

ATTACHMENT VII-3

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TABLE 1: GROUNDWATER DETECTION MONITORING (CLASS 1) PARAMETERS

DRAFT

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
VOLATILE ORGANICS				
Acetone	67-64-1	100	100	SW-846 8260B
Acrolein	107-02-8	5	200	SW-846 8260B
Acrylonitrile	107-13-1	5	20	SW-846 8260B
Benzene	71-43-2	5	5	SW-846 8260B
Bromodichloromethane	75-27-4	5	5	SW-846 8260B
Bromoform (Tribromomethane)	75-25-2	5	5	SW-846 8260B
Bromomethane	74-83-9	10	10	SW-846 8260B
2-Butanone (MEK)	78-93-3	100	100	SW-846 8260B
Carbon disulfide	75-15-0	5	5	SW-846 8260B
Carbon tetrachloride	56-23-5	5	5	SW-846 8260B
Chlorobenzene	108-90-7	5	5	SW-846 8260B
Chloroethane	75-00-3	10	10	SW-846 8260B
2-chloroethyl vinyl ether	110-75-3	n/a	5	SW-846 8260B
Chloroform	67-66-3	5	5	SW-846 8260B
Chloromethane	74-87-3	10	10	SW-846 8260B
Cyclohexane	110-82-7	n/a	20	SW-846 8260B
Dibromochloromethane	124-48-1	5	5	SW-846 8260B
1,2-Dibromo-3-chloropropane	96-12-8	5	5	SW-846 8260B or 8270C
1,2-Dibromoethane	106-93-4	5	5	SW-846 8260B
Dibromomethane (methylene bromide)	74-95-3	5	5	SW-846 8260B
cis-1,4-Dichloro-2-butene	1476-11-5	n/a	20	SW-846 8260B
Dichlorodifluoromethane	75-71-8	5	5	SW-846 8260B
1,1-Dichloroethane	75-34-3	5	5	SW-846 8260B
1,2-Dichloroethane	107-06-2	5	5	SW-846 8260B
trans-1,2-Dichloroethene	156-60-5	5	5	SW-846 8260B
1,1-Dichloroethene	75-35-4	5	5	SW-846 8260B
1,2-Dichloropropane	78-87-5	5	5	SW-846 8260B
cis-1,3-Dichloropropene	10061-01-5	5	5	SW-846 8260B
trans-1,3-Dichloropropene	10061-02-6	5	5	SW-846 8260B
Ethylbenzene	100-41-4	5	5	SW-846 8260B
Ethyl methacrylate	97-63-2	5	20	SW-846 8260B or 8270C
Methyl iodide (Iodomethane)	74-88-4	5	20	SW-846 8260B
Methacrylonitrile	126-98-7	5	20	SW-846 8260B
Methylene chloride (Dichloromethane)	75-09-2	5	90	SW-846 8260B
Methyl methacrylate	80-62-6	5	20	SW-846 8260B
4-Methyl-2-pentanone (MIBK)	108-10-1	50	50	SW-846 8260B
Pentachloroethane	76-01-7	5	100	SW-846 8260B or 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
Propionitrile (Ethyl cyanide)	107-12-0	5	250	SW-846 8260B
Styrene	100-42-5	5	5	SW-846 8260B
1,1,1,2-Tetrachloroethane	630-20-6	5	5	SW-846 8260B
1,1,2,2-Tetrachloroethane	79-34-5	5	5	SW-846 8260B
Tetrachloroethene	127-18-4	5	5	SW-846 8260B
Toluene	108-88-3	5	5	SW-846 8260B
1,1,1-Trichloroethane	71-55-6	5	5	SW-846 8260B
1,1,2-Trichloroethane	79-00-5	5	5	SW-846 8260B
Trichloroethene	79-01-6	5	5	SW-846 8260B
Trichlorofluoromethane	75-69-4	5	5	SW-846 8260B
Vinyl acetate	108-05-4	5	5	SW-846 8260B
Vinyl chloride	75-01-4	10	10	SW-846 8260B
total Xylenes	1330-20-7	5	15	SW-846 8260B
Acetonitrile	75-05-8	100	100	SW-846 8260B
1,4-dioxane	123-91-1	150	500	SW-846 8260B
isobutyl alcohol	78-83-1	50	250	SW-846 8260B
SEMIVOLATILE COMPOUNDS (ACID/BASE/NEUTRAL EXTRACTABLES)				
Acenaphthene	83-32-9	10	10	SW-846 8270C
Acenaphthylene	208-96-8	10	10	SW-846 8270C
Acetophenone	98-86-2	10	10	SW-846 8270C
2-Acetylaminofluorene	53-96-3	10	10	SW-846 8270C
Aniline	62-53-3	10	10	SW-846 8270C
Anthracene	120-12-7	10	10	SW-846 8270C
Benzenethiol	108-98-5	n/a	100	SW-846 8270C
Benzidine	92-87-5	n/a	100	SW-846 8270C
Benzoic Acid	65-85-0	n/a	25	SW-846 8270C
Benz(a)anthracene	56-55-3	10	10	SW-846 8270C
Benzo(a)pyrene	50-32-8	10	25	SW-846 8270C
Benzo(b)fluoranthene	205-99-2	10	10	SW-846 8270C
Benzo(g,h,i)perylene	191-24-2	10	10	SW-846 8270C
Benzo(k)fluoranthene	207-08-9	10	10	SW-846 8270C
Benzyl alcohol	100-51-6	20	50	SW-846 8270C
bis(2-Chloroethoxy)methane	111-91-1	10	10	SW-846 8270C
bis(2-Chloroethyl) ether	111-44-4	10	10	SW-846 8270C
bis(2-Chloroisopropyl) ether (2,2'-oxybis(1-Chloropropane))	108-60-1	10	10	SW-846 8270C
bis(2-Ethylhexyl) phthalate	117-81-7	10	35	SW-846 8270C
4-Bromophenyl phenyl ether	101-55-3	10	10	SW-846 8270C
Butyl benzyl phthalate	85-68-7	10	25	SW-846 8270C
p-Chloroaniline	106-47-8	20	20	SW-846 8270C
Chlorobenzilate	510-15-6	10	300	SW-846 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	59-50-7	20	25	SW-846 8270C
2-Chloronaphthalene	91-58-7	10	10	SW-846 8270C
2-Chlorophenol	95-57-8	10	25	SW-846 8270C
4-Chlorophenyl phenyl ether	7005-72-3	10	10	SW-846 8270C
Chrysene	218-01-9	10	10	SW-846 8270C
2-Methylphenol (o-Cresol)	95-48-7	10	25	SW-846 8270C
3-Methylphenol (m-Cresol)	108-39-4	10	25	SW-846 8270C
4-Methylphenol (p-Cresol) or m + p	106-44-5	10	25	SW-846 8270C
Diallate	2303-16-4	10	20	SW-846 8270C
Dibenz(a,h)anthracene	53-70-3	10	10	SW-846 8270C
Dibenzofuran	132-64-9	10	10	SW-846 8270C
Di-n-butyl phthalate	84-74-2	10	25	SW-846 8270C
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	10	10	SW-846 8270C
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	10	10	SW-846 8270C
