TABLES

TABLE 2-1
SUMMARY OF RFI PHASE II SOIL CHARACTERIZATION PROGRAM
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

SWMU or AOC ID	Location Description	No. Samples (excluding QA/QC)	Sample Depth	Sample ID	Analytical Program	Comments
SWMU 1	Former North Phosphoric Acid Pond	1 1 1 1	3.0 - 4.0 ft. 4.0 - 5.5 ft. 3.5 - 5.0 ft. 5.0 - 6.0 ft.	SWMU1-1A SWMU1-1B SWMU1-2A SWMU1-2B	Appendix IX Metals, pH	
SWMU 3	Former Red Mud Slurry Pond A	1 1 1 1	3.0 - 4.5 ft. 5.0 - 6.5 ft. 2.5 - 4.0 ft. 5.0 - 6.5 ft.	SWMU3-1A SWMU3-1B SWMU3-2A SWMU3-2B	Appendix IX Metals, pH	
SWMU 5	Former Spar Building Storage Area	43	Various	Various	Various	Refer to Table 2-2.
SWMU 33	Former Spray Pond Area	1 1	1.0 - 4.0 ft. 4.0 - 6.0 ft.	SWMU33-1A SWMU33-1B	Appendix IX Metals, VOCs, SVOCs	
SWMU 34	Former Waste Oil Storage Pad	2	0 - 6 in.	SWMU34-1 and SWMU34-2	Appendix IX Metals, VOCs, SVOCs, PCBs	
SWMU 35	Former Hazardous Waste Storage Pad	4	0 - 6 in.	SWMU35-1 through SWMU35-4	Appendix IX Metals, VOCs, SVOCs, PCBs	
SWMU 36	Former Debris Staging Area/Alum Plant Area	8	0 - 6 in.	SWMU36-1 through SWMU36-8	Appendix IX Metals, pH	
AOC 5	Former Sulfur Storage Tank Spill	6	0 - 6 in.	AOC5-1 through AOC5-6	Appendix IX Metals, pH	
AOC 6	Former Aboveground Fuel Storage Tank A	2 2	0 - 6 in. 0.5 ft. - 1.0 ft.	AOC6-1A and AOC6-2A AOC6-1B and AOC6-2B	Appendix IX Metals, VOCs, SVOCs	
AOC 7	Former Sulfuric Acid Plant - Unpaved Area	6	0 - 6 in.	AOC7-1 through AOC7-6	Appendix IX Metals, VOCs, SVOCs, pH	
AOC 8	Former Spent Sulfuric Acid Loading/ Unloading Area Sumps	NA [a]	NA	NA	NA	Sample was not collected due to perched groundwater encountered beneath the sump.
AOC 9	Former Spent Sulfuric Acid Storage Area Sumps	1	0 - 6 in.	AOC9-1	Appendix IX Metals, VOCs, SVOCs, pH	
AOC 10	Former Sulfuric Acid Plant Area – Acid and Caustic Storage Tank Area Sumps	2	0 - 6 in.	AOC10-1 and AOC10-2	Appendix IX Metals, pH	
AOC 14	Former Sulfuric Acid Storage Tank Area Sump	1	0 - 6 in.	AOC14-1	Appendix IX Metals, pH	
AOC 15	Former Acid Loading/Unloading Area Sumps	1	4.5 - 5.0 ft. [b]	AOC15-2	Appendix IX Metals, pH	AOC15-1 was not sampled due to refusal being encountered prior to reaching the target depth.
AOC 16	Former Aboveground Fuel Oil Storage Tank C	6	0 - 6 in.	AOC16-1 through AOC16-6	Appendix IX Metals, VOCs, SVOCs	

Notes:

[a] NA denotes not applicable.

[b] Sample was collected at a depth interval of 4.5 - 5.0 ft. adjacent to sump. This corresponds to the 0 - 6 in. depth interval beneath the sump.

TABLE 2-2
SUMMARY OF RFI PHASE II SOIL CHARACTERIZATION PROGRAM
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Sample ID	No. Samples (excluding QA/QC)	Sample Depth	Analytical Program	Comments/Deviations
SWMU5-1A through SWMU5-4A	4	0 - 6 in.	As, Hg, Pb, PAHs, 9 additional organics [(a)]	
SWMU5-1B through SWMU5-4B	4	1.5 - 2.0 ft.	9 additional organics	
SWMU5-5A through SWMU5-16A	12	0 - 6 in.	As, Hg, Pb, PAHs	
SWMU5-5B	1	2.0 - 4.0 ft.	As, Pb, benzo(b)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene	
SWMU5-6B	1	2.0 - 4.0 ft.	As, Pb, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h,)anthracene	
SWMU5-7B, SWMU5-8B, SWMU5-10B, SWMU5-11B, SWMU5-12B, SWMU5-13B, SWMU5-16B	7	2.0 - 4.0 ft.	As, Pb, benzo(a)pyrene	Sample SWMU5-15B could not be collected because refusal was encountered prior to reaching the target depth.
SWMU5-9B and SWMU5-14B	2	2.0 - 4.0 ft.	As, Pb	
SWMU5-4C	1	4.0 - 6.0 ft.	As, Hg, Pb, PAHs	Samples SWMU5-1C and SWMU5-2C could not be collected because refusal was encountered prior to reaching the target depth.
SWMU5-3C and SWMU5-5C	2	4.0 - 6.0 ft.	As, Pb, benzo(b)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene	
SWMU5-6C	1	4.0 - 6.0 ft.	As, Pb, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene	Sample SWMU5-7C could not be collected because refusal was encountered prior to reaching the target depth.
SWMU5-8C, SWMU5-10C, SWMU5-11C, SWMU5-12C, SWMU5-13C, SWMU5-16C	6	4.0 - 6.0 ft.	As, Pb, benzo(a)pyrene	Sample SWMU5-15C could not be collected because refusal was encountered prior to reaching the target depth.
SWMU5-9C and SWMU5-14C	2	4.0 - 6.0 ft.	As, Pb	

Note:
[(a)] The additional organics include: 1,4-dioxane, isobutyl alcohol, acetonitrile, acrolein, dichlorodifluoromethane, methacrylonitrile, propionitrile, kepone, and 4-nitroquinoline-1-oxide.

TABLE 2-3
QUALITY ASSURANCE / QUALITY CONTROL SAMPLE RESULTS
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Date Sampled	TB-1 12/5/2006	TB-2 12/7/2006	TB-3 12/13/2006	EQB-1 12/5/2006	EQB-2 12/7/2006	EQB-3 12/12/2006
Metals (mg/l) [a]						
Mercury	NA [b]	NA	NA	0.000056 UL	0.000056 U	0.000056 U
Thallium	NA	NA	NA	0.0135 U	0.0135 U	0.0135 U
Arsenic	NA	NA	NA	0.010 UL	0.010 UL	0.010 UL
Selenium	NA	NA	NA	0.0094 U	0.0094 U	0.0094 U
Antimony	NA	NA	NA	0.0097 UL	0.0097 U	0.0097 U
Barium	NA	NA	NA	0.00062 U	0.00077 J	0.00062 U
Beryllium	NA	NA	NA	0.00094 U	0.00094 U	0.00094 U
Cadmium	NA	NA	NA	0.00091 U	0.00091 U	0.00091 U
Chromium	NA	NA	NA	0.0023 U	0.0023 U	0.0023 U
Cobalt	NA	NA	NA	0.0021 UL	0.0021 U	0.0021 UL
Copper	NA	NA	NA	0.0022 U	0.0022 U	0.0022 UL
Lead	NA	NA	NA	0.0069 U	0.0075 J	0.0069 U
Nickel	NA	NA	NA	0.0056 U	0.0056 U	0.0056 U
Silver	NA	NA	NA	0.0016 UL	0.0016 U	0.0016 UL
Tin	NA	NA	NA	0.0084 U	0.0084 UL	0.0084 U
Vanadium	NA	NA	NA	0.0015 U	0.0015 UL	0.0015 UL
Zinc	NA	NA	NA	0.0081 U	0.0081 U	0.0081 U
Hexachlorophene (µg/l) [c]	NA	NA	NA	0.029 U	0.029 U	NA
Pesticides (µg/l)						
Kepone	NA	NA	NA	0.14 U	0.065 U	0.066 UJ
Semivolatile Organic Compounds (µg/l)						
1,4-Dioxane	NA	NA	NA	1 U	1 U	0.9 U
Phenol	NA	NA	NA	1 U	1 U	0.9 U
2-Chlorophenol	NA	NA	NA	1 U	1 U	0.9 U
1,4-Dichlorobenzene	NA	NA	NA	1 U	1 U	0.9 U
N-Nitroso-di-n-propylamine	NA	NA	NA	1 U	1 U	0.9 U
1,2,4-Trichlorobenzene	NA	NA	NA	1 U	1 U	0.9 U
4-chloro-3-methylphenol	NA	NA	NA	1 U	1 U	0.9 U
Acenaphthene	NA	NA	NA	1 U	1 U	0.9 U
4-Nitrophenol	NA	NA	NA	10 U	10 U	9 U
2,4-Dinitrotoluene	NA	NA	NA	1 U	1 U	0.9 U
Pentachlorophenol	NA	NA	NA	3 U	3 U	3 U
Pyrene	NA	NA	NA	1 U	1 U	0.9 U
4-Methylphenol [d]	NA	NA	NA	2 U	2 U	2 U
2-Nitrophenol	NA	NA	NA	1 U	1 U	0.9 U
2,4-Dimethylphenol	NA	NA	NA	3 U	3 U	3 U
2,4-Dichlorophenol	NA	NA	NA	1 U	1 U	0.9 U
2,4,6-Trichlorophenol	NA	NA	NA	1 U	1 U	0.9 U
2,4-Dinitrophenol	NA	NA	NA	19 U	19 U	19 U
4,6-Dinitro-2-methylphenol	NA	NA	NA	5 U	5 U	5 U
N-Nitrosodimethylamine	NA	NA	NA	2 U	2 U	2 U
bis(2-Chloroethyl)ether	NA	NA	NA	1 U	1 U	0.9 U
1,3-Dichlorobenzene	NA	NA	NA	1 U	1 U	0.9 U
1,2-Dichlorobenzene	NA	NA	NA	1 U	1 U	0.9 U
bis(2-Chloroisopropyl)ether	NA	NA	NA	1 U	1 U	0.9 U
Hexachloroethane	NA	NA	NA	1 U	1 U	0.9 U
Nitrobenzene	NA	NA	NA	1 U	1 U	0.9 U
Isophorone	NA	NA	NA	1 U	1 U	0.9 U
bis(2-Chloroethoxy)methane	NA	NA	NA	1 U	1 U	0.9 U
Naphthalene	NA	NA	NA	1 U	1 U	0.9 U
Hexachlorobutadiene	NA	NA	NA	1 U	1 U	0.9 U
Hexachlorocyclopentadiene	NA	NA	NA	5 U	5 U	5 U
2-Chloronaphthalene	NA	NA	NA	2 U	2 U	2 U

CUMMINGS RITER

TABLE 2-3
QUALITY ASSURANCE / QUALITY CONTROL SAMPLE RESULTS
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Date Sampled	TB-1 12/5/2006	TB-2 12/7/2006	TB-3 12/13/2006	EQB-1 12/5/2006	EQB-2 12/7/2006	EQB-3 12/12/2006
Semivolatile Organic Compounds (µg/l)						
Acenaphthylene	NA	NA	NA	1 U	1 U	0.9 U
Dimethylphthalate	NA	NA	NA	2 U	2 U	2 U
2,6-Dinitrotoluene	NA	NA	NA	1 U	1 U	0.9 U
Fluorene	NA	NA	NA	1 U	1 U	0.9 U
4-Chlorophenyl-phenylether	NA	NA	NA	2 U	2 U	2 U
Diethylphthalate	NA	NA	NA	2 U	2 U	2 U
N-Nitrosodiphenylamine [(e)]	NA	NA	NA	2 U	2 U	2 U
4-Bromophenyl-phenylether	NA	NA	NA	1 U	1 U	0.9 U
Hexachlorobenzene	NA	NA	NA	1 U	1 U	0.9 U
Phenanthrene	NA	NA	NA	1 U	1 U	0.9 U
Anthracene	NA	NA	NA	1 U	1 U	0.9 U
Di-n-butylphthalate	NA	NA	NA	2 U	2 U	2 U
Fluoranthene	NA	NA	NA	1 U	1 U	0.9 U
Butylbenzylphthalate	NA	NA	NA	2 U	2 U	2 U
Benzo(a)anthracene	NA	NA	NA	1 U	1 U	0.9 U
Chrysene	NA	NA	NA	1 U	1 U	0.9 U
3,3'-Dichlorobenzidine	NA	NA	NA	2 U	2 U	2 U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	2 U	2 U	2 U
Di-n-octylphthalate	NA	NA	NA	2 U	2 U	2 U
Benzo(b)fluoranthene	NA	NA	NA	1 U	1 U	0.9 U
Benzo(k)fluoranthene	NA	NA	NA	1 U	1 U	0.9 U
Benzo(a)pyrene	NA	NA	NA	1 U	1 U	0.9 U
Indeno(1,2,3-cd)pyrene	NA	NA	NA	1 U	1 U	0.9 U
Dibenz(a,h)anthracene	NA	NA	NA	1 U	1 U	0.9 U
Benzo(g,h,i)perylene	NA	NA	NA	1 U	1 U	0.9 U
Acetophenone	NA	NA	NA	2 U	2 U	2 U
2-Acetylaminofluorene	NA	NA	NA	2 U	2 U	2 U
4-Aminobiphenyl	NA	NA	NA	2 U	2 U	2 U
Aniline	NA	NA	NA	1 U	1 U	0.9 U
Benzyl alcohol	NA	NA	NA	5 U	5 U	5 U
Chlorobenzilate	NA	NA	NA	3 U	3 U	3 U
Diallate trans/cis	NA	NA	NA	1 U	1 U	0.9 U
2,6-Dichlorophenol	NA	NA	NA	2 U	2 U	2 U
Dimethoate	NA	NA	NA	3 U	3 U	3 UR
p-Dimethylaminoazobenzene	NA	NA	NA	2 UR	2 UR	2 U
7,12-Dimethylbenz[a]anthracene	NA	NA	NA	2 U	2 U	2 U
3,3'-Dimethylbenzidine	NA	NA	NA	10 U	10 U	9 U
1,3-Dinitrobenzene	NA	NA	NA	2 U	2 U	2 U
Ethyl methanesulfonate	NA	NA	NA	2 U	2 U	2 U
Hexachloropropene	NA	NA	NA	2 U	2 U	2 U
Isodrin	NA	NA	NA	1 UR	1 UR	0.9 U
Isosafrole	NA	NA	NA	2 U	2 U	2 U
Methapyrilene	NA	NA	NA	14 U	14 U	14 U
3-Methylcholanthrene	NA	NA	NA	2 U	2 U	2 U
Methyl methanesulfonate	NA	NA	NA	1 U	1 U	0.9 U
1,4-Naphthoquinone	NA	NA	NA	10 U	10 U	9 UR
1-Naphthylamine	NA	NA	NA	5 U	5 U	5 U
2-Naphthylamine	NA	NA	NA	5 U	5 U	5 U
4-Nitroquinoline-1-oxide	NA	NA	NA	19 UR	19 UR	19 UR
N-Nitrosodi-n-butylamine	NA	NA	NA	2 U	2 U	2 U
N-Nitrosodiethylamine	NA	NA	NA	2 U	2 U	2 U
N-Nitrosomethylethylamine	NA	NA	NA	2 U	2 U	2 U
N-Nitrosomorpholine	NA	NA	NA	2 U	2 U	2 U
N-Nitrosopiperidine	NA	NA	NA	2 U	2 U	2 U

CUMMINGS RITER

TABLE 2-3
QUALITY ASSURANCE / QUALITY CONTROL SAMPLE RESULTS
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Date Sampled	TB-1 12/5/2006	TB-2 12/7/2006	TB-3 12/13/2006	EQB-1 12/5/2006	EQB-2 12/7/2006	EQB-3 12/12/2006
Semivolatile Organic Compounds (µg/l)						
N-Nitrosopyrrolidine	NA	NA	NA	2 U	2 U	2 U
5-Nitro-o-toluidine	NA	NA	NA	3 U	3 U	3 U
Pentachlorobenzene	NA	NA	NA	2 U	2 U	2 U
Pentachloronitrobenzene	NA	NA	NA	2 U	2 U	2 U
Phenacetin	NA	NA	NA	2 U	2 U	2 U
1,4-Phenylenediamine	NA	NA	NA	72 UR	72 UR	71 UR
2-Picoline	NA	NA	NA	2 U	2 U	2 U
Pronamide	NA	NA	NA	1 U	1 U	0.9 U
Pyridine	NA	NA	NA	2 U	2 U	2 U
Safrole	NA	NA	NA	2 U	2 U	2 U
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	2 U	2 U	2 U
2,3,4,6-Tetrachlorophenol	NA	NA	NA	2 U	2 U	2 U
Tetraethyldithiopyrophosphate	NA	NA	NA	1 U	1 U	0.9 U
Thionazin	NA	NA	NA	2 U	2 U	2 U
o-Toluidine	NA	NA	NA	1 U	1 U	0.9 U
O,O,O-Triethylphosphorothioate	NA	NA	NA	2 U	2 U	2 U
1,3,5-Trinitrobenzene	NA	NA	NA	5 U	5 U	5 U
2-Methylphenol	NA	NA	NA	1 U	1 U	0.9 U
4-Chloroaniline	NA	NA	NA	1 U	1 U	0.9 U
2-Methylnaphthalene	NA	NA	NA	1 U	1 U	0.9 U
2,4,5-Trichlorophenol	NA	NA	NA	1 U	1 U	0.9 U
2-Nitroaniline	NA	NA	NA	1 U	1 U	0.9 U
3-Nitroaniline	NA	NA	NA	1 U	1 U	0.9 U
Dibenzofuran	NA	NA	NA	1 U	1 U	0.9 U
4-Nitroaniline	NA	NA	NA	1 UR	1 UR	0.9 U
Volatile Organic Compounds (µg/l)						
Dichlorodifluoromethane	2 U	2 U	2 U	2 U	2 U	2 U
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Methylene Chloride	2 U	2 U	2 U	2 U	2 U	2 U
trans-1,2-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroform	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Carbon Tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U
Dibromomethane	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Tetrachloroethene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U

CUMMINGS RITER

TABLE 2-3
QUALITY ASSURANCE / QUALITY CONTROL SAMPLE RESULTS
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Date Sampled	TB-1 12/5/2006	TB-2 12/7/2006	TB-3 12/13/2006	EQB-1 12/5/2006	EQB-2 12/7/2006	EQB-3 12/12/2006
Volatile Organic Compounds (µg/l)						
Ethylbenzene	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Styrene	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane	2 U	2 U	2 U	2 U	2 U	2 U
Acetone	6 U	6 U	6 U	6 U	6 U	6 U
Carbon Disulfide	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	3 U	3 U	3 U	3 U	3 U	3 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	3 U	3 U	3 U	3 U	3 U	3 U
Xylene (total)	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Acrolein	40 U	40 U	40 U	40 U	40 U	40 U
Acrylonitrile	4 U	4 U	4 U	4 U	4 U	4 U
Methyl Iodide	1 U	1 U	1 U	1 U	1 U	1 U
Acetonitrile	25 U	25 U	25 U	25 U	25 U	25 U
Allyl Chloride	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Acetate	2 U	2 U	2 U	2 U	2 U	2 U
2-Chloro-1,3-butadiene	1 U	1 U	1 U	1 U	1 U	1 U
Propionitrile	30 U	30 U	30 U	30 U	30 U	30 U
Methacrylonitrile	10 U	10 U	10 U	10 U	10 U	10 U
Isobutyl Alcohol	100 U	100 U	100 U	100 U	100 U	100 U
Methyl Methacrylate	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	70 U	70 U	NA	70 U	70 U	NA
Ethyl Methacrylate	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene	15 U	15 U	15 U	15 U	15 U	15 U
Pentachloroethane	1 U	1 U	1 U	1 U	1 U	1 U
Polychlorinated Biphenyls (µg/l)						
PCB-1016	NA	NA	NA	0.097 U	NA	NA
PCB-1221	NA	NA	NA	0.097 U	NA	NA
PCB-1232	NA	NA	NA	0.097 U	NA	NA
PCB-1242	NA	NA	NA	0.097 U	NA	NA
PCB-1248	NA	NA	NA	0.097 U	NA	NA
PCB-1254	NA	NA	NA	0.097 U	NA	NA
PCB-1260	NA	NA	NA	0.097 U	NA	NA

Notes:

U - Analyte was not detected. The associated number is the method detection limit.
J - Value is estimated.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.
UR - Result is unusable. The analyte may or may not be present in the sample.

(a) "mg/l" is milligrams per liter, or parts per million.

(b) "NA" indicates the sample was not analyzed for that particular parameter.

(c) "µg/l" is micrograms per liter, or parts per billion.

(d) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(e) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamine.

CUMMINGS RITER

TABLE 2-4
SUMMARY OF RFI PHASE I AND II ANALYTICAL RESULTS
SWMU1 - FORMER NORTH PHOSPHORIC ACID POND
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	B1-A 0.0'-0.5' 12/11/2002	B1-B 0.0'-0.5' 12/11/2002	SWMU1-1A 3.0'-4.0' 12/5/2006	SWMU1-1B 4.0'-5.5' 12/5/2006	SWMU1-2A 3.5'-5.0' 12/5/2006	SWMU1-2B 5.0'-6.0' 12/5/2006
General Chemistry									
Moisture (%)	-- [a]	--	--	NA [b]	NA	14.5	12.8	13.9	16.1
pH	--	--	--	4.57	5.15	9.53	8.85	7.12	7.67
Metals (mg/kg) [c]									
Antimony	410	31	13	0.58 B	1 B	**14.1 L [d]**	9.62 L	2.22 L	**15.0 L**
Arsenic	1.9	0.43	0.026	**7.3 [e]**	**9**	**158 K**	**83.5 K**	**76.1 K**	**118 K**
Barium	200,000	16,000	6,000	45 L	55 L	353 J	157 J	634	700 J
Beryllium	2,000	160	1,200	0.56	0.51	0.637	0.411 J	0.382 J	0.362 J
Cadmium	1,000	78	55	0.25	0.33	3.18 J	1.01 J	1.33	2.64 J
Chromium	3,100 [f]	230 [f]	42 [f]	24	30	30.4 K	42.0 K	**50.0 K**	**44.4 K**
Cobalt	--	--	--	5.6	5.4	14.0 L	10.7 L	5.96 L	8.67 L
Copper	41,000	3,100	11,000	12	18	421 J	276 J	43.8 L	464 J
Lead	800	400	--	15 J	38 J	631 K	381 K	118	1,060 K [g]
Mercury	310 [h]	23 [h]	--	0.037	0.068	3.16 K	0.631 K	0.396 K	1.04 K
Nickel	20,000	1,600	--	10	9.9	64.7 L	31.9 L	15.4 K	11.1 L
Selenium	5,100	390	19	0.7	1.2	2.74 L	1.20 L	1.45 L	1.39 L
Silver	5,100	390	31	0.2 U	0.21 U	2.45 L	1.51 L	0.327 K	4.86 L
Thallium	72	5.5	3.6	2 U	2.1 U	3.18 L	1.78 L	1.53 UL	**4.19 L**
Tin	610,000	47,000	--	3.6 B	4.7 B	31.6 K	14.1 B	5.85 B	30.0 K
Vanadium	1,000	78	730	33	40	213	49.9	30.0	43.0
Zinc	310,000	23,000	14,000	32	37 R	611	178	74.2 K	455

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
R - Result is unusable. The analyte may or may not be present in the sample.
U - Analyte was not detected. The associated number is the dry method detection limit.
UL - Analyte was not detected. The associated number may be biased low.

[a] "--" indicates standard does not currently exist for this parameter.

[b] "NA" indicates the sample was not analyzed for that particular parameter.

[c] "mg/kg" is milligrams per kilogram, or parts per million.

[d] **Values shown in bold indicate an exceedance of the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20.**

[e] **Bolded and shaded values indicate an exceedance of both the USEPA Region III SSL for Groundwater Migration, DAF = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**

[f] Chromium VI standards are listed.

[g] Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.

[h] Mercuric chloride standards are listed.

CUMMINGS RITER

TABLE 2-5
SUMMARY OF ANALYTICAL RESULTS
SWMU 3 - FORMER RED MUD SLURRY POND A
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU3-1A 3.0'-4.5' 12/5/2006	SWMU3-1B 5.0'-6.5' 12/5/2006	SWMU3-2A 2.5'-4.0' 12/5/2006	SWMU3-2B 5.0'-6.5' 12/5/2006
Moisture (%)	-- [a]	--	--	24.8	28.2	29.4	28.9
pH	--	--	--	9.57	6.21	9.68	9.71
Metals (mg/kg) [b]							
Mercury	310 [c]	23 [c]	--	0.419 K	0.734 K	1.03 K	0.889 K
Thallium	72	5.5	3.6	8.84 UL	8.91 UL	9.42 UL	9.35 UL
Arsenic	1.9	0.43	0.026	**77.6 K [d]**	**181 K**	**168 K**	**204 K**
Selenium	5,100	390	19	**191 L [e]**	**295 L**	**309 L**	**312 L**
Antimony	410	31	13	6.48 L	1.21 UL	1.97 L	8.98 L
Barium	200,000	16,000	6,000	103 J	62.0 J	146 J	126 J
Beryllium	2,000	160	1,200	0.0904 U	0.0911 U	0.0963 U	0.0956 U
Cadmium	1,000	78	55	21.1 J	17.7 J	19.8 J	21.6 J
Chromium	3,100 [f]	230 [f]	42 [f]	**65.2 K**	**77.9 K**	**89.1 K**	**76.9 K**
Cobalt	--	--	--	360 L	287 L	251 L	272 L
Copper	41,000	3,100	11,000	690 J	525 J	528 J	658 J
Lead	800	400	--	249 K	207 K	349 K	448 K
Nickel	20,000	1,600	--	23.9 L	24.9 L	25.2 L	27.4 L
Silver	5,100	390	31	14.2 L	16.9 L	21.0 L	21.7 L
Tin	610,000	47,000	--	14.6 B	22.2 K	28.7 K	39.7 K
Vanadium	1,000	78	730	268	250	226	188
Zinc	310,000	23,000	14,000	1,740	1,160	1,150	2,380

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UL - Analyte was not detected. The associated number may be biased low.

(a) "--" indicates standard does not currently exist for this parameter.

(b) "mg/kg" is milligrams per kilogram, or parts per million.

(c) Mercuric chloride standards are listed.

(d) **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration for Industrial Soil.**

(e) **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

(f) Chromium VI standards are listed.

