APPENDIX I

SWRCB Minimum Levels in ppb (µg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of this Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides & PCBs.

Table 2a - VOLATILE SUBSTANCES	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Bromomethane	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI VOLATILE SUBSTANCES	GC	GCMS	LC	COLOR
1,2 Benzanthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
3,4 Benzofluoranthene		10	10	
4 Chloro-3-methylphenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene(3,4 Benzopyrene)		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		

Table 2b - SEMI VOLATILE SUBSTANCES	GC	GCMS	LC	COLOR
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

** Phenol by colorimetric technique has a factor of 1.

Table 2c INORGANICS	F-AA	GF/AA	ICP	ICPMS	SPGFAA	HYDRIDE	CV/AA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000

* The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table A: PESTICIDES/PCBs	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
a-Hexachloro-cyclohexane	0.01
Aldrin	0.005
b-Endosulfan	0.01
b-Hexachloro-cyclohexane	0.005
Chlordane	0.1
d-Hexachloro-cyclohexane	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Lindane(g-Hexachloro-cyclohexane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

* The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR - Colorimetric

ATTACHMENT B-1

ANALYTICAL METHODS FOR INTERIM MONITORING

# Compound	Pollutant [1]	Toxic Pollutants	Analytical Method
		Metals & Miscellaneous	
1	1097	Antimony (Sb)	200.7, 200.8, 204.1, 204.2, 6010B, 6020, 7040, 7041
2	1000	Arsenic (As)	200.7, 200.8, 200.9, 206.2, 206.3, 206.4, 206.5, 6010B, 6020, 7060A, 7061A
3	1012	Beryllium (Be)	200.7, 200.8, 200.9, 210.1, 210.2, 6010B, 6020, 7090, 7091
4	1027	Cadmium (Cd)	200.7, 200.8, 200.9, 213.1, 213.2, 6010B, 6020, 7130, 7131A
5a	1032	Chromium (Total)	200.7, 200.8, 200.9, 218.1, 218.2, 218.3, 6010B, 6020, 7190, 7191
5b	1033	Chromium-(Cr-VI)	218.4, 7196A, 218.6, 719.9
6	1119	Copper (Cu)	200.7, 200.8, 200.9, 220.1, 220.2, 6010B, 6020, 7210, 7211
	720	Cyanide (CN)	335.2, 335.3, 9010B, 9012A
8	1051	Lead (Pb)	200.8, 200.9, 239.1, 239.2, 6010B, 6020, 7420, 7421
9	71900	Mercury (Hg)	245.1, 245.2, 200.8, 7470A, 7471A
10	1067	Nickel (Ni)	200.7, 200.8, 200.9, 249.1, 249.2, 6010B, 6020, 7520, 7521
11	1147	Selenium (Se)	200.7, 200.8, 200.9, 270.2, 6010B, 6020, 7740, 7741A
12	1077	Silver (Ag)	200.7, 200.8, 200.9, 272.1, 272.2, 6010B, 6020, 7760A, 7761
13	1059	Thallium (Tl)	200.7, 200.8, 200.9, 279.1, 279.2, 6010B, 6020, 7840, 7841
14	1092	Zinc (Zn)	200.7, 200.8, 289.1, 289.2, 6010B, 6020, 7950, 7951
15	948	Asbestos	100.1, 100.2
16[2]	82698	**TCDD Equivalent**	8280A, 8290

Toxicity Equivalent Factors (TEFs) for 2,3,7,8-TCDD Equivalents

Congener	TEF
2,3,7,8-TetraCDD	1
1,2,3,7,8-PentaCDD	1.0
1,2,3,4,7,8-HexaCDD	0.1
1,2,3,6,7,8-HexaCDD	0.1
1,2,3,7,8,9-HexaCDD	0.1
1,2,3,4,6,7,8-HeptaCDD	0.01
OctaCDD	0.0001
2,3,7,8-TetraCDF	0.1

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[1] **Analytical Method selected must be capable of achieving an ML that is lower than the lowest criterion for the pollutant, as shown on Attachment B.**

[2] **You shall report for each congener the analytical results of the effluent monitoring, including the quantifiable limit and the MDL, and the measured or estimated concentration. In addition you shall multiply each measured or estimated congener concentration by its respective TEF value above and report the sum of these values.**

