
Philadelphia, Pennsylvania

TO-15 Volatile Organic Compounds	CAS Number	PADEP Residential Indoor Air MSC (mg/m3)	Sample ID	Jackson Ambient Can #062				Manhole #1 Summa #509				Manhole #3 Summa #515				Manhole #6 Summa #102			
			Sample Date	6/5/2009				6/5/2009				6/5/2009				6/5/2009			
			Sample Matrix	Air				Air				Air				Air			
			Unit	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
Ethylbenzene	100-41-4	0.019	mg/m3	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043
Styrene (Monomer)	100-42-5	1.4	mg/m3	ND	U	0.00085	0.0043	ND	U	0.00085	0.0043	ND	U	0.00085	0.0043	ND	U	0.00085	0.0043
cis-1,3-Dichloropropene	10061-01-5	NS	mg/m3	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045
trans-1,3-Dichloropropene	10061-02-6	NS	mg/m3	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045	ND	U	0.00091	0.0045
1,4-Dichlorobenzene	106-46-7	0.0033	mg/m3	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**
Ethylene dibromide (EDB)	106-93-4	0.000095	mg/m3	ND	U	0.0015	**0.0077**	ND	U	0.0015	**0.0077**	ND	U	0.0015	**0.0077**	ND	U	0.0015	**0.0077**
1,3-Butadiene	106-99-0	0.00067	mg/m3	ND	U	0.0011	**0.0044**	ND	U	0.0011	**0.0044**	ND	U	0.0011	**0.0044**	ND	U	0.0011	**0.0044**
Acrolein	107-02-8	0.000028	mg/m3	ND	U	0.0011	**0.0046**	ND	U	0.0011	**0.0046**	ND	U	0.0011	**0.0046**	ND	U	0.0011	**0.0046**
3-Chloropropene	107-05-1	0.0014	mg/m3	ND	U	0.00063	**0.0031**	ND	U	0.00063	**0.0031**	ND	U	0.00063	**0.0031**	ND	U	0.00063	**0.0031**
1,2-Dichloroethane	107-06-2	0.00081	mg/m3	ND	U	0.00081	**0.004**	ND	U	0.00081	**0.004**	ND	U	0.00081	**0.004**	ND	U	0.00081	**0.004**
Acrylonitrile	107-13-1	0.00031	mg/m3	ND	U	0.0011	**0.0043**	ND	U	0.0011	**0.0043**	ND	U	0.0011	**0.0043**	ND	U	0.0011	**0.0043**
Vinyl Acetate	108-05-4	0.28	mg/m3	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035
4-Methyl-2-pentanone	108-10-1	0.097	mg/m3	ND	U	0.002	0.0082	ND	U	0.002	0.0082	ND	U	0.002	0.0082	ND	U	0.002	0.0082
1,3,5-Trimethylbenzene	108-67-8	0.0083	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
Bromobenzene	108-86-1	NS	mg/m3	ND	U	0.0013	0.0064	ND	U	0.0013	0.0064	ND	U	0.0013	0.0064	ND	U	0.0013	0.0064
Toluene	108-88-3	0.56	mg/m3	ND	U	0.00075	0.0038	0.0041		0.00075	0.0038	ND	U	0.00075	0.0038	ND	U	0.00075	0.0038
Chlorobenzene	108-90-7	0.024	mg/m3	ND	U	0.00092	0.0046	ND	U	0.00092	0.0046	ND	U	0.00092	0.0046	ND	U	0.00092	0.0046
Pentane	109-66-0	NS	mg/m3	ND	U	0.00059	0.003	ND	U	0.00059	0.003	0.059		0.00059	0.003	0.013		0.00059	0.003