CUMMINGS RITER

TABLE 2-6
SUMMARY OF RFI PHASE I ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters	Method	Units	Sample Identification and Date Sampled							
			B5-A (1.2'-1.7') 11/21/2002	B5-A Field Dup (1.2'-1.7') 11/21/2002	B5-A Lab Dup (1.2'-1.7') 11/21/2002	B5-A MS (1.2'-1.7') 11/21/2002	B5-A MSD (1.2'-1.7') 11/21/2002	B5-B (1.3'-1.8') 11/21/2002	B5-C (1.4'-1.9') 11/21/2002	B5-D (1.8'-2.3') 11/21/2002
General Chemistry										
pH	9045	pH	4.19 J	7.99 J	7.58	4.76	NA	4.14 J	5.9 J	7.04 J
Metals										
Antimony	6010B	mg/kg	6.3	11	6.2	45	NA	8.2	7.9	4.9
Arsenic	6010B	mg/kg	340	560	430	350	NA	170	150	92
Barium	6010B	mg/kg	180 K	260 K	190	280	NA	220 K	200 K	190 K
Beryllium	6010B	mg/kg	0.96 J	0.85 J	0.18 J	48	NA	0.53 J	0.54 J	0.33 J
Cadmium	6010B	mg/kg	1.6 J	2.5 J	1.1	47	NA	3 J	3.5 J	1.7 J
Chromium	6010B	mg/kg	39 J	43 J	19	85	NA	130 J	30 J	31 J
Cobalt	6010B	mg/kg	16 J	21 J	9	58	NA	35 J	20 J	15 J
Copper	6010B	mg/kg	200 J	320 J	130	240	NA	300 J	200 J	170 J
Lead	6010B	mg/kg	550	900	400	550	NA	700	470	390
Mercury	7471	mg/kg	15 J	46	7.4 D	16 D	NA	7.1 J	10 J	4.6 J
Nickel	6010B	mg/kg	21 J	33 J	8.5	65	NA	32 J	35 J	18 J
Selenium	6010B	mg/kg	42 J	66 J	14	90	NA	39 J	34 J	43 J
Silver	6010B	mg/kg	1.6	2.8	1.3	27	NA	3	2.5	1.8
Thallium	6010B	mg/kg	2 U	2 U	2.3 U	44	NA	2 U	2 U	2.2 U
Tin	6010B	mg/kg	25	42	24	70	NA	130	34	15 B
Vanadium	6010B	mg/kg	61 J	71 J	40	110	NA	44 J	37 J	41 J
Zinc	6010B	mg/kg	250 J	440 J	140	300	NA	500 J	260 J	200 J
Semivolatile Organic Compounds										
Acenaphthene	8270C	µg/kg	420 J	400 UJ	NA	1,700	1,900	830 J	390 UJ	370 UJ
Acenaphthylene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Acetophenone	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Acetylaminofluorene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
4-Aminobiphenyl	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Aniline	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Anthracene	8270C	µg/kg	420 UJ	230 J	NA	380 U	410 U	2,500 J	510 J	370 UJ
Aramite	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Benzo(a)anthracene	8270C	µg/kg	340 J	800 J	NA	400	310 J	7,700 J	1,100 J	480 J
Benzo(a)pyrene	8270C	µg/kg	300 J	860 J	NA	410	280 J	7,500 J	1,000 J	470 J
Benzo(b)fluoranthene	8270C	µg/kg	360 J	1100 J	NA	450	300 J	6,900 J	1,100 J	550 J
Benzo(ghi)perylene	8270C	µg/kg	240 J	650 J	NA	350 J	240 J	4,300 J	730 J	380 J
Benzo(k)fluoranthene	8270C	µg/kg	360 J	930 J	NA	530	290 J	6,900 J	1,200 J	540 J
Benzoic Acid	8270C	µg/kg	1,000 UJ	1,000 UJ	NA	950 U	1,000 U	1,900 UJ	990 UJ	920 UJ
Benzyl alcohol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Bis(2-Chloroethoxy)methane	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Bis(2-Chloroethyl)ether	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Bis(2-Chloroisopropyl)ether	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Bis(2-Ethylhexyl)phthalate	8270C	µg/kg	510 J	2,200 J	NA	330 J	310 J	1,200 J	900 J	370 UJ
4-Bromophenyl-phenylether	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Butylbenzylphthalate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Carbazole	8270C	µg/kg	420 J	400 UJ	NA	NA	NA	670 J	390 UJ	370 UJ
4-Chloro-3-methylphenol	8270C	µg/kg	420 UJ	400 UJ	NA	3000	3100	770 UJ	390 UJ	370 UJ
4-Chloroaniline	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Chlorobenzilate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ

CUMMINGS RITER

TABLE 2-6
SUMMARY OF RFI PHASE I ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters	Method	Units	Sample Identification and Date Sampled							
			B5-A (1.2'-1.7') 11/21/2002	B5-A Field Dup (1.2'-1.7') 11/21/2002	B5-A Lab Dup (1.2'-1.7') 11/21/2002	B5-A MS (1.2'-1.7') 11/21/2002	B5-A MSD (1.2'-1.7') 11/21/2002	B5-B (1.3'-1.8') 11/21/2002	B5-C (1.4'-1.9') 11/21/2002	B5-D (1.8'-2.3') 11/21/2002
Semivolatile Organic Compounds										
2-Chloronaphthalene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Chlorophenol	8270C	µg/kg	420 UJ	400 UJ	NA	2,300	2,800	770 UJ	390 UJ	370 UJ
4-Chlorophenyl-phenylether	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Chrysene	8270C	µg/kg	390 J	870 J	NA	450	310 J	7,300 J	1,100 J	510 J
o-Cresol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
m,p-Cresol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Di-n-butylphthalate	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Di-n-octylphthalate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 J
Diallate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Dibenz(a,h)anthracene	8270C	µg/kg	420 UJ	230 J	NA	380 U	410 U	1,500 J	280 J	370 UJ
Dibenzofuran	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,2-Dichlorobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,3-Dichlorobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,4-Dichlorobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	1,300	1,700	770 UJ	390 UJ	370 UJ
3,3'-Dichlorobenzidine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2,4-Dichlorophenol	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2,6-Dichlorophenol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Diethylphthalate	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
7,12-Dimethylbenz(A)anthracene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Dimethoate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
a,a-Dimethylphenethylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
p-Dimethylaminoazobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
3,3'-Dimethylbenzidine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2,4-Dimethylphenol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Dimethylphthalate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
4,6-Dinitro-2-methylphenol	8270C	µg/kg	840 J	830 UJ	NA	830 U	830 U	1,500 UJ	830 UJ	830 UJ
1,3-Dinitrobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2,4-Dinitrophenol	8270C	µg/kg	840 UJ	830 UJ	NA	830 U	830 U	1,500 UJ	830 UJ	830 UJ
2,4-Dinitrotoluene	8270C	µg/kg	420 J	400 UJ	NA	1,500	1,500	770 UJ	390 UJ	370 UJ
2,6-Dinitrotoluene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Dinoseb	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Diphenylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Disulfoton	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Ethyl methanesulfonate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Famphur	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Fluoranthene	8270C	µg/kg	530 J	1,500 J	NA	740	600	10,000 J	1,500 J	650 J
Fluorene	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	670 J	390 UJ	370 UJ
Hexachlorobenzene	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Hexachlorobutadiene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Hexachlorocyclopentadiene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Hexachloroethane	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Hexachlorophene	8270C	µg/kg	3,400 UJ	3,200 UJ	NA	3,100 U	3,300 U	6,100 UJ	3,200 UJ	3,000 UJ
Hexachloropropene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Indeno(1,2,3-cd)pyrene	8270C	µg/kg	220 J	590 J	NA	300 J	410 U	4,000 J	740 J	350 J
Isodrin	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Isophorone	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ

TABLE 2-6
SUMMARY OF RFI PHASE I ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters	Method	Units	Sample Identification and Date Sampled							
			B5-A (1.2'-1.7') 11/21/2002	B5-A Field Dup (1.2'-1.7') 11/21/2002	B5-A Lab Dup (1.2'-1.7') 11/21/2002	B5-A MS (1.2'-1.7') 11/21/2002	B5-A MSD (1.2'-1.7') 11/21/2002	B5-B (1.3'-1.8') 11/21/2002	B5-C (1.4'-1.9') 11/21/2002	B5-D (1.8'-2.3') 11/21/2002
Semivolatile Organic Compounds										
Isosafrole	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Kepone	8270C	µg/kg	420 R	400 R	NA	380 U	410 U	770 R	390 R	370 R
Methapyrilene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Methyl methanesulfonate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Methyl parathion	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
3-Methylcholanthrene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Methylnaphthalene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosodi-n-butylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosodi-n-propylamine	8270C	µg/kg	420 UJ	400 UJ	NA	1,500	2,000	770 UJ	390 UJ	370 UJ
N-nitrosodiethylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosodimethylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosodiphenylamine	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosomethylethylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosomorpholine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosopiperidine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
N-nitrosopyrrolidine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Naphthalene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,4-Naphthoquinone	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1-Naphthylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Naphthylamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
5-Nitro-o-toluidine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Nitroaniline	8270C	µg/kg	840 UJ	830 UJ	NA	830 U	830 U	1,500 UJ	830 UJ	830 UJ
3-Nitroaniline	8270C	µg/kg	840 J	830 UJ	NA	830 U	830 U	1,500 UJ	830 UJ	830 UJ
4-Nitroaniline	8270C	µg/kg	840 J	830 UJ	NA	830 U	830 U	1,500 UJ	830 UJ	830 UJ
Nitrobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Nitrophenol	8270C	µg/kg	420 J	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
4-Nitrophenol	8270C	µg/kg	840 UJ	830 UJ	NA	2,400	2,700	1,500 UJ	830 UJ	830 UJ
4-Nitroquinoline-1-oxide	8270C	µg/kg	420 R	400 R	NA	380 U	410 U	770 R	390 R	370 R
Parathion	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Pentachlorobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Pentachloroethane	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Pentachloronitrobenzene	8270C	µg/kg	1,000 UJ	1,000 UJ	NA	950 U	1,000 U	1,900 UJ	990 UJ	920 UJ
Pentachlorophenol	8270C	µg/kg	840 J	830 UJ	NA	3,100	3,400	1,500 UJ	830 UJ	830 UJ
Phenacetin	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Phenanthrene	8270C	µg/kg	420 J	650 UJ	NA	250 J	330 J	9,700 J	1,100 J	470 J
Phenol	8270C	µg/kg	420 UJ	400 UJ	NA	2,300	2,800	770 UJ	390 UJ	370 UJ
1,4-Phenylenediamine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Phorate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2-Picoline	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Pronamide	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Pyrene	8270C	µg/kg	400 J	1,000 J	NA	2,100	2,300	9,300 J	1,400 J	610 J
Pyridine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Safrole	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,2,4,5-Tetrachlorobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
2,3,4,6-Tetrachlorophenol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Tetraethyl Dithiopyrophosphate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ

TABLE 2-6
SUMMARY OF RFI PHASE I ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters	Method	Units	Sample Identification and Date Sampled							
			B5-A (1.2'-1.7') 11/21/2002	B5-A Field Dup (1.2'-1.7') 11/21/2002	B5-A Lab Dup (1.2'-1.7') 11/21/2002	B5-A MS (1.2'-1.7') 11/21/2002	B5-A MSD (1.2'-1.7') 11/21/2002	B5-B (1.3'-1.8') 11/21/2002	B5-C (1.4'-1.9') 11/21/2002	B5-D (1.8'-2.3') 11/21/2002
Semivolatile Organic Compounds										
Thionazine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
o-Toluidine	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,2,4-Trichlorobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	1,500	1,900	770 UJ	390 UJ	370 UJ
2,4,5-Trichlorophenol	8270C	µg/kg	840 UJ	830 UJ	NA	830 U	830 U	1,500 UJ	830 UJ	830 UJ
2,4,6-Trichlorophenol	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
0,0,0-Triethylphosphorothioate	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
1,3,5-Trinitrobenzene	8270C	µg/kg	420 UJ	400 UJ	NA	380 U	410 U	770 UJ	390 UJ	370 UJ
Semivolatile TICs										
o,p'-DDT	8270C	µg/kg	ND	20.14 NJ	NA	NA	NA	ND	ND	ND
4,4-Dichlorobenzophenone	8270C	µg/kg	ND	18.3 NJ	NA	NA	NA	ND	ND	ND
Unknown	8270C	µg/kg	49.44 NJ	262.81 NJ	NA	NA	NA	467.1 NJ	20,340 NJ	20,110 NJ
Unknown benzene isomer	8270C	µg/kg	41.77 NJ	15.23 NJ	NA	NA	NA	ND	ND	ND
Unknown DDE isomer	8270C	µg/kg	ND	19.49 NJ	NA	NA	NA	ND	ND	ND
Unknown hydrocarbon	8270C	µg/kg	37.99 NJ	17.17 NJ	NA	NA	NA	ND	1,100 NJ	ND
Unknown pyrene isomer	8270C	µg/kg	ND	ND	NA	NA	NA	ND	19.92 NJ	ND
Volatile Organic Compounds										
1,1,1,2-Tetrachloroethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,1,1-Trichloroethane (Methyl chloroform)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,1,2,2-Tetrachloroethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,1,2-Trichloroethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,1-Dichloroethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,1-Dichloroethene (Dichloroethylene)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,2,3-Trichloropropane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,2-Dibromo-3-chloropropane (DBCP)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,2-Dibromoethane (Ethylene dibromide)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,2-Dichloroethane (Ethylene dichloride)	8260	µg/kg	5.81 UJ	5.49 UJ	NA	NA	NA	5.06 UJ	5.24 UJ	4.67 UJ
1,2-Dichloropropane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
1,4-Dioxane	8260	µg/kg	290.5 R	274.6 R	NA	NA	NA	252.9 R	262 R	233.3 R
2-Butanone (Methyl ethyl ketone)	8260	µg/kg	11.62 U	10.99 U	NA	NA	NA	6.4 J	10.48 U	9.33 U
2-Hexanone	8260	µg/kg	11.62 U	10.99 U	NA	NA	NA	10.12 U	10.48 U	9.33 U
2-Methyl-1-propanol (iso-Butyl alcohol)	8260	µg/kg	290.5 R	274.6 R	NA	NA	NA	252.9 R	262 R	233.3 R
4-Methyl-2-pentanone (MIBK)	8260	µg/kg	11.62 UJ	10.99 UJ	NA	NA	NA	10.12 UJ	10.48 UJ	9.33 UJ
Acetone (2-Propanone, Dimethyl ketone)	8260	µg/kg	84.1 B	46.7 B	NA	NA	NA	57.4 B	33.5 B	22.4 B
Acetonitrile (Methyl cyanide)	8260	µg/kg	116.2 R	109.9 R	NA	NA	NA	101.2 R	104.8 R	93.3 R
Acrolein (2-Propenal)	8260	µg/kg	23.24 R	21.97 R	NA	NA	NA	20.23 R	20.96 R	18.66 R
Acrylonitrile (2-Propenenitrile)	8260	µg/kg	23.24 U	21.97 U	NA	NA	NA	20.23 U	20.96 U	18.66 U
Allyl chloride (3-Chloropropene)	8260	µg/kg	11.62 U	10.99 U	NA	NA	NA	10.12 U	10.48 U	9.33 U
Benzene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Bromodichloromethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Bromoform	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Bromomethane (Methyl bromide)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Carbon disulfide	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	7.70	6.2	4.67 U
Carbon tetrachloride	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Carbazole	8260	µg/kg	ND	ND	NA	NA	NA	ND	ND	ND
Chlorobenzene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Chloroethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U

CUMMINGS RITER

TABLE 2-6
SUMMARY OF RFI PHASE I ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters	Method	Units	Sample Identification and Date Sampled							
			B5-A (1.2'-1.7') 11/21/2002	B5-A Field Dup (1.2'-1.7') 11/21/2002	B5-A Lab Dup (1.2'-1.7') 11/21/2002	B5-A MS (1.2'-1.7') 11/21/2002	B5-A MSD (1.2'-1.7') 11/21/2002	B5-B (1.3'-1.8') 11/21/2002	B5-C (1.4'-1.9') 11/21/2002	B5-D (1.8'-2.3') 11/21/2002
Volatile Organic Compounds										
Chloroform	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Chloromethane (Methyl chloride)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Chloroprene (2-Chloro-1,3-butadiene)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
cis-1,3-Dichloropropene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Dibromochloromethane	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Dibromomethane (Methylene bromide)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Dichlorodifluoromethane (Freon 12)	8260	µg/kg	5.81 R	5.49 R	NA	NA	NA	5.06 R	5.24 R	4.67 R
Ethyl methacrylate (2-Propenoic acid)	8260	µg/kg	11.62 U	10.99 U	NA	NA	NA	10.12 U	10.48 U	9.33 U
Ethylbenzene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Iodomethane (Methyl iodide)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
m,p-Xylene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Methacrylonitrile	8260	µg/kg	116.2 R	109.9 R	NA	NA	NA	101.2 R	104.8 R	93.3 R
Methyl methacrylate	8260	µg/kg	11.62 UJ	10.99 UJ	NA	NA	NA	10.12 UJ	10.48 UJ	9.33 UJ
Methylene chloride (Dichloromethane)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
o-Xylene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Propionitrile (Ethyl cyanide)	8260	µg/kg	23.24 R	21.97 R	NA	NA	NA	20.23 R	20.96 R	18.66 R
Styrene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Tetrachloroethene (Perchloroethylene)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Toluene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
trans-1,2-Dichloroethene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
trans-1,3-Dichloropropene	8260	µg/kg	5.81 UJ	5.49 UJ	NA	NA	NA	5.06 UJ	5.24 UJ	4.67 UJ
trans-1,4-Dichloro-2-butene	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Trichloroethene (Trichloroethylene)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Trichlorofluoromethane (Freon 11)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Vinyl acetate	8260	µg/kg	11.62 U	10.99 U	NA	NA	NA	10.12 U	10.48 U	9.33 U
Vinyl chloride (Chloroethene)	8260	µg/kg	5.81 U	5.49 U	NA	NA	NA	5.06 U	5.24 U	4.67 U
Volatile TICs										
Hexanal	8260	µg/kg	ND	ND	NA	NA	NA	ND	ND	3.1 NJ
Unknown	8260	µg/kg	ND	ND	NA	NA	NA	ND	31.1 NJ	ND
Unknown hydrocarbon	8260	µg/kg	4.9 NJ	ND	NA	NA	NA	ND	ND	ND

Notes:

U - Not Detected - The associated number indicates approximate sample concentration necessary to be detected.
J - Analyte Present - Reported value may not be accurate or precise.
D - Analyte Present - Results reported from diluted analysis.
B - Not Detected - Not detected substantially above the level reported in the laboratory or field blanks.
R - Unusable Results - Analyte may or may not be present in the sampling.
UJ - Not Detected - Quantitation limit may be inaccurate or imprecise.
K - Analyte Present - Reported value may be biased high. Actual value is expected to be lower.
L - Analyte Present - Reported value may be biased low. Actual value is expected to be higher.
N - Consider Present - Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
ND - Denotes none detected.
NA - Denotes not applicable.

TABLE 2-7
SUMMARY OF RFI PHASE II ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU5-1A 0'-0.5' 12/5/2006	SWMU-5-1B 1.5'-2.0' 12/5/2006	SWMU5-2A 0'-0.5' 12/5/2006	SWMU5-2B 1.5'-2.0' 12/5/2006	SWMU5-3A 0'-0.5' 12/6/2006	SWMU5-3B 1.5'-2.0' 12/6/2006	SWMU5-3C 4.0'-6.0' 12/6/2006
General Chemistry										
Moisture (%)	-- [a]	--	--	15.9	15.8	12.4	17.6	10.5 / 10.5 [b]	9.5	12.4
pH	--	--	--	NA [c]	NA	NA	NA	NA / NA	NA	7.26
Metals (mg/kg) [d]										
Arsenic	1.9	0.43	0.026	**95.9 K** [e]	NA	**210 K**	NA	**723 K / 216 J**	NA	**734**
Lead	800	400	--	546	NA	**1,520** [f]	NA	**926** / 786 K	NA	**6,010 L**
Mercury	310 [g]	23 [g]	--	5.66 L	NA	3.02 L	NA	3.63 L / 7.09 L	NA	NA
Pesticides (µg/kg) [h]										
Kepone	510,000	39,000	--	23,000 UJ	6,800 UJ	3,100 UJ	1,100 UJ	16,000 UJ / 230,000 UJ	130 UJ	NA
Semivolatile Organic Compounds (µg/kg)										
1,4-Dioxane	260,000	58,000	26	590 U	590 U	570 U	610 U	560 U / 560 U	550 U	NA
Acenaphthene	61,000,000	4,700,000	100,000	200 U	NA	240 J	NA	190 U / 190 U	NA	NA
Pyrene	31,000,000	2,300,000	680,000	1,300	NA	4,300	NA	1,500 / 2,200	NA	NA
Naphthalene	20,000,000	1,600,000	150	200 U	NA	190 U	NA	190 U / 190 U	NA	NA
Acenaphthylene	--	--	--	200 U	NA	210 J	NA	190 U / 190 U	NA	NA
Fluorene	41,000,000	3,100,000	140,000	200 U	NA	230 J	NA	190 U / 190 U	NA	NA
Phenanthrene	--	--	--	840 J	NA	2,600	NA	810 J / 1,200	NA	NA
Anthracene	310,000,000	23,000,000	470,000	250 J	NA	1,000	NA	250 J / 350 J	NA	NA
Fluoranthene	41,000,000	3,100,000	6,300,000	1,600	NA	5,200	NA	1,900 / 2,900	NA	NA
Benzo(a)anthracene	3,900	220	480	**840 J** [i]	NA	**3,600**	NA	**1,100 / 1,600**	NA	NA
Chrysene	390,000	22,000	48,000	940 J	NA	5,800	NA	1,100 / 1,700	NA	NA
Benzo(b)fluoranthene	3,900	220	1,500	1,100	NA	**4,600**	NA	1,500 / **2,400**	NA	**2,400 J**
Benzo(k)fluoranthene	39,000	2,200	15,000	540 J	NA	1,800	NA	650 J / 920 J	NA	NA
Benzo(a)pyrene	390	22	120	**780 J**	NA	**2,200**	NA	**1,000 / 1,500**	NA	**1,500 J**
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	530 J	NA	1,700	NA	640 J / 1,200	NA	NA
Dibenz(a,h)anthracene	390	22	460	200 U	NA	**530 J**	NA	190 U / 360 J	NA	210 J
Benzo(g,h,i)perylene	--	--	--	460 J	NA	1,300	NA	510 J / 1,000	NA	NA
4-Nitroquinoline-1-oxide	--	--	--	2,000 U	2,000 U	1,900 U	2,000 U	1,900 U / 1,900 U	1,800 U	NA
2-Methylnaphthalene	4,100,000	310,000	4,400	200 U	NA	190 U	NA	190 U / 190 U	NA	NA
Volatile Organic Compounds (µg/kg)										
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	3 U	2 U	2 U	3 U	2 U / 2 U	2 U	NA
Acrolein	510,000	39,000	0.2	30 U	23 U	23 U	28 U	21 U / 19 U	23 U	NA
Acetonitrile	--	--	580	37 U	29 U	29 U	35 U	27 U / 24 U	28 U	NA
Propionitrile	--	--	--	45 U	35 U	34 U	42 U	32 U / 29 U	34 U	NA
Methacrylonitrile	--	--	--	7 U	6 U	6 U	7 U	5 U / 5 U	6 U	NA
Isobutyl Alcohol	310,000,000	23,000,000	12,000	150 U	120 U	110 U	140 U	110 U / 97 U	110 U	NA

CUMMINGS RITER

TABLE 2-7
SUMMARY OF RFI PHASE II ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU5-4A 0'-0.5' 12/5/2006	SWMU5-4B 1.5'-2.0' 12/5/2006	SWMU5-4C 4.0'-6.0' 12/5/2006	SWMU5-5A 0'-0.5' 12/5/2006	SWMU5-5B 2.0'-4.0' 12/5/2006	SWMU5-5C 4.0'-6.0' 12/5/2006	SWMU5-6A 0'-0.5' 12/5/2006	SWMU5-6B 2.0'-4.0' 12/5/2006	SWMU5-6C 4.0'-6.0' 12/5/2006
General Chemistry												
Moisture (%)	-- [a]	--	--	13.3	13.2	15.8	12.6	23.1	22.9	14.3	15.1	25.3
pH	--	--	--	NA	NA	NA	NA	7.39	9.02	NA	8.16	4.22
Metals (mg/kg) [d]												
Arsenic	1.9	0.43	0.026	**857 K**	NA	**148 K**	**443 K**	**398**	**204**	**459 K**	**120**	**135**
Lead	800	400	--	**1,210**	NA	293 L	**1,040**	775 L	**1,250 L**	**834**	458 L	697 L
Mercury	310 [g]	23 [g]	--	11.2 J	NA	0.946	4.32 L	NA	NA	1.58 L	NA	NA
Pesticides (µg/kg) [h]												
Kepone	510,000	39,000	--	30,000 U	1,300 UJ	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (µg/kg)												
1,4-Dioxane	260,000	58,000	26	120 U	580 U	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	61,000,000	4,700,000	100,000	46 J	NA	3,300 J	230	NA	NA	990	NA	NA
Pyrene	31,000,000	2,300,000	680,000	1,200	NA	19,000 J	3,700	NA	NA	17,000	NA	NA
Naphthalene	20,000,000	1,600,000	150	38 U	NA	**580 J**	120 J	NA	NA	**620**	NA	NA
Acenaphthylene	--	--	--	120 J	NA	87 J	150 J	NA	NA	230	NA	NA
Fluorene	41,000,000	3,100,000	140,000	52 J	NA	2,000 J	200	NA	NA	970	NA	NA
Phenanthrene	--	--	--	720	NA	17,000 J	2,200	NA	NA	12,000	NA	NA
Anthracene	310,000,000	23,000,000	470,000	200	NA	4,400 J	680	NA	NA	2,500	NA	NA
Fluoranthene	41,000,000	3,100,000	6,300,000	1,400	NA	24,000 J	2,700	NA	NA	12,000	NA	NA
Benzo(a)anthracene	3,900	220	480	**850**	NA	**10,000 J**	**1,800**	NA	NA	**6,800**	**900 J**	**2,800 J**
Chrysene	390,000	22,000	48,000	870	NA	11,000 J	2,100	NA	NA	6,600	NA	NA
Benzo(b)fluoranthene	3,900	220	1,500	1,200	NA	**11,000 J**	**2,400**	1,500 J	230 J	**7,000**	1,100 J	**3,100 J**
Benzo(k)fluoranthene	39,000	2,200	15,000	580	NA	4,200 J	960	NA	NA	3,400	NA	NA
Benzo(a)pyrene	390	22	120	**770**	NA	**8,300 J**	**1,600**	**830 J**	**130 J**	**5,000**	**850 J**	**2,500 J**
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	730	NA	**6,500 J**	940	NA	NA	3,200	650 J	1,700 J
Dibenz(a,h)anthracene	390	22	460	240	NA	**1,200 J**	330	180 J	43 UJ	**890**	130 J	320 J
Benzo(g,h,i)perylene	--	--	--	610	NA	4,800 J	1,100	NA	NA	3,400	NA	NA
4-Nitroquinoline-1-oxide	--	--	--	380 U	1,900 U	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	4,100,000	310,000	4,400	38 U	NA	210 J	52 J	NA	NA	330	NA	NA
Volatile Organic Compounds (µg/kg)												
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	3 U	2 U	NA	NA	NA	NA	NA	NA	NA
Acrolein	510,000	39,000	0.2	26 U	21 U	NA	NA	NA	NA	NA	NA	NA
Acetonitrile	--	--	580	32 U	27 U	NA	NA	NA	NA	NA	NA	NA
Propionitrile	--	--	--	39 U	32 U	NA	NA	NA	NA	NA	NA	NA
Methacrylonitrile	--	--	--	6 U	5 U	NA	NA	NA	NA	NA	NA	NA
Isobutyl Alcohol	310,000,000	23,000,000	12,000	130 U	110 U	NA	NA	NA	NA	NA	NA	NA

TABLE 2-7
SUMMARY OF RFI PHASE II ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU5-7A 0'-0.5' 12/5/2006	SWMU5-7B 2.0'-4.0' 12/5/2006	SWMU5-8A 0'-0.5' 12/6/2006	SWMU5-8B 2.0'-4.0' 12/6/2006	SWMU5-8C 4.0'-6.0' 12/6/2006	SWMU5-9A 0'-0.5' 12/6/2006	SWMU5-9B 2.0'-4.0' 12/6/2006	SWMU5-9C 4.0'-6.0' 12/6/2006
General Chemistry											
Moisture (%)	-- [a]	--	--	8.7	22.4	10.1	19.5	14.9	12.0	13.2	27.2
pH	--	--	--	NA	9.32	NA	9.00	6.94	NA	7.68	9.26
Metals (mg/kg) [d]											
Arsenic	1.9	0.43	0.026	**291 K**	**6.79**	**235 K**	**62.6**	**83.7**	**89.9 K**	**51.9**	**172**
Lead	800	400	--	769	61.8 L	585	**998 L**	**1,650 L**	290	**1,040 L**	**1,170 L**
Mercury	310 [g]	23 [g]	--	1.97 L	NA	5.12 L	NA	NA	1.94 L	NA	NA
Pesticides (µg/kg) [b]											
Kepone	510,000	39,000	--	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (µg/kg)											
1,4-Dioxane	260,000	58,000	26	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	61,000,000	4,700,000	100,000	43 J	NA	78 J	NA	NA	38 U	NA	NA
Pyrene	31,000,000	2,300,000	680,000	1,100	NA	1,900	NA	NA	300	NA	NA
Naphthalene	20,000,000	1,600,000	150	43 J	NA	37 U	NA	NA	38 U	NA	NA
Acenaphthylene	--	--	--	58 J	NA	50 J	NA	NA	38 U	NA	NA
Fluorene	41,000,000	3,100,000	140,000	40 J	NA	73 J	NA	NA	38 U	NA	NA
Phenanthrene	--	--	--	510	NA	930	NA	NA	110 J	NA	NA
Anthracene	310,000,000	23,000,000	470,000	170 J	NA	290	NA	NA	44 J	NA	NA
Fluoranthene	41,000,000	3,100,000	6,300,000	860	NA	1,500	NA	NA	230	NA	NA
Benzo(a)anthracene	3,900	220	480	**560**	NA	**900**	NA	NA	170 J	NA	NA
Chrysene	390,000	22,000	48,000	620	NA	990	NA	NA	220	NA	NA
Benzo(b)fluoranthene	3,900	220	1,500	810	NA	1,300	NA	NA	250	NA	NA
Benzo(k)fluoranthene	39,000	2,200	15,000	340	NA	400	NA	NA	72 J	NA	NA
Benzo(a)pyrene	390	22	120	**480**	**170 J**	**770**	**44 J**	**330 J**	**150 J**	NA	NA
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	320	NA	580	NA	NA	130 J	NA	NA
Dibenz(a,h)anthracene	390	22	460	120 J	NA	170 J	NA	NA	53 J	NA	NA
Benzo(g,h,i)perylene	--	--	--	380	NA	630	NA	NA	150 J	NA	NA
4-Nitroquinoline-1-oxide	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	4,100,000	310,000	4,400	37 U	NA	37 U	NA	NA	38 U	NA	NA
Volatile Organic Compounds (µg/kg)											
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	510,000	39,000	0.2	NA	NA	NA	NA	NA	NA	NA	NA
Acetonitrile	--	--	580	NA	NA	NA	NA	NA	NA	NA	NA
Propionitrile	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Methacrylonitrile	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA
Isobutyl Alcohol	310,000,000	23,000,000	12,000	NA	NA	NA	NA	NA	NA	NA	NA