ATTACHMENT B-1

Compound	Pollutant ID	Toxic Pollutants		Analytical Method
		1,2,3,7,8-PentaCDF	0.05	
		2,3,4,7,8-PentaCDF	0.5	
		1,2,3,4,7,8-HexaCDF	0.1	
		1,2,3,6,7,8-HexaCDF	0.1	
		1,2,3,7,8,9-HexaCDF	0.1	
		2,3,4,6,7,8-HexaCDF	0.1	
		1,2,3,4,6,7,8-HeptaCDF	0.01	
		1,2,3,4,7,8,9-HeptaCDF	0.01	
		OctaCDF	0.0001	
		Volatile Pollutants		
17	34210	Acrolein		603, 8030A, 8260B
18	34215	Acrylonitrile		603, 8031, 8260B
19	34030	Benzene		602, 624, 8021B, 8260B
20	32104	Bromoform		601, 624, 8021B, 8260B
21	32102	Carbon Tetrachloride		601, 624, 8021B, 8260B
22	34301	Chlorobenzene		601, 602, 624, 8021B, 8260B
23	34306	Chlorodibromomethane		601, 624, 8021B, 8260B
24	85811	Chloroethane		601, 624, 8021B, 8260B
25	34576	2-Chloroethylvinyl Ether		601, 624, 8021B, 8260B
26	32106	Chloroform		601, 624, 8021B, 8260B
27	32101	Dichlorobromomethane		601, 624, 8021B, 8260B
28	34496	1,1-Dichloroethane		601, 624, 8021B, 8260B
29	32103	1,2-Dichloroethane		601, 624, 8021B, 8260B
30	34501	1,1-Dichloroethylene		601, 624, 8021B, 8260B
31	34541	1,2-Dichloropropane		601, 624, 8021B, 8260B
32	34561	1,3-Dichloropropylene		601, 624, 8021B, 8260B
33	78113	Ethylbenzene		602, 624, 8021B, 8260B
34	34413	Methyl Bromide		601, 624, 8021B, 8260B
35	3	Methyl Chloride		601, 624, 8021B, 8260B
36	34418	Methylene Chloride		601, 624, 8021B, 8260B
37	34516	1,1,2,2-Tetrachloroethane		601, 624, 8021B, 8260B
38	34475	Tetrachloroethylene		601, 624, 8021B, 8260B
39	34010	Toluene		602, 624, 8021B, 8260B
40	34549	1,2-Trans-Dichloroethylene		601, 624, 8021B, 8260B
41	34506	1,1,1-Trichloroethane		601, 624, 8021B, 8260B
42	34511	1,1,2-Trichloroethane		601, 624, 8021B, 8260B
43	39180	Trichloroethylene		601, 624, 8021B, 8260B
44	39175	Vinyl Chloride		601, 624, 8021B, 8260B
		Semi-Volatile Pollutants		
45	34586	2-Chlorophenol		604, 625, 8041, 8270C
46	34601	2,4-Dichlorophenol		604, 625, 8041, 8270C
47	34606	2,4-Dimethylphenol		604, 625, 8041, 8270C
48	34452	2-Methyl-4,6-Dintrophenol		604, 625, 8041, 8270C