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	10	10	SW-846 8270C
3,3'-Dichlorobenzidine	91-94-1	20	20	SW-846 8270C
2,4-Dichlorophenol	120-83-2	10	25	SW-846 8270C
2,6-Dichlorophenol	87-65-0	10	10	SW-846 8270C
o,o-Diethyl 0-2-pyrazinylphosphorothic acid (Thionazin and Zinaphos)	297-97-2	10	10	SW-846 8270C
Diethyl phthalate	84-66-2	10	10	SW-846 8270C
Dimethoate	60-51-5	10	100	SW-846 8270C
3,3'-Dimethylbenzidine	119-93-7	10	10	SW-846 8270C
p-Dimethylaminoazobenzene	60-11-7	10	10	SW-846 8270C
7,12-Dimethylbenz(a)anthracene	57-97-6	10	10	SW-846 8270C
alpha, alpha Dimethylphenethylamine	122-09-8	10	50	SW-846 8270C
2,4-Dimethylphenol	105-67-9	10	25	SW-846 8270C
Dimethyl phthalate	131-11-3	10	10	SW-846 8270C
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) (2-methyl-4,6-dinitrophenol)	534-52-1	50	50	SW-846 8270C
2,4-Dinitrophenol	51-28-5	50	50	SW-846 8270C
2,4-Dinitrotoluene	121-14-2	10	10	SW-846 8270C
2,6-Dinitrotoluene	606-20-2	10	10	SW-846 8270C
Di-n-octyl phthalate	117-84-0	10	20	SW-846 8270C
Ethyl methanesulfonate	62-50-0	10	10	SW-846 8270C
Famphur	52-85-7	10	10	SW-846 8270C
Fluoranthene	206-44-0	10	10	SW-846 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
Fluorene	86-73-7	10	10	SW-846 8270C
Hexachlorobenzene	118-74-1	10	10	SW-846 8270C
Hexachlorobutadiene	87-68-3	10	10	SW-846 8270C
Hexachlorocyclopentadiene	77-47-4	10	10	SW-846 8270C
Hexachloroethane	67-72-1	10	10	SW-846 8270C
Hexachlorophene	70-30-4	10	400	SW-846 8270C
Hexachloropropene	1888-71-7	10	10	SW-846 8270C
Indene	95-13-6	n/a	10	SW-846 8270C
Indeno(1,2,3-cd)pyrene	193-39-5	10	10	SW-846 8270C
Isodrin	465-73-6	10	10	SW-846 8270C
Isophorone	78-59-1	10	10	SW-846 8270C
Isosafrole	120-58-1	10	10	SW-846 8270C
Kepone	143-50-0	10	100	SW-846 8270C
Methapyrilene	91-80-5	10	20	SW-846 8270C
3-Methylcholanthrene	56-49-5	10	10	SW-846 8270C
1-Methylnaphthalene	90-12-0	n/a	10	SW-846 8270C
2-Methylnaphthalene	91-57-6	10	10	SW-846 8270C
Naphthalene	91-20-3	10	10	SW-846 8270C
1,4-Naphthoquinone	130-15-4	10	20	SW-846 8270C
1-Naphthylamine	134-32-7	10	10	SW-846 8270C
2-Naphthylamine	91-59-8	10	10	SW-846 8270C
4-Nitroaniline (p-nitroaniline) (4-nitrobenzenamine)	100-01-6	50	50	SW-846 8270C
Nitrobenzene	98-95-3	10	10	SW-846 8270C
2-Nitrophenol (o-Nitrophenol)	88-75-5	10	25	SW-846 8270C
4-Nitrophenol (p-Nitrophenol)	100-02-7	10	25	SW-846 8270C
N-Nitroso-di-n-butylamine	924-16-3	10	10	SW-846 8270C
N-Nitroso-di-n-propylamine	621-64-7	10	10	SW-846 8270C
N-Nitrosodiethylamine	55-18-5	10	10	SW-846 8270C
N-Nitrosodimethylamine	62-75-9	10	10	SW-846 8270C
N-Nitrosodiphenylamine	86-30-6	10	10	SW-846 8270C
N-Nitrosopiperidine	100-75-4	10	10	SW-846 8270C
N-Nitrosopyrrolidine	930-55-2	10	10	SW-846 8270C
5-Nitro-o-toluidine	99-55-8	10	10	SW-846 8270C
Parathion	56-38-2	10	10	SW-846 8270C
Pentachlorobenzene	608-93-5	10	10	SW-846 8270C
Pentachloronitrobenzene	82-68-8	10	10	SW-846 8270C
Pentachlorophenol	87-86-5	50	50	SW-846 8270C
Phenacetin	62-44-2	10	10	SW-846 8270C
Phenanthrene	85-01-8	10	10	SW-846 8270C
Phenol	108-95-2	10	25	SW-846 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
2-Picoline	109-06-8	10	10	SW-846 8270C or 8240
Pronamide	23950-58-5	10	10	SW-846 8270C
Pyridine *	110-86-1	10	10	SW-846 8270C or SW-846 8260B + A32
Quinoline	91-22-5	NA	10	SW-846 8270C
Safrole	94-59-7	10	10	SW-846 8270C
Sulfotepp	3689-24-5	10	10	SW-846 8270C
1,2,4,5-Tetrachlorobenzene	95-94-3	10	10	SW-846 8270C
Thionazin (o,o,-Diethyl-o-2-pyrazinyl phosphorothioate)	297-97-2	10	10	SW-846 8270C
o-Toluidine	95-53-4	10	10	SW-846 8270C
1,2,4-Trichlorobenzene	120-82-1	10	10	SW-846 8270C
2,4,6-Trichlorophenol	88-06-2	10	25	SW-846 8270C
1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	99-35-4	10	10	SW-846 8270C
ORGANOCHLORINE PESTICIDES & PCBs				
Aldrin	309-00-2	0.05	0.1	SW-846 8081A or 8270
Hexachlorocyclohexane gamma-BHC (Lindane)	58-89-9	0.05	0.1	SW-846 8081A or 8250
Chlordane	57-74-9	0.1	1	SW-846 8081A or 8250
4,4'-DDD	72-54-8	0.1	0.2	SW-846 8081A or 8270
4,4'-DDT	50-29-3	0.1	0.2	SW-846 8081A or 8270
Dieldrin	60-57-1	0.05	0.1	SW-846 8081A or 8270
Endrin	72-20-8	0.1	0.1	SW-846 8081A or 8270
Heptachlor	76-44-8	0.05	0.1	SW-846 8081A or 8270
Heptachlor epoxide	1024-57-3	1	1	SW-846 8081A or 8270
Methoxychlor	72-43-5	2	2	SW-846 8081A or 8270
PCB-1016	12674-11-2	50	50	SW-846 8082 or 8082A
PCB-1221	11104-28-2	50	50	SW-846 8082 or 8082A SW-846 8082
PCB-1232	11141-16-5	50	50	SW-846 8082 or 8082A SW-846 8082
PCB-1242	53469-21-9	50	50	SW-846 8082 or 8082A SW-846 8082
PCB-1248	12672-29-6	50	50	SW-846 8082 or 8082A SW-846 8082
PCB-1254	11097-69-1	50	50	SW-846 8082 or 8082A SW-846 8082
PCB-1260	11096-82-5	50	50	SW-846 8082 or 8082A SW-846 8082
Toxaphene	8001-35-2	2	2	SW-846 8081A or 8250