CUMMINGS RITER

TABLE 2-7
SUMMARY OF RFI PHASE II ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU5-10A 0'-0.5' 12/6/2006	SWMU5-10B 2.0'-4.0' 12/6/2006	SWMU5-10C 4.0'-6.0' 12/6/2006	SWMU5-11A 0'-0.5' 12/6/2006	SWMU5-11B 2.0'-4.0' 12/6/2006	SWMU5-11C 4.0'-6.0' 12/6/2006	SWMU5-12A 0'-0.5' 12/6/2006	SWMU5-12B 2.0'-4.0' 12/6/2006	SWMU5-12C 4.0'-6.0' 12/6/2006
General Chemistry												
Moisture (%)	-- [a]	--	--	13.0 / 15.2	21.9	17.6	14.9	23.5	20.7	16.7	20.8	30.1
pH	--	--	--	NA / NA	6.33	5.93	NA	4.97	7.42	NA	7.40	9.27
Metals (mg/kg) [d]												
Arsenic	1.9	0.43	0.026	**63.1 L / 28.8 K**	**441**	**22.6**	**110 K**	**483**	**300**	**377 L**	**305**	**124**
Lead	800	400	--	413 / 271	**3,570 L**	328 L	**1,480**	**5,370 L**	**2,110 L**	**14,100**	**3,120 L**	**1,180 L**
Mercury	310 [g]	23 [g]	--	1.17 L / 0.459 L	NA	NA	1.31 L	NA	NA	3.16 L	NA	NA
Pesticides (µg/kg) [h]												
Kepone	510,000	39,000	--	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (µg/kg)												
1,4-Dioxane	260,000	58,000	26	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	61,000,000	4,700,000	100,000	170 J / 39 U	NA	NA	39 U	NA	NA	40 U	NA	NA
Pyrene	31,000,000	2,300,000	680,000	2,400 / 200	NA	NA	640 J	NA	NA	1,400	NA	NA
Naphthalene	20,000,000	1,600,000	150	47 J / 39 U	NA	NA	39 U	NA	NA	66 J	NA	NA
Acenaphthylene	--	--	--	54 J / 39 U	NA	NA	61 J	NA	NA	46 J	NA	NA
Fluorene	41,000,000	3,100,000	140,000	78 J / 39 U	NA	NA	39 U	NA	NA	40 U	NA	NA
Phenanthrene	--	--	--	1,100 / 110 J	NA	NA	270	NA	NA	780	NA	NA
Anthracene	310,000,000	23,000,000	470,000	280 / 39 U	NA	NA	110 J	NA	NA	190 J	NA	NA
Fluoranthene	41,000,000	3,100,000	6,300,000	1,800 / 160 J	NA	NA	470	NA	NA	1,100	NA	NA
Benzo(a)anthracene	3,900	220	480	1,100 / 100 J	NA	NA	380 J	NA	NA	770	NA	NA
Chrysene	390,000	22,000	48,000	1,300 / 130 J	NA	NA	460 J	NA	NA	740	NA	NA
Benzo(b)fluoranthene	3,900	220	1,500	1,400 / 170 J	NA	NA	570	NA	NA	1,100	NA	NA
Benzo(k)fluoranthene	39,000	2,200	15,000	530 / 39 U	NA	NA	160 J	NA	NA	440	NA	NA
Benzo(a)pyrene	390	22	120	**920** / 100 J	**640 J**	40 UJ	**360**	**2,900 J**	**1,500 J**	**720**	**390 J**	54 J
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	570 / 66 J	NA	NA	320	NA	NA	440	NA	NA
Dibenz(a,h)anthracene	390	22	460	190 J / 39 U	NA	NA	92 J	NA	NA	130 J	NA	NA
Benzo(g,h,i)perylene	--	--	--	660 / 98 J	NA	NA	360	NA	NA	530	NA	NA
4-Nitroquinoline-1-oxide	--	--	--	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	4,100,000	310,000	4,400	38 U / 39 U	NA	NA	39 U	NA	NA	44 J	NA	NA
Volatile Organic Compounds (µg/kg)												
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	510,000	39,000	0.2	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetonitrile	--	--	580	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Propionitrile	--	--	--	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Methacrylonitrile	--	--	--	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA
Isobutyl Alcohol	310,000,000	23,000,000	12,000	NA / NA	NA	NA	NA	NA	NA	NA	NA	NA

CUMMINGS RITER

TABLE 2-7
SUMMARY OF RFI PHASE II ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameters / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU5-13A 0'-0.5' 12/6/2006	SWMU5-13B 2.0'-4.0' 12/6/2006	SWMU5-13C 4.0'-6.0' 12/6/2006	SWMU5-14A 0'-0.5' 12/6/2006	SWMU5-14B 2.0'-4.0' 12/6/2006	SWMU5-14C 4.0'-6.0' 12/6/2006	SWMU5-15A 0'-0.5' 12/6/2006	SWMU5-16A 0'-0.5' 12/6/2006	SWMU5-16B 2.0'-4.0' 12/6/2006	SWMU5-16C 4.0'-6.0' 12/6/2006
General Chemistry													
Moisture (%)	-- [a]	--	--	9.5	26.5	19.0	2.5	23.6	14.8	10.8	22.7	15.3	25.1
pH	--	--	--	NA	6.58	6.70	NA	7.78	7.16	NA	NA	11.6	8.84
Metals (mg/kg) [d]													
Arsenic	1.9	0.43	0.026	**29.4 K**	**957**	**849**	**13.0 K**	**25.7**	**22.2**	**74.0 K**	**16.3 J**	**70.6**	**545**
Lead	800	400	--	224	578 L	**845 L**	50.8	139 L	11.2 L	385	246	**860 L**	**2,160 L**
Mercury	310 [g]	23 [g]	--	2.13 L	NA	NA	0.114 L	NA	NA	4.14 L	0.554 L	NA	NA
Pesticides (µg/kg) [h]													
Kepone	510,000	39,000	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds (µg/kg)													
1,4-Dioxane	260,000	58,000	26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	61,000,000	4,700,000	100,000	43 J	NA	NA	34 U	NA	NA	470	43 U	NA	NA
Pyrene	31,000,000	2,300,000	680,000	1,100	NA	NA	89 J	NA	NA	5,900	1,000	NA	NA
Naphthalene	20,000,000	1,600,000	150	37 U	NA	NA	34 U	NA	NA	130 J	43 U	NA	NA
Acenaphthylene	--	--	--	59 J	NA	NA	50 J	NA	NA	180 J	240	NA	NA
Fluorene	41,000,000	3,100,000	140,000	37 U	NA	NA	34 U	NA	NA	360	43 U	NA	NA
Phenanthrene	--	--	--	440	NA	NA	34 U	NA	NA	3,400	80 J	NA	NA
Anthracene	310,000,000	23,000,000	470,000	170 J	NA	NA	50 J	NA	NA	1,000	290	NA	NA
Fluoranthene	41,000,000	3,100,000	6,300,000	770	NA	NA	77 J	NA	NA	3,700	310	NA	NA
Benzo(a)anthracene	3,900	220	480	470	NA	NA	63 J	NA	NA	**2,700 J**	420	NA	NA
Chrysene	390,000	22,000	48,000	550	NA	NA	85 J	NA	NA	2,900 J	780	NA	NA
Benzo(b)fluoranthene	3,900	220	1,500	650	NA	NA	140 J	NA	NA	**3,400**	1,500	NA	NA
Benzo(k)fluoranthene	39,000	2,200	15,000	240	NA	NA	69 J	NA	NA	1,400	360	NA	NA
Benzo(a)pyrene	390	22	120	**390**	450 UJ	410 UJ	72 J	NA	NA	**2,500**	**630**	**460 J**	**3,100 J**
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	300	NA	NA	70 J	NA	NA	1,800	370	NA	NA
Dibenz(a,h)anthracene	390	22	460	83 J	NA	NA	34 U	NA	NA	**560**	150 J	NA	NA
Benzo(g,h,i)perylene	--	--	--	420	NA	NA	93 J	NA	NA	1,900	440	NA	NA
4-Nitroquinoline-1-oxide	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	4,100,000	310,000	4,400	37 U	NA	NA	34 U	NA	NA	63 J	43 U	NA	NA
Volatile Organic Compounds (µg/kg)													
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	510,000	39,000	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetonitrile	--	--	580	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Propionitrile	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methacrylonitrile	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isobutyl Alcohol	310,000,000	23,000,000	12,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2-7
SUMMARY OF RFI PHASE II ANALYTICAL RESULTS
SWMU 5 - FORMER SPAR BUILDING STORAGE AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Notes:

J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.

(a) "--" indicates standard does not currently exist for this parameter.
(b) x/x indicates a duplicate sample was collected at this location.
(c) "NA" indicates the sample was not analyzed for that particular parameter.
(d) "mg/kg" is milligrams per kilogram, or parts per million.
(e) **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**
(f) Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.
(g) Mercuric chloride standards are listed.
(h) "µg/kg" is micrograms per kilogram, or parts per billion.
(i) **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

TABLE 2-8
SUMMARY OF ANALYTICAL RESULTS
SWMU 33 AND SWMU 34
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU33-1A 1.0'-4.0' 12/5/2006	SWMU33-1B 4.0'-6.0' 12/5/2006	SWMU34-1 0.0'-0.5' 12/4/2006	SWMU34-2 0.0'-0.5' 12/4/2006
Moisture (%)		-- [a]	--	--	22.1	17.3	10.9	14.2
Metals (mg/kg) [b]								
Mercury		310 [c]	23 [c]	--	0.0294 B	0.0295 K	0.0146 B	0.279 K
Thallium		72	5.5	3.6	1.71 UL	1.61 UL	7.46 U	7.67 U
Arsenic		1.9	0.43	0.026	**6.52 K [d]**	**4.27 K**	**2.13 L**	**50.6 L**
Selenium		5,100	390	19	1.26 UL	1.18 UL	1.10 U	10.9 K
Antimony		410	31	13	1.16 UL	1.94 L	1.01 UL	2.22 L
Barium		200,000	16,000	6,000	81.6 J	50.2	114	236
Beryllium		2,000	160	1,200	0.828	0.863 J	0.264 J	0.969 J
Cadmium		1,000	78	55	0.0834 UJ	0.579 J	0.365 UL	0.375 UL
Chromium		3,100 [e]	230 [e]	42 [e]	**45.6 K [f]**	33.1 K	**135**	**121**
Cobalt		--	--	--	9.59 L	9.30 L	15.8 K	32.8 K
Copper		41,000	3,100	11,000	15.0 J	13.6 L	127 L	282 L
Lead		800	400	--	14.9 K	8.03	12.9 K	275 K
Nickel		20,000	1,600	--	26.5 L	19.6 K	43.1 L	91.1 L
Silver		5,100	390	31	0.326 L	0.206 U	0.299 L	1.61 L
Tin		610,000	47,000	--	3.87 B	3.39 B	13.8	19.0
Vanadium		1,000	78	730	58.6	37.8	62.9 K	78.0 K
Zinc		310,000	23,000	14,000	52.9	47.9 K	78.1	733
Hexachlorophene (µg/kg) [g]		310,000	23,000	2,000,000	2.6 U	2.4 U	2.2 U	2.3 U
Pesticides (µg/kg)								
Kepone		510,000	39,000	--	3.0 UJ	2.8 UJ	52 UJ	54 UJ
Semivolatile Organic Compounds (µg/kg)								
1,4-Dioxane		260,000	58,000	26	130 U	120 U	110 U	120 U
Phenol		310,000,000	23,000,000	67,000	43 U	40 U	37 U	39 U
2-Chlorophenol		5,100,000	390,000	--	43 U	40 U	37 U	39 U
1,4-Dichlorobenzene		120,000	27,000	7.1	43 U	40 U	37 U	39 U
N-Nitroso-di-n-propylamine		410	91	0.047	43 U	40 U	37 U	39 U
1,2,4-Trichlorobenzene		10,000,000	780,000	2,400	43 U	40 U	37 U	39 U
4-chloro-3-methylphenol		--	--	--	86 U	81 U	75 U	78 U
Acenaphthene		61,000,000	4,700,000	100,000	43 U	40 U	43 J	50 J
4-Nitrophenol		--	--	--	210 U	200 U	190 U	190 U
2,4-Dinitrotoluene		2,000,000	160,000	570	86 U	81 U	75 U	78 U
Pentachlorophenol		24,000	5,300	--	210 U	200 U	190 U	190 U
Pyrene		31,000,000	2,300,000	680,000	43 U	40 U	1,000	930
4-Methylphenol [h]		5,100,000	390,000	--	86 U	81 U	75 U	78 U
2-Nitrophenol		--	--	--	43 U	40 U	37 U	39 U
2,4-Dimethylphenol		20,000,000	1,600,000	6,700	86 U	81 U	75 U	78 U
2,4-Dichlorophenol		3,100,000	230,000	1,200	43 U	40 U	37 U	39 U
2,4,6-Trichlorophenol		260,000	58,000	--	43 U	40 U	37 U	39 U
2,4-Dinitrophenol		2,000,000	160,000	--	860 U	810 U	750 U	780 U
4,6-Dinitro-2-methylphenol		--	--	--	210 U	200 U	190 U	190 U
N-Nitrosodimethylamine		56	3	0.0018	86 U	81 U	75 U	78 U
bis(2-Chloroethyl)ether		2,600	580	0.044	43 U	40 U	37 U	39 U
1,3-Dichlorobenzene		3,100,000	230,000	290	43 U	40 U	37 U	39 U
1,2-Dichlorobenzene		92,000,000	7,000,000	4,600	43 U	40 U	37 U	39 U
bis(2-Chloroisopropyl)ether		41,000	9,100	1.7	43 U	40 U	37 U	39 U
Hexachloroethane		200,000	46,000	360	43 U	40 U	37 U	39 U
Nitrobenzene		510,000	39,000	23	43 U	40 U	37 U	39 U
Isophorone		3,000,000	670,000	410	43 U	40 U	37 U	39 U
bis(2-Chloroethoxy)methane		--	--	--	43 U	40 U	37 U	39 U
Naphthalene		20,000,000	1,600,000	150	43 U	40 U	37 U	39 U
Hexachlorobutadiene		37,000	8,200	1,800	86 U	81 U	75 U	78 U
Hexachlorocyclopentadiene		6,100,000	470,000	1,800,000	210 U	200 U	190 U	190 U
2-Chloronaphthalene		82,000,000	6,300,000	32,000	43 U	40 U	37 U	39 U

CUMMINGS RITER

TABLE 2-8
SUMMARY OF ANALYTICAL RESULTS
SWMU 33 AND SWMU 34
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU33-1A 1.0'-4.0' 12/5/2006	SWMU33-1B 4.0'-6.0' 12/5/2006	SWMU34-1 0.0'-0.5' 12/4/2006	SWMU34-2 0.0'-0.5' 12/4/2006
Semivolatile Organic Compounds (µg/kg)							
Acenaphthylene	--	--	--	43 U	40 U	37 U	39 U
Dimethylphthalate	--	--	--	86 U	81 U	75 U	120 J
2,6-Dinitrotoluene	1,000,000	78,000	250	43 U	40 U	37 U	39 U
Fluorene	41,000,000	3,100,000	140,000	43 U	40 U	37 U	39 U
4-Chlorophenyl-phenylether	--	--	--	43 U	40 U	37 U	39 U
Diethylphthalate	820,000,000	63,000,000	450,000	86 U	81 U	75 U	78 U
N-Nitrosodiphenylamine [(i)]	580,000	130,000	760	43 U	40 U	37 U	39 U
4-Bromophenyl-phenylether	--	--	--	43 U	40 U	37 U	39 U
Hexachlorobenzene	1,800	400	52	43 U	40 U	37 U	39 U
Phenanthrene	--	--	--	43 U	40 U	550	540
Anthracene	310,000,000	23,000,000	470,000	43 U	40 U	81 J	100 J
Di-n-butylphthalate	100,000,000	7,800,000	5,000,000	86 U	81 U	75 U	320
Fluoranthene	41,000,000	3,100,000	6,300,000	43 U	40 U	1,200	1,000
Butylbenzylphthalate	200,000,000	16,000,000	17,000,000	86 U	81 U	75 U	78 U
Benzo(a)anthracene	3,900	220	480	43 U	40 U	**520**	450
Chrysene	390,000	22,000	48,000	43 U	40 U	620	550
3,3'-Dichlorobenzidine	6,400	1,400	4.9	130 U	120 U	110 U	120 U
bis(2-Ethylhexyl)phthalate	200,000	46,000	2,900,000	86 U	81 U	75 U	570
Di-n-octylphthalate	--	--	--	86 U	81 U	75 U	78 U
Benzo(b)fluoranthene	3,900	220	1,500	43 U	40 U	690	630
Benzo(k)fluoranthene	39,000	2,200	15,000	43 U	40 U	300	250
Benzo(a)pyrene	390	22	120	43 U	40 U	**470**	**410**
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	43 U	40 U	350	320
Dibenz(a,h)anthracene	390	22	460	43 U	40 U	98 J	100 J
Benzo(g,h,i)perylene	--	--	--	43 U	40 U	340	330
Acetophenone	100,000,000	7,800,000	3,200	86 U	81 U	75 U	78 U
2-Acetylaminofluorene	--	--	--	86 U	81 U	75 U	78 U
4-Aminobiphenyl	--	--	--	210 U	200 U	190 U	190 U
Aniline	500,000	110,000	140	210 U	200 U	190 U	190 U
Benzyl alcohol	510,000,000	39,000,000	150,000	210 U	200 U	190 U	190 U
Chlorobenzilate	--	--	--	43 U	40 U	37 U	39 U
Diallate TRANS/CIS	--	--	--	43 U	40 U	37 U	39 U
2,6-Dichlorophenol	--	--	--	86 U	81 U	75 U	78 U
Dimethoate	--	--	--	210 U	200 U	190 U	190 U
p-Dimethylaminoazobenzene	--	--	--	86 U	81 U	75 U	78 U
7,12-Dimethylbenz[a]anthracene	--	--	--	43 U	40 U	37 U	39 U
3,3'-Dimethylbenzidine	--	--	--	430 U	400 U	370 U	390 U
1,3-Dinitrobenzene	100,000	7,800	37	86 U	81 U	75 U	78 U
Ethyl methanesulfonate	--	--	--	86 U	81 U	75 U	78 U
Hexachloropropene	--	--	--	130 U	120 U	110 U	120 U
Isodrin	--	--	--	43 U	40 U	37 U	39 U
Isosafrole	--	--	--	86 U	81 U	75 U	78 U
Methapyrilene	--	--	--	2,100 U	2,000 U	1,900 U	1,900 U
3-Methylcholanthrene	--	--	--	86 U	81 U	75 U	78 U
Methyl methanesulfonate	--	--	--	43 U	40 U	37 U	39 U
1,4-Naphthoquinone	--	--	--	1,100 U	1,000 U	940 U	970 U
1-Naphthylamine	--	--	--	210 U	200 U	190 U	190 U
2-Naphthylamine	--	--	--	210 U	200 U	190 U	190 U
4-Nitroquinoline-1-oxide	--	--	--	430 U	400 U	370 U	390 U
N-Nitrosodi-n-butylamine	530	120	0.027	86 U	81 U	75 U	78 U
N-Nitrosodiethylamine	19	1.0	0.00071	86 U	81 U	75 U	78 U
N-Nitrosomethylethylamine	130	29	--	86 U	81 U	75 U	78 U
N-Nitrosomorpholine	--	--	--	86 U	81 U	75 U	78 U
N-Nitrosopiperidine	--	--	--	86 U	81 U	75 U	78 U
N-Nitrosopyrrolidine	1,400	300	--	86 U	81 U	75 U	78 U
5-Nitro-o-toluidine	--	--	--	210 U	200 U	190 U	190 U

CUMMINGS RITER

TABLE 2-8
SUMMARY OF ANALYTICAL RESULTS
SWMU 33 AND SWMU 34
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU33-1A 1.0'-4.0' 12/5/2006	SWMU33-1B 4.0'-6.0' 12/5/2006	SWMU34-1 0.0'-0.5' 12/4/2006	SWMU34-2 0.0'-0.5' 12/4/2006
Semivolatile Organic Compounds (µg/kg)							
Pentachlorobenzene	820,000	63,000	20,000	86 U	81 U	75 U	78 U
Pentachloronitrobenzene	11,000	2,500	82	86 U	81 U	75 U	78 U
Phenacetin	--	--	--	86 U	81 U	75 U	78 U
1,4-Phenylenediamine	190,000,000	15,000,000	--	15,000 U	14,000 U	13,000 U	14,000 U
2-Picoline	--	--	--	130 U	120 U	110 U	120 U
Pronamide	--	--	--	43 U	40 U	37 U	39 U
Pyridine	1,000,000	78,000	--	86 U	81 U	75 U	78 U
Safrole	--	--	--	86 U	81 U	75 U	78 U
1,2,4,5-Tetrachlorobenzene	310,000	23,000	660	86 U	81 U	75 U	78 U
2,3,4,6-Tetrachlorophenol	31,000,000	2,300,000	--	86 U	81 U	75 U	78 U
Tetraethyldithiopyrophosphate	--	--	--	86 U	81 U	75 U	78 U
Thionazin	--	--	--	86 U	81 U	75 U	78 U
o-Toluidine	12,000	2,700	5.7	260 U	240 U	220 U	230 U
O,O,O-Triethylphosphorothioate	--	--	--	86 U	81 U	75 U	78 U
1,3,5-Trinitrobenzene	31,000,000	2,300,000	--	210 U	200 U	190 U	190 U
2-Methylphenol	51,000,000	3,900,000	--	86 U	81 U	75 U	78 U
4-Chloroaniline	4,100,000	310,000	970	86 U	81 U	75 U	78 U
2-Methylnaphthalene	4,100,000	310,000	4,400	43 U	40 U	37 U	39 U
2,4,5-Trichlorophenol	100,000,000	7,800,000	--	86 U	81 U	75 U	78 U
2-Nitroaniline	--	--	--	43 U	40 U	37 U	39 U
3-Nitroaniline	--	--	--	86 U	81 U	75 U	78 U
Dibenzofuran	1,000,000	78,000	--	43 U	40 U	37 U	39 U
4-Nitroaniline	--	--	--	86 U	81 U	75 U	78 U
Volatile Organic Compounds (µg/kg)							
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	2 U	2 U	2 U	2 U
Chloromethane	--	--	930	2 U	2 U	2 U	2 U
Vinyl Chloride	4,000	90	0.12	1 U	1 U	1 U	1 U
Bromomethane	1,400,000	110,000	41	2 U	2 U	2 U	2 U
Chloroethane	990,000	220,000	19	2 U	2 U	2 U	2 U
Trichlorofluoromethane	310,000,000	23,000,000	23,000	2 U	2 U	2 U	2 U
1,1-Dichloroethene	51,000,000	3,900,000	2,900	1 U	1 U	1 U	1 U
Methylene Chloride	380,000	85,000	19	2 U	2 J	2 U	2 U
trans-1,2-Dichloroethene	20,000,000	1,600,000	720	1 U	1 U	1 U	1 U
1,1-Dichloroethane	200,000,000	16,000,000	5,100	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	10,000,000	780,000	--	1 U	1 U	1 U	1 U
Chloroform	10,000,000	780,000	0.91	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	290,000,000	22,000,000	32,000	1 U	1 U	1 U	1 U
Carbon Tetrachloride	22,000	4,900	2.1	1 U	1 U	1 U	1 U
Benzene	52,000	12,000	1.9	0.5 U	0.5 U	0.5 U	0.6 U
1,2-Dichloroethane	31,000	7,000	1.0	1 U	1 U	1 U	1 U
Trichloroethene	7,200	1,600	0.26	1 U	1 U	1 U	1 U
1,2-Dichloropropane	42,000	9,400	2.1	1 U	1 U	1 U	1 U
Dibromomethane	10,000,000	780,000	300	1 U	1 U	1 U	1 U
Bromodichloromethane	46,000	10,000	1.1	1 U	1 U	1 U	1 U
Toluene	82,000,000	6,300,000	27,000	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	50,000	11,000	0.78	1 U	1 U	1 U	1 U
Tetrachloroethene	5,300	1,200	4.7	**6**	**57**	1 U	1 U
Dibromochloromethane	34,000	7,600	0.83	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1,400	320	0.060	1 U	1 U	1 U	1 U
Chlorobenzene	20,000,000	1,600,000	680	1 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane	110,000	25,000	4.0	1 U	1 U	1 U	1 U
Ethylbenzene	100,000,000	7,800,000	15,000	1 U	1 U	9	5 J
Styrene	200,000,000	16,000,000	57,000	1 U	1 U	1 U	1 U
Bromoform	360,000	81,000	67	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	14,000	3,200	0.68	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	1,400	320	0.036	1 U	1 U	1 U	1 U

CUMMINGS RITER

TABLE 2-8
SUMMARY OF ANALYTICAL RESULTS
SWMU 33 AND SWMU 34
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU33-1A 1.0'-4.0' 12/5/2006	SWMU33-1B 4.0'-6.0' 12/5/2006	SWMU34-1 0.0'-0.5' 12/4/2006	SWMU34-2 0.0'-0.5' 12/4/2006
Volatile Organic Compounds (µg/kg)								
1,2-Dibromo-3-chloropropane		3,600	200	0.0037	2 U	2 U	2 U	2 U
Acetone		920,000,000	70,000,000	22,000	8 U	7 U	9 J	60
Carbon Disulfide		100,000,000	7,800,000	19,000	1 U	1 U	1 U	3 J
2-Butanone		610,000,000	47,000,000	29,000	4 U	4 U	4 U	6 J
trans-1,3-Dichloropropene		--	--	--	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		--	--	--	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone		--	--	59,000	3 U	3 U	3 U	3 U
2-Hexanone		--	--	--	3 U	3 U	3 U	3 U
Xylene (total)		200,000,000	16,000,000	3,000	1 U	1 U	51	35
Acrolein		510,000	39,000	0.2	22 U	20 U	22 U	23 U
Acrylonitrile		5,300	1,200	0.15	4 U	4 U	4 U	5 U
Methyl Iodide		--	--	--	3 U	3 U	3 U	3 U
Acetonitrile		--	--	580	27 U	25 U	27 U	29 U
Allyl Chloride		--	--	--	1 U	1 U	1 U	1 U
Vinyl Acetate		1,000,000,000	78,000,000	1,700	2 U	2 U	2 U	2 U
2-Chloro-1,3-butadiene		20,000,000	1,600,000	120	1 U	1 U	1 U	1 U
Propionitrile		--	--	--	33 U	30 U	33 U	35 U
Methacrylonitrile		--	--	--	5 U	5 U	5 U	6 U
Isobutyl Alcohol		310,000,000	23,000,000	12,000	110 U	100 U	110 U	120 U
Methyl Methacrylate		1,400,000,000	110,000,000	6,500	1 U	1 U	1 U	1 U
1,4-Dioxane		260,000	58,000	26	76 U	70 U	77 U	81 U
Ethyl Methacrylate		--	--	--	1 U	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene		--	--	--	11 U	10 U	11 U	12 U
Pentachloroethane		--	--	--	1 U	1 U	1 U	1 U
Polychlorinated Biphenyls (µg/kg)								
PCB-1016		41,000	5,500	4,200	NA [j]	NA	3.7 U	38 U
PCB-1221		1,400	320	--	NA	NA	5.8 U	61 U
PCB-1232		1,400	320	--	NA	NA	3.7 U	38 U
PCB-1242		1,400	320	--	NA	NA	3.7 U	38 U
PCB-1248		1,400	320	--	NA	NA	3.7 U	38 U
PCB-1254		1,400	320	1,100	NA	NA	3.7 U	38 U
PCB-1260		1,400	320	--	NA	NA	130	1,500 [k]

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.

(a) "--" indicates standard does not currently exist for this parameter.

(b) "mg/kg" is milligrams per kilogram, or parts per million.

(c) Mercuric chloride standards are listed.

(d) **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**

(e) Chromium VI standards are listed.

(f) **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

(g) "µg/kg" is micrograms per kilogram, or parts per billion.

(h) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(i) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamine.

(j) "NA" indicates the sample was not analyzed for that particular parameter.

(k) Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.