Hexane	110-54-3	0.28	mg/m3	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035	0.016		0.0007	0.0035	0.0036		0.0007	0.0035
Octane	111-65-9	NS	mg/m3	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047
Propylene (Propene)	115-07-1	NS	mg/m3	ND	U	0.00034	0.0017	0.0023		0.00034	0.0017	ND	U	0.00034	0.0017	ND	U	0.00034	0.0017
1,2,4-Trichlorobenzene	120-82-1	0.02	mg/m3	ND	U	0.0037	0.015	ND	U	0.0037	0.015	ND	U	0.0037	0.015	ND	U	0.0037	0.015
1,4-Dioxane	123-91-1	0.0027	mg/m3	ND	U	0.00072	**0.0036**	ND	U	0.00072	**0.0036**	ND	U	0.00072	**0.0036**	ND	U	0.00072	**0.0036**
Chlorodibromomethane	124-48-1	0.00078	mg/m3	ND	U	0.0017	**0.0085**	ND	U	0.0017	**0.0085**	ND	U	0.0017	**0.0085**	ND	U	0.0017	**0.0085**
Tetrachloroethene	127-18-4	0.036	mg/m3	ND	U	0.0014	0.0068	ND	U	0.0014	0.0068	ND	U	0.0014	0.0068	ND	U	0.0014	0.0068
Ethyl Acrylate	140-88-5	0.0015	mg/m3	ND	U	0.00082	**0.0041**	ND	U	0.00082	**0.0041**	***0.34***		0.00082	**0.041**	ND	U	0.00082	**0.0041**
Ethyl Acetate	141-78-6	4.4	mg/m3	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036
N-Heptane	142-82-5	NS	mg/m3	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041
cis-1,2-Dichloroethene	156-59-2	0.049	mg/m3	ND	U	0.00079	0.004	ND	U	0.00079	0.004	ND	U	0.00079	0.004	ND	U	0.00079	0.004
trans-1,2-Dichloroethene	156-60-5	0.097	mg/m3	ND	U	0.00079	0.004	ND	U	0.00079	0.004	ND	U	0.00079	0.004	ND	U	0.00079	0.004
Methyl Tertiary Butyl Ether	1634-04-4	0.081	mg/m3	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036	ND	U	0.00072	0.0036
m/p-Xylene	179601-23-1	NS	mg/m3	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043	0.0069		0.00087	0.0043	ND	U	0.00087	0.0043
2,2,4-Trimethylpentane	540-84-1	NS	mg/m3	ND	U	0.00093	0.0047	0.016		0.00093	0.0047	0.94		0.00093	0.047	0.25		0.00093	0.047
M-Dichlorobenzene	541-73-1	NS	mg/m3	ND	U	0.0012	0.006	ND	U	0.0012	0.006	ND	U	0.0012	0.006	ND	U	0.0012	0.006
Carbon Tetrachloride	56-23-5	0.0014	mg/m3	ND	U	0.0013	**0.0063**	ND	U	0.0013	**0.0063**	ND	U	0.0013	**0.0063**	ND	U	0.0013	**0.0063**
Methyl N-Butyl Ketone	591-78-6	NS	mg/m3	ND	U	0.002	0.0082	ND	U	0.002	0.0082	ND	U	0.002	0.0082	ND	U	0.002	0.0082
4-Ethyltoluene	622-96-8	NS	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
1,1,1,2-Tetrachlorroethane	630-20-6	0.0028	mg/m3	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**
Acetone	67-64-1	43	mg/m3	0.018		0.0012	0.0048	0.018		0.0012	0.0048	0.022		0.0012	0.0048	0.012		0.0012	0.0048
Chloroform	67-66-3	0.00044	mg/m3	ND	U	0.00098	**0.0049**	***0.0055***		0.00098	**0.0049**	ND	U	0.00098	**0.0049**	***0.0067***		0.00098	**0.0049**