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
2,4-Dichlorophenoxy acetic acid (2,4-D)	94-75-7	10	10	SW-846 8151A
Dinoseb	88-85-7	1	1	SW-846 8151A
DIOXIN COMPOUNDS				
Hexachlorodibenzo-p-dioxins	-----	-----	-----	SW-846 8280
Hexachlorodibenzofurans	-----	-----	-----	SW-846 8280
Pentachlorodibenzo-p-dioxins	-----	-----	-----	SW-846 8280
Pentachlorodibenzofurans	-----	-----	-----	SW-846 8280
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.005	0.005	SW-846 8280
Tetrachlorodibenzo-p-dioxins	-----	-----	-----	SW-846 8280
Tetrachlorodibenzofurans	-----	-----	-----	SW-846 8280
2,3,4,6-Tetrachlorophenol	58-90-2	10	20	SW-846 8270C
2,4,5-Trichlorophenol	95-95-4	10	25	SW-846 8270C
2,4,5-T	93-76-5	2	2	SW-846 8151A
2,4,5-TP (Silvex)	93-72-1	2	2	SW-846 8151A
ORGANOPHOSPHORUS PESTICIDES				
Disulfoton	298-04-4	2	2	SW-846 8141A
Methyl parathion	298-00-0	0.5	0.5	SW-846 8141A
Phorate	298-02-2	2	2	SW-846 8141A
METALS (TOTALS)				
NONE				
INORGANIC COMPOUNDS				
NONE				

* Pyridine is currently analyzed using method 8270 C but may also be analyzed using 8260B+A32