CUMMINGS RITER

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS
SWMU 35 - FORMER HAZARDOUS WASTE STORAGE PAD
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU35-1 0.0'-0.5' 12/5/2006	SWMU35-2 0.0'-0.5' 12/5/2006	SWMU35-3 0.0'-0.5' 12/5/2006	SWMU35-4 0.0'-0.5' 12/5/2006
Moisture (%)	-- [a]	--	--	6.8	24.3	6.5 / 14.0 [b]	5.5
Metals (mg/kg) [c]							
Mercury	310 [d]	23 [d]	--	0.767 K	2.26 K	1.28 K / 1.38	0.0630 K
Thallium	72	5.5	3.6	6.86 U	8.70 U	7.04 U / 7.44 UR	2.25
Arsenic	1.9	0.43	0.026	**46.2 L [e]**	**22.9 L**	**11.8 L / 17.6 L**	**9.69 L**
Selenium	5,100	390	19	13.0 L	6.40 UL	6.06 L / 5.47 UL	1.04 U
Antimony	410	31	13	5.14 L	7.00 L	7.23 J / 5.05 UL	0.956 UL
Barium	200,000	16,000	6,000	262	272	276 / 539	305
Beryllium	2,000	160	1,200	0.918 J	0.595 J	0.847 J / 0.794 J	0.620 J
Cadmium	1,000	78	55	0.335 UL	0.425 UL	0.344 UL / 1.39 J	0.0688 UL
Chromium	3,100 [f]	230 [f]	42 [f]	**75.4 [g]**	**67.7**	**68.0 / 85.4**	**63.8**
Cobalt	--	--	--	20.9 K	13.5 K	14.1 K / 19.8	16.6 K
Copper	41,000	3,100	11,000	185	59.6	73.5 / 98.0 K	57.3 L
Lead	800	400	--	157	117	124 / 137	25.5 K
Nickel	20,000	1,600	--	42.3	42.7	40.4 / 47.2	40.9 L
Silver	5,100	390	31	0.877 U	3.24 J	0.900 U / 1.03 J	0.673 L
Tin	610,000	47,000	--	13.1 J	5.00 B	5.44 B / 7.21 B	3.18 B
Vanadium	1,000	78	730	69.0 J	95.2 J	68.7 J / 84.1 L	74.3 K
Zinc	310,000	23,000	14,000	310	173	131 / 200	283
Hexachlorophene (µg/kg) [h]	310,000	23,000	2,000,000	2.1 U	2.6 U	2.1 U / 2.3 UJ	2.1 U
Pesticides (µg/kg)							
Kepone	510,000	39,000	--	120 UJ	170 UJ	120 UJ / 160 UJ	49 UJ
Semivolatile Organic Compounds (µg/kg)							
1,4-Dioxane	260,000	58,000	26	110 U	130 U	110 U / 120 U	110 U
Phenol	310,000,000	23,000,000	67,000	36 U	44 U	36 U / 39 U	35 U
2-Chlorophenol	5,100,000	390,000	--	36 U	44 U	36 U / 39 U	35 U
1,4-Dichlorobenzene	120,000	27,000	7.1	36 U	44 U	36 U / 39 U	35 U
N-Nitroso-di-n-propylamine	410	91	0.047	36 U	44 U	36 U / 39 U	35 U
1,2,4-Trichlorobenzene	10,000,000	780,000	2,400	36 U	44 U	36 U / 39 U	35 U
4-chloro-3-methylphenol	--	--	--	72 U	88 U	71 U / 78 U	71 U
Acenaphthene	61,000,000	4,700,000	100,000	50 J	150 J	140 J / 160 J	63 J
4-Nitrophenol	--	--	--	180 U	220 U	180 U / 190 U	180 U
2,4-Dinitrotoluene	2,000,000	160,000	570	72 U	88 U	71 U / 78 U	71 U
Pentachlorophenol	24,000	5,300	--	180 U	220 U	180 U / 190 U	180 U
Pyrene	31,000,000	2,300,000	680,000	860	6,100	4,000 / 4,000	2,900
4-Methylphenol [i]	5,100,000	390,000	--	72 U	88 U	71 U / 78 U	71 U
2-Nitrophenol	--	--	--	36 U	44 U	36 U / 39 U	35 U
2,4-Dimethylphenol	20,000,000	1,600,000	6,700	72 U	88 U	71 U / 78 U	71 U
2,4-Dichlorophenol	3,100,000	230,000	1,200	36 U	44 U	36 U / 39 U	35 U
2,4,6-Trichlorophenol	260,000	58,000	--	36 U	44 U	36 U / 39 U	35 U
2,4-Dinitrophenol	2,000,000	160,000	--	720 U	880 U	710 U / 780 U	710 U
4,6-Dinitro-2-methylphenol	--	--	--	180 U	220 U	180 U / 190 U	180 U
N-Nitrosodimethylamine	56	3	0.0018	72 U	88 U	71 U / 78 U	71 U
bis(2-Chloroethyl)ether	2,600	580	0.044	36 U	44 U	36 U / 39 U	35 U
1,3-Dichlorobenzene	3,100,000	230,000	290	36 U	44 U	36 U / 39 U	35 U
1,2-Dichlorobenzene	92,000,000	7,000,000	4,600	36 U	44 U	36 U / 39 U	35 U
bis(2-Chloroisopropyl)ether	41,000	9,100	1.7	36 U	44 U	36 U / 39 U	35 U
Hexachloroethane	200,000	46,000	360	36 U	44 U	36 U / 39 U	35 U
Nitrobenzene	510,000	39,000	23	36 U	44 U	36 U / 39 U	35 U
Isophorone	3,000,000	670,000	410	36 U	44 U	36 U / 39 U	35 U
bis(2-Chloroethoxy)methane	--	--	--	36 U	44 U	36 U / 39 U	35 U
Naphthalene	20,000,000	1,600,000	150	36 U	89 J	36 U / 39 U	35 U
Hexachlorobutadiene	37,000	8,200	1,800	72 U	88 U	71 U / 78 U	71 U
Hexachlorocyclopentadiene	6,100,000	470,000	1,800,000	180 U	220 U	180 U / 190 U	180 U
2-Chloronaphthalene	82,000,000	6,300,000	32,000	36 U	44 U	36 U / 39 U	35 U
Acenaphthylene	--	--	--	36 U	63 J	42 J / 39 U	35 U
Dimethylphthalate	--	--	--	72 U	88 U	71 U / 78 U	71 U
2,6-Dinitrotoluene	1,000,000	78,000	250	36 U	44 U	36 U / 39 U	35 U
Fluorene	41,000,000	3,100,000	140,000	36 U	80 J	74 J / 98 J	61 J
4-Chlorophenyl-phenylether	--	--	--	36 U	44 U	36 U / 39 U	35 U
Diethylphthalate	820,000,000	63,000,000	450,000	72 U	88 U	71 U / 78 U	71 U
N-Nitrosodiphenylamine [j]	580,000	130,000	760	36 U	44 U	36 U / 39 U	35 U
4-Bromophenyl-phenylether	--	--	--	36 U	44 U	36 U / 39 U	35 U

CUMMINGS RITER

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS
SWMU 35 - FORMER HAZARDOUS WASTE STORAGE PAD
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU35-1 0.0'-0.5' 12/5/2006	SWMU35-2 0.0'-0.5' 12/5/2006	SWMU35-3 0.0'-0.5' 12/5/2006	SWMU35-4 0.0'-0.5' 12/5/2006
Semivolatile Organic Compounds (µg/kg)								
Hexachlorobenzene		1,800	400	52	36 U	44 U	36 U / 39 U	35 U
Phenanthrene		--	--	--	390	1,300	1,100 / 1,300	1,800
Anthracene		310,000,000	23,000,000	470,000	100 J	480	340 / 360	140 J
Di-n-butylphthalate		100,000,000	7,800,000	5,000,000	72 U	88 U	81 J / 78 U	71 U
Fluoranthene		41,000,000	3,100,000	6,300,000	940	7,300	4,000 / 4,200	3,600
Butylbenzylphthalate		200,000,000	16,000,000	17,000,000	72 U	88 U	71 U / 78 U	71 U
Benzo(a)anthracene		3,900	220	480	**500**	**4,700**	**2,500 / 2,400**	**1,100**
Chrysene		390,000	22,000	48,000	540	4,300	2,400 / 2,400	1,800
3,3'-Dichlorobenzidine		6,400	1,400	4.9	110 U	130 U	110 U / 120 U	110 U
bis(2-Ethylhexyl)phthalate		200,000	46,000	2,900,000	280 J	2,700	2,400 / 2,800	71 U
Di-n-octylphthalate		--	--	--	72 U	88 U	71 U / 78 U	71 U
Benzo(b)fluoranthene		3,900	220	1,500	720	**6,000**	**3,000 / 3,100**	**1,900**
Benzo(k)fluoranthene		39,000	2,200	15,000	260	2,100	1,200 / 1,300	730
Benzo(a)pyrene		390	22	120	**520**	**4,800**	**2,400 / 2,400**	**1,200**
Indeno(1,2,3-cd)pyrene		3,900	220	4,200	400	3,300	1,500 / 1,400	880
Dibenz(a,h)anthracene		390	22	460	110 J	**860**	420 [k] / 390	240
Benzo(g,h,i)perylene		--	--	--	380	3,100	1,300 / 1,200	770
Acetophenone		100,000,000	7,800,000	3,200	72 U	88 U	71 U / 78 U	71 U
2-Acetylaminofluorene		--	--	--	72 U	88 U	71 U / 78 U	71 U
4-Aminobiphenyl		--	--	--	180 U	220 U	180 U / 190 U	180 U
Aniline		500,000	110,000	140	180 U	220 U	180 U / 190 U	180 U
Benzyl alcohol		510,000,000	39,000,000	150,000	180 U	220 U	180 U / 190 U	180 U
Chlorobenzilate		--	--	--	36 U	44 U	36 U / 39 U	35 U
Diallate TRANS/CIS		--	--	--	36 U	44 U	36 U / 39 U	35 U
2,6-Dichlorophenol		--	--	--	72 U	88 U	71 U / 78 U	71 U
Dimethoate		--	--	--	180 U	220 U	180 U / 190 U	180 U
p-Dimethylaminoazobenzene		--	--	--	72 U	88 U	71 U / 78 U	71 U
7,12-Dimethylbenz[a]anthracene		--	--	--	36 U	59 J	36 U / 68 J	41 J
3,3'-Dimethylbenzidine		--	--	--	360 U	440 U	360 U / 390 U	350 U
1,3-Dinitrobenzene		100,000	7,800	37	72 U	88 U	71 U / 78 U	71 U
Ethyl methanesulfonate		--	--	--	72 U	88 U	71 U / 78 U	71 U
Hexachloropropene		--	--	--	110 U	130 U	110 U / 120 U	110 U
Isodrin		--	--	--	36 U	44 U	36 U / 39 U	35 U
Isosafrole		--	--	--	72 U	88 U	71 U / 78 U	71 U
Methapyrilene		--	--	--	1,800 U	2,200 U	1,800 U / 1,900 U	1,800 U
3-Methylcholanthrene		--	--	--	72 U	90 J	71 U / 78 U	71 U
Methyl methanesulfonate		--	--	--	36 U	44 U	36 U / 39 U	35 U
1,4-Naphthoquinone		--	--	--	890 U	1,100 U	890 U / 970 U	880 U
1-Naphthylamine		--	--	--	180 U	220 U	180 U / 190 U	180 U
2-Naphthylamine		--	--	--	180 U	220 U	180 U / 190 U	180 U
4-Nitroquinoline-1-oxide		--	--	--	630 J	440 U	360 U / 390 U	350 U
N-Nitrosodi-n-butylamine		530	120	0.027	72 U	88 U	71 U / 78 U	71 U
N-Nitrosodiethylamine		19	1.0	0.00071	72 U	88 U	71 U / 78 U	71 U
N-Nitrosomethylethylamine		130	29	--	72 U	88 U	71 U / 78 U	71 U
N-Nitrosomorpholine		--	--	--	72 U	88 U	71 U / 78 U	71 U
N-Nitrosopiperidine		--	--	--	72 U	88 U	71 U / 78 U	71 U
N-Nitrosopyrrolidine		1,400	300	--	72 U	88 U	71 U / 78 U	71 U
5-Nitro-o-toluidine		--	--	--	180 U	220 U	180 U / 190 U	180 U
Pentachlorobenzene		820,000	63,000	20,000	72 U	88 U	71 U / 78 U	71 U
Pentachloronitrobenzene		11,000	2,500	82	72 U	88 U	71 U / 78 U	71 U
Phenacetin		--	--	--	72 U	88 U	71 U / 78 U	71 U
1,4-Phenylenediamine		190,000,000	15,000,000	--	13,000 U	15,000 U	12,000 U / 14,000 U	12,000 U
2-Picoline		--	--	--	110 U	130 U	110 U / 120 U	110 U
Pronamide		--	--	--	36 U	44 U	36 U / 39 U	35 U
Pyridine		1,000,000	78,000	--	72 U	88 U	71 U / 78 U	71 U
Safrole		--	--	--	72 U	88 U	71 U / 78 U	71 U
1,2,4,5-Tetrachlorobenzene		310,000	23,000	660	72 U	88 U	71 U / 78 U	71 U
2,3,4,6-Tetrachlorophenol		31,000,000	2,300,000	--	72 U	88 U	71 U / 78 U	71 U
Tetraethyldithiopyrophosphate		--	--	--	72 U	88 U	71 U / 78 U	71 U
Thionazin		--	--	--	72 U	88 U	71 U / 78 U	71 U
o-Toluidine		12,000	2,700	5.7	210 U	260 U	210 U / 230 U	210 U
O,O,O-Triethylphosphorothioate		--	--	--	72 U	88 U	71 U / 78 U	71 U
1,3,5-Trinitrobenzene		31,000,000	2,300,000	--	180 U	220 U	180 U / 190 U	180 U
2-Methylphenol		51,000,000	3,900,000	--	72 U	88 U	71 U / 78 U	71 U

CUMMINGS RITER

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS
SWMU 35 - FORMER HAZARDOUS WASTE STORAGE PAD
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU35-1 0.0'-0.5' 12/5/2006	SWMU35-2 0.0'-0.5' 12/5/2006	SWMU35-3 0.0'-0.5' 12/5/2006	SWMU35-4 0.0'-0.5' 12/5/2006
Semivolatile Organic Compounds (µg/kg)							
4-Chloroaniline	4,100,000	310,000	970	72 U	88 U	71 U / 78 U	71 U
2-Methylnaphthalene	4,100,000	310,000	4,400	36 U	44 U	36 U / 39 U	35 U
2,4,5-Trichlorophenol	100,000,000	7,800,000	--	72 U	88 U	71 U / 78 U	71 U
2-Nitroaniline	--	--	--	36 U	44 U	36 U / 39 U	35 U
3-Nitroaniline	--	--	--	72 U	88 U	71 U / 78 U	71 U
Dibenzofuran	1,000,000	78,000	--	36 U	65 J	37 J / 49 J	35 U
4-Nitroaniline	--	--	--	72 U	88 U	71 U / 78 U	71 U
Volatile Organic Compounds (ug/kg)							
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	2 U	2 U	2 U / 2 U	2 U
Chloromethane	--	--	930	2 U	2 U	2 U / 2 U	2 U
Vinyl Chloride	4,000	90	0.12	1 U	1 U	1 U / 1 U	1 U
Bromomethane	1,400,000	110,000	41	2 U	2 U	2 U / 2 U	2 U
Chloroethane	990,000	220,000	19	2 U	2 U	2 U / 2 U	2 U
Trichlorofluoromethane	310,000,000	23,000,000	23,000	2 U	2 U	2 U / 2 U	2 U
1,1-Dichloroethene	51,000,000	3,900,000	2,900	1 U	1 U	1 U / 1 U	1 U
Methylene Chloride	380,000	85,000	19	2 U	2 U	2 U / 2 U	2 U
trans-1,2-Dichloroethene	20,000,000	1,600,000	720	1 U	1 U	1 U / 1 U	1 U
1,1-Dichloroethane	200,000,000	16,000,000	5,100	1 U	1 U	1 U / 1 U	1 U
cis-1,2-Dichloroethene	10,000,000	780,000	--	1 U	1 U	1 U / 1 U	1 U
Chloroform	10,000,000	780,000	0.91	1 U	1 U	1 U / 1 U	1 U
1,1,1-Trichloroethane	290,000,000	22,000,000	32,000	1 U	1 U	1 U / 1 U	1 U
Carbon Tetrachloride	22,000	4,900	2.1	1 U	1 U	1 U / 1 U	1 U
Benzene	52,000	12,000	1.9	0.7 J	0.7 J	0.6 U / 0.6 J	0.5 U
1,2-Dichloroethane	31,000	7,000	1.0	1 U	1 U	1 U / 1 U	1 U
Trichloroethene	7,200	1,600	0.26	1 U	1 U	1 U / 1 U	1 U
1,2-Dichloropropane	42,000	9,400	2.1	1 U	1 U	1 U / 1 U	1 U
Dibromomethane	10,000,000	780,000	300	1 U	1 U	1 U / 1 U	1 U
Bromodichloromethane	46,000	10,000	1.1	1 U	1 U	1 U / 1 U	1 U
Toluene	82,000,000	6,300,000	27,000	1 U	1 U	1 U / 1 U	1 U
1,1,2-Trichloroethane	50,000	11,000	0.78	1 U	1 U	1 U / 1 U	1 U
Tetrachloroethene	5,300	1,200	4.7	1 U	1 U	1 U / 1 U	1 U
Dibromochloromethane	34,000	7,600	0.83	1 U	1 U	1 U / 1 U	1 U
1,2-Dibromoethane	1,400	320	0.060	1 U	1 U	1 U / 1 U	1 U
Chlorobenzene	20,000,000	1,600,000	680	1 U	1 U	1 U / 1 U	1 U
1,1,1,2-Tetrachloroethane	110,000	25,000	4.0	1 U	1 U	1 U / 1 U	1 U
Ethylbenzene	100,000,000	7,800,000	15,000	1 U	1 U	1 U / 1 U	1 U
Styrene	200,000,000	16,000,000	57,000	1 U	1 U	1 U / 1 U	1 U
Bromoform	360,000	81,000	67	1 U	1 U	1 U / 1 U	1 U
1,1,2,2-Tetrachloroethane	14,000	3,200	0.68	1 U	1 U	1 U / 1 U	1 U
1,2,3-Trichloropropane	1,400	320	0.036	1 U	1 U	1 U / 1 U	1 U
1,2-Dibromo-3-chloropropane	3,600	200	0.0037	2 U	2 U	2 U / 2 U	2 U
Acetone	920,000,000	70,000,000	22,000	21 J	26	70 / 20 J	29
Carbon Disulfide	100,000,000	7,800,000	19,000	1 U	2 J	2 J / 1 J	2 J
2-Butanone	610,000,000	47,000,000	29,000	4 U	4 J	13 J / 5 U	4 U
trans-1,3-Dichloropropene	--	--	--	1 U	1 U	1 U / 1 U	1 U
cis-1,3-Dichloropropene	--	--	--	1 U	1 U	1 U / 1 U	1 U
4-Methyl-2-pentanone	--	--	59,000	3 U	3 U	3 U / 3 U	3 U
2-Hexanone	--	--	--	3 U	3 U	3 U / 3 U	3 U
Xylene (total)	200,000,000	16,000,000	3,000	1 U	1 U	1 U / 1 U	1 U
Acrolein	510,000	39,000	0.2	22 U	20 U	23 U / 23 U	21 U
Acrylonitrile	5,300	1,200	0.15	4 U	4 U	5 U / 5 U	4 U
Methyl Iodide	--	--	--	3 U	3 U	3 U / 3 U	3 U
Acetonitrile	--	--	580	28 U	26 U	29 U / 29 U	26 U
Allyl Chloride	--	--	--	1 U	1 U	1 U / 1 U	1 U
Vinyl Acetate	1,000,000,000	78,000,000	1,700	2 U	2 U	2 U / 2 U	2 U
2-Chloro-1,3-butadiene	20,000,000	1,600,000	120	1 U	1 U	1 U / 1 U	1 U
Propionitrile	--	--	--	33 U	31 U	35 U / 35 U	31 U
Methacrylonitrile	--	--	--	6 U	5 U	6 U / 6 U	5 U
Isobutyl Alcohol	310,000,000	23,000,000	12,000	110 U	100 U	120 U / 120 U	100 U
Methyl Methacrylate	1,400,000,000	110,000,000	6,500	1 U	1 U	1 U / 1 U	1 U
1,4-Dioxane	260,000	58,000	26	78 U	71 U	81 U / 81 U	73 U
Ethyl Methacrylate	--	--	--	1 U	1 U	1 U / 1 U	1 U
trans-1,4-Dichloro-2-butene	--	--	--	11 U	10 U	12 U / 12 U	10 U
Pentachloroethane	--	--	--	1 U	1 U	1 U / 1 U	1 U

CUMMINGS RITER

TABLE 2-9
SUMMARY OF ANALYTICAL RESULTS
SWMU 35 - FORMER HAZARDOUS WASTE STORAGE PAD
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID Depth Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU35-1 0.0'-0.5' 12/5/2006	SWMU35-2 0.0'-0.5' 12/5/2006	SWMU35-3 0.0'-0.5' 12/5/2006	SWMU35-4 0.0'-0.5' 12/5/2006
Polychlorinated Biphenyls (µg/kg)								
PCB-1016		41,000	5,500	4,200	35 U	220 U	180 U / 77 U	3.5 U
PCB-1221		1,400	320	--	56 U	340 U	280 U / 120 U	5.5 U
PCB-1232		1,400	320	--	35 U	220 U	180 U / 77 U	3.5 U
PCB-1242		1,400	320	--	35 U	220 U	180 U / 77 U	3.5 U
PCB-1248		1,400	320	--	35 U	220 U	180 U / 77 U	3.5 U
PCB-1254		1,400	320	1,100	300	**8,100**	**5,700 / 2,400**	23
PCB-1260		1,400	320	--	110 J	220 U	1,200 / 670	41

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.
UR - Result is unusable. The analyte may or may not be present in the sample.

(a) "--" indicates standard does not currently exist for this parameter.

(b) x/x indicates a duplicate sample was collected at this location.

(c) "mg/kg" is milligrams per kilogram, or parts per million.

(d) Mercuric chloride standards are listed.

(e) **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**

(f) Chromium VI standards are listed.

(g) **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

(h) "µg/kg" is micrograms per kilogram, or parts per billion.

(i) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(j) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamine.

(k) Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.

CUMMINGS RITER

TABLE 2-10
SUMMARY OF ANALYTICAL RESULTS
SWMU 36 - FORMER DEBRIS STAGING AREA / ALUM PLANT AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	SWMU36-1 0.0'-0.5' 12/5/2006	SWMU36-2 0.0'-0.5' 12/5/2006	SWMU36-3 0.0'-0.5' 12/5/2006	SWMU36-4 0.0'-0.5' 12/5/2006	SWMU36-5 0.0'-0.5' 12/5/2006	SWMU36-6 0.0'-0.5' 12/5/2006	SWMU36-7 0.0'-0.5' 12/5/2006	SWMU36-8 0.0'-0.5' 12/5/2006
Moisture (%)		-- [a]	--	--	7.7	24.5	14.9	14.1	19.0	12.8	13.6	15.0
pH		--	--	--	7.38	6.82	5.92	6.94	5.20	7.48	8.08	7.60
Metals (mg/kg) [b]												
Mercury		310 [c]	23 [c]	--	0.0708 K	1.89 K	0.333 K	0.0623 K	0.898 K	0.0660 K	0.0543 K	0.209 K
Thallium		72	5.5	3.6	1.43 U	8.72 U	7.74 UL	1.58 L	7.89 UL	7.55 UJ	7.47 UJ	7.75 UJ
Arsenic		1.9	0.43	0.026	**7.59 L [d]**	**13.3 L**	**10.6 K**	**3.21 K**	**20.8 K**	**14.1 K**	**11.3 K**	**6.81 K**
Selenium		5,100	390	19	1.05 U	3.73 K	1.14 UL	1.13 UL	9.55 L	1.11 UL	1.10 UL	1.14 UL
Antimony		410	31	13	0.969 UL	3.00 L	1.98 L	1.04 UL	4.40 L	2.38 L	2.69 L	2.38 L
Barium		200,000	16,000	6,000	41.7	231	208 J	185 J	1,090 J	736 J	1,220 J	769 J
Beryllium		2,000	160	1,200	0.231 J	0.707 J	0.286 J	1.09	0.858	0.660	0.780	0.911
Cadmium		1,000	78	55	0.0697 UL	0.911 L	0.158 J	0.0749 UJ	0.0772 UJ	0.143 J	0.317 J	0.171 J
Chromium		3,100 [e]	230 [e]	42 [e]	24.3	**146 [f]**	25.0 K	**52.4 K**	**43.7 K**	21.9 K	17.4 K	**44.6 K**
Cobalt		--	--	--	3.83 K	18.2 K	6.28 L	16.8 L	6.19 L	8.57 L	6.07 L	10.1 L
Copper		41,000	3,100	11,000	20.4 L	166 L	71.5 J	41.7 J	201 J	153 J	138 J	112 J
Lead		800	400	--	49.7 K	327 K	150 J	27.3 K	343 K	306 K	276 K	341 K
Nickel		20,000	1,600	--	7.17 L	110 L	13.9 L	32.9 L	19.9 L	12.7 L	9.85 L	21.7 L
Silver		5,100	390	31	0.182 UL	0.972 L	0.615 L	0.501 L	1.12 L	0.946 L	0.920 L	1.10 L
Tin		610,000	47,000	--	3.22 B	20.2	8.24 B	4.46 B	20.0 K	11.1 B	9.84 B	10.4 B
Vanadium		1,000	78	730	40.1 K	80.6 K	20.8	68.9	28.2	26.3	19.9	43.6
Zinc		310,000	23,000	14,000	45.5	369	152	79.1	273	438	396	397

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.

[a] "--" indicates standard does not currently exist for this parameter.

[b] "mg/kg" is milligrams per kilogram, or parts per million.

[c] Mercuric chloride standards are listed.

[d] **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration for Industrial Soil.**

[e] Chromium VI standards are listed.

[f] **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

CUMMINGS RITER

TABLE 2-11
SUMMARY OF ANALYTICAL RESULTS
AOC 5 - FORMER SULFUR STORAGE TANK SPILL
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC5-1 0.0'-0.5' 12/4/2006	AOC5-2 0.0'-0.5' 12/4/2006	AOC5-3 0.0'-0.5' 12/4/2006	AOC5-4 0.0'-0.5' 12/4/2006	AOC5-5 0.0'-0.5' 12/4/2006	AOC5-6 0.0'-0.5' 12/4/2006
Moisture (%)	-- [a]	--	--	7.6	9.4	11.5	9.5	8.5	9.4
pH	--	--	--	2.46	2.34	2.63	2.35	3.21	3.25
Metals (mg/kg) [b]									
Mercury	310 [c]	23 [c]	--	0.0113 U	0.0340 K	0.0675 K	0.0207 B	0.0615 K	0.345 K
Thallium	72	5.5	3.6	1.43 U	1.45 U	1.55 J	1.47 U	2.17	2.50
Arsenic	1.9	0.43	0.026	**2.25 L** [d]	**2.49 L**	**4.76 L**	**2.79 L**	**28.8 L**	**3.72 L**
Selenium	5,100	390	19	1.05 U	1.07 U	1.07 U	1.08 U	4.48 K	1.07 U
Antimony	410	31	13	0.968 UL	0.987 UL	0.991 UL	0.998 UL	0.968 UL	0.987 UL
Barium	200,000	16,000	6,000	12.6	18.6	37.1	12.0	190	346
Beryllium	2,000	160	1,200	0.0729 UJ	0.242 J	0.139 B	0.243 J	0.116 B	0.155 B
Cadmium	1,000	78	55	0.0696 UL	0.0710 UL	0.357 UL	0.0718 UL	0.0696 UL	0.0710 UL
Chromium	3,100 [e]	230 [e]	42 [e]	3.81	7.84	18.1	7.82	22.5	**54.1** [f]
Cobalt	--	--	--	1.15 K	2.25 K	9.20 K	2.52 K	16.6 K	13.3 K
Copper	41,000	3,100	11,000	9.02 L	6.06 L	69.3 L	9.77 L	115 L	71.6 L
Lead	800	400	--	1.75 B	4.77 K	7.60 K	8.32 K	55.9 K	12.3 K
Nickel	20,000	1,600	--	1.47 L	3.87 L	20.9 L	3.66 L	12.8 L	28.4 L
Silver	5,100	390	31	0.182 UL	0.186 UL	0.206 L	0.188 UL	0.971 L	0.681 L
Tin	610,000	47,000	--	2.18 B	2.34 B	4.16 B	2.60 B	3.12 B	1.62 B
Vanadium	1,000	78	730	53.1 K	15.9 K	64.1 K	33.6 K	150 K	92.3 K
Zinc	310,000	23,000	14,000	11.2	13.2	34.1	18.3	82.1	72.6

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.

[a] "--" indicates standard does not currently exist for this parameter.

[b] "mg/kg" is milligrams per kilogram, or parts per million.

[c] Mercuric chloride standards are listed.

[d] **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration for Industrial Soil.**

[e] Chromium VI standards are listed.