Hexachloroethane	67-72-1	NS	mg/m3	ND	U	0.0019	0.0097	ND	U	0.0019	0.0097	ND	U	0.0019	0.0097	ND	U	0.0019	0.0097
Benzene	71-43-2	0.0027	mg/m3	ND	U	0.00064	**0.0032**	ND	U	0.00064	**0.0032**	***0.0036***		0.00064	**0.0032**	ND	U	0.00064	**0.0032**
1,1,1-Trichloroethane	71-55-6	2.9	mg/m3	ND	U	0.0011	0.0055	ND	U	0.0011	0.0055	ND	U	0.0011	0.0055	ND	U	0.0011	0.0055
Methane	74-82-8	NS	mg/m3	ND	U	1.3	6.6	ND	U	1.3	6.6	30		1.3	6.6	9.8		1.3	6.6
Bromomethane	74-83-9	0.0068	mg/m3	ND	U	0.00078	0.0039	ND	U	0.00078	0.0039	ND	U	0.00078	0.0039	ND	U	0.00078	0.0039
Chloromethane	74-87-3	0.012	mg/m3	ND	U	0.00041	0.0021	ND	U	0.00041	0.0021	ND	U	0.00041	0.0021	ND	U	0.00041	0.0021
Methyl Iodide	74-88-4	NS	mg/m3	ND	U	0.0012	0.0058	ND	U	0.0012	0.0058	ND	U	0.0012	0.0058	ND	U	0.0012	0.0058
Dibromomethane	74-95-3	0.049	mg/m3	ND	U	0.0014	0.0071	ND	U	0.0014	0.0071	ND	U	0.0014	0.0071	ND	U	0.0014	0.0071
Chloroethane	75-00-3	0.025	mg/m3	ND	U	0.00053	0.0026	ND	U	0.00053	0.0026	ND	U	0.00053	0.0026	ND	U	0.00053	0.0026
Vinyl chloride	75-01-4	0.0024	mg/m3	ND	U	0.00051	**0.0026**	ND	U	0.00051	**0.0026**	ND	U	0.00051	**0.0026**	ND	U	0.00051	**0.0026**
Acetonitrile	75-05-8	0.083	mg/m3	ND	U	0.00084	0.0034	ND	U	0.00084	0.0034	ND	U	0.00084	0.0034	ND	U	0.00084	0.0034
Dichloromethane	75-09-2	0.044	mg/m3	0.042		0.00069	0.0035	ND	U	0.00069	0.0035	ND	U	0.00069	0.0035	ND	U	0.00069	0.0035
Carbon Disulfide	75-15-0	0.97	mg/m3	0.0067		0.00062	0.0031	ND	U	0.00062	0.0031	ND	U	0.00062	0.0031	ND	U	0.00062	0.0031
Tribomomethane	75-25-2	0.019	mg/m3	ND	U	0.0021	0.01	ND	U	0.0021	0.01	ND	U	0.0021	0.01	ND	U	0.0021	0.01
Bromodichloromethane	75-27-4	0.00057	mg/m3	ND	U	0.0013	**0.0067**	ND	U	0.0013	**0.0067**	ND	U	0.0013	**0.0067**	ND	U	0.0013	**0.0067**
1,1-Dichloroethane	75-34-3	0.013	mg/m3	ND	U	0.00081	0.004	ND	U	0.00081	0.004	ND	U	0.00081	0.004	ND	U	0.00081	0.004
1,1-Dichloroethylene	75-35-4	0.28	mg/m3	ND	U	0.00079	0.004	ND	U	0.00079	0.004	ND	U	0.00079	0.004	ND	U	0.00079	0.004
Dichloromonofluoromethane	75-43-4	NS	mg/m3	ND	U	0.00084	0.0042	ND	U	0.00084	0.0042	ND	U	0.00084	0.0042	ND	U	0.00084	0.0042
Chlorodifluoromethane	75-45-6	68	mg/m3	ND	U	0.00071	0.0035	ND	U	0.00071	0.0035	ND	U	0.00071	0.0035	ND	U	0.00071	0.0035
Tert-Butyl Alcohol	75-65-0	NS	mg/m3	ND	U	0.00061	0.003	ND	U	0.00061	0.003	ND	U	0.00061	0.003	ND	U	0.00061	0.003
CFC-11	75-69-4	0.97	mg/m3	ND	U	0.0011	0.0056	ND	U	0.0011	0.0056	ND	U	0.0011	0.0056	ND	U	0.0011	0.0056