TABLE 2: GROUNDWATER COMPLIANCE MONITORING (CLASS 2) PARAMETERS

DRAFT

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
VOLATILE ORGANICS				
Acetone	67-64-1	100	100	SW-846 8260B
Acrolein	107-02-8	5	200	SW-846 8260B
Acrylonitrile	107-13-1	5	20	SW-846 8260B
Benzene	71-43-2	5	5	SW-846 8260B
Bromodichloromethane	75-27-4	5	5	SW-846 8260B
Bromoform (Tribromomethane)	75-25-2	5	5	SW-846 8260B
Bromomethane	74-83-9	10	10	SW-846 8260B
2-Butanone (MEK)	78-93-3	100	100	SW-846 8260B
Carbon disulfide	75-15-0	5	5	SW-846 8260B
Carbon tetrachloride	56-23-5	5	5	SW-846 8260B
Chlorobenzene	108-90-7	5	5	SW-846 8260B
2-Chloro-1,3-butadiene (Chloroprene)	126-99-8	5	200	SW-846 8260B
Chloroethane	75-00-3	10	10	SW-846 8260B
2-chloroethyl vinyl ether	110-75-3	n/a	5	SW-846 8260B
Chloroform	67-66-3	5	5	SW-846 8260B
Chloromethane	74-87-3	10	10	SW-846 8260B
3-Chloropropene (Allyl Chloride)	107-05-1	100	100	SW-846 8260B
Cyclohexane	110-82-7	n/a	20	SW-846 8260B
Dibromochloromethane	124-48-1	5	5	SW-846 8260B
1,2-Dibromo-3-chloropropane	96-12-8	5	5	SW-846 8260B or 8270C
1,2-Dibromoethane	106-93-4	5	5	SW-846 8260B
Dibromomethane (methylene bromide)	74-95-3	5	5	SW-846 8260B
cis-1,4-Dichloro-2-butene	1476-11-5	n/a	20	SW-846 8260B
trans-1,4-Dichloro-2-butene	110-57-6	5	20	SW-846 8260B
Dichlorodifluoromethane	75-71-8	5	5	SW-846 8260B
1,1-Dichloroethane	75-34-3	5	5	SW-846 8260B
1,2-Dichloroethane	107-06-2	5	5	SW-846 8260B
trans-1,2-Dichloroethene	156-60-5	5	5	SW-846 8260B
1,1-Dichloroethene	75-35-4	5	5	SW-846 8260B
1,2-Dichloropropane	78-87-5	5	5	SW-846 8260B
cis-1,3-Dichloropropene	10061-01-5	5	5	SW-846 8260B
trans-1,3-Dichloropropene	10061-02-6	5	5	SW-846 8260B
Ethylbenzene	100-41-4	5	5	SW-846 8260B
Ethyl methacrylate	97-63-2	5	20	SW-846 8260B or 8270C
2-Hexanone	591-78-6	50	50	SW-846 8260B
Methyl iodide (Iodomethane)	74-88-4	5	20	SW-846 8260B
Methacrylonitrile	126-98-7	5	20	SW-846 8260B
Methylene chloride (Dichloromethane)	75-09-2	5	90	SW-846 8260B
Methyl methacrylate	80-62-6	5	20	SW-846 8260B

