

ATTACHMENT 16

Evaluation of cooling tower and mechanical equipment discharges threat to groundwater quality using the designated level methodology (DLM); comparison of maximum value detected in samples with the DLM values for disposal units (percolation pits or septic systems) using attenuation factor of 100 for systems more than 30 feet above ground water.

Parameter	Units	Maximum value detected in effluent	Designated level methodology value	Corresponding water quality goal ^a	Source of water quality goal ^a
Aluminum	mg/L	0.25	100	1	CA primary MCL ^b
Bicarbonate alkalinity (as CaCO ₃)	mg/L	220	None	None	None
Boron	mg/L	2.2	140	1.4	IRIS ^c
Calcium	mg/L	22	None	None	None
Carbonate alkalinity (as CaCO ₃)	mg/L	800	None	None	None
Chloride	mg/L	210	Not applicable	250	CA secondary MCL
Chromium (total)	mg/L	0.0072	5	0.05	CA primary MCL
Chromium (hexavalent)	mg/L	0.0067	2.1	0.021	IRIS
Copper	mg/L	2.4	130	1.3	CA primary MCL
Fluoride	mg/L	1.1	200	2	CA primary MCL
Hydroxide alkalinity (as CaCO ₃)	mg/L	120	None	None	None
Iron	mg/L	2.3	30	0.3	CA secondary MCL
Lead	mg/L	0.0077	1.5	0.015	CA primary MCL
Magnesium	mg/L	1.4	None	None	None
Manganese	mg/L	0.2	5	0.05	CA secondary MCL
Molybdenum	mg/L	0.045	3.5	0.035	IRIS

continued

ATTACHMENT 16 - CONTINUED

Evaluation of cooling tower and mechanical equipment discharges on ground water quality using the designated level methodology (DLM); comparison of maximum value detected in samples with the DLM values for disposal units (percolation pits or septic systems) using attenuation factor of 100 for systems more than 30 feet above ground water.

Parameter	Units	Maximum value detected in effluent	Designated level methodology value	Corresponding water quality goal ^a	Source of water quality goal ^a
Nickel	mg/L	0.019	10	0.1	CA primary MCL
Nitrate (as N)	mg/L	0.4	Not applicable	10	CA primary MCL
Nitrate (as NO ₃)	mg/L	1.8	Not applicable	45	CA primary MCL
Nitrate plus Nitrite (as N)	mg/L	0.17	Not applicable	10	CA primary MCL
Ortho-phosphate	mg/L	180	None	None	None
Potassium	mg/L	280	None	None	None
Selenium	mg/L	0.0036	5	0.05	CA primary MCL
Sodium	mg/L	740	Not applicable	30-60	Taste & odor
Specific conductance	µmhos/cm	4,340	Not applicable	900	CA secondary MCL
Sulfate	mg/L	885	Not applicable	250	CA secondary MCL
Total alkalinity (as CaCO ₃)	mg/L	920	None	None	None
Total dissolved solids	mg/L	3,300	Not applicable	500	CA secondary MCL
Total hardness (as CaCO)	mg/L	58	None	None	None
Total phosphorus (as P)	mg/L	54	None	None	None
Total trihalomethanes	mg/L	0.011	Not applicable	0.08	CA primary MCL
Vanadium	mg/L	0.1	6.3	0.063	IRIS
Zinc	mg/L	0.34	500	5	CA secondary MCL

^a From *A Compilation of Water Quality Goals* (Marshack August 2007).

^b MCL – Maximum contaminant level.

^c IRIS – USEPA Integrated Risk Information System reference dose for drinking water.