

Fact Sheet Attachment 4

City of Petaluma
Calculation of Final WQBELs

PRIORITY POLLUTANTS	Copper	Mercury	Nickel	Selenium	Cyanide	Bis(2-Ethylhexyl) Phthalate	TCDD TEQ
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	pg/L
Basis and Criteria type	CTR SW	BP SW (4-d, 1-hr avg)	BP SW (24- hr, Max)	BP,	CTR SW	CTR hh	CTR,hh
Lowest WQO	3.73	0.025	8.28	5.00	1.00	5.90	0.014
Translators							
Dilution Factor (D) (if applicable)	0	0	0	0	0	0	0
No. of samples per month	4	4	4	4	4	4	4
Aquatic life criteria analysis required? (Y/N)	Y	Y	Y	Y	Y	N	N
HH criteria analysis required? (Y/N)	N	Y	Y	N	Y	Y	Y
Applicable Acute WQO	5.78	2.1	75	20	1	na	na
Applicable Chronic WQO	3.73	0.025	8.28	5	1	na	na
HH criteria		0.051	4600		220000	5.9	0.014
Background (max conc for Aq Life calc)	14.7	0.018	24.5	12	3		0.0527
Background (avg conc for HH calc)							
Is the pollutant Bioaccumulative(Y/N)? (e.g., Hg)	N	Y	N	Y	N	N	Y
ECA acute	5.783133	2.1	74.7474747	20	1		
ECA chronic	3.73494	0.025	8.28282828	5	1		
ECA HH		0.051	4600		220000	5.9	0.014
No. of data points <10 or at least 80% of data reported non detect? (Y/N)	N	N	N	Y	N	Y	N
Avg of effluent data points	3.261	0.0071	4.055		3.14		
Std Dev of effluent data points	1.108	0.0037	1.130				
CV calculated	0.34	0.52	0.28	N/A	0.64		N/A
CV (Selected) - Final	0.34	0.52	0.28	0.60	0.64	0.60	0.6
ECA acute mult99	0.49	0.36	0.55	0.32	0.30		
ECA chronic mult99	0.69	0.57	0.73	0.53	0.51		
LTA acute	2.83	0.75	41.07	6.42	0.30		
LTA chronic	2.56	0.014	6.057	2.64	0.51		
minimum of LTAs	2.56	0.014	6.057	2.64	0.30		
AMEL mult95	1.30	1.48	1.24	1.55	1.59	1.55	1.55
MDEL mult99	2.04	2.78	1.82	3.11	3.29	3.11	3.11
AMEL (aq life)	3.33	0.021	7.54	4.09	0.48		
MDEL(aq life)	5.23	0.040	11.02	8.21	1.00		
MDEL/AMEL Multiplier	1.57	1.88	1.46	2.01	2.07	2.01	2.01
AMEL (human hlth)		0.051	4600		220000	6	0.014
MDEL (human hlth)		0.096	6728		454843	12	0.028
minimum of AMEL for Aq. life vs HH	3.3	0.021	7.5	4.1	0.5	5.9	0.014
minimum of MDEL for Aq. Life vs HH	5.2	0.040	11	8.2	1.0	11.8	0.028
Max Effl Conc (MEC)	6.0	0.021	6.8	2.0	10	12	8.73
Previous Permit Limit	4.9	0.012	7.1	na	14	na	na
Compliance feasibility with WQBELs or previous Permit limit, whichever is more stringent	No	No	Yes	Yes	No	No	No
99.87th percentile	7.9	na	na	na	16.5		na
Limit in new permit	7.9	0.021/0.04	7.1	4.1/8.2	14	no limit	no limit