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
4-Methyl-2-pentanone (MIBK)	108-10-1	50	50	SW-846 8260B
Pentachloroethane	76-01-7	5	100	SW-846 8260B or 8270C
Propionitrile (Ethyl cyanide)	107-12-0	5	250	SW-846 8260B
Styrene	100-42-5	5	5	SW-846 8260B
1,1,1,2-Tetrachloroethane	630-20-6	5	5	SW-846 8260B
1,1,2,2-Tetrachloroethane	79-34-5	5	5	SW-846 8260B
Tetrachloroethene	127-18-4	5	5	SW-846 8260B
Toluene	108-88-3	5	5	SW-846 8260B
1,1,1-Trichloroethane	71-55-6	5	5	SW-846 8260B
1,1,2-Trichloroethane	79-00-5	5	5	SW-846 8260B
Trichloroethene	79-01-6	5	5	SW-846 8260B
Trichlorofluoromethane	75-69-4	5	5	SW-846 8260B
1,2,3-Trichloropropane	96-18-4	5	5	SW-846 8260B
Vinyl acetate	108-05-4	5	5	SW-846 8260B
Vinyl chloride	75-01-4	10	10	SW-846 8260B
total Xylenes	1330-20-7	5	15	SW-846 8260B
Acetonitrile	75-05-8	100	100	SW-846 8260B
1,4-dioxane	123-91-1	150	500	SW-846 8260B
isobutyl alcohol	78-83-1	50	250	SW-846 8260B
SEMIVOLATILE COMPOUNDS (ACID/BASE/NEUTRAL EXTRACTABLES)				
Acenaphthene	83-32-9	10	10	SW-846 8270C
Acenaphthylene	208-96-8	10	10	SW-846 8270C
Acetophenone	98-86-2	10	10	SW-846 8270C
2-Acetylaminofluorene	53-96-3	10	10	SW-846 8270C
4-Aminobiphenyl	92-67-1	10	10	SW-846 8270C
Aniline	62-53-3	10	10	SW-846 8270C
Anthracene	120-12-7	10	10	SW-846 8270C
Aramite	140-57-8	10	10	SW-846 8270C
Benzenethiol	108-98-5	n/a	100	SW-846 8270C
Benzidine	92-87-5	n/a	100	SW-846 8270C
Benzoic Acid	65-85-0	n/a	25	SW-846 8270C
Benz(a)anthracene	56-55-3	10	10	SW-846 8270C
Benzo(a)pyrene	50-32-8	10	25	SW-846 8270C
Benzo(b)fluoranthene	205-99-2	10	10	SW-846 8270C
Benzo(g,h,i)perylene	191-24-2	10	10	SW-846 8270C
Benzo(k)fluoranthene	207-08-9	10	10	SW-846 8270C
Benzyl alcohol	100-51-6	20	50	SW-846 8270C
bis(2-Chloroethoxy)methane	111-91-1	10	10	SW-846 8270C
bis(2-Chloroethyl) ether	111-44-4	10	10	SW-846 8270C
bis(2-Chloroisopropyl) ether (2,2'-oxybis(1-Chloropropane))	108-60-1	10	10	SW-846 8270C
bis(2-Ethylhexyl) phthalate	117-81-7	10	35	SW-846 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
4-Bromophenyl phenyl ether	101-55-3	10	10	SW-846 8270C
Butyl benzyl phthalate	85-68-7	10	25	SW-846 8270C
p-Chloroaniline	106-47-8	20	20	SW-846 8270C
Chlorobenzilate	510-15-6	10	300	SW-846 8270C
4-Chloro-3-methylphenol (p-Chloro-m-cresol)	59-50-7	20	25	SW-846 8270C
2-Chloronaphthalene	91-58-7	10	10	SW-846 8270C
2-Chlorophenol	95-57-8	10	25	SW-846 8270C
4-Chlorophenyl phenyl ether	7005-72-3	10	10	SW-846 8270C
Chrysene	218-01-9	10	10	SW-846 8270C
2-Methylphenol (o-Cresol)	95-48-7	10	25	SW-846 8270C
3-Methylphenol (m-Cresol)	108-39-4	10	25	SW-846 8270C
4-Methylphenol (p-Cresol) or m + p	106-44-5	10	25	SW-846 8270C
Diallate	2303-16-4	10	20	SW-846 8270C
Dibenz(a,h)anthracene	53-70-3	10	10	SW-846 8270C
Dibenzofuran	132-64-9	10	10	SW-846 8270C
Di-n-butyl phthalate	84-74-2	10	25	SW-846 8270C
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	10	10	SW-846 8270C
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	10	10	SW-846 8270C
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	10	10	SW-846 8270C
3,3'-Dichlorobenzidine	91-94-1	20	20	SW-846 8270C
2,4-Dichlorophenol	120-83-2	10	25	SW-846 8270C
2,6-Dichlorophenol	87-65-0	10	10	SW-846 8270C
o,o-Diethyl 0-2-pyrazinylphosphorothic acid (Thionazin and Zinaphos)	297-97-2	10	10	SW-846 8270C
Diethyl phthalate	84-66-2	10	10	SW-846 8270C
Dimethoate	60-51-5	10	100	SW-846 8270C
3,3'-Dimethylbenzidine	119-93-7	10	10	SW-846 8270C
p-Dimethylaminoazobenzene	60-11-7	10	10	SW-846 8270C
7,12-Dimethylbenz(a)anthracene	57-97-6	10	10	SW-846 8270C
alpha, alpha Dimethylphenethylamine	122-09-8	10	50	SW-846 8270C
2,4-Dimethylphenol	105-67-9	10	25	SW-846 8270C
Dimethyl phthalate	131-11-3	10	10	SW-846 8270C
M-dinitrobenzene (1,3-dinitrobenzene)	99-65-0	10	10	SW-846 8270C
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) (2-methyl-4,6-dinitrophenol)	534-52-1	50	50	SW-846 8270C
2,4-Dinitrophenol	51-28-5	50	50	SW-846 8270C
2,4-Dinitrotoluene	121-14-2	10	10	SW-846 8270C
2,6-Dinitrotoluene	606-20-2	10	10	SW-846 8270C
Di-n-octyl phthalate	117-84-0	10	20	SW-846 8270C
Diphenylamine	122-39-4	10	10	SW-846 8270C
Ethyl methanesulfonate	62-50-0	10	10	SW-846 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
Famphur	52-85-7	10	10	SW-846 8270C
Fluoranthene	206-44-0	10	10	SW-846 8270C
Fluorene	86-73-7	10	10	SW-846 8270C
Hexachlorobenzene	118-74-1	10	10	SW-846 8270C
Hexachlorobutadiene	87-68-3	10	10	SW-846 8270C
Hexachlorocyclopentadiene	77-47-4	10	10	SW-846 8270C
Hexachloroethane	67-72-1	10	10	SW-846 8270C
Hexachlorophene	70-30-4	10	400	SW-846 8270C
Hexachloropropene	1888-71-7	10	10	SW-846 8270C
Indene	95-13-6	NA	10	SW-846 8270C
Indeno(1,2,3-cd)pyrene	193-39-5	10	10	SW-846 8270C
Isodrin	465-73-6	10	10	SW-846 8270C
Isophorone	78-59-1	10	10	SW-846 8270C
Isosafrole	120-58-1	10	10	SW-846 8270C
Kepone	143-50-0	10	100	SW-846 8270C
Methapyrilene	91-80-5	10	20	SW-846 8270C
3-Methylcholanthrene	56-49-5	10	10	SW-846 8270C
Methyl methanesulfonate	66-27-3	10	10	SW-846 8270C
1-Methylnaphthalene	90-12-0	NA	10	SW-846 8270C
2-Methylnaphthalene	91-57-6	10	10	SW-846 8270C
Naphthalene	91-20-3	10	10	SW-846 8270C
1,4-Naphthoquinone	130-15-4	10	20	SW-846 8270C
1-Naphthylamine	134-32-7	10	10	SW-846 8270C
2-Naphthylamine	91-59-8	10	10	SW-846 8270C
2-Nitroaniline (o-nitroaniline) (2-nitrobenzenamine)	88-74-4	50	50	SW-846 8270C
3-Nitroaniline (m-nitroaniline) (3-nitrobenzenamine)	99-09-2	50	50	SW-846 8270C
4-Nitroaniline (p-nitroaniline) (4-nitrobenzenamine)	100-01-6	50	50	SW-846 8270C
Nitrobenzene	98-95-3	10	10	SW-846 8270C
2-Nitrophenol (o-Nitrophenol)	88-75-5	10	25	SW-846 8270C
4-Nitrophenol (p-Nitrophenol)	100-02-7	10	25	SW-846 8270C
4-Nitroquinoline-1-oxide	56-57-5	10	50	SW-846 8270C
N-Nitroso-di-n-butylamine	924-16-3	10	10	SW-846 8270C
N-Nitroso-di-n-propylamine	621-64-7	10	10	SW-846 8270C
N-Nitrosodiethylamine	55-18-5	10	10	SW-846 8270C
N-Nitrosodimethylamine	62-75-9	10	10	SW-846 8270C
N-Nitrosodiphenylamine	86-30-6	10	10	SW-846 8270C
N-Nitrosomethylethylamine	10595-95-6	10	10	SW-846 8270C
N-Nitrosomorpholine	59-89-2	10	10	SW-846 8270C
N-Nitrosopiperidine	100-75-4	10	10	SW-846 8270C