ATTACHMENT B-1

#	Pollutant	Test Pollutant	Method
49	34616	2,4-Dinitrophenol	604, 625, 8041, 8270C
50	34591	2-Nitrophenol	604, 625, 8041, 8270C
51	34646	4-Nitrophenol	604, 625, 8041, 8270C
52		3-Methyl-4-Chlorophenol	604, 625, 8041, 8270C
53	39032	Pentachlorophenol	604, 625, 8041, 8270C
54	34694	Phenol	604, 625, 8041, 8270C
55	34624	2,4,6-Trichlorophenol	604, 625, 8041, 8270C
56	34205	Acenaphthene	610, 625, 8100, 8270C
57	34200	Acenapthylene	610, 625, 8100, 8270C
58	34220	Anthracene	610, 625, 8100, 8270C
59	39120	Benzidine	625, 8270C
60	34526	Benzo (a) Anthracene	610, 625, 8100, 8270C
61	34247	Benzo (a) Pyrene	610, 625, 8100, 8270C
62	34230	Benzo (b) Fluoranthene	610, 625, 8100, 8270C
63	34521	Benzo (g,h,i) Perylene	610, 625, 8100, 8270C
64	34242	Benzo (k) Fluoranthene	610, 625, 8100, 8270C
65	34278	Bis (2-Chloroethoxy) Methane	611, 625, 8270C
66	34283	Bis (2-Chloroisopropyl) Ether	611, 625, 8111, 8270C
67	34273	Bis (2-Chloroethyl) Ether	611, 625, 8111, 8270C
68	39100	Bis (2-Ethylhexyl) Phthalate	606, 625, 8061A, 8270C
69	34636	4-Bromophenyl Phenyl Ether	611, 625, 8111, 8270C
70	34292	Butylbenzyl Phthalate	606, 625, 8061A, 8270C
71	34581	2-Chloronaphthalene	612, 625, 8100, 8270C
72	34641	4-Chlorophenyl Phenyl Ether	611, 625, 8111, 8270C
73	34320	Chrysene	610, 625, 8100, 8270C
74	34556	Dibenzo (a,h) Anthracene	610, 625, 8100, 8270C
75	34536	1,2-Dichlorobenzene	601, 602, 612, 624, 625, 8021B, 8270C
76	34566	1,3-Dichlorobenzene	601, 602, 612, 624, 625, 8021B, 8270C
77	34571	1,4-Dichlorobenzene	601, 602, 612, 624, 625, 8021B, 8270C
78	34631	3,3-Dichlorobenzidine	625, 8270C
79	34336	Diethyl Phthalate	606, 625, 8061A, 8270C
80	34341	Dimethyl Phthalate	606, 625, 8061A, 8270C
81	34596	Di-n-Octyl Phthalate	606, 625, 8061A, 8270C
82	34611	2,4-Dinitrotoluene	609, 625, 8091, 8270C
83	34626	2,6-Dinitrotoluene	609, 625, 8091, 8270C
84	39110	Di-n-Butyl Phthalate	606, 625, 8061A, 8270C
85	34346	1,2-Diphenylhydrazine	625, 8270C
86	34376	Fluoranthene	610, 625, 8100, 8270C
87	34381	Fluorene	610, 625, 8100, 8270C
88	39700	Hexachlorobenzene	612, 625, 8120A, 8270C
89	39702	Hexachlorobutadiene	612, 625, 8120A, 8270C
90	34386	Hexachlorocyclopentatadiene	612, 8120A, 8270C
91	34396	Hexachloroethane	616, 625, 8120A, 8270C

ATTACHMENT B-1

Compound	Pollutant ID	Toxic Pollutant	Method of Analysis
92	34403	Indeno (1,2,3-cd) Pyrene	610, 625, 8100, 8270C
93	34408	Isophorone	609, 625, 8270C
94	34696	Napthalene	610, 625, 8100, 8270C
95	34447	Nitrobenzene	609, 625, 8091, 8270C
96	34438	N-Nitrosodimethylamine	607, 625, 8070A, 8270C
97	34428	N-Nitrosodi-n-Propylamine	607, 625, 8070A, 8270C
98	34433	N-Nitrosodiphenylamine	607, 8070A, 8270C
99	34461	Phenanthrene	610, 625, 8100, 8270C
100	34469	Pyrene	610, 625, 8100, 8270C
101	34551	1,2,4-Trichlorobenzene	612, 625, 8120A, 8270C
		Pesticides	
102	39330	Aldrin	608, 8081A
103	39336	Alpha-BHC	608, 8081A
104	39338	beta-BHC	608, 8081A
105	39340	Gamma-BHC	608, 8081A
106	34198	delta-BHC	608, 8081A
107	39350	Chlordane	608, 8081A
108	39300	4,4'-DDT	608, 8081A
109	39320	4,4'-DDE	608, 8081A
110	39310	4,4'-DDD	608, 8081A
111	39380	Dieldrin	608, 8081A
112	78428	Alpha-Endosulfan	608, 8081A
113	34356	beta-Endosulfan	608, 8081A
114	34351	Endosulfan Sulfate	608, 8081A
115	39390	Endrin	608, 8081A
116	34366	Endrin Aldehyde	608, 8081A
117	39410	Heptachlor	608, 8081A
118	39420	Heptachlor Epoxide	608, 8081A
119-125	4166	PCBs)	608, 8082
126	39400	Toxaphene	608, 8081A
		Miscellaneous receiving water Monitoring parameters	
	4	pH of receiving water	
	2	Hardness (mg/L as CaCO3)	
		Salinity of receiving water (mg/L)	
		Receiving water flow rate (cfs)	