CFC-12	75-71-8	0.24	mg/m3	ND	U	0.00099	0.0049	ND	U	0.00099	0.0049	ND	U	0.00099	0.0049	ND	U	0.00099	0.0049
Chlorinated Fluocarbon (Freon 113)	76-13-1	42	mg/m3	ND	U	0.0038	0.015	ND	U	0.0038	0.015	ND	U	0.0038	0.015	ND	U	0.0038	0.015
1,2-114 Dichlorotetrafluoroethane; Fluorocarbon 114	76-14-2	NS	mg/m3	ND	U	0.0014	0.007	ND	U	0.0014	0.007	ND	U	0.0014	0.007	ND	U	0.0014	0.007
1,2-Dichloropropane	78-87-5	0.002	mg/m3	ND	U	0.00092	**0.0046**	ND	U	0.00092	**0.0046**	ND	U	0.00092	**0.0046**	ND	U	0.00092	**0.0046**
2-Butanone	78-93-3	1.4	mg/m3	0.0059		0.0015	0.0059	ND	U	0.0015	0.0059	0.0066		0.0015	0.0059	ND	U	0.0015	0.0059
1,1,2-Trichloroethane	79-00-5	0.0013	mg/m3	ND	U	0.0011	**0.0055**	ND	U	0.0011	**0.0055**	ND	U	0.0011	**0.0055**	ND	U	0.0011	**0.0055**
Trichloroethylene	79-01-6	0.012	mg/m3	ND	U	0.0011	0.0054	ND	U	0.0011	0.0054	ND	U	0.0011	0.0054	ND	U	0.0011	0.0054
1,1,2,2-Tetrachloroethane	79-34-5	0.00036	mg/m3	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**	ND	U	0.0014	**0.0069**
Methyl Methacrylate	80-62-6	0.97	mg/m3	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041	ND	U	0.00082	0.0041
Hexachloro-1,3-Butadiene	87-68-3	NS	mg/m3	ND	U	0.0053	0.021	ND	U	0.0053	0.021	ND	U	0.0053	0.021	ND	U	0.0053	0.021
o-Xylene	95-47-6	NS	mg/m3	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043	ND	U	0.00087	0.0043
1,2-Dichlorobenzene	95-50-1	0.19	mg/m3	ND	U	0.0012	0.006	ND	U	0.0012	0.006	ND	U	0.0012	0.006	ND	U	0.0012	0.006
1,2,4-Trimethylbenzene	95-63-6	0.0083	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049
1,2,3-Trichloropropane	96-18-4	0.00001	mg/m3	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**	ND	U	0.0012	**0.006**
Methyl Acrylate	96-33-3	0.15	mg/m3	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035	ND	U	0.0007	0.0035
Ethyl Methacrylate	97-63-2	0.44	mg/m3	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047	ND	U	0.00093	0.0047
Cumene	98-82-8	0.54	mg/m3	ND	U	0.00098	0.0049	ND	U	0.00098	0.0049	0.046		0.00098	0.0049	0.0075		0.00098	0.0049
Alpha Methyl Styrene	98-83-9	0.049	mg/m3	ND	U	0.00097	0.0048	ND	U	0.00097	0.0048	ND	U	0.00097	0.0048	ND	U	0.00097	0.0048

Notes:
PADEP - Pennsylvania Department of Environmental Protection
mg/m3 - milligram per cubic meter
MSC - PADEP's Medium Specific Concentration for Air
RL - Reporting Limit
ND - Not Detected

Qualifiers:
Q - Qualifier
U - Undetected

Exceedance Summary:
10 - MDL exceeds the PADEP Residential Indoor Air MSC
10 - RL exceeds the PADEP Residential Indoor Air MSC
10 - Concentration exceeds the PADEP Residential Indoor Air MSC