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
N-Nitrosopyrrolidine	930-55-2	10	10	SW-846 8270C
5-Nitro-o-toluidine	99-55-8	10	10	SW-846 8270C
Parathion	56-38-2	10	10	SW-846 8270C
Pentachlorobenzene	608-93-5	10	10	SW-846 8270C
Pentachloronitrobenzene	82-68-8	10	10	SW-846 8270C
Pentachlorophenol	87-86-5	50	50	SW-846 8270C
Phenacetin	62-44-2	10	10	SW-846 8270C
Phenanthrene	85-01-8	10	10	SW-846 8270C
Phenol	108-95-2	10	25	SW-846 8270C
p-Phenylenediamine (1,4-Benzenediamine)	106-50-3	10	100	SW-846 8270C
2-Picoline	109-06-8	10	10	SW-846 8270C or 8240
Pronamide	23950-58-5	10	10	SW-846 8270C
Pyrene	129-00-0	10	10	SW-846 8270C
Pyridine *	110-86-1	10	10	SW-846 8270C or SW-846 8260B + A32
Quinoline	91-22-5	NA	10	SW-846 8270C
Safrole	94-59-7	10	10	SW-846 8270C
Sulfotepp	3689-24-5	10	10	SW-846 8270C
1,2,4,5-Tetrachlorobenzene	95-94-3	10	10	SW-846 8270C
2,3,4,6-Tetrachlorophenol	58-90-2	10	20	SW-846 8270C
Thionazin (o,o,-Diethyl-o-2-pyrazinyl phosphorothioate)	297-97-2	10	10	SW-846 8270C
o-Toluidine	95-53-4	10	10	SW-846 8270C
1,2,4-Trichlorobenzene	120-82-1	10	10	SW-846 8270C
2,4,5-Trichlorophenol	95-95-4	10	25	SW-846 8270C
2,4,6-Trichlorophenol	88-06-2	10	25	SW-846 8270C
o,o,o-Triethylphosphorothioate	126-68-1	10	10	SW-846 8270C
1,3,5-Trinitrobenzene (sym-Trinitrobenzene)	99-35-4	10	10	SW-846 8270C
ORGANOCHLORINE PESTICIDES & PCBs				
Aldrin	309-00-2	0.05	0.1	SW-846 8081A or 8270
Hexachlorocyclohexane alpha-BHC	319-84-6	0.05	0.1	SW-846 8081A or 8250
Hexachlorocyclohexane beta-BHC	319-85-7	0.05	0.1	SW-846 8081A or 8250
Hexachlorocyclohexane delta-BHC	319-86-8	0.1	0.1	SW-846 8081A or 8250
Hexachlorocyclohexane gamma-BHC (Lindane)	58-89-9	0.05	0.1	SW-846 8081A or 8250
Chlordane	57-74-9	0.1	1.0	SW-846 8081A or 8250
4,4'-DDD	72-54-8	0.1	0.2	SW-846 8081A or 8270
4,4'-DDE	72-55-9	0.05	0.2	SW-846 8081A or 8270
4,4'-DDT	50-29-3	0.1	0.2	SW-846 8081A or 8270
Dieldrin	60-57-1	0.05	0.1	SW-846 8081A or 8270
alpha-Endosulfan (Endosulfan I)	959-98-8	0.1	0.1	SW-846 8081A or 8270