[f] **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

CUMMINGS RITER

TABLE 2-12
SUMMARY OF ANALYTICAL RESULTS
AOC 6 - FORMER ABOVEGROUND FUEL STORAGE TANK A
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC6-1A 0.0'-0.5' 12/12/2006	AOC6-1B 0.5'-1.0' 12/12/2006	AOC6-2A 0.0'-0.5' 12/12/2006	AOC6-2B 0.5'-1.0' 12/12/2006
Moisture (%)		-- [a]	--	--	19.6	18.5	19.8	21.2
Metals (mg/kg) [b]								
Mercury		310 [c]	23 [c]	--	0.0734 L	0.0279 B	0.0347 B	0.0331 B
Thallium		72	5.5	3.6	2.35 J	1.57 UJ	2.63 J	**3.62 J [d]**
Arsenic		1.9	0.43	0.026	**26.5 [e]**	**10.2**	**14.8**	**7.26**
Selenium		5,100	390	19	1.17 U	1.67 K	1.21 U	1.28 K
Antimony		410	31	13	5.01 K	2.88 K	3.91 K	3.01 K
Barium		200,000	16,000	6,000	84.6	62.1	66.4	54.5
Beryllium		2,000	160	1,200	0.885	0.747	0.675	0.574 J
Cadmium		1,000	78	55	0.0777 U	0.0767 U	0.0802 U	0.0809 U
Chromium		3,100 [f]	230 [f]	42 [f]	27.7	30.6	24.9	28.0
Cobalt		--	--	--	10.5	7.08	7.67	6.24
Copper		41,000	3,100	11,000	141 K	18.9 K	283 K	99.9 K
Lead		800	400	--	68.7	9.63	33.2	13.3
Nickel		20,000	1,600	--	17.1 K	15.1 K	17.2 K	15.7 K
Silver		5,100	390	31	0.506 J	0.201 U	0.210 U	0.212 U
Tin		610,000	47,000	--	4.99 B	4.01 B	5.18 B	4.09 B
Vanadium		1,000	78	730	40.5	55.4	38.1	53.5
Zinc		310,000	23,000	14,000	66.0	41.6	78.0	47.0
Hexachlorophene (µg/kg) [g]		310,000	23,000	2,000,000	2.5 U	2.5 U	2.5 U	2.5 U
Pesticides (µg/kg)								
Kepone		510,000	39,000	--	2.9 UJ	2.8 UJ	14 UJ	2.9 UL
Semivolatile Organic Compounds (µg/kg)								
1,4-Dioxane		260,000	58,000	26	120 U	120 U	120 U	130 U
Phenol		310,000,000	23,000,000	67,000	41 U	41 U	42 U	42 U
2-Chlorophenol		5,100,000	390,000	--	41 U	41 U	42 U	42 U
1,4-Dichlorobenzene		120,000	27,000	7.1	41 U	41 U	42 U	42 U
N-Nitroso-di-n-propylamine		410	91	0.047	41 U	41 U	42 U	42 U
1,2,4-Trichlorobenzene		10,000,000	780,000	2,400	41 U	41 U	42 U	42 U
4-chloro-3-methylphenol		--	--	--	83 U	82 U	83 U	85 U
Acenaphthene		61,000,000	4,700,000	100,000	41 U	41 U	42 U	42 U
4-Nitrophenol		--	--	--	210 U	200 U	210 U	210 U
2,4-Dinitrotoluene		2,000,000	160,000	570	83 U	82 U	83 U	85 U
Pentachlorophenol		24,000	5,300	--	210 U	200 U	210 U	210 U
Pyrene		31,000,000	2,300,000	680,000	41 U	41 U	50 J	42 U
4-Methylphenol [h]		5,100,000	390,000	--	83 U	82 U	83 U	85 U
2-Nitrophenol		--	--	--	41 U	41 U	42 U	42 U
2,4-Dimethylphenol		20,000,000	1,600,000	6,700	83 U	82 U	83 U	85 U
2,4-Dichlorophenol		3,100,000	230,000	1,200	41 U	41 U	42 U	42 U
2,4,6-Trichlorophenol		260,000	58,000	--	41 U	41 U	42 U	42 U
2,4-Dinitrophenol		2,000,000	160,000	--	830 U	820 U	830 U	850 U
4,6-Dinitro-2-methylphenol		--	--	--	210 U	200 U	210 U	210 U
N-Nitrosodimethylamine		56	3	0.0018	83 U	82 U	83 U	85 U
bis(2-Chloroethyl)ether		2,600	580	0.044	41 U	41 U	42 U	42 U
1,3-Dichlorobenzene		3,100,000	230,000	290	41 U	41 U	42 U	42 U
1,2-Dichlorobenzene		92,000,000	7,000,000	4,600	41 U	41 U	42 U	42 U
bis(2-Chloroisopropyl)ether		41,000	9,100	1.7	41 U	41 U	42 U	42 U
Hexachloroethane		200,000	46,000	360	41 U	41 U	42 U	42 U
Nitrobenzene		510,000	39,000	23	41 U	41 U	42 U	42 U
Isophorone		3,000,000	670,000	410	41 U	41 U	42 U	42 U
bis(2-Chloroethoxy)methane		--	--	--	41 U	41 U	42 U	42 U
Naphthalene		20,000,000	1,600,000	150	41 U	41 U	42 U	42 U
Hexachlorobutadiene		37,000	8,200	1,800	83 U	82 U	83 U	85 U
Hexachlorocyclopentadiene		6,100,000	470,000	1,800,000	210 U	200 U	210 U	210 U
2-Chloronaphthalene		82,000,000	6,300,000	32,000	41 U	41 U	42 U	42 U
Acenaphthylene		--	--	--	41 U	41 U	42 U	42 U
Dimethylphthalate		--	--	--	83 U	82 U	83 U	85 U
2,6-Dinitrotoluene		1,000,000	78,000	250	41 U	41 U	42 U	42 U
Fluorene		41,000,000	3,100,000	140,000	41 U	41 U	42 U	42 U
4-Chlorophenyl-phenylether		--	--	--	41 U	41 U	42 U	42 U
Diethylphthalate		820,000,000	63,000,000	450,000	83 U	82 U	83 U	85 U
N-Nitrosodiphenylamine [i]		580,000	130,000	760	41 U	41 U	42 U	42 U
4-Bromophenyl-phenylether		--	--	--	41 U	41 U	42 U	42 U
Hexachlorobenzene		1,800	400	52	41 U	41 U	42 U	42 U

CUMMINGS RITER

TABLE 2-12
SUMMARY OF ANALYTICAL RESULTS
AOC 6 - FORMER ABOVEGROUND FUEL STORAGE TANK A
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC6-1A 0.0'-0.5' 12/12/2006	AOC6-1B 0.5'-1.0' 12/12/2006	AOC6-2A 0.0'-0.5' 12/12/2006	AOC6-2B 0.5'-1.0' 12/12/2006
Semivolatile Organic Compounds (µg/kg)								
Phenanthrene		--	--	--	41 U	41 U	51 J	42 U
Anthracene		310,000,000	23,000,000	470,000	41 U	41 U	42 U	42 U
Di-n-butylphthalate		100,000,000	7,800,000	5,000,000	83 U	82 U	83 U	85 U
Fluoranthene		41,000,000	3,100,000	6,300,000	41 U	41 U	42 U	42 U
Butylbenzylphthalate		200,000,000	16,000,000	17,000,000	83 U	82 U	83 U	85 U
Benzo(a)anthracene		3,900	220	480	41 U	41 U	42 U	42 U
Chrysene		390,000	22,000	48,000	41 U	41 U	42 U	42 U
3,3'-Dichlorobenzidine		6,400	1,400	4.9	120 U	120 U	120 U	130 U
bis(2-Ethylhexyl)phthalate		200,000	46,000	2,900,000	83 U	82 U	91 J	85 U
Di-n-octylphthalate		--	--	--	83 U	82 U	83 U	85 U
Benzo(b)fluoranthene		3,900	220	1,500	41 U	41 U	42 U	42 U
Benzo(k)fluoranthene		39,000	2,200	15,000	41 U	41 U	42 U	42 U
Benzo(a)pyrene		390	22	120	41 U	41 U	42 U	42 U
Indeno(1,2,3-cd)pyrene		3,900	220	4,200	41 U	41 U	42 U	42 U
Dibenz(a,h)anthracene		390	22	460	41 U	41 U	42 U	42 U
Benzo(g,h,i)perylene		--	--	--	41 U	41 U	42 U	42 U
Acetophenone		100,000,000	7,800,000	3,200	83 U	82 U	83 U	85 U
2-Acetylaminofluorene		--	--	--	83 U	82 U	83 U	85 U
4-Aminobiphenyl		--	--	--	210 U	200 U	210 U	210 U
Aniline		500,000	110,000	140	210 U	200 U	210 U	210 U
Benzyl alcohol		510,000,000	39,000,000	150,000	210 U	200 U	210 U	210 U
Chlorobenzilate		--	--	--	41 U	41 U	42 U	42 U
Diallate TRANS/CIS		--	--	--	41 U	41 U	42 U	42 U
2,6-Dichlorophenol		--	--	--	83 U	82 U	83 U	85 U
Dimethoate		--	--	--	210 U	200 U	210 U	210 U
p-Dimethylaminoazobenzene		--	--	--	83 U	82 U	83 U	85 U
7,12-Dimethylbenz[a]anthracene		--	--	--	41 U	41 U	42 U	42 U
3,3'-Dimethylbenzidine		--	--	--	410 U	410 U	420 U	420 U
1,3-Dinitrobenzene		100,000	7,800	37	83 U	82 U	83 U	85 U
Ethyl methanesulfonate		--	--	--	83 U	82 U	83 U	85 U
Hexachloropropene		--	--	--	120 U	120 U	120 U	130 U
Isodrin		--	--	--	41 U	41 U	42 U	42 U
Isosafrole		--	--	--	83 U	82 U	83 U	85 U
Methapyrilene		--	--	--	2,100 UJ	2,000 UJ	2,100 UJ	2,100 UJ
3-Methylcholanthrene		--	--	--	83 U	82 U	83 U	85 U
Methyl methanesulfonate		--	--	--	41 U	41 U	42 U	42 U
1,4-Naphthoquinone		--	--	--	1,000 U	1,000 U	1,000 U	1,100 U
1-Naphthylamine		--	--	--	210 U	200 U	210 U	210 U
2-Naphthylamine		--	--	--	210 UR	200 UR	210 UR	210 UR
4-Nitroquinoline-1-oxide		--	--	--	410 U	410 U	420 U	420 U
N-Nitrosodi-n-butylamine		530	120	0.027	83 U	82 U	83 U	85 U
N-Nitrosodiethylamine		19	1.0	0.00071	83 U	82 U	83 U	85 U
N-Nitrosomethylethylamine		130	29	--	83 U	82 U	83 U	85 U
N-Nitrosomorpholine		--	--	--	83 U	82 U	83 U	85 U
N-Nitrosopiperidine		--	--	--	83 U	82 U	83 U	85 U
N-Nitrosopyrrolidine		1,400	300	--	83 U	82 U	83 U	85 U
5-Nitro-o-toluidine		--	--	--	210 U	200 U	210 U	210 U
Pentachlorobenzene		820,000	63,000	20,000	83 U	82 U	83 U	85 U
Pentachloronitrobenzene		11,000	2,500	82	83 U	82 U	83 U	85 U
Phenacetin		--	--	--	83 U	82 U	83 U	85 U
1,4-Phenylenediamine		190,000,000	15,000,000	--	15,000 U	14,000 U	15,000 U	15,000 U
2-Picoline		--	--	--	120 U	120 U	120 U	130 U
Pronamide		--	--	--	41 U	41 U	42 U	42 U
Pyridine		1,000,000	78,000	--	83 U	82 U	83 U	85 U
Safrole		--	--	--	83 U	82 U	83 U	85 U
1,2,4,5-Tetrachlorobenzene		310,000	23,000	660	83 U	82 U	83 U	85 U
2,3,4,6-Tetrachlorophenol		31,000,000	2,300,000	--	83 U	82 U	83 U	85 U
Tetraethyldithiopyrophosphate		--	--	--	83 U	82 U	83 U	85 U
Thionazin		--	--	--	83 U	82 U	83 U	85 U
o-Toluidine		12,000	2,700	5.7	250 U	250 U	250 U	250 U
O,O,O-Triethylphosphorothioate		--	--	--	83 U	82 U	83 U	85 U
1,3,5-Trinitrobenzene		31,000,000	2,300,000	--	210 U	200 U	210 U	210 U
2-Methylphenol		51,000,000	3,900,000	--	83 U	82 U	83 U	85 U
4-Chloroaniline		4,100,000	310,000	970	83 U	82 U	83 U	85 U
2-Methylnaphthalene		4,100,000	310,000	4,400	41 U	41 U	42 U	42 U

CUMMINGS RITER

TABLE 2-12
SUMMARY OF ANALYTICAL RESULTS
AOC 6 - FORMER ABOVEGROUND FUEL STORAGE TANK A
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC6-1A 0.0'-0.5' 12/12/2006	AOC6-1B 0.5'-1.0' 12/12/2006	AOC6-2A 0.0'-0.5' 12/12/2006	AOC6-2B 0.5'-1.0' 12/12/2006
Semivolatile Organic Compounds (µg/kg)								
2,4,5-Trichlorophenol		100,000,000	7,800,000	--	83 U	82 U	83 U	85 U
2-Nitroaniline		--	--	--	41 U	41 U	42 U	42 U
3-Nitroaniline		--	--	--	83 U	82 U	83 U	85 U
Dibenzofuran		1,000,000	78,000	--	41 U	41 U	42 U	42 U
4-Nitroaniline		--	--	--	83 U	82 U	83 U	85 U
Volatile Organic Compounds (µg/kg)								
Dichlorodifluoromethane		200,000,000	16,000,000	11,000	2 U	2 U	3 U	2 U
Chloromethane		--	--	930	2 U	2 U	3 U	2 U
Vinyl Chloride		4,000	90	0.12	1 U	1 U	1 U	1 U
Bromomethane		1,400,000	110,000	41	2 U	2 U	3 U	2 U
Chloroethane		990,000	220,000	19	2 U	2 U	3 U	2 U
Trichlorofluoromethane		310,000,000	23,000,000	23,000	2 U	2 U	3 U	2 U
1,1-Dichloroethene		51,000,000	3,900,000	2,900	1 U	1 U	1 U	1 U
Methylene Chloride		380,000	85,000	19	2 U	2 U	3 U	2 U
trans-1,2-Dichloroethene		20,000,000	1,600,000	720	1 U	1 U	1 U	1 U
1,1-Dichloroethane		200,000,000	16,000,000	5,100	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene		10,000,000	780,000	--	1 U	1 U	1 U	1 U
Chloroform		10,000,000	780,000	0.91	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane		290,000,000	22,000,000	32,000	1 U	1 U	1 U	1 U
Carbon Tetrachloride		22,000	4,900	2.1	1 U	1 U	1 U	1 U
Benzene		52,000	12,000	1.9	0.5 U	0.6 U	0.7 U	0.5 U
1,2-Dichloroethane		31,000	7,000	1.0	1 U	1 U	1 U	1 U
Trichloroethene		7,200	1,600	0.26	1 U	1 U	1 U	1 U
1,2-Dichloropropane		42,000	9,400	2.1	1 U	1 U	1 U	1 U
Dibromomethane		10,000,000	780,000	300	1 U	1 U	1 U	1 U
Bromodichloromethane		46,000	10,000	1.1	1 U	1 U	1 U	1 U
Toluene		82,000,000	6,300,000	27,000	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane		50,000	11,000	0.78	1 U	1 U	1 U	1 U
Tetrachloroethene		5,300	1,200	4.7	1 U	1 U	1 U	1 U
Dibromochloromethane		34,000	7,600	0.83	1 U	1 U	1 U	1 U
1,2-Dibromoethane		1,400	320	0.060	1 U	1 U	1 U	1 U
Chlorobenzene		20,000,000	1,600,000	680	1 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane		110,000	25,000	4.0	1 U	1 U	1 U	1 U
Ethylbenzene		100,000,000	7,800,000	15,000	1 U	1 U	1 U	1 U
Styrene		200,000,000	16,000,000	57,000	1 U	1 U	1 U	1 U
Bromoform		360,000	81,000	67	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane		14,000	3,200	0.68	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane		1,400	320	0.036	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane		3,600	200	0.0037	2 U	2 U	3 U	2 U
Acetone		920,000,000	70,000,000	22,000	7 U	8 U	38	9 J
Carbon Disulfide		100,000,000	7,800,000	19,000	1 U	1 U	2 J	1 U
2-Butanone		610,000,000	47,000,000	29,000	4 U	4 U	6 U	4 U
trans-1,3-Dichloropropene		--	--	--	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		--	--	--	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone		--	--	59,000	3 U	3 U	4 U	3 U
2-Hexanone		--	--	--	3 U	3 U	4 U	3 U
Xylene (total)		200,000,000	16,000,000	3,000	1 J	2 J	1 U	1 U
Acrolein		510,000	39,000	0.2	20 U	22 U	29 U	22 U
Acrylonitrile		5,300	1,200	0.15	4 U	4 U	6 U	4 U
Methyl Iodide		--	--	--	3 U	3 U	4 U	3 U
Acetonitrile		--	--	580	25 U	28 U	36 U	27 U
Allyl Chloride		--	--	--	1 U	1 U	1 U	1 U
Vinyl Acetate		1,000,000,000	78,000,000	1,700	2 U	2 U	3 U	2 U
2-Chloro-1,3-butadiene		20,000,000	1,600,000	120	1 U	1 U	1 U	1 U
Propionitrile		--	--	--	30 U	33 U	43 U	32 U
Methacrylonitrile		--	--	--	5 U	6 U	7 U	5 U
Isobutyl Alcohol		310,000,000	23,000,000	12,000	100 U	110 U	140 U	110 U
Methyl Methacrylate		1,400,000,000	110,000,000	6,500	1 U	1 U	1 U	1 U
Ethyl Methacrylate		--	--	--	1 U	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene		--	--	--	10 U	11 U	14 U	11 U
Pentachloroethane		--	--	--	1 U	1 U	1 U	1 U

CUMMINGS RITER

TABLE 2-12
SUMMARY OF ANALYTICAL RESULTS
AOC 6 - FORMER ABOVEGROUND FUEL STORAGE TANK A
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.
UR - Result is unusable. The analyte may or may not be present in the sample.

(a) "--" indicates standard does not currently exist for this parameter.

(b) "mg/kg" is milligrams per kilogram, or parts per million.

(c) Mercuric chloride standards are listed.

(d) **Values shown in bold indicate an exceedance of the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20.**

(e) **Bolded and shaded values indicate an exceedance of both the USEPA Region III SSL for Groundwater Migration, DAF = 20; and the USEPA Region III Risk-based Concentration for Industrial Soil.**

(f) Chromium VI standards are listed.

(g) "µg/kg" is micrograms per kilogram, or parts per billion.

(h) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(i) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamine.

TABLE 2-13
SUMMARY OF ANALYTICAL RESULTS
AOC 7 - FORMER SULFURIC ACID PLANT - UNPAVED AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC7-1 0.0'-0.5' 12/4/2006	AOC7-2 0.0'-0.5' 12/4/2006	AOC7-3 0.0'-0.5' 12/4/2006	AOC7-4 0.0'-0.5' 12/4/2006	AOC7-5 0.0'-0.5' 12/4/2006	AOC7-6 0.0'-0.5' 12/4/2006
Moisture (%)	-- [a]	--	--	32.3	34.2 / 19.7 [b]	18.0	24.9	14.7	32.7
pH	--	--	--	10.4	4.56 / 4.58	7.48	3.81	3.83	5.79
Metals (mg/kg) [c]									
Mercury	310 [d]	23 [d]	--	0.461 K	0.293 K / 0.397 K	2.67 K	1.20 K	0.337 K	0.849 K
Thallium	72	5.5	3.6	1.91 U	10.1 U / 1.59 UL	7.87 U	8.60 U	7.80 U	9.88 U
Arsenic	1.9	0.43	0.026	**10.6 L [e]**	**16.2 L / 18.8 K**	**16.6 L**	**133 L**	**17.0 L**	**43.1 L**
Selenium	5,100	390	19	7.55 K	11.8 K / 14.9 L	9.46 K	**179 K [f]**	8.69 K	**92.5 K**
Antimony	410	31	13	1.29 UL	1.47 L / 2.70 L	12.6 L	5.84 UL	1.06 UL	3.59 L
Barium	200,000	16,000	6,000	69.3	133 / 99.6	162	82.6	97.8	236
Beryllium	2,000	160	1,200	0.660 J	0.456 J / 0.286 J	1.19 J	0.0879 UJ	0.732 J	0.722 J
Cadmium	1,000	78	55	0.225 L	0.494 UL / 2.29	0.385 UL	1.68 UL	0.381 UL	0.483 UL
Chromium	3,100 [g]	230 [g]	42 [g]	22.5	**46.2** / 28.4 K	**83.2**	**53.4**	**59.5**	**90.8**
Cobalt	--	--	--	22.7 K	9.68 K / 8.57 L	18.7 K	187 K	27.4 K	36.3 K
Copper	41,000	3,100	11,000	55.0 L	102 L / 75.1 L	279 L	445 L	306 L	311 L
Lead	800	400	--	54.4 K	82.6 K / 72.4	**1,280 [h]**	282 K	67.4 K	674 K
Nickel	20,000	1,600	--	16.4 L	16.9 L / 12.9 K	110 L	34.3 L	44.8 L	50.2 L
Silver	5,100	390	31	0.658 L	0.581 L / 0.310 K	0.954 L	7.93 L	0.899 L	5.24 L
Tin	610,000	47,000	--	5.98 B	18.0 / 10.5 B	56.2	26.5	9.36 J	11.5 J
Vanadium	1,000	78	730	13.4 K	26.4 K / 15.7	53.4 K	160 K	45.4 K	38.8 K
Zinc	310,000	23,000	14,000	187	274 / 223 K	809	621	412	440
Hexachlorophene (µg/kg) [i]	310,000	23,000	2,000,000	3.0 U	7.7 J / 14 J	250 J	640 J	2.3 U	430 J
Pesticides (µg/kg)									
Kepone	510,000	39,000	--	340 UJ	70 UJ / 57 UJ	73 UJ	370 UJ	15 UJ	650 UJ
Semivolatile Organic Compounds (µg/kg)									
1,4-Dioxane	260,000	58,000	26	150 U	150 U / 120 U	120 UJ	130 UJ	120 U	150 U
Phenol	310,000,000	23,000,000	67,000	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
2-Chlorophenol	5,100,000	390,000	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
1,4-Dichlorobenzene	120,000	27,000	7.1	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	**420**
N-Nitroso-di-n-propylamine	410	91	0.047	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
1,2,4-Trichlorobenzene	10,000,000	780,000	2,400	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
4-chloro-3-methylphenol	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Acenaphthene	61,000,000	4,700,000	100,000	49 U	51 U / 42 U	41 UJ	440 J	39 U	50 U
4-Nitrophenol	--	--	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
2,4-Dinitrotoluene	2,000,000	160,000	570	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Pentachlorophenol	24,000	5,300	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
Pyrene	31,000,000	2,300,000	680,000	540	150 J / 560	260 J	840 J	40 J	50 U
4-Methylphenol [j]	5,100,000	390,000	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
2-Nitrophenol	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
2,4-Dimethylphenol	20,000,000	1,600,000	6,700	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
2,4-Dichlorophenol	3,100,000	230,000	1,200	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
2,4,6-Trichlorophenol	260,000	58,000	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
2,4-Dinitrophenol	2,000,000	160,000	--	980 U	1,000 U / 830 U	810 UJ	890 UJ	780 U	990 U
4,6-Dinitro-2-methylphenol	--	--	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
N-Nitrosodimethylamine	56	3	0.0018	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
bis(2-Chloroethyl)ether	2,600	580	0.044	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
1,3-Dichlorobenzene	3,100,000	230,000	290	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U

CUMMINGS RITER

TABLE 2-13
SUMMARY OF ANALYTICAL RESULTS
AOC 7 - FORMER SULFURIC ACID PLANT - UNPAVED AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC7-1 0.0'-0.5' 12/4/2006	AOC7-2 0.0'-0.5' 12/4/2006	AOC7-3 0.0'-0.5' 12/4/2006	AOC7-4 0.0'-0.5' 12/4/2006	AOC7-5 0.0'-0.5' 12/4/2006	AOC7-6 0.0'-0.5' 12/4/2006
Semivolatile Organic Compounds (µg/kg)									
1,2-Dichlorobenzene	92,000,000	7,000,000	4,600	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
bis(2-Chloroisopropyl)ether	41,000	9,100	1.7	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Hexachloroethane	200,000	46,000	360	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Nitrobenzene	510,000	39,000	23	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Isophorone	3,000,000	670,000	410	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
bis(2-Chloroethoxy)methane	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Naphthalene	20,000,000	1,600,000	150	49 U	51 U / 42 U	41 UJ	84 J	39 U	50 U
Hexachlorobutadiene	37,000	8,200	1,800	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Hexachlorocyclopentadiene	6,100,000	470,000	1,800,000	250 U	250 U / 210 U	200 UJ	220 UJ	200 UR	250 U
2-Chloronaphthalene	82,000,000	6,300,000	32,000	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Acenaphthylene	--	--	--	49 U	51 U / 42 U	41 UJ	82 J	39 U	50 U
Dimethylphthalate	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
2,6-Dinitrotoluene	1,000,000	78,000	250	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Fluorene	41,000,000	3,100,000	140,000	49 U	51 U / 47 J	41 UJ	600 J	39 U	50 U
4-Chlorophenyl-phenylether	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Diethylphthalate	820,000,000	63,000,000	450,000	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
N-Nitrosodiphenylamine [k]	580,000	130,000	760	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
4-Bromophenyl-phenylether	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Hexachlorobenzene	1,800	400	52	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Phenanthrene	--	--	--	210 J	110 J / 660	220 J	1,600 J	39 U	50 U
Anthracene	310,000,000	23,000,000	470,000	49 J	51 U / 120 J	41 UJ	170 J	39 U	50 U
Di-n-butylphthalate	100,000,000	7,800,000	5,000,000	120 J	1,600 / 1,000	1,900 J	1,300 J	1,000	160 J
Fluoranthene	41,000,000	3,100,000	6,300,000	580	190 J / 690	370 J	1,400 J	43 J	50 U
Butylbenzylphthalate	200,000,000	16,000,000	17,000,000	98 U	100 U / 83 U	81 UJ	590 J	560	200 J
Benzo(a)anthracene	3,900	220	480	270	81 J / 270	170 J	360 J	39 U	50 U
Chrysene	390,000	22,000	48,000	330	120 J / 320	190 J	400 J	39 U	50 U
3,3'-Dichlorobenzidine	6,400	1,400	4.9	150 U	150 U / 120 U	120 UJ	130 UJ	120 U	150 U
bis(2-Ethylhexyl)phthalate	200,000	46,000	2,900,000	420 J	450 J / 220 J	3,100 J	2,800 J	2,200	3,300
Di-n-octylphthalate	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Benzo(b)fluoranthene	3,900	220	1,500	410	51 U / 320	270 J	360 J	39 U	50 U
Benzo(k)fluoranthene	39,000	2,200	15,000	190 J	51 U / 120 J	84 J	170 J	39 U	50 U
Benzo(a)pyrene	390	22	120	**320**	51 U / **210**	**150 J**	**140 J**	39 U	50 U
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	260	51 U / 130 J	130 J	130 J	39 U	50 U
Dibenz(a,h)anthracene	390	22	460	49 U	51 U / 42 U	41 UJ	62 J	39 U	50 U
Benzo(g,h,i)perylene	--	--	--	240 J	51 U / 100 J	120 J	110 J	39 U	50 U
Acetophenone	100,000,000	7,800,000	3,200	98 U	100 U / 83 U	81 UJ	160 J	78 U	99 U
2-Acetylaminofluorene	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
4-Aminobiphenyl	--	--	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
Aniline	500,000	110,000	140	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
Benzyl alcohol	510,000,000	39,000,000	150,000	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
Chlorobenzilate	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Diallate TRANS/CIS	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
2,6-Dichlorophenol	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Dimethoate	--	--	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
p-Dimethylaminoazobenzene	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U

CUMMINGS RITER

TABLE 2-13
SUMMARY OF ANALYTICAL RESULTS
AOC 7 - FORMER SULFURIC ACID PLANT - UNPAVED AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC7-1 0.0'-0.5' 12/4/2006	AOC7-2 0.0'-0.5' 12/4/2006	AOC7-3 0.0'-0.5' 12/4/2006	AOC7-4 0.0'-0.5' 12/4/2006	AOC7-5 0.0'-0.5' 12/4/2006	AOC7-6 0.0'-0.5' 12/4/2006
Semivolatile Organic Compounds (µg/kg)									
7,12-Dimethylbenz[a]anthracene	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
3,3'-Dimethylbenzidine	--	--	--	490 U	510 U / 420 U	410 UJ	440 UJ	390 U	500 U
1,3-Dinitrobenzene	100,000	7,800	37	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Ethyl methanesulfonate	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Hexachloropropene	--	--	--	150 U	150 U / 120 U	120 UJ	130 UJ	120 U	150 U
Isodrin	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Isosafrole	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Methapyrilene	--	--	--	2,500 U	2,500 U / 2,100 U	2,000 UJ	2,200 UJ	2,000 UR	2,500 U
3-Methylcholanthrene	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Methyl methanesulfonate	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
1,4-Naphthoquinone	--	--	--	1,200 U	1,300 U / 1,000 U	1,000 UJ	1,100 UJ	980 U	1,200 U
1-Naphthylamine	--	--	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 UR	250 U
2-Naphthylamine	--	--	--	250 U	250 U / 210 U	200 UR	220 UR	200 U	250 U
4-Nitroquinoline-1-oxide	--	--	--	490 U	510 U / 420 U	410 UJ	440 UJ	390 U	500 U
N-Nitrosodi-n-butylamine	530	120	0.027	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
N-Nitrosodiethylamine	19	1.0	0.00071	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
N-Nitrosomethylethylamine	130	29	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
N-Nitrosomorpholine	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
N-Nitrosopiperidine	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
N-Nitrosopyrrolidine	1,400	300	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
5-Nitro-o-toluidine	--	--	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
Pentachlorobenzene	820,000	63,000	20,000	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Pentachloronitrobenzene	11,000	2,500	82	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Phenacetin	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
1,4-Phenylenediamine	190,000,000	15,000,000	--	17,000 U	18,000 U / 15,000 U	14,000 UR	16,000 UR	14,000 UR	17,000 U
2-Picoline	--	--	--	150 U	150 U / 120 U	120 UJ	130 UJ	120 U	150 U
Pronamide	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
Pyridine	1,000,000	78,000	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Safrole	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
1,2,4,5-Tetrachlorobenzene	310,000	23,000	660	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
2,3,4,6-Tetrachlorophenol	31,000,000	2,300,000	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Tetraethyldithiopyrophosphate	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Thionazin	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
o-Toluidine	12,000	2,700	5.7	300 U	300 U / 250 U	240 UJ	270 UJ	230 U	300 U
O,O,O-Triethylphosphorothioate	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
1,3,5-Trinitrobenzene	31,000,000	2,300,000	--	250 U	250 U / 210 U	200 UJ	220 UJ	200 U	250 U
2-Methylphenol	51,000,000	3,900,000	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
4-Chloroaniline	4,100,000	310,000	970	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
2-Methylnaphthalene	4,100,000	310,000	4,400	49 U	51 U / 42 U	41 UJ	51 J	39 U	50 U
2,4,5-Trichlorophenol	100,000,000	7,800,000	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
2-Nitroaniline	--	--	--	49 U	51 U / 42 U	41 UJ	44 UJ	39 U	50 U
3-Nitroaniline	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U
Dibenzofuran	1,000,000	78,000	--	49 U	51 U / 42 U	41 UJ	400 J	39 U	50 U
4-Nitroaniline	--	--	--	98 U	100 U / 83 U	81 UJ	89 UJ	78 U	99 U

CUMMINGS RITER

TABLE 2-13
SUMMARY OF ANALYTICAL RESULTS
AOC 7 - FORMER SULFURIC ACID PLANT - UNPAVED AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC7-1 0.0'-0.5' 12/4/2006	AOC7-2 0.0'-0.5' 12/4/2006	AOC7-3 0.0'-0.5' 12/4/2006	AOC7-4 0.0'-0.5' 12/4/2006	AOC7-5 0.0'-0.5' 12/4/2006	AOC7-6 0.0'-0.5' 12/4/2006
Volatile Organic Compounds (µg/kg)									
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
Chloromethane	--	--	930	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
Vinyl Chloride	4,000	90	0.12	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Bromomethane	1,400,000	110,000	41	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
Chloroethane	990,000	220,000	19	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
Trichlorofluoromethane	310,000,000	23,000,000	23,000	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
1,1-Dichloroethene	51,000,000	3,900,000	2,900	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Methylene Chloride	380,000	85,000	19	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
trans-1,2-Dichloroethene	20,000,000	1,600,000	720	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,1-Dichloroethane	200,000,000	16,000,000	5,100	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
cis-1,2-Dichloroethene	10,000,000	780,000	--	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Chloroform	10,000,000	780,000	0.91	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,1,1-Trichloroethane	290,000,000	22,000,000	32,000	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Carbon Tetrachloride	22,000	4,900	2.1	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Benzene	52,000	12,000	1.9	0.6 U	0.6 U / 0.6 U	0.6 U	0.8 U	0.6 U	0.7 U
1,2-Dichloroethane	31,000	7,000	1.0	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Trichloroethene	7,200	1,600	0.26	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,2-Dichloropropane	42,000	9,400	2.1	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Dibromomethane	10,000,000	780,000	300	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Bromodichloromethane	46,000	10,000	1.1	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Toluene	82,000,000	6,300,000	27,000	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,1,2-Trichloroethane	50,000	11,000	0.78	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Tetrachloroethene	5,300	1,200	4.7	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Dibromochloromethane	34,000	7,600	0.83	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,2-Dibromoethane	1,400	320	0.060	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Chlorobenzene	20,000,000	1,600,000	680	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,1,1,2-Tetrachloroethane	110,000	25,000	4.0	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Ethylbenzene	100,000,000	7,800,000	15,000	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Styrene	200,000,000	16,000,000	57,000	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Bromoform	360,000	81,000	67	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,1,2,2-Tetrachloroethane	14,000	3,200	0.68	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,2,3-Trichloropropane	1,400	320	0.036	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,2-Dibromo-3-chloropropane	3,600	200	0.0037	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
Acetone	920,000,000	70,000,000	22,000	16 J	15 J / 44	420	94	72	22 J
Carbon Disulfide	100,000,000	7,800,000	19,000	3 J	1 U / 1 U	1 J	14	7	1 U
2-Butanone	610,000,000	47,000,000	29,000	5 U	5 U / 5 U	47 J	13 J	7 J	6 U
trans-1,3-Dichloropropene	--	--	--	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
cis-1,3-Dichloropropene	--	--	--	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
4-Methyl-2-pentanone	--	--	59,000	4 U	4 U / 4 U	11 J	5 U	4 U	4 U
2-Hexanone	--	--	--	4 U	4 U / 4 U	12 J	5 U	4 U	4 U
Xylene (total)	200,000,000	16,000,000	3,000	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Acrolein	510,000	39,000	0.2	25 U	25 U / 24 U	24 U	32 U	23 U	29 U
Acrylonitrile	5,300	1,200	0.15	5 U	5 U / 5 U	5 U	6 U	5 U	6 U
Methyl Iodide	--	--	--	4 U	4 U / 4 U	4 U	5 U	4 U	4 U
Acetonitrile	--	--	580	32 U	31 U / 30 U	30 U	40 U	29 U	37 U

CUMMINGS RITER

TABLE 2-13
SUMMARY OF ANALYTICAL RESULTS
AOC 7 - FORMER SULFURIC ACID PLANT - UNPAVED AREA
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC7-1 0.0'-0.5' 12/4/2006	AOC7-2 0.0'-0.5' 12/4/2006	AOC7-3 0.0'-0.5' 12/4/2006	AOC7-4 0.0'-0.5' 12/4/2006	AOC7-5 0.0'-0.5' 12/4/2006	AOC7-6 0.0'-0.5' 12/4/2006
Volatile Organic Compounds (µg/kg)										
Allyl Chloride		--	--	--	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Vinyl Acetate		1,000,000,000	78,000,000	1,700	3 U	2 U / 2 U	2 U	3 U	2 U	3 U
2-Chloro-1,3-butadiene		20,000,000	1,600,000	120	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
Propionitrile		--	--	--	38 U	37 U / 36 U	36 U	49 U	35 U	44 U
Methacrylonitrile		--	--	--	6 U	6 U / 6 U	6 U	8 U	6 U	7 U
Isobutyl Alcohol		310,000,000	23,000,000	12,000	130 U	120 U / 120 U	120 U	160 U	120 U	150 U
Methyl Methacrylate		1,400,000,000	110,000,000	6,500	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
1,4-Dioxane		260,000	58,000	26	89 U	87 U / 85 U	83 U	110 U	82 U	100 U
Ethyl Methacrylate		--	--	--	1 U	1 U / 1 U	1 U	2 U	1 U	1 U
trans-1,4-Dichloro-2-butene		--	--	--	13 U	12 U / 12 U	12 U	16 U	12 U	15 U
Pentachloroethane		--	--	--	1 U	1 U / 1 U	1 U	2 U	1 U	1 U

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.
UR - Result is unusable. The analyte may or may not be present in the sample.

(a) "--" indicates standard does not currently exist for this parameter.

(b) x/x indicates a duplicate sample was collected at this location.

(c) "mg/kg" is milligrams per kilogram, or parts per million.

(d) Mercuric chloride standards are listed.

(e) **Bolded and shaded values indicate an exceedance of both the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**

(f) **Values shown in bold indicate an exceedance of the USEPA Region III SSL for Groundwater Migration, DAF = 20.**

(g) Chromium VI standards are listed.

(h) Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.

(i) "µg/kg" is micrograms per kilogram, or parts per billion.

(j) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(k) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamine.

CUMMINGS RITER

TABLE 2-14
SUMMARY OF ANALYTICAL RESULTS
AOC 9, AOC 10, AOC 14, AND AOC 15
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID Depth Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC9-1 0.0'-0.5' 12/12/2006	AOC10-1 0.0'-0.5' 12/13/2006	AOC10-2 0.0'-0.5' 12/13/2006	AOC14-1 0.0'-0.5' 12/12/2006	AOC15-2 4.5'-5.0' 12/6/2006
Moisture (%)		-- [a]	--	--	23.7	14.4	9.1	31.8 / 37.5 [b]	16.4
pH		--	--	--	8.09	11.7	11.6	12.0 / 8.91	9.39
Metals (mg/kg) [c]									
Mercury		310 [d]	23 [d]	--	0.662 L	1.23 L	0.832 L	1.04 L / 2.36 L	0.0288 B
Thallium		72	5.5	3.6	1.73 UJ	**4.96 J** [e]	**5.60 J**	3.08 J / **7.24 J**	1.59 U
Arsenic		1.9	0.43	0.026	**3.55** [f]	**158**	**37.4**	**946 / 2,300**	**6.42 J**
Selenium		5,100	390	19	5.44 K	6.62 K	2.85 K	2.22 K / 5.30 K	1.17 U
Antimony		410	31	13	1.82 K	**31.8 K**	6.16 K	9.95 K / **23.8 K**	1.08 UL
Barium		200,000	16,000	6,000	148	54.5	23.5	77.6 / 124	81.6 K
Beryllium		2,000	160	1,200	0.0882 U	0.0902 J	0.150 J	0.284 J / 0.409 J	0.189 J
Cadmium		1,000	78	55	0.205 J	0.121 J	0.0701 U	0.135 J / 0.254 J	0.403 J
Chromium		3,100 [g]	230 [g]	42 [g]	2.20	12.8	12.0	14.5 / 19.0	32.0
Cobalt		--	--	--	5.67	7.71	3.55	4.06 / 5.47	1.91
Copper		41,000	3,100	11,000	23.4 K	27.3 K	17.3 K	66.4 K / 96.7 K	6.03
Lead		800	400	--	**1,750 L** [b]	157	**950**	115 / 165	6.26 K
Nickel		20,000	1,600	--	9.33 K	7.48 K	5.77 K	8.93 K / 14.0 K	8.62
Silver		5,100	390	31	0.620 J	1.18	0.183 U	0.298 J / 0.429 J	0.203 UL
Tin		610,000	47,000	--	4.49 B	13.3	3.57 B	5.62 B / 5.82 B	4.66 B
Vanadium		1,000	78	730	0.872	15.7	15.0	16.3 / 18.8	13.5 L
Zinc		310,000	23,000	14,000	30.4	73.4	44.7	33.5 / 62.7	10.8

TABLE 2-14
SUMMARY OF ANALYTICAL RESULTS
AOC 9, AOC 10, AOC 14, AND AOC 15
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC9-1 0.0'-0.5' 12/12/2006
Hexachlorophene (µg/kg) [1]	310,000	23,000	2,000,000	2.6 U
Pesticides (µg/kg)				
Kepone	510,000	39,000	--	60 UJ
Semivolatile Organic Compounds (µg/kg)				
1,4-Dioxane	260,000	58,000	26	130 U
Phenol	310,000,000	23,000,000	67,000	44 U
2-Chlorophenol	5,100,000	390,000	--	44 U
1,4-Dichlorobenzene	120,000	27,000	7.1	44 U
N-Nitroso-di-n-propylamine	410	91	0.047	44 U
1,2,4-Trichlorobenzene	10,000,000	780,000	2,400	44 U
4-chloro-3-methylphenol	--	--	--	87 U
Acenaphthene	61,000,000	4,700,000	100,000	44 U
4-Nitrophenol	--	--	--	220 U
2,4-Dinitrotoluene	2,000,000	160,000	570	87 U
Pentachlorophenol	24,000	5,300	--	220 U
Pyrene	31,000,000	2,300,000	680,000	170 J
4-Methylphenol [1]	5,100,000	390,000	--	87 U
2-Nitrophenol	--	--	--	44 U
2,4-Dimethylphenol	20,000,000	1,600,000	6,700	87 U
2,4-Dichlorophenol	3,100,000	230,000	1,200	44 U
2,4,6-Trichlorophenol	260,000	58,000	--	44 U
2,4-Dinitrophenol	2,000,000	160,000	--	870 U
4,6-Dinitro-2-methylphenol	--	--	--	220 U
N-Nitrosodimethylamine	56	3	0.0018	87 U
bis(2-Chloroethyl)ether	2,600	580	0.044	44 U
1,3-Dichlorobenzene	3,100,000	230,000	290	44 U
1,2-Dichlorobenzene	92,000,000	7,000,000	4,600	44 U
bis(2-Chloroisopropyl)ether	41,000	9,100	1.7	44 U
Hexachloroethane	200,000	46,000	360	44 U
Nitrobenzene	510,000	39,000	23	44 U
Isophorone	3,000,000	670,000	410	44 U
bis(2-Chloroethoxy)methane	--	--	--	44 U
Naphthalene	20,000,000	1,600,000	150	44 U
Hexachlorobutadiene	37,000	8,200	1,800	87 U
Hexachlorocyclopentadiene	6,100,000	470,000	1,800,000	220 UR
2-Chloronaphthalene	82,000,000	6,300,000	32,000	44 U
Acenaphthylene	--	--	--	44 U
Dimethylphthalate	--	--	--	87 U
2,6-Dinitrotoluene	1,000,000	78,000	250	44 U

TABLE 2-14
SUMMARY OF ANALYTICAL RESULTS
AOC 9, AOC 10, AOC 14, AND AOC 15
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC9-1 0.0'-0.5' 12/12/2006
Semivolatile Organic Compounds (µg/kg)				
Fluorene	41,000,000	3,100,000	140,000	44 U
4-Chlorophenyl-phenylether	--	--	--	44 U
Diethylphthalate	820,000,000	63,000,000	450,000	87 U
N-Nitrosodiphenylamine [k]	580,000	130,000	760	44 U
4-Bromophenyl-phenylether	--	--	--	44 U
Hexachlorobenzene	1,800	400	52	44 U
Phenanthrene	--	--	--	240
Anthracene	310,000,000	23,000,000	470,000	44 U
Di-n-butylphthalate	100,000,000	7,800,000	5,000,000	87 U
Fluoranthene	41,000,000	3,100,000	6,300,000	300
Butylbenzylphthalate	200,000,000	16,000,000	17,000,000	87 U
Benzo(a)anthracene	3,900	220	480	70 J
Chrysene	390,000	22,000	48,000	100 J
3,3'-Dichlorobenzidine	6,400	1,400	4.9	130 U
bis(2-Ethylhexyl)phthalate	200,000	46,000	2,900,000	130 J
Di-n-octylphthalate	--	--	--	87 U
Benzo(b)fluoranthene	3,900	220	1,500	78 J
Benzo(k)fluoranthene	39,000	2,200	15,000	44 U
Benzo(a)pyrene	390	22	120	44 U
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	44 U
Dibenz(a,h)anthracene	390	22	460	44 U
Benzo(g,h,i)perylene	--	--	--	44 U
Acetophenone	100,000,000	7,800,000	3,200	87 U
2-Acetylaminofluorene	--	--	--	87 U
4-Aminobiphenyl	--	--	--	220 U
Aniline	500,000	110,000	140	220 U
Benzyl alcohol	510,000,000	39,000,000	150,000	1,100
Chlorobenzilate	--	--	--	44 U
Diallate TRANS/CIS	--	--	--	44 U
2,6-Dichlorophenol	--	--	--	87 U
Dimethoate	--	--	--	220 U
p-Dimethylaminoazobenzene	--	--	--	87 UR
7,12-Dimethylbenz[a]anthracene	--	--	--	44 U
3,3'-Dimethylbenzidine	--	--	--	440 UR
1,3-Dinitrobenzene	100,000	7,800	37	87 U
Ethyl methanesulfonate	--	--	--	87 U
Hexachloropropene	--	--	--	130 U
Isodrin	--	--	--	44 UR

TABLE 2-14
SUMMARY OF ANALYTICAL RESULTS
AOC 9, AOC 10, AOC 14, AND AOC 15
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC9-1 0.0'-0.5' 12/12/2006
Semivolatile Organic Compounds (µg/kg)				
Isosafrole	--	--	--	87 U
Methapyrilene	--	--	--	2,200 UJ
3-Methylcholanthrene	--	--	--	87 U
Methyl methanesulfonate	--	--	--	44 U
1,4-Naphthoquinone	--	--	--	1,100 UR
1-Naphthylamine	--	--	--	220 U
2-Naphthylamine	--	--	--	220 UR
4-Nitroquinoline-1-oxide	--	--	--	440 UR
N-Nitrosodi-n-butylamine	530	120	0.027	87 U
N-Nitrosodiethylamine	19	1.0	0.00071	87 U
N-Nitrosomethylethylamine	130	29	--	87 U
N-Nitrosomorpholine	--	--	--	87 U
N-Nitrosopiperidine	--	--	--	87 U
N-Nitrosopyrrolidine	1,400	300	--	87 U
5-Nitro-o-toluidine	--	--	--	220 U
Pentachlorobenzene	820,000	63,000	20,000	87 U
Pentachloronitrobenzene	11,000	2,500	82	87 U
Phenacetin	--	--	--	87 U
1,4-Phenylenediamine	190,000,000	15,000,000	--	15,000 UR
2-Picoline	--	--	--	130 U
Pronamide	--	--	--	44 U
Pyridine	1,000,000	78,000	--	87 U
Safrole	--	--	--	87 U
1,2,4,5-Tetrachlorobenzene	310,000	23,000	660	87 U
2,3,4,6-Tetrachlorophenol	31,000,000	2,300,000	--	87 U
Tetraethyldithiopyrophosphate	--	--	--	87 U
Thionazin	--	--	--	87 U
o-Toluidine	12,000	2,700	5.7	260 U
O,O,O-Triethylphosphorothioate	--	--	--	87 U
1,3,5-Trinitrobenzene	31,000,000	2,300,000	--	220 U
2-Methylphenol	51,000,000	3,900,000	--	87 U
4-Chloroaniline	4,100,000	310,000	970	87 U
2-Methylnaphthalene	4,100,000	310,000	4,400	44 U
2,4,5-Trichlorophenol	100,000,000	7,800,000	--	87 U
2-Nitroaniline	--	--	--	44 U
3-Nitroaniline	--	--	--	87 U
Dibenzofuran	1,000,000	78,000	--	44 U
4-Nitroaniline	--	--	--	87 U

TABLE 2-14
SUMMARY OF ANALYTICAL RESULTS
AOC 9, AOC 10, AOC 14, AND AOC 15
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC9-1 0.0'-0.5' 12/12/2006
Volatile Organic Compounds (µg/kg)				
Dichlorodifluoromethane	200,000,000	16,000,000	11,000	3 U
Chloromethane	--	--	930	3 U
Vinyl Chloride	4,000	90	0.12	2 U
Bromomethane	1,400,000	110,000	41	3 U
Chloroethane	990,000	220,000	19	3 U
Trichlorofluoromethane	310,000,000	23,000,000	23,000	3 U
1,1-Dichloroethene	51,000,000	3,900,000	2,900	2 U
Methylene Chloride	380,000	85,000	19	3 U
trans-1,2-Dichloroethene	20,000,000	1,600,000	720	2 U
1,1-Dichloroethane	200,000,000	16,000,000	5,100	2 U
cis-1,2-Dichloroethene	10,000,000	780,000	--	2 U
Chloroform	10,000,000	780,000	0.91	2 U
1,1,1-Trichloroethane	290,000,000	22,000,000	32,000	2 U
Carbon Tetrachloride	22,000	4,900	2.1	2 U
Benzene	52,000	12,000	1.9	0.8 U
1,2-Dichloroethane	31,000	7,000	1.0	2 U
Trichloroethene	7,200	1,600	0.26	2 U
1,2-Dichloropropane	42,000	9,400	2.1	2 U
Dibromomethane	10,000,000	780,000	300	2 U
Bromodichloromethane	46,000	10,000	1.1	2 U
Toluene	82,000,000	6,300,000	27,000	2 U
1,1,2-Trichloroethane	50,000	11,000	0.78	2 U
Tetrachloroethene	5,300	1,200	4.7	2 U
Dibromochloromethane	34,000	7,600	0.83	2 U
1,2-Dibromoethane	1,400	320	0.060	2 U
Chlorobenzene	20,000,000	1,600,000	680	2 U
1,1,1,2-Tetrachloroethane	110,000	25,000	4.0	2 U
Ethylbenzene	100,000,000	7,800,000	15,000	3 J
Styrene	200,000,000	16,000,000	57,000	2 U
Bromoform	360,000	81,000	67	2 U
1,1,2,2-Tetrachloroethane	14,000	3,200	0.68	2 U
1,2,3-Trichloropropane	1,400	320	0.036	2 U
1,2-Dibromo-3-chloropropane	3,600	200	0.0037	3 U
Acetone	920,000,000	70,000,000	22,000	41
Carbon Disulfide	100,000,000	7,800,000	19,000	45
2-Butanone	610,000,000	47,000,000	29,000	30 K
trans-1,3-Dichloropropene	--	--	--	2 U
cis-1,3-Dichloropropene	--	--	--	2 U
4-Methyl-2-pentanone	--	--	59,000	5 U

TABLE 2-14
SUMMARY OF ANALYTICAL RESULTS
AOC 9, AOC 10, AOC 14, AND AOC 15
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC9-1 0.0'-0.5' 12/12/2006
Volatile Organic Compounds (µg/kg)				
2-Hexanone	--	--	--	5 U
Xylene (total)	200,000,000	16,000,000	3,000	22
Acrolein	510,000	39,000	0.2	32 U
Acrylonitrile	5,300	1,200	0.15	6 U
Methyl Iodide	--	--	--	5 U
Acetonitrile	--	--	580	40 U
Allyl Chloride	--	--	--	2 U
Vinyl Acetate	1,000,000,000	78,000,000	1,700	3 U
2-Chloro-1,3-butadiene	20,000,000	1,600,000	120	2 U
Propionitrile	--	--	--	49 U
Methacrylonitrile	--	--	--	8 U
Isobutyl Alcohol	310,000,000	23,000,000	12,000	160 U
Methyl Methacrylate	1,400,000,000	110,000,000	6,500	2 U
Ethyl Methacrylate	--	--	--	2 U
trans-1,4-Dichloro-2-butene	--	--	--	16 U
Pentachloroethane	--	--	--	2 U

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.
UR - Result is unusable. The analyte may or may not be present in the sample.

(a) "--" indicates standard does not currently exist for this parameter.

(b) x/x indicates that a duplicate sample was collected at this location.

(c) "mg/kg" is milligrams per kilogram, or parts per million.

(d) Mercuric chloride standards are listed.

(e) **Values shown in bold indicate an exceedance of the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20.**

(f) **Bolded and shaded values indicate an exceedance of both the USEPA Region III SSL for Groundwater Migration, DAF = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**

(g) Chromium VI standards are listed.

(h) Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.

(i) "µg/kg" is micrograms per kilogram, or parts per billion.

(j) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(k) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamin

TABLE 2-15
SUMMARY OF ANALYTICAL RESULTS
AOC 16 - FORMER ABOVEGROUND FUEL OIL STORAGE TANK C
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC16-1 0.0'-0.5' 12/7/2006	AOC16-2 0.0'-0.5' 12/7/2006	AOC16-3 0.0'-0.5' 12/5/2006	AOC16-4 0.0'-0.5' 12/7/2006	AOC16-5 0.0'-0.5' 12/7/2006	AOC16-6 0.0'-0.5' 12/7/2006
Moisture (%)	-- [a]	--	--	31.9	34.2	28.9	28.4	17.5	34.6
Metals (mg/kg) [b]									
Mercury	310 [c]	23 [c]	--	0.295 L	0.236 K	0.259 K	0.892 K	0.383 K	0.344 K
Thallium	72	5.5	3.6	1.88 U	1.98 U	9.26 UJ	1.79 U	**3.71 K [d]**	1.99 U
Arsenic	1.9	0.43	0.026	**7.45 J [e]**	**8.90 J**	**47.4 K**	**173 J**	**110 J**	**22.0 J**
Selenium	5,100	390	19	1.38 U	1.46 U	3.53 L	**19.7**	16.8	1.47 U
Antimony	410	31	13	1.27 UL	1.35 UL	1.26 UL	4.78 L	9.95 L	2.53 L
Barium	200,000	16,000	6,000	104 K	398 K	117 J	60.3 K	214 K	36.1 K
Beryllium	2,000	160	1,200	0.0960 U	0.101 U	0.0947 U	0.148 J	0.179 J	0.102 U
Cadmium	1,000	78	55	0.738	0.486 J	0.164 J	4.31	5.96	0.567 J
Chromium	3,100 [f]	230 [f]	42 [f]	6.05	11.9	15.2 K	12.9	19.2	11.6
Cobalt	--	--	--	5.19	2.09	2.29 L	40.0	73.8	3.38
Copper	41,000	3,100	11,000	45.1	30.7	51.6 J	164	227	99.5
Lead	800	400	--	**1,400 K [g]**	**816 K**	**1,890 L**	**1,430 K**	375 K	**1,220 K**
Nickel	20,000	1,600	--	4.10	4.43	4.96 L	5.83	11.4	1.16 J
Silver	5,100	390	31	0.240 UL	0.253 UL	0.544 L	1.33 L	2.46 L	0.255 UL
Tin	610,000	47,000	--	3.13 B	3.60 B	3.27 B	10.1 B	15.8 L	5.06 B
Vanadium	1,000	78	730	2.79 L	14.0 L	33.7	12.5 L	28.2 L	3.39 L
Zinc	310,000	23,000	14,000	163	55.2	42.2	347	608	53.7
Hexachlorophene (µg/kg) [h]	310,000	23,000	2,000,000	2.9 U	3.0 U	2.8 U	2.8 U	2.4 U	3.1 U
Pesticides (µg/kg)									
Kepone	510,000	39,000	--	50 UJ	1,700 UJ	65 UJ	2,200 UJ	280 UJ	29 UJ
Semivolatile Organic Compounds (µg/kg)									
1,4-Dioxane	260,000	58,000	26	150 U	150 U	700 U	140 U	120 U	150 U
Phenol	310,000,000	23,000,000	67,000	49 U	51 U	230 U	47 U	40 U	51 U
2-Chlorophenol	5,100,000	390,000	--	49 U	51 U	230 U	47 U	40 U	51 U
1,4-Dichlorobenzene	120,000	27,000	7.1	49 U	51 U	230 U	47 U	40 U	51 U
N-Nitroso-di-n-propylamine	410	91	0.047	49 U	51 U	230 U	47 U	40 U	51 U
1,2,4-Trichlorobenzene	10,000,000	780,000	2,400	49 U	51 U	230 U	47 U	40 U	51 U
4-chloro-3-methylphenol	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Acenaphthene	61,000,000	4,700,000	100,000	49 U	51 U	230 U	47 U	40 U	51 U
4-Nitrophenol	--	--	--	240 U	250 U	1,200 U	230 U	200 U	250 U
2,4-Dinitrotoluene	2,000,000	160,000	570	98 U	100 U	470 U	93 U	81 U	100 U
Pentachlorophenol	24,000	5,300	--	240 U	250 U	1,200 U	230 U	200 U	250 U
Pyrene	31,000,000	2,300,000	680,000	49 U	51 U	230 U	190 J	540	51 U
4-Methylphenol [i]	5,100,000	390,000	--	98 U	100 U	470 U	93 U	81 U	100 U
2-Nitrophenol	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
2,4-Dimethylphenol	20,000,000	1,600,000	6,700	98 U	100 U	470 U	93 U	81 U	100 U
2,4-Dichlorophenol	3,100,000	230,000	1,200	49 U	51 U	230 U	47 U	40 U	51 U
2,4,6-Trichlorophenol	260,000	58,000	--	49 U	51 U	230 U	47 U	40 U	51 U
2,4-Dinitrophenol	2,000,000	160,000	--	980 U	1,000 U	4,700 U	930 U	810 U	1,000 U
4,6-Dinitro-2-methylphenol	--	--	--	240 U	250 U	1,200 U	230 U	200 U	250 U
N-Nitrosodimethylamine	56	3	0.0018	98 U	100 U	470 U	93 U	81 U	100 U
bis(2-Chloroethyl)ether	2,600	580	0.044	49 U	51 U	230 U	47 U	40 U	51 U
1,3-Dichlorobenzene	3,100,000	230,000	290	49 U	51 U	230 U	47 U	40 U	51 U

CUMMINGS RITER

TABLE 2-15
SUMMARY OF ANALYTICAL RESULTS
AOC 16 - FORMER ABOVEGROUND FUEL OIL STORAGE TANK C
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC16-1 0.0'-0.5' 12/7/2006	AOC16-2 0.0'-0.5' 12/7/2006	AOC16-3 0.0'-0.5' 12/5/2006	AOC16-4 0.0'-0.5' 12/7/2006	AOC16-5 0.0'-0.5' 12/7/2006	AOC16-6 0.0'-0.5' 12/7/2006
Semivolatile Organic Compounds (µg/kg)									
1,2-Dichlorobenzene	92,000,000	7,000,000	4,600	49 U	51 U	230 U	47 U	40 U	51 U
bis(2-Chloroisopropyl)ether	41,000	9,100	1.7	49 U	51 U	230 U	47 U	40 U	51 U
Hexachloroethane	200,000	46,000	360	49 U	51 U	230 U	47 U	40 U	51 U
Nitrobenzene	510,000	39,000	23	49 U	51 U	230 U	47 U	40 U	51 U
Isophorone	3,000,000	670,000	410	49 U	51 U	230 U	47 U	40 U	51 U
bis(2-Chloroethoxy)methane	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Naphthalene	20,000,000	1,600,000	150	49 U	51 U	230 U	47 U	88 J	51 U
Hexachlorobutadiene	37,000	8,200	1,800	98 U	100 U	470 U	93 U	81 U	100 U
Hexachlorocyclopentadiene	6,100,000	470,000	1,800,000	240 U	250 U	1,200 U	230 U	200 U	250 U
2-Chloronaphthalene	82,000,000	6,300,000	32,000	49 U	51 U	230 U	47 U	40 U	51 U
Acenaphthylene	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Dimethylphthalate	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
2,6-Dinitrotoluene	1,000,000	78,000	250	49 U	51 U	230 U	47 U	40 U	51 U
Fluorene	41,000,000	3,100,000	140,000	49 U	51 U	230 U	47 U	40 U	51 U
4-Chlorophenyl-phenylether	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Diethylphthalate	820,000,000	63,000,000	450,000	98 U	100 U	470 U	93 U	81 U	100 U
N-Nitrosodiphenylamine (j)	580,000	130,000	760	49 U	51 U	230 U	47 U	40 U	51 U
4-Bromophenyl-phenylether	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Hexachlorobenzene	1,800	400	52	49 U	51 U	230 U	47 U	40 U	51 U
Phenanthrene	--	--	--	49 U	51 U	230 U	47 U	390	51 U
Anthracene	310,000,000	23,000,000	470,000	49 U	51 U	230 U	47 U	40 U	51 U
Di-n-butylphthalate	100,000,000	7,800,000	5,000,000	98 U	100 U	470 U	93 U	81 U	100 U
Fluoranthene	41,000,000	3,100,000	6,300,000	49 U	51 U	230 U	130 J	230	51 U
Butylbenzylphthalate	200,000,000	16,000,000	17,000,000	98 U	160 J	470 U	93 U	81 U	100 U
Benzo(a)anthracene	3,900	220	480	49 U	51 U	230 U	78 J	110 J	51 U
Chrysene	390,000	22,000	48,000	49 U	51 U	230 U	100 J	160 J	51 U
3,3'-Dichlorobenzidine	6,400	1,400	4.9	150 U	150 U	700 U	140 U	120 U	150 U
bis(2-Ethylhexyl)phthalate	200,000	46,000	2,900,000	98 U	100 U	470 U	93 U	81 U	100 U
Di-n-octylphthalate	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Benzo(b)fluoranthene	3,900	220	1,500	49 U	51 U	230 U	91 J	40 U	51 U
Benzo(k)fluoranthene	39,000	2,200	15,000	49 U	51 U	230 U	47 U	40 U	51 U
Benzo(a)pyrene	390	22	120	49 U	51 U	230 U	61 J	40 U	51 U
Indeno(1,2,3-cd)pyrene	3,900	220	4,200	49 U	51 U	230 U	47 U	40 U	51 U
Dibenz(a,h)anthracene	390	22	460	49 U	51 U	230 U	47 U	40 U	51 U
Benzo(g,h,i)perylene	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Acetophenone	100,000,000	7,800,000	3,200	98 U	100 U	470 U	93 U	81 U	100 U
2-Acetylaminofluorene	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
4-Aminobiphenyl	--	--	--	240 U	250 U	1,200 U	230 U	200 U	250 U
Aniline	500,000	110,000	140	240 U	250 U	1,200 U	230 U	200 U	250 U
Benzyl alcohol	510,000,000	39,000,000	150,000	240 U	250 U	1,200 U	230 U	200 U	250 U
Chlorobenzilate	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Diallate TRANS/CIS	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
2,6-Dichlorophenol	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Dimethoate	--	--	--	240 U	250 U	1,200 U	230 U	200 U	250 U