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
beta-Endosulfan (Endosulfan II)	33213-65-9	0.05	0.1	SW-846 8081A
Endosulfan sulfate	1031-07-8	0.05	0.1	SW-846 8081A or 8270
Endrin	72-20-8	0.1	0.1	SW-846 8081A or 8270
Endrin aldehyde	7421-93-4	0.2	0.2	SW-846 8081A or 8270
Heptachlor	76-44-8	0.05	0.1	SW-846 8081A or 8270
Heptachlor epoxide	1024-57-3	1	1	SW-846 8081A or 8270
Methoxychlor	72-43-5	2	2	SW-846 8081A or 8270
PCB-1016	12674-11-2	50	50	SW-846 8082
PCB-1221	11104-28-2	50	50	SW-846 8082
PCB-1232	11141-16-5	50	50	SW-846 8082
PCB-1242	53469-21-9	50	50	SW-846 8082
PCB-1248	12672-29-6	50	50	SW-846 8082
PCB-1254	11097-69-1	50	50	SW-846 8082
PCB-1260	11096-82-5	50	50	SW-846 8082
Toxaphene	8001-35-2	2	2	SW-846 8081A or 8250
2,4-Dichlorophenoxy acetic acid (2,4-D)	94-75-7	10	10	SW-846 8151A
2,4,5-T	93-76-5	2	2	SW-846 8151A
2,4,5-TP (Silvex)	93-72-1	2	2	SW-846 8151A
Dinoseb	88-85-7	1	1	SW-846 8151A
DIOXIN COMPOUNDS				
Hexachlorodibenzo-p-dioxins	-----	-----	-----	SW-846 8280
Hexachlorodibenzofurans	-----	-----	-----	SW-846 8280
Pentachlorodibenzo-p-dioxins	-----	-----	-----	SW-846 8280
Pentachlorodibenzofurans	-----	-----	-----	SW-846 8280
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.005	0.005	SW-846 8280
Tetrachlorodibenzo-p-dioxins	-----	-----	-----	SW-846 8280
Tetrachlorodibenzofurans	-----	-----	-----	SW-846 8280
ORGANOPHOSPHORUS PESTICIDES				
Disulfoton	298-04-4	2.0	2.0	SW-846 8141A
Methyl parathion	298-00-0	0.5	0.5	SW-846 8141A
Phorate	298-02-2	2.0	2.0	SW-846 8141A
METALS (TOTALS)				
Antimony	7440-36-0	300	500	SW-846 6010B or 7041
Arsenic	7440-38-2	500	500	SW-846 6010B or 7060
Barium	7440-39-3	20	20	SW-846 6010B
Beryllium	7440-41-7	3	3	SW-846 6010B

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analysis Method
Cadmium	7440-43-9	40	40	SW-846 6010B
Chromium	7440-47-3	70	70	SW-846 6010B
Copper	7440-50-8	60	60	SW-846 6010B
Lead	7439-92-1	40	50	SW-846 6010B
Mercury	7439-97-6	2	2	SW-846 7470A
Nickel	7440-02-0	50	50	SW-846 6010B
Selenium	7782-49-2	750	750	SW-846 6010B or 7740
Silver	7440-22-4	70	70	SW-846 6010B
Thallium	7440-28-0	400	500	SW-846 6010B or 7841
Tin	7440-31-5	8000	8000	SW-846 6010B
Vanadium	7440-62-2	80	80	SW-846 6010B
Zinc	7440-66-6	20	250	SW-846 6010B
INORGANIC COMPOUNDS				
Cyanide, Total	57-12-5	40	40	SW-846 9010B/9014
Sulfide	18496-25-8	10000	5000	EPA 376.1

* Pyridine is currently analyzed using method 8270 C but may also be analyzed using 8260B+A32

TABLE 3: GROUNDWATER MONITORING INDICATOR (CLASS 3) PARAMETERS

ANALYTE	CAS Number	40 CFR 264 App. IX - PQL (ug/L)	Critical Level (ug/L)	Analytical Method *
METALS (TOTALS)				
Arsenic	7440-38-2	500	500	SW-846 6010B or 7060
Barium	7440-39-3	20	20	SW-846 6010B
Beryllium	7440-41-7	3	3	SW-846 6010B
Cadmium	7440-43-9	40	40	SW-846 6010B
Chromium	7440-47-3	70	70	SW-846 6010B
Copper	7440-50-8	60	60	SW-846 6010B
Lead	7439-92-1	40	50	SW-846 6010B
Mercury	7439-97-6	2	2	SW-846 7470A
Nickel	7440-02-0	50	50	SW-846 6010B
Selenium	7782-49-2	750	750	SW-846 6010B or 7740
Silver	7440-22-4	70	70	SW-846 6010B
Zinc	7440-66-6	20	250	SW-846 6010B
INORGANIC COMPOUNDS				
Sulfide ***	18496-25-8	10000	5,000	EPA 376.1
Total Organic Carbon ***	n/a	n/a	3,000	SW-846 9060 / EPA 415.1
pH ***	n/a	n/a	n/a	EPA 150.1
Total Dissolved Solids ***	n/a	n/a	21,000	EPA 160.1
Total Suspended Solids ***	n/a	n/a	10,000	EPA 160.2
Turbidity **	n/a	n/a	n/a	
GROSS CATIONS / ANIONS **				
Bicarbonate alkalinity	71-52-3	n/a	5,000	EPA 310.1
Chloride	16887-00-6	n/a	1,000	EPA 300.0
Fluoride	16984-48-8	n/a	500	EPA 300.0
Sulfate	14808-79-8	n/a	5,000	EPA 300.0
Calcium	7440-70-2	n/a	1,000	SW-846 6010B / EPA 200.7
Magnesium	7439-95-4	n/a	100	SW-846 6010B / EPA 200.7
Potassium	7440-09-7	n/a	1,000	SW-846 6010B / EPA 200.7
Sodium	7440-23-5	n/a	1,500	SW-846 6010B / EPA 200.7

*Or equivalent SW-846 or EPA methods. These or the current published method may be used.