CUMMINGS RITER

TABLE 2-15
SUMMARY OF ANALYTICAL RESULTS
AOC 16 - FORMER ABOVEGROUND FUEL OIL STORAGE TANK C
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter / Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC16-1 0.0'-0.5' 12/7/2006	AOC16-2 0.0'-0.5' 12/7/2006	AOC16-3 0.0'-0.5' 12/5/2006	AOC16-4 0.0'-0.5' 12/7/2006	AOC16-5 0.0'-0.5' 12/7/2006	AOC16-6 0.0'-0.5' 12/7/2006
Semivolatile Organic Compounds (µg/kg)									
p-Dimethylaminoazobenzene	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
7,12-Dimethylbenz[a]anthracene	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
3,3'-Dimethylbenzidine	--	--	--	490 U	510 U	2,300 U	470 U	400 U	510 U
1,3-Dinitrobenzene	100,000	7,800	37	98 U	100 U	470 U	93 U	81 U	100 U
Ethyl methanesulfonate	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Hexachloropropene	--	--	--	150 U	150 U	700 U	140 U	120 U	150 U
Isodrin	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Isosafrole	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Methapyrilene	--	--	--	2,400 U	2,500 U	12,000 U	2,300 U	2,000 U	2,500 U
3-Methylcholanthrene	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Methyl methanesulfonate	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
1,4-Naphthoquinone	--	--	--	1,200 U	1,300 U	5,900 U	1,200 U	1,000 U	1,300 U
1-Naphthylamine	--	--	--	240 U	250 U	1,200 U	230 U	200 U	250 U
2-Naphthylamine	--	--	--	240 UR	250 UR	1,200 U	230 UR	200 UR	250 UR
4-Nitroquinoline-1-oxide	--	--	--	490 U	510 U	2,300 U	470 U	400 U	510 U
N-Nitrosodi-n-butylamine	530	120	0.027	98 U	100 U	470 U	93 U	81 U	100 U
N-Nitrosodiethylamine	19	1.0	0.00071	98 U	100 U	470 U	93 U	81 U	100 U
N-Nitrosomethylethylamine	130	29	--	98 U	100 U	470 U	93 U	81 U	100 U
N-Nitrosomorpholine	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
N-Nitrosopiperidine	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
N-Nitrosopyrrolidine	1,400	300	--	98 U	100 U	470 U	93 U	81 U	100 U
5-Nitro-o-toluidine	--	--	--	240 U	250 U	1,200 U	230 U	200 U	250 U
Pentachlorobenzene	820,000	63,000	20,000	98 U	100 U	470 U	93 U	81 U	100 U
Pentachloronitrobenzene	11,000	2,500	82	98 U	100 U	470 U	93 U	81 U	100 U
Phenacetin	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
1,4-Phenylenediamine	190,000,000	15,000,000	--	17,000 UR	18,000 UR	82,000 U	16,000 UR	14,000 UR	18,000 UR
2-Picoline	--	--	--	150 U	150 U	700 U	140 U	120 U	150 U
Pronamide	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
Pyridine	1,000,000	78,000	--	98 U	100 U	470 U	93 U	81 U	100 U
Safrole	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
1,2,4,5-Tetrachlorobenzene	310,000	23,000	660	98 U	100 U	470 U	93 U	81 U	100 U
2,3,4,6-Tetrachlorophenol	31,000,000	2,300,000	--	98 U	100 U	470 U	93 U	81 U	100 U
Tetraethyldithiopyrophosphate	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Thionazin	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
o-Toluidine	12,000	2,700	5.7	290 U	300 U	1,400 U	280 U	240 U	310 U
O,O,O-Triethylphosphorothioate	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
1,3,5-Trinitrobenzene	31,000,000	2,300,000	--	240 U	250 U	1,200 U	230 U	200 U	250 U
2-Methylphenol	51,000,000	3,900,000	--	98 U	100 U	470 U	93 U	81 U	100 U
4-Chloroaniline	4,100,000	310,000	970	98 U	100 U	470 U	93 U	81 U	100 U
2-Methylnaphthalene	4,100,000	310,000	4,400	49 U	51 U	230 U	47 U	290	51 U
2,4,5-Trichlorophenol	100,000,000	7,800,000	--	98 U	100 U	470 U	93 U	81 U	100 U
2-Nitroaniline	--	--	--	49 U	51 U	230 U	47 U	40 U	51 U
3-Nitroaniline	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U
Dibenzofuran	1,000,000	78,000	--	49 U	51 U	230 U	47 U	40 U	51 U
4-Nitroaniline	--	--	--	98 U	100 U	470 U	93 U	81 U	100 U

CUMMINGS RITER

TABLE 2-15
SUMMARY OF ANALYTICAL RESULTS
AOC 16 - FORMER ABOVEGROUND FUEL OIL STORAGE TANK C
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC16-1 0.0'-0.5' 12/7/2006	AOC16-2 0.0'-0.5' 12/7/2006	AOC16-3 0.0'-0.5' 12/5/2006	AOC16-4 0.0'-0.5' 12/7/2006	AOC16-5 0.0'-0.5' 12/7/2006	AOC16-6 0.0'-0.5' 12/7/2006
Volatile Organic Compounds (µg/kg)										
Dichlorodifluoromethane		200,000,000	16,000,000	11,000	2 U	2 U	3 U	2 U	2 U	2 U
Chloromethane		--	--	930	2 U	2 U	3 U	2 U	2 U	2 U
Vinyl Chloride		4,000	90	0.12	1 U	1 U	2 U	1 U	1 U	1 U
Bromomethane		1,400,000	110,000	41	2 U	2 U	3 U	2 U	2 U	2 U
Chloroethane		990,000	220,000	19	2 U	2 U	3 U	2 U	2 U	2 U
Trichlorofluoromethane		310,000,000	23,000,000	23,000	2 U	2 U	3 U	2 U	2 U	2 U
1,1-Dichloroethene		51,000,000	3,900,000	2,900	1 U	1 U	2 U	1 U	1 U	1 U
Methylene Chloride		380,000	85,000	19	2 U	2 U	3 U	2 U	2 U	2 U
trans-1,2-Dichloroethene		20,000,000	1,600,000	720	1 U	1 U	2 U	1 U	1 U	1 U
1,1-Dichloroethane		200,000,000	16,000,000	5,100	1 U	1 U	2 U	1 U	1 U	1 U
cis-1,2-Dichloroethene		10,000,000	780,000	--	1 U	1 U	2 U	1 U	1 U	1 U
Chloroform		10,000,000	780,000	0.91	1 U	1 U	2 U	1 U	1 U	1 U
1,1,1-Trichloroethane		290,000,000	22,000,000	32,000	1 U	1 U	2 U	1 U	1 U	1 U
Carbon Tetrachloride		22,000	4,900	2.1	1 U	1 U	2 U	1 U	1 U	1 U
Benzene		52,000	12,000	1.9	0.5 U	0.6 U	0.8 U	0.6 U	**22**	0.5 U
1,2-Dichloroethane		31,000	7,000	1.0	1 U	1 U	2 U	1 U	1 U	1 U
Trichloroethene		7,200	1,600	0.26	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dichloropropane		42,000	9,400	2.1	1 U	1 U	2 U	1 U	1 U	1 U
Dibromomethane		10,000,000	780,000	300	1 U	1 U	2 U	1 U	1 U	1 U
Bromodichloromethane		46,000	10,000	1.1	1 U	1 U	2 U	1 U	1 U	1 U
Toluene		82,000,000	6,300,000	27,000	1 U	1 U	2 U	1 U	43	1 U
1,1,2-Trichloroethane		50,000	11,000	0.78	1 U	1 U	2 U	1 U	1 U	1 U
Tetrachloroethene		5,300	1,200	4.7	1 U	1 U	2 U	1 U	1 U	1 U
Dibromochloromethane		34,000	7,600	0.83	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dibromoethane		1,400	320	0.060	1 U	1 U	2 U	1 U	1 U	1 U
Chlorobenzene		20,000,000	1,600,000	680	1 U	1 U	2 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane		110,000	25,000	4.0	1 U	1 U	2 U	1 U	1 U	1 U
Ethylbenzene		100,000,000	7,800,000	15,000	1 U	1 U	2 U	4 J	98	7
Styrene		200,000,000	16,000,000	57,000	1 U	1 U	2 U	1 U	1 U	1 U
Bromoform		360,000	81,000	67	1 U	1 U	2 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane		14,000	3,200	0.68	1 U	1 U	2 U	1 U	1 U	1 U
1,2,3-Trichloropropane		1,400	320	0.036	1 U	1 U	2 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane		3,600	200	0.0037	2 U	2 U	3 U	2 U	2 U	2 U
Acetone		920,000,000	70,000,000	22,000	11 J	13 J	12 U	77	130	8 U
Carbon Disulfide		100,000,000	7,800,000	19,000	1 U	1 U	2 U	1 U	1 U	1 U
2-Butanone		610,000,000	47,000,000	29,000	4 U	5 U	7 U	5 U	21	4 U
trans-1,3-Dichloropropene		--	--	--	1 U	1 U	2 U	1 U	1 U	1 U
cis-1,3-Dichloropropene		--	--	--	1 U	1 U	2 U	1 U	1 U	1 U
4-Methyl-2-pentanone		--	--	59,000	3 U	4 U	5 U	3 U	3 U	3 U
2-Hexanone		--	--	--	3 U	4 U	5 U	3 U	3 U	3 U
Xylene (total)		200,000,000	16,000,000	3,000	1 U	1 U	2 U	28	430	46
Acrolein		510,000	39,000	0.2	22 U	24 U	34 U	23 U	20 U	21 UJ
Acrylonitrile		5,300	1,200	0.15	4 U	5 U	7 U	5 U	4 U	4 U
Methyl Iodide		--	--	--	3 U	4 U	5 U	3 U	3 U	3 U
Acetonitrile		--	--	580	27 U	30 U	42 U	28 U	25 U	27 U

CUMMINGS RITER

TABLE 2-15
SUMMARY OF ANALYTICAL RESULTS
AOC 16 - FORMER ABOVEGROUND FUEL OIL STORAGE TANK C
GENERAL CHEMICAL CORPORATION
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

Parameter	Sample ID / Depth / Date Sampled	USEPA Region III RBC Industrial Soil	USEPA Region III RBC Residential Soil	USEPA Region III SSLs Soil, for Groundwater Migration, DAF=20	AOC16-1 0.0'-0.5' 12/7/2006	AOC16-2 0.0'-0.5' 12/7/2006	AOC16-3 0.0'-0.5' 12/5/2006	AOC16-4 0.0'-0.5' 12/7/2006	AOC16-5 0.0'-0.5' 12/7/2006	AOC16-6 0.0'-0.5' 12/7/2006
Volatile Organic Compounds (µg/kg)										
Allyl Chloride		--	--	--	1 U	1 U	2 U	1 U	1 U	1 U
Vinyl Acetate		1,000,000,000	78,000,000	1,700	2 U	2 U	3 U	2 U	2 U	2 U
2-Chloro-1,3-butadiene		20,000,000	1,600,000	120	1 U	1 U	2 U	1 U	1 U	1 U
Propionitrile		--	--	--	33 U	36 U	51 U	34 U	29 U	32 UJ
Methacrylonitrile		--	--	--	5 U	6 U	8 U	6 U	5 U	5 U
Isobutyl Alcohol		310,000,000	23,000,000	12,000	110 U	120 U	170 U	110 U	98 U	160 J
Methyl Methacrylate		1,400,000,000	110,000,000	6,500	1 U	1 U	2 U	1 U	1 U	1 U
1,4-Dioxane		260,000	58,000	26	77 U	85 U	120 U	80 U	69 U	75 UJ
Ethyl Methacrylate		--	--	--	1 U	1 U	2 U	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene		--	--	--	11 U	12 U	17 U	11 U	10 U	11 U
Pentachloroethane		--	--	--	1 U	1 U	2 U	1 U	1 U	1 U

Notes:

B - Analyte was not detected substantially above the level reported in the laboratory or field blanks.
J - Value is estimated.
K - Reported value may be biased high. The actual value is expected to be lower.
L - Reported value may be biased low. The actual value is expected to be higher.
U - Analyte was not detected. The associated number is the dry method detection limit.
UJ - Analyte was not detected. The associated number is estimated.
UL - Analyte was not detected. The associated number may be biased low.
UR - Result is unusable. The analyte may or may not be present in the sample.

(a) "--" indicates standard does not currently exist for this parameter.

(b) "mg/kg" is milligrams per kilogram, or parts per million.

(c) Mercuric chloride standards are listed.

(d) **Values shown in bold indicate an exceedance of the USEPA Region III Soil Screening Level (SSL) for Groundwater Migration, Dilution Attenuation Factor (DAF) = 20.**

(e) **Bolded and shaded values indicate an exceedance of both the USEPA Region III SSL for Groundwater Migration, DAF = 20; and the USEPA Region III Risk-based Concentration (RBC) for Industrial Soil.**

(f) Chromium VI standards are listed.

(g) **Shaded values indicate an exceedance of the USEPA Region III RBC for Industrial Soil.**

(h) "µg/kg" is micrograms per kilogram, or parts per billion.

(i) The result reported for 4-Methylphenol represents the combined total of 3-Methylphenol and 4-Methylphenol.

(j) The result reported for N-Nitrosodiphenylamine represents the combined total of N-Nitrosodiphenylamine and Diphenylamine.

CUMMINGS RITER

TABLE 3-1
SUMMARY OF RFI PHASE II DISSOLVED TAL METALS + MERCURY by 6010B/7470
IN GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			SWMU1-HP01 121406 12/14/2006	SWMU1-HP02 121406 12/14/2006	SWMU1-HP02D 121406 12/14/2006	W106-HP01 121506 12/15/2006	W106-HP01D 121506 12/15/2006	W106-HP02 121406 12/14/2006	W106-HP03 121406 12/14/2006	W106-HP03D 121406 12/14/2006
All values given in ug/L										
Mercury	n/s	2	ND<0.28	ND<0.056	ND<0.056	ND<0.056	ND<0.056	ND<0.28	ND<0.28	ND<0.28
Aluminum	n/s	n/s	217	ND<80.2	ND<80.2	1,140	1,070	5,830	4,100	4,120
Calcium	n/s	n/s	47,600	48,500	50,000	126,000	126,000	413,000	449,000	440,000
Iron	26,000	n/s	171 J	3,080	3,130	1,490	1,660	**1,340,000**	**757,000**	**747,000**
Magnesium	n/s	n/s	10,400	9,700	9,720	44,800	45,000	217,000	334,000	331,000
Potassium	n/s	n/s	41,500	18,800	18,200	3,750	3,800	14,100	37,000	36,400
Sodium	n/s	n/s	2,980,000	1,600,000	1,570,000	222,000	225,000	267,000	207,000	197,000
Thallium	2.6	2	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<67.5	ND<0.28	ND<0.28
Arsenic	0.045	10	**9,050**	**3,820**	**3,780**	**14.5 J**	**10.1 J**	**79,100**	**66,400**	**66,400**
Selenium	180	50	ND<9.4	ND<9.4	ND<9.4	ND<9.4	ND<9.4	ND<46.9	27.7	31.1
Antimony	15	6	12.2 J	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<48.3	ND<9.7	ND<9.7
Barium	7,300	2,000	9.1	1.9 J	2.4 J	15.8	16.5	14.1 J	7.2	5.7
Beryllium	73	4	ND<0.94	ND<0.94	ND<0.94	2.2 J	2.1 J	ND<4.7	ND<0.94	ND<0.94
Cadmium	18	5	ND<0.91	ND<0.91	ND<0.91	4.7 J	4.5 J	15.2 J	ND<0.91	12.5 J
Chromium	110	100	6.9 J	ND<2.3	ND<2.3	2.8 J	ND<2.3	ND<11.5	ND<2.3	ND<2.3
Cobalt	n/s	n/s	ND<2.1	ND<2.1	ND<2.1	130	131	725	64.0	45.2
Copper	1,500	1,300	ND<2.2	ND<2.2	ND<2.2	87.1	79.8	8.7 J	5.6 J	5.3 J
Lead	n/s	15	ND<6.9	ND<6.9	ND<6.9	ND<6.9	ND<6.9	ND<34.3	ND<6.9	ND<6.9
Manganese	730	n/s	239	249	251	**5,010**	**5,020**	**6,700**	**1,810**	**1,670**
Nickel	730	n/s	7.8 J	15.7	16.3	69.1	74.5	117	24.8	17.4
Silver	180	n/s	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<8.0	ND<1.6	ND<1.6
Vanadium	37	n/s	24.1	3.2 J	4.6 J	ND<1.5	2.1 J	**39.6**	ND<1.5	ND<1.5
Zinc	11,000	n/s	ND<8.1	ND<8.1	ND<8.1	746	750	4,280	428	128

Notes:

15 : Bold indicates exceedance of RBC
15 : Shade indicates exceedance of MCL
15 : Bold with Shade indicate exceedance of both RBC and MCL
n/a : Not Applicable
n/s No standard available.
ND : Non-Detect
J : Estimated Value
D : Compound quatitated on a diluted sample
Chromium RBC based on chromium VI RBC
Manganese RBC applied is 'non food' RBC

TABLE 3-1
SUMMARY OF RFI PHASE II DISSOLVED TAL METALS + MERCURY by 6010B/7470
IN GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL		Sample Identification and Date Collected						
			W106-HP04 121506 12/15/2006	W114-HP01 121506 12/15/2006	AOC11-HP01 121506 12/15/2006	SAL3-HP02 121806 12/18/2006	SAL3-HP03 121506 12/15/2006	SAL3-HP04 121806 12/18/2006	W112-HP01 121306 12/13/2006	W112-HP02 121306 12/13/2006
All values given in ug/L										
Mercury	n/s	2	n/a	ND<0.28	ND<0.28	ND<0.28	ND<0.056	ND<0.056	ND<0.056	ND<0.056
Aluminum	n/s	n/s	n/a	9,230	1,820,000	39,300	3,330	87.7 J	ND<80.2	ND<80.2
Calcium	n/s	n/s	n/a	366,000	411,000	424,000	466,000	633,000	135,000	60,700
Iron	26,000	n/s	n/a	**581,000**	**2,630,000**	**779,000**	**167,000**	**33,400**	21,400	23,600
Magnesium	n/s	n/s	n/a	107,000	568,000	215,000	177,000	107,000	158,000	21,200
Potassium	n/s	n/s	n/a	18,400	68,500	23,000	59,600	46,400	2,870	4,120
Sodium	n/s	n/s	n/a	359,000	933,000	238,000	125,000	127,000	379,000	103,000
Thallium	2.6	2	n/a	ND<13.5	ND<135	**21.9**	ND<13.5	ND<13.5	ND<13.5	ND<13.5
Arsenic	0.045	10	n/a	**23.0**	**124 J**	ND<10	**770**	**12.4 J**	ND<10	ND<10
Selenium	180	50	n/a	13.0 J	ND<93.8	28.0	ND<9.4	ND<9.4	ND<9.4	ND<9.4
Antimony	15	6	n/a	ND<9.7	ND<96.6	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<9.7
Barium	7,300	2,000	n/a	11.2	21.7 J	8.3	17.1	21.3	251	17.8
Beryllium	73	4	n/a	2.8 J	65.1	12.4	1.7 J	ND<0.94	ND<0.94	ND<0.94
Cadmium	18	5	n/a	**15.9**	**77.7**	**19.6**	**8.0**	ND<0.91	ND<0.91	**5.1**
Chromium	110	100	n/a	5.8 J	**11,300**	11.3 J	2.7 J	ND<2.3	ND<2.3	ND<2.3
Cobalt	n/s	n/s	n/a	387	1,540	396	61.2	2.2 J	15.6	88.2
Copper	1,500	1,300	n/a	1,070	**3,200**	199	69.4	ND<2.2	ND<2.2	3.9 J
Lead	n/s	15	n/a	ND<6.9	**97.8 J**	ND<6.9	ND<6.9	ND<6.9	ND<6.9	**19.6**
Manganese	730	n/s	n/a	**7,100**	**29,500**	**13,600**	**2,850**	**1,430**	**4,540**	**3,330**
Nickel	730	n/s	n/a	189	**8,840**	294	58.6	ND<5.6	17.2	46.8
Silver	180	n/s	n/a	ND<1.6	ND<16.0	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6
Vanadium	37	n/s	n/a	16.7	**5,390**	**46.7**	6.4	2.9 J	ND<1.5	ND<1.5
Zinc	11,000	n/s	n/a	9,470	**13,900**	**18,100**	6,950	ND<8.1	20.1	1,990

TABLE 3-1
SUMMARY OF RFI PHASE II DISSOLVED TAL METALS + MERCURY by 6010B/7470
IN GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected				
			W112-HP03 121306 12/13/2006	W115-GW01 010307 1/3/2007	W115-GW02 010207 1/2/2007	W115-GW03 010207 1/2/2007	W115-GW04 010307 1/3/2007
All values given in ug/L							
Mercury	n/s	2	ND<0.056	ND<0.056	ND<0.056	ND<0.056	ND<0.056
Aluminum	n/s	n/s	ND<80.2	1,390	ND<80.2	7,980	31,600
Calcium	n/s	n/s	231,000	636,000	338,000	439,000	409,000
Iron	26,000	n/s	**131,000**	5,220	6,410	**364,000**	**481,000**
Magnesium	n/s	n/s	119,000	3,730	43,700	141,000	151,000
Potassium	n/s	n/s	4,220	37,700	450,000	17,300	8,980
Sodium	n/s	n/s	628,000	110,000	41,200,000	124,000	970,000
Thallium	2.6	2	ND<13.5	ND<13.5	**18.3 J**	ND<13.5	ND<13.5
Arsenic	0.045	10	**46.6**	**238.0**	**73.0**	**26.8**	**16.6 J**
Selenium	180	50	ND<9.4	ND<9.4	9.8 J	20.6	ND<9.4
Antimony	15	6	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<9.7
Barium	7,300	2,000	991	15.6	1,090	14.8	19.5
Beryllium	73	4	ND<0.94	ND<0.94	ND<0.94	**7.6**	**17.2**
Cadmium	18	5	**5**	**7.2**	**22.4**	2.3 J	**32.3**
Chromium	110	100	ND<2.3	5.6 J	6.3 J	ND<2.3	13.5
Cobalt	n/s	n/s	3.9 J	51.6	7.9	471	947
Copper	1,500	1,300	ND<2.2	144	365	49.7	942
Lead	n/s	15	ND<6.9	**396**	**120**	8.5 J	**24.8**
Manganese	730	n/s	**13,600**	168	412	**14,200**	**34,300**
Nickel	730	n/s	ND<5.6	27.0	22.4	186	316
Silver	180	n/s	ND<1.6	ND<1.6	26.4	ND<1.6	ND<1.6
Vanadium	37	n/s	ND<1.5	ND<1.5	ND<1.5	ND<1.5	ND<7.5
Zinc	11,000	n/s	ND<8.1	869	357	**17,600**	**17,300**

TABLE 3-2
SUMMARY OF RFI PHASE II TOTAL TAL METALS + MERCURY by 6010B/7470
IN GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			SWMU1-HP01 121406 12/14/2006	SWMU1-HP02 121406 12/14/2006	W106-HP01 121506 12/15/2006	W106-HP01D 121506 12/15/2006	SWMU1-HP02D 121406 12/14/2006	W106-HP02 121406 12/14/2006	W106-HP03 121406 12/14/2006	W106-HP03D 121406 12/14/2006
All values given in ug/L										
Mercury	n/s	2	**5.9**	0.15 J	ND<0.056	ND<0.056	0.19 J	ND<0.28	1.4	1.1
Aluminum	n/s	n/s	58,400	6,820	18,300	12,000	5,540	8,120	19,800	14,600
Calcium	n/s	n/s	75,400	55,500	131,000	128,000	59,700	433,000	486,000	465,000
Iron	26,000	n/s	**61,700**	**28,900**	16,600	11,200	20,500	**1,320,000**	**769,000**	**754,000**
Magnesium	n/s	n/s	16,900	10,800	47,300	45,600	11,300	223,000	344,000	338,000
Potassium	n/s	n/s	43,800	21,300	5,050	4,530	22,100	14,600	39,000	38,600
Sodium	n/s	n/s	2,880,000	1,610,000	220,000	223,000	1,510,000	284,000	207,000	205,000
Thallium	2.6	2	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5
Arsenic	0.045	10	**7,440**	**4,250**	**30.8**	**17.5 J**	**4,250**	**81,100**	**65,700**	**65,600**
Selenium	180	50	ND<9.4	ND<9.4	ND<9.4	ND<9.4	ND<9.4	ND<9.4	25.1	22.4
Antimony	15	6	**31.3**	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<9.7
Barium	7,300	2,000	358	77.0	43.9	32.6	47.9	16.7	178	147
Beryllium	73	4	2.3 J	ND<0.94	3.1 J	2.7 J	ND<0.94	1.3 J	1.3 J	0.96 J
Cadmium	18	5	ND<0.91	ND<0.91	4.1 J	4.1 J	ND<0.91	**12.1**	ND<0.91	ND<0.91
Chromium	110	100	**110**	**229**	40.7	26.9	**194**	3.2 J	32.0	19.6
Cobalt	n/s	n/s	67.1	6.3	139	134	4.4 J	714	68.5	58.4
Copper	1,500	1,300	849	106	126	113	59	19.8	538	391
Lead	n/s	15	**808**	**59.6**	**17.3**	13.6 J	**37.9**	12.1 J	**337**	**274**
Manganese	730	n/s	**1,240**	399	**5,370**	**5,160**	397	**6,400**	**2,020**	**1,800**
Nickel	730	n/s	58.0	74.5	84.3	77.5	64.7	114	33.3	27.8
Silver	180	n/s	2.7 J	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6	ND<1.6
Vanadium	37	n/s	**138**	29.0	**62.9**	**43.5**	29.8	ND<15.0	23.1	7.9
Zinc	11,000	n/s	483	306	810	775	238	4,330	1,090	617

Notes:

15 : Bold indicates exceedance of RBC
15 : Shade indicates exceedance of MCL
15 : Bold with Shade indicate exceedance of both RBC and MCL
n/a : Not Applicable
n/s No standard available.
ND : Non-Detect
J : Estimated Value
D : Compound quatitated on a diluted sample
Notes: Chromium RBC based on chromium VI RBC
Manganese RBC applied is 'non food' RBC

TABLE 3-2
SUMMARY OF RFI PHASE II TOTAL TAL METALS + MERCURY by 6010B/7470
IN GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			W106-HP04 121506 12/15/2006	W114-HP01 121506 12/15/2006	AOC11-HP01 121506 12/15/2006	SAL3-HP02 121806 12/18/2006	SAL3-HP03 121506 12/15/2006	SAL3-HP04 121806 12/18/2006	W112-HP01 121306 12/13/2006	W112-HP02 121306 12/13/2006
All values given in ug/L										
Mercury	n/s	2	n/a	ND<0.28	**8.8**	ND<0.28	ND<0.056	0.061 J	ND<0.56	0.52
Aluminum	n/s	n/s	n/a	17,400	1,780,000	64,800	16,600	13,000	419	28,800
Calcium	n/s	n/s	n/a	384,000	413,000	420,000	468,000	626,000	105,000	62,600
Iron	26,000	n/s	n/a	**630,000**	**2,580,000**	**790,000**	**175,000**	**56,200**	16,900	**82,300**
Magnesium	n/s	n/s	n/a	113,000	554,000	224,000	182,000	110,000	135,000	33,800
Potassium	n/s	n/s	n/a	19,700	73,900	26,300	61,000	47,700	2,750	8,010
Sodium	n/s	n/s	n/a	379,000	884,000	246,000	119,000	121,000	361,000	98,400
Thallium	2.6	2	n/a	**13.8 J**	ND<67.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5	ND<13.5
Arsenic	0.045	10	n/a	**52.2**	**224**	ND<10	**1,770**	**37.2**	ND<10	**68.3**
Selenium	180	50	n/a	29.4	**86.2 J**	16.8 J	ND<9.4	ND<9.4	ND<9.4	ND<9.4
Antimony	15	6	n/a	ND<9.7	ND<48.3	ND<9.7	ND<9.7	ND<9.7	ND<9.7	**14.0 J**
Barium	7,300	2,000	n/a	25.0	636	63.6	68.4	63.7	224	208
Beryllium	73	4	n/a	3.2 J	**64.0**	14.0	2.8 J	ND<0.94	ND<0.94	2.9 J
Cadmium	18	5	n/a	2.9 J	**20.8 J**	9.9	4.7 J	**59.7**	ND<0.91	**8.5**
Chromium	110	100	n/a	28.4	**11,000**	54.3	64.7	46.1	ND<2.3	68.5
Cobalt	n/s	n/s	n/a	444	1,490	405	53.0	25.3	10.2	126
Copper	1,500	1,300	n/a	1,340	**3,240**	903	**2,210**	**1,840**	2.4 J	982
Lead	n/s	15	n/a	**22.3**	**437**	**37.6**	**38.0**	**28.6**	ND<6.9	**2,480**
Manganese	730	n/s	n/a	**7,510**	**28,400**	**13,700**	**2,550**	**1,460**	**3,570**	**4,350**
Nickel	730	n/s	n/a	228	**8,460**	326	66.8	26	9.2 J	93.4
Silver	180	n/s	n/a	ND<1.6	16.0 J	ND<1.6	ND<1.6	ND<1.6	ND<1.6	3.6 J
Vanadium	37	n/s	n/a	30.7	**5,170**	**67**	**146**	21.3	1.8 J	**81.1**
Zinc	11,000	n/s	n/a	10,600	**13,300**	**17,700**	5,110	1,070	18.2 J	2,490