**Statistical analysis not required.

***Statistical analysis not required but the value versus time plot will be reviewed for anomalies.

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TABLE 4: GROUNDWATER MONITORING ANALYTICAL METHODS

SW-846 Hazardous Waste Method (1) (2)	EPA Water Method (1) (2)	ASTM Method (1) (2)	Parameter Type	Minimum Sample Size, ml (3)	Number of Containers	Container Type	Maximum Holding Time, days	Preservation Method	Fill Sample Bottle to:
	310.1		Alkalinity, bicarbonate	100	1	Plastic or Glass	14	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
	350.2		Ammonia	200	1	Plastic or Glass	28	Cool to $\leq 6^{\circ}\text{C}$ add H_2SO_4 to $\text{pH} < 2$	Shoulder
		D-596-83	Cations	Analysis uses Method 6010 Metals Sample				Shoulder	
9010B fb 9014	335.2		Cyanide	250	1	Plastic or Glass	14	Cool to $\leq 6^{\circ}\text{C}$, add NaOH to $\text{pH} > 12$	Shoulder
8280			Dioxins	1000	1	Amber Glass	30/45	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
	130.2		Hardness	100	1	Plastic or Glass	181	HNO_3 or H_2SO_4 to $\text{pH} < 2$	Shoulder
8151A			Herbicides	1000	1	Amber Glass	7/40	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
	300.0		Inorganics	25	1	Plastic or Glass	28	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
	300.0		Inorganics - Nitrate-IC	25	1	Plastic or Glass	2	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
	300.0		Inorganics - Nitrite	25	1	Plastic or Glass	2	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
	300.0		Inorganics - Ortho Phosphate, IC	25	1	Plastic or Glass	2	Cool to $\leq 6^{\circ}\text{C}$	Shoulder
7470A	245.1		Metals - Mercury	500	1	Plastic or Glass	28	HNO_3 to $\text{pH} < 2$	Shoulder
6010B	200.7		Metals	500	1	Plastic or Glass	180	HNO_3 to $\text{pH} < 2$	Shoulder
7060A	206.2		Metals - Arsenic	500	1	Plastic or Glass	28	HNO_3 to $\text{pH} < 2$	Shoulder

SW-846 Hazardous Waste Method (1) (2)	EPA Water Method (1) (2)	ASTM Method (1) (2)	Parameter Type	Minimum Sample Size, ml (3)	Number of Containers	Container Type	Maximum Holding Time, days	Preservation Method	Fill Sample Bottle to:
7131	213.2		Metals - Cadmium	500	1	Plastic or Glass	180	HNO ₃ to pH < 2	Shoulder
7421	239.2		Metals - Lead	500	1	Plastic or Glass	180	HNO ₃ to pH < 2	Shoulder
7740	270.2		Metals - Selenium	500	1	Plastic or Glass	180	HNO ₃ to pH < 2	Shoulder
8141A			Organophosphate Pesticides	1000	1	Glass	7/40	Cool to ≤ 6 °C	Shoulder
8082			PCBs	1000	1	Glass	180	Cool to ≤ 6 °C	Shoulder
8081			Organochlorine Pesticides	1000	1	Amber Glass	7/40	Cool to ≤ 6 °C	Shoulder
	150.1		pH	25	1	Plastic or Glass	2	Cool to ≤ 6 °C or run immediately	Shoulder
9065	420.1		Phenols	1000	1	Glass	28	Cool to ≤ 6 °C add H ₂ SO ₄ to pH < 4	Shoulder
8270C			Semi-Volatile Organic Compounds	1000	1	Amber Glass	7/40	Cool to ≤ 6 °C	Shoulder
9050	120.1		Specific Conductance	100	1	Plastic or Glass	28	Cool to ≤ 6 °C	Shoulder
	376.1		Sulfide	500	1	Plastic or Glass	7	Cool to ≤ 6 °C, add Zinc Acetate NaOH to pH > 9	Shoulder
	160.1		TDS	100	1	Plastic or Glass	7	Cool to ≤ 6 °C	Shoulder
9060	415.1		TOC	25	1	Glass	28	Cool to ≤ 6 °C add H ₂ SO ₄ or HCl to pH < 2	Zero Headspace (ZHS) or shoulder ⁽⁴⁾

SW-846 Hazardous Waste Method (1) (2)	EPA Water Method (1) (2)	ASTM Method (1) (2)	Parameter Type	Minimum Sample Size, ml (3)	Number of Containers	Container Type	Maximum Holding Time, days	Preservation Method	Fill Sample Bottle to:
9020B	450.1		TOX	500	1	Amber Glass	28	Cool to $\leq 6^{\circ}\text{C}$ add H_2SO_4 or HNO_3 to $\text{pH} < 2$	ZHS
	160.2		TSS	200	1			Cool to $\leq 6^{\circ}\text{C}$	Shoulder
8260B			Volatile Organic Compounds	40	3	Glass septa vial	14	Cool to $\leq 6^{\circ}\text{C}$ add H_2SO_4 or HCl OR NaHSO_4 to $\text{pH} < 2$	ZHS
	351.3		Nitrogen - Total Kjeldahl	300	1	Plastic or Glass	28	Cool to $\leq 6^{\circ}\text{C}$ add H_2SO_4 to $\text{pH} < 2$	Shoulder
9070	413.1		Oil/Grease	1000	1	Glass	28	Cool to $\leq 6^{\circ}\text{C}$ add H_2SO_4 or HCl to $\text{pH} < 2$	Shoulder
	365.2		Phosphorus, Total	125	1	Plastic or Glass	28	Cool to $\leq 6^{\circ}\text{C}$ add H_2SO_4 to $\text{pH} < 2$	Shoulder

- (1) Up to and including latest published revision may be used.
- (2) Any analysis needing to be done may be done using any applicable and current SW-846, EPA, or ASTM method in this order of preference.
- (3) Parameters with the same preservatives may be combined (i.e., metals), resulting in a final volume of less than the sum individually (minimum sample size, ml).
- (4) TOC may be collected as either a Group I or Group II analyte which will be determined by the type of the sample container provided by the laboratory.