TABLE 3-2
SUMMARY OF RFI PHASE II TOTAL TAL METALS + MERCURY by 6010B/7470
IN GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected				
			W112-HP03 121306 12/13/2006	W115-GW01 010307 1/3/2007	W115-GW02 010207 1/2/2007	W115-GW03 010207 1/2/2007	W115-GW04 010307 1/3/2007
All values given in ug/L							
Mercury	n/s	2	ND<0.056	ND<0.056	ND<0.056	ND<0.056	0.084 J
Aluminum	n/s	n/s	ND<80.2	1,470	180 J	7,980	34,200
Calcium	n/s	n/s	243,000	614,000	288,000	434,000	395,000
Iron	26,000	n/s	**139,000**	7,980	7,620	**324,000**	**440,000**
Magnesium	n/s	n/s	134,000	3,740	50,800	137,000	152,000
Potassium	n/s	n/s	4,590	37,000	344,000	16,400	9,350
Sodium	n/s	n/s	654,000	108,000	36,800,000	116,000	968,000
Thallium	2.6	2	ND<13.5	ND<13.5	**16.1 J**	ND<13.5	ND<13.5
Arsenic	0.045	10	**55.7**	**282**	**94.3**	**33.2**	**21.7**
Selenium	180	50	ND<9.4	ND<9.4	ND<9.4	16.8 J	ND<9.4
Antimony	15	6	ND<9.7	ND<9.7	ND<9.7	ND<9.7	ND<9.7
Barium	7,300	2,000	1,140	16.3	1,180	15.0	25.1
Beryllium	73	4	ND<0.94	ND<0.94	ND<0.94	**7.2**	**18.2**
Cadmium	18	5	2.7 J	**6.8**	3.5 J	ND<0.91	**29.9**
Chromium	110	100	ND<2.3	33.4	38.1	3.8 J	18.9
Cobalt	n/s	n/s	4.2 J	51.5	11.8	453	896
Copper	1,500	1,300	ND<2.2	137	443	117	1,080
Lead	n/s	15	ND<6.9	**391**	8.6 J	ND<6.9	**26.4**
Manganese	730	n/s	**11,600**	165	390	**13,900**	**33,400**
Nickel	730	n/s	ND<5.6	30.0	35.5	169	307
Silver	180	n/s	ND<1.6	ND<1.6	6.5	ND<1.6	ND<1.6
Vanadium	37	n/s	ND<1.5	ND<1.5	ND<1.5	3.5 J	3.3 J
Zinc	11,000	n/s	ND<8.1	787	428	**16,400**	**16,000**

TABLE 3-3
SUMMARY OF RFI PHASE II TCL PESTICIDES by 8081
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			SWMU1-HP01 121406 12/14/2006	SWMU1-HP02 121406 12/14/2006	SWMU1-HP02D 121406 12/14/2006	W106-HP01 121506 12/15/2006	W106-HP01D 121506 12/15/2006	W106-HP02 121406 12/14/2006	W106-HP03 121406 12/14/2006	W106-HP03D 121406 12/14/2006
All values given in ug/L										
p,p-DDD	0.28	n/s	n/a	n/a	n/a	0.079	0.042	ND <0.004	**0.99**	**0.48**
p,p-DDE	0.2	n/s	n/a	n/a	n/a	ND <0.005	ND <0.005	ND <0.005	**0.2**	0.1
p,p-DDT	0.2	n/s	n/a	n/a	n/a	0.063	0.046	ND <0.006	**0.91**	**0.48**
Aldrin	0.0039	n/s	n/a	n/a	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Alpha BHC	0.011	n/s	n/a	n/a	n/a	**0.11**	**0.10**	**0.052**	**0.08**	**0.042**
Alpha Chlordane	n/s	n/s	n/a	n/a	n/a	ND <0.003	ND <0.003	ND <0.003	ND<0.014	ND<0.0029
Beta BHC	0.037	n/s	n/a	n/a	n/a	**0.14**	**0.14**	ND <0.008	ND <0.008	0.022 J
Delta BHC	n/s	n/s	n/a	n/a	n/a	0.034	0.033	ND <0.008	ND <0.008	0.03
Dieldrin	0.0042	n/s	n/a	n/a	n/a	ND <0.004	ND <0.004	ND <0.004	**0.024 J**	**0.037**
Endosulfan I	n/s	n/s	n/a	n/a	n/a	ND< 0.003	ND< 0.003	ND< 0.003	ND< 0.003	ND< 0.003
Endosulfan II	n/s	n/s	n/a	n/a	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Endosulfan Sulfate	n/s	n/s	n/a	n/a	n/a	ND <0.012	ND <0.012	ND <0.012	ND <0.012	ND <0.012
Endrin	11	2	n/a	n/a	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Endrin Aldehyde	n/s	n/s	n/a	n/a	n/a	ND <0.02	ND <0.02	ND <0.02	ND <0.02	ND <0.02
Endrin Ketone	n/s	n/s	n/a	n/a	n/a	ND <0.013	ND <0.013	ND <0.013	ND <0.013	ND <0.013
Gamma BHC - Lindane	0.052	0.2	n/a	n/a	n/a	0.025	0.025	ND <0.002	ND <0.002	ND <0.002
Gamma Chlordane	n/s	n/s	n/a	n/a	n/a	ND <0.003	ND <0.003	ND <0.003	ND <0.003	ND <0.003
Heptachlor	0.015	0.4	n/a	n/a	n/a	0.004 J	0.0045 J	ND <0.003	ND <0.003	ND <0.003
Heptachlor Epoxide	0.0074	0.2	n/a	n/a	n/a	ND <0.008	ND <0.008	ND <0.008	ND <0.008	ND <0.008
Methoxychlor	180	40	n/a	n/a	n/a	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03
Toxaphene	0.061	3	n/a	n/a	n/a	ND <0.3	ND <0.3	ND <0.3	ND <0.3	ND <0.3

Notes:

15 : Bold indicates exceedance of RBC
15 : Shade indicates exceedance of MCL
15 : Bold with Italics indicate exceedance of both RBC and MCL
n/a : Not Applicable
ND : Non-Detect
J : Estimated Value
D : Compound quatitated on a diluted sample
n/s : No standard available

TABLE 3-3
SUMMARY OF RFI PHASE II TCL PESTICIDES by 8081
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			W106-HP04 121506 12/15/2006	AOC11-HP01 121506 12/15/2006	SAL3-HP02 121806 12/18/2006	SAL3-HP03 121506 12/15/2006	SAL3-HP04 121806 12/18/2006	W112-HP01 121306 12/13/2006	W112-HP02 121306 12/13/2006	W112-HP03 121306 12/13/2006
All values given in ug/L										
p,p-DDD	0.28	n/s	n/a	**9.5**	0.023	0.21	0.14	0.12	0.055	0.0048 J
p,p-DDE	0.2	n/s	n/a	**8.6**	0.028	0.034	0.026	0.082	0.038	ND <0.005
p,p-DDT	0.2	n/s	n/a	**54**	ND <0.006	0.12	0.091	**0.44**	0.14	0.012 J
Aldrin	0.0039	n/s	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Alpha BHC	0.011	n/s	n/a	**15**	**0.37**	**1.3**	**0.014**	**0.98**	**0.46**	0.0088 J
Alpha Chlordane	n/s	n/s	n/a	ND <0.003	0.032	ND <0.003	ND <0.003	ND <0.003	ND <0.003	ND <0.003
Beta BHC	0.037	n/s	n/a	**3.0**	**0.074**	**0.47**	ND <0.008	**0.19**	**0.075**	ND <0.008
Delta BHC	n/s	n/s	n/a	0.73 J	0.094	0.15	0.046	0.33	0.044	ND <0.008
Dieldrin	0.0042	n/s	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	**0.008 J**	ND <0.004
Endosulfan I	n/s	n/s	n/a	ND< 0.003	ND< 0.003	0.024	ND< 0.003	ND< 0.003	ND< 0.003	ND< 0.003
Endosulfan II	n/s	n/s	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Endosulfan Sulfate	n/s	n/s	n/a	ND <0.012	ND <0.012	ND <0.012	ND <0.012	ND <0.012	ND <0.012	ND <0.012
Endrin	11	2	n/a	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Endrin Aldehyde	n/s	n/s	n/a	ND <0.02	ND <0.02	ND <0.02	ND <0.02	ND <0.02	ND <0.02	ND <0.02
Endrin Ketone	n/s	n/s	n/a	ND <0.013	ND <0.013	ND <0.013	ND <0.013	ND <0.013	ND <0.013	ND <0.013
Gamma BHC - Lindane	0.052	0.2	n/a	**1.0**	ND <0.002	ND <0.002	ND <0.002	ND <0.002	0.049	0.03
Gamma Chlordane	n/s	n/s	n/a	ND <0.003	ND <0.003	ND <0.003	ND <0.003	ND <0.003	ND <0.003	ND <0.003
Heptachlor	0.015	0.4	n/a	ND <0.003	ND <0.003	ND <0.003	ND <0.003	ND <0.003	0.0075 J	0.0046 J
Heptachlor Epoxide	0.0074	0.2	n/a	ND <0.008	**0.012 J**	ND <0.008	ND <0.008	ND <0.008	ND <0.008	ND <0.008
Methoxychlor	180	40	n/a	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03
Toxaphene	0.061	3	n/a	ND <0.3	ND <0.3	ND <0.3	ND <0.3	ND <0.3	ND <0.3	ND <0.3

TABLE 3-3
SUMMARY OF RFI PHASE II TCL PESTICIDES by 8081
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected				
			W114-HP01 121506 12/15/2006	W115-GW01 01/03/07 1/3/2007	W115-GW02 01/02/07 1/2/2007	W115-GW03 01/02/07 1/2/2007	W115-GW04 01/03/07 1/3/2007
All values given in ug/L							
p,p-DDD	0.28	n/s	0.029 J	0.0098 J	ND <0.004	0.0098 J	**0.54**
p,p-DDE	0.2	n/s	ND <0.005	0.0074 J	ND <0.005	0.0074 J	**0.32**
p,p-DDT	0.2	n/s	ND <0.006	0.031	ND <0.006	0.012 J	**2.4**
Aldrin	0.0039	n/s	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Alpha BHC	0.011	n/s	**0.73**	**0.29**	**0.028**	**0.26**	**51**
Alpha Chlordane	n/s	n/s	ND <0.003	ND <0.003	ND <0.003	0.0071 J	ND <0.003
Beta BHC	0.037	n/s	**0.22**	**0.15**	0.014 J	**0.14**	**3.0**
Delta BHC	n/s	n/s	0.29	0.019 J	ND <0.008	0.0053	1.1 J
Dieldrin	0.0042	n/s	ND <0.004	**0.037**	ND <0.004	ND <0.004	ND <0.004
Endosulfan I	n/s	n/s	ND< 0.003	ND< 0.003	ND< 0.003	0.015	ND< 0.003
Endosulfan II	n/s	n/s	ND <0.004	ND <0.004	ND <0.004	ND <0.004	ND <0.004
Endosulfan Sulfate	n/s	n/s	ND <0.012	ND <0.012	ND <0.012	ND <0.012	ND <0.012
Endrin	11	2	ND <0.004	ND <0.004	ND <0.004	0.0056 J	ND <0.004
Endrin Aldehyde	n/s	n/s	ND <0.02	ND <0.02	ND <0.02	ND <0.02	ND <0.02
Endrin Ketone	n/s	n/s	ND <0.013	ND <0.013	ND <0.013	ND <0.013	ND <0.013
Gamma BHC - Lindane	0.052	0.2	ND <0.002	0.02	ND <0.002	0.0097	**7.3**
Gamma Chlordane	n/s	n/s	ND <0.003	0.0042 J	ND <0.003	ND <0.003	ND <0.003
Heptachlor	0.015	0.4	ND <0.003	0.0033 J	ND <0.003	0.0083 J	ND <0.003
Heptachlor Epoxide	0.0074	0.2	ND <0.008	ND <0.008	ND <0.008	ND <0.008	ND <0.008
Methoxychlor	180	40	ND <0.03	ND <0.03	ND <0.03	ND <0.03	ND <0.03
Toxaphene	0.061	3	ND <0.3	ND <0.3	ND <0.3	ND <0.3	ND <0.3

TABLE 3-4
SUMMARY OF RFI PHASE II TCL SVOCs by 8270C
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			SWMU1-HP01 121406 12/14/2006	SWMU1-HP02 121406 12/14/2006	SWMU1-HP02D 121406 12/14/2006	W106-HP03 121406 12/14/2006	W106-HP03D 121406 12/14/2006	W106-HP02 121406 12/14/2006	W106-HP04 121506 12/15/2006	W106-HP01 121506 12/15/2006
All values given in ug/L										
1,1-Biphenyl	300	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9
Dibenzofuran	37	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9
2-Methylnaphthalene	24	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9
Pyridine	37	n/s	n/a	n/a	n/a	ND<2	ND<2	ND<2	ND<2	ND<2
Naphthalene	6.5	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9
Acenaphthene	370	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9
Fluorene	240	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9
Phenanthrene	n/s	n/s	n/a	n/a	n/a	1 J	1 J	ND<1	ND<1	ND<0.9
Fluoranthene	1,500	n/s	n/a	n/a	n/a	1 J	1 J	ND<1	ND<1	ND<0.9
Pyrene	180	n/s	n/a	n/a	n/a	1 J	1 J	ND<1	ND<1	ND<0.9
Chrysene	3	n/s	n/a	n/a	n/a	1 J	1 J	ND<1	ND<1	ND<0.9
Carbazole	3.3	n/s	n/a	n/a	n/a	ND<0.9	ND<0.9	ND<1	ND<1	ND<0.9

Notes:

15 : Bold indicates exceedance of RBC
15 : Shade indicates exceedance of MCL
15 : Bold with Italics indicate exceedance of both RBC and MCL
n/a : Not Applicable
ND : Non-Detect
J : Estimated Value
D : Compound quatitated on a diluted sample
n/s : No standard available

TABLE 3-4
SUMMARY OF RFI PHASE II TCL SVOCs by 8270C
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected							
			W106-HP01D 121506 12/15/2006	W114-HP01 121506 12/15/2006	AOC11-HP01 121506 12/15/2006	SAL3-HP03 121506 12/15/2006	SAL3-HP04 121806 12/18/2006	SAL3-HP02 121806 12/18/2006	W112-HP02 121306 12/13/2006	W112-HP01 121306 12/13/2006
All values given in ug/L										
1,1-Biphenyl	300	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	ND<1	ND<5	ND<1
Dibenzofuran	37	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	3 J	ND<5	ND<1
2-Methylnaphthalene	24	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	9	ND<5	ND<1
Pyridine	37	n/s	ND<2	ND<2	ND<20	ND<2	ND<2	**85**	ND<10	ND<2
Naphthalene	6.5	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	**58**	ND<5	ND<1
Acenaphthene	370	n/s	ND<1	ND<0.9	ND<10	ND<1	4 J	4 J	ND<5	ND<1
Fluorene	240	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	3 J	ND<5	ND<1
Phenanthrene	n/s	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	2 J	ND<5	ND<1
Fluoranthene	1,500	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	ND<1	ND<5	ND<1
Pyrene	180	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	ND<1	ND<5	ND<1
Chrysene	3	n/s	ND<1	ND<0.9	ND<10	ND<1	ND<1	ND<1	ND<5	ND<1
Carbazole	3.3	n/s	ND<1	ND<0.9	ND<10	1 J	ND<1	**5**	ND<5	ND<1

TABLE 3-4
SUMMARY OF RFI PHASE II TCL SVOCs by 8270C
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	Region III RBC Tap Water	MCL	Sample Identification and Date Collected				
			W112-HP03 121306 12/13/2006	W115-GW02 010207 1/2/2007	W115-GW03 010207 1/2/2007	W115-GW01 010307 1/3/2007	W115-GW04 010307 1/3/2007
All values given in ug/L							
1,1-Biphenyl	300	n/s	ND<1	ND<1	ND<1	ND<1	3 J
Dibenzofuran	37	n/s	ND<1	ND<1	ND<1	ND<1	2 J
2-Methylnaphthalene	24	n/s	ND<1	ND<1	ND<1	ND<1	14
Pyridine	37	n/s	ND<2	ND<2	ND<2	ND<2	ND<2
Naphthalene	6.5	n/s	ND<1	ND<1	ND<1	ND<1	27
Acenaphthene	370	n/s	ND<1	ND<1	ND<1	1 J	4 J
Fluorene	240	n/s	ND<1	ND<1	ND<1	ND<1	2 J
Phenanthrene	n/s	n/s	ND<1	ND<1	ND<1	ND<1	ND<1
Fluoranthene	1,500	n/s	ND<1	ND<1	ND<1	ND<1	ND<1
Pyrene	180	n/s	ND<1	ND<1	ND<1	ND<1	ND<1
Chrysene	3	n/s	ND<1	ND<1	ND<1	ND<1	ND<1
Carbazole	3.3	n/s	ND<1	ND<1	ND<1	ND<1	2 J

TABLE 3-5
SUMMARY OF RFI PHASE II TCL VOCS by METHOD 8260B
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	RBC Tap	MCL	Sample Identification and Collection Date								
			SWMU1-HP01 121406 12/14/2006	SWMU1-HP02 121406 12/14/2006	SWMU1-HP02D 121406 12/14/2006	W106-HP01 121506 12/15/2006	W106-HP01D 121506 12/15/2006	W106-HP02 121406 12/14/2006	W106-HP03 121406 12/14/2006	W106-HP03D 121406 12/14/2006	W106-HP04 121406 12/14/2006
All values given in ug/L											
1,1,1-Trichloroethane	1,700	200	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
1,1,2,2-Tetrachloroethane	0.053	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,1,2-Trichloroethane	0.19	5	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
1,1-Dichloroethane	900	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,1-Dichloroethene	350	7	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
1,2,4-Trichlorobenzene	61	70	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dibromo-3-chloropropane	0.0002	0.2	n/a	n/a	n/a	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
1,2-Dibromoethane	0.0053	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dichlorobenzene	270	600	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dichloroethane	0.12	5	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dichloropropane	0.16	5	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,3-Dichlorobenzene	18	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,4-Dichlorobenzene	0.47	75	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
2-Butanone (MEK)	7,000	n/s	n/a	n/a	n/a	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0
2-Hexanone	n/s	n/s	n/a	n/a	n/a	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0
4-Methyl-2-pentanone	6,300	n/s	n/a	n/a	n/a	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0
Acetone	5,500	n/s	n/a	n/a	n/a	ND <6.0	ND <6.0	ND <6.0	ND <6.0	ND <6.0	6 J
Acetonitrile	120	n/s	n/a	n/a	n/a	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0
Benzene	0.34	5	n/a	n/a	n/a	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5
Bromodichloromethane	0.17	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Bromoform	8.5	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Bromomethane	8.5	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Carbon Disulfide	1000	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Carbon Tetrachloride	0.16	5	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Chlorobenzene	90	100	n/a	n/a	n/a	2 J	2 J	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Dibromochloromethane	0.13	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Chloroethane	3.6	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Chloroform	0.15	n/s	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Chloromethane	190	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
cis-1,2-Dichloroethene	61	70	n/a	n/a	n/a	2 J	1 J	ND <0.8	ND <0.8	ND <0.8	ND <0.8
cis-1,3-Dichloropropene	0.44	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Cyclohexane	12000	n/s	n/a	n/a	n/a	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Dichlorodifluoromethane	350	n/s	n/a	n/a	n/a	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Ethylbenzene	1,300	700	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Isopropylbenzene (Cumene)	660	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methyl Acetate	6100	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methyl Tertiary Butyl Ether	2.6	n/s	n/a	n/a	n/a	1 J	0.9 J	ND <0.5	ND <0.5	ND <0.5	ND <0.5
Methylcyclohexane	6300	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methylene Chloride	4.1	n/s	n/a	n/a	n/a	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Styrene	1,600	100	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Tetrachloroethene	0.1	5	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Toluene	2,300	1000	n/a	n/a	n/a	ND <0.7	ND <0.7	ND <0.7	ND <0.7	ND <0.7	ND <0.7
Trans-1,2-Dichloroethene	110	n/s	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Trans-1,3-Dichloropropene	n/s	n/s	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Trichloroethene	0.026	5	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Trichlorofluoromethane	1,300	n/s	n/a	n/a	n/a	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Vinyl Chloride	0.015	2	n/a	n/a	n/a	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Xylene (Total)	210	10000	n/a	n/a	n/a	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8

Notes:

15 : Bold indicates exceedance of RBC
15 : Shade indicates exceedance of MCL
15 : Bold with Italics indicate exceedance of both RBC and MCL
n/s : No standard available
n/a : Not Applicable
ND : Non-Detect
J : Estimated Value
D : Compound quatitated on a diluted sample

TABLE 3-5
SUMMARY OF RFI PHASE II TCL VOCS by METHOD 8260B
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	RBC Tap	MCL	Sample Identification and Collection Date								
			AOC11-HP01 121506 12/15/2006	SAL3-HP02 121806 12/18/2006	SAL3-HP03 121506 12/15/2006	SAL3-HP04 121806 12/18/2006	W112-HP01 121306 12/13/2006	W112-HP02 121306 12/13/2006	W112-HP03 121306 12/13/2006	W114-HP01 121506 12/15/2006	W115-GW01 010307 1/3/2007
All values given in ug/L											
1,1,1-Trichloroethane	1,700	200	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
1,1,2,2-Tetrachloroethane	0.053	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,1,2-Trichloroethane	0.19	5	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
1,1-Dichloroethane	900	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,1-Dichloroethene	350	7	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8
1,2,4-Trichlorobenzene	61	70	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dibromo-3-chloropropane	0.0002	0.2	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
1,2-Dibromoethane	0.0053	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dichlorobenzene	270	600	ND <1.0	ND <1.0	ND <1.0	ND <1.0	16	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,2-Dichloroethane	0.12	5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	**3 J**	**4 J**	ND <1.0	ND <1.0	ND <1.0
1,2-Dichloropropane	0.16	5	ND <1.0	**16**	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,3-Dichlorobenzene	18	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
1,4-Dichlorobenzene	0.47	75	ND <1.0	ND <1.0	ND <1.0	ND <1.0	**2 J**	ND <1.0	ND <1.0	ND <1.0	ND <1.0
2-Butanone (MEK)	7,000	n/s	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	11	ND <3.0	ND <3.0	ND <3.0
2-Hexanone	n/s	n/s	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0
4-Methyl-2-pentanone	6,300	n/s	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0	ND <3.0
Acetone	5,500	n/s	6 J	18 J	ND <6.0	110	ND <6.0	33	15 J	33	ND <6.0
Acetonitrile	120	n/s	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0	ND <25.0
Benzene	0.34	5	**2 J**	**11**	**1 J**	ND <0.5	**3 J**	**2 J**	**0.8 J**	**0.6 J**	**0.6 J**
Bromodichloromethane	0.17	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Bromoform	8.5	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Bromomethane	8.5	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Carbon Disulfide	1000	n/s	ND <1.0	5 J	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Carbon Tetrachloride	0.16	5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Chlorobenzene	90	100	ND <0.8	2 J	ND <0.8	1 J	53	9	11	2 J	ND <0.8
Dibromochloromethane	0.13	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Chloroethane	3.6	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Chloroform	0.15	n/s	**4 J**	**0.9 J**	ND <0.8	ND <0.8	**0.9 J**	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Chloromethane	190	n/s	4 J	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
cis-1,2-Dichloroethene	61	70	6	ND <1.0	ND <1.0	ND <1.0	16	34	1 J	ND <1.0	ND <1.0
cis-1,3-Dichloropropene	0.44	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Cyclohexane	12000	n/s	ND <2.0	56	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	24	ND <2.0
Dichlorodifluoromethane	350	n/s	ND <2.0	ND <2.0	10	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Ethylbenzene	1,300	700	ND <0.8	39	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	6	ND <0.8
Isopropylbenzene (Cumene)	660	n/s	ND <1.0	5 J	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	2 J	ND <1.0
Methyl Acetate	6100	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Methyl Tertiary Butyl Ether	2.6	n/s	ND <1.0	0.7 J	**3 J**	ND <1.0	0.6 J	ND <1.0	0.7 J	ND <1.0	0.9 J
Methylcyclohexane	6300	n/s	ND <1.0	69	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	20	ND <1.0
Methylene Chloride	4.1	n/s	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Styrene	1,600	100	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Tetrachloroethene	0.1	5	ND <0.8	ND <0.8	ND <0.8	ND <0.8	**10**	ND <0.8	ND <0.8	ND <0.8	ND <0.8
Toluene	2,300	1000	ND <0.7	19	ND <0.7	ND <0.7	ND <0.7	5 J	ND <0.7	1 J	ND <0.7
Trans-1,2-Dichloroethene	110	n/s	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	ND <0.8	3 J	ND <0.8	ND <0.8
Trans-1,3-Dichloropropene	n/s	n/s	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Trichloroethene	0.026	5	ND <1.0	ND <1.0	ND <1.0	ND <1.0	**75**	**4 J**	**1 J**	ND <1.0	ND <1.0
Trichlorofluoromethane	1,300	n/s	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0	ND <2.0
Vinyl Chloride	0.015	2	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0	ND <1.0
Xylene (Total)	210	10000	ND <0.8	190	ND <0.8	ND <0.8	ND <0.8	2 J	ND <0.8	11	ND <0.8

TABLE 3-5
SUMMARY OF RFI PHASE II TCL VOCS by METHOD 8260B
GROUNDWATER DETECTIONS AND EXCEEDANCES
DELAWARE VALLEY WORKS FACILITY
CLAYMONT, DELAWARE

	RBC Tap	MCL	Sample Identification and Collection Date		
			W115-GW02 010207 1/2/2007	W115-GW03 010207 1/2/2007	W115-GW04 010307 1/3/2007
All values given in ug/L					
1,1,1-Trichloroethane	1,700	200	ND <0.8	ND <0.8	ND <0.8
1,1,2,2-Tetrachloroethane	0.053	n/s	ND <1.0	ND <1.0	ND <1.0
1,1,2-Trichloroethane	0.19	5	ND <0.8	ND <0.8	ND <0.8
1,1-Dichloroethane	900	n/s	ND <1.0	ND <1.0	ND <1.0
1,1-Dichloroethene	350	7	ND <0.8	ND <0.8	ND <0.8
1,2,4-Trichlorobenzene	61	70	ND <1.0	ND <1.0	ND <1.0
1,2-Dibromo-3-chloropropane	0.0002	0.2	ND <2.0	ND <2.0	ND <2.0
1,2-Dibromoethane	0.0053	n/s	ND <1.0	ND <1.0	ND <1.0
1,2-Dichlorobenzene	270	600	ND <1.0	ND <1.0	ND <1.0
1,2-Dichloroethane	0.12	5	ND <1.0	**2 J**	ND <1.0
1,2-Dichloropropane	0.16	5	ND <1.0	**4 J**	ND <1.0
1,3-Dichlorobenzene	18	n/s	ND <1.0	ND <1.0	ND <1.0
1,4-Dichlorobenzene	0.47	75	ND <1.0	ND <1.0	ND <1.0
2-Butanone (MEK)	7,000	n/s	4 J	6 J	ND <3.0
2-Hexanone	n/s	n/s	ND <3.0	ND <3.0	ND <3.0
4-Methyl-2-pentanone	6,300	n/s	ND <3.0	ND <3.0	ND <3.0
Acetone	5,500	n/s	22	63	82
Acetonitrile	120	n/s	ND <25.0	ND <25.0	ND <25.0
Benzene	0.34	5	ND <0.5	**8**	**11**
Bromodichloromethane	0.17	n/s	ND <1.0	ND <1.0	ND <1.0
Bromoform	8.5	n/s	ND <1.0	ND <1.0	ND <1.0
Bromomethane	8.5	n/s	ND <1.0	ND <1.0	ND <1.0
Carbon Disulfide	1000	n/s	ND <1.0	ND <1.0	ND <1.0
Carbon Tetrachloride	0.16	5	ND <1.0	ND <1.0	ND <1.0
Chlorobenzene	90	100	ND <0.8	0.8 J	3 J
Dibromochloromethane	0.13	n/s	ND <1.0	ND <1.0	ND <1.0
Chloroethane	3.6	n/s	ND <1.0	ND <1.0	ND <1.0
Chloroform	0.15	n/s	ND <0.8	ND <0.8	**6**
Chloromethane	190	n/s	ND <1.0	ND <1.0	ND <1.0
cis-1,2-Dichloroethene	61	70	ND <1.0	ND <1.0	ND <1.0
cis-1,3-Dichloropropene	0.44	n/s	ND <1.0	ND <1.0	ND <1.0
Cyclohexane	12000	n/s	ND <2.0	16	43
Dichlorodifluoromethane	350	n/s	ND <2.0	ND <2.0	ND <2.0
Ethylbenzene	1,300	700	ND <0.8	39	11
Isopropylbenzene (Cumene)	660	n/s	ND <1.0	42	4 J
Methyl Acetate	6100	n/s	ND <1.0	ND <1.0	ND <1.0
Methyl Tertiary Butyl Ether	2.6	n/s	ND <1.0	1 J	ND <1.0
Methylcyclohexane	6300	n/s	ND <1.0	20	36
Methylene Chloride	4.1	n/s	ND <2.0	ND <2.0	ND <2.0
Styrene	1,600	100	ND <1.0	ND <1.0	ND <1.0
Tetrachloroethene	0.1	5	ND <0.8	ND <0.8	ND <0.8
Toluene	2,300	1000	ND <0.7	1 J	1 J
Trans-1,2-Dichloroethene	110	n/s	ND <0.8	ND <0.8	ND <0.8
Trans-1,3-Dichloropropene	n/s	n/s	ND <1.0	ND <1.0	ND <1.0
Trichloroethene	0.026	5	ND <1.0	ND <1.0	ND <1.0
Trichlorofluoromethane	1,300	n/s	ND <2.0	ND <2.0	ND <2.0
Vinyl Chloride	0.015	2	ND <1.0	ND <1.0	ND <1.0
Xylene (Total)	210	10000	ND <0.8	13	12