Table 31. Analytical Results of Sampling at the STP Percolation Ditches (Winter 2011)

Parameter	units	Screening Level	Screening Level Source	MPL-001 2/8/2011	MPL-002 2/1/2011	MPL-003 2/9/2011	MPL-004 2/7/2011	MPL-005 1/11/2011	MPL-006 1/12/2011	MPL-007 1/21/2011	MPL-010 1/20/2011	MPL-013 1/19/2011	MPL-016 1/19/2011	MPL-017 1/21/2011	MPL-018 1/12/2011	MPL-019 1/18/2011
Chloride	mg/L	250	NMED WQCC	35	55.8	58.5	62.1	54.6	19	105	45	32.5	46.5	45.9	13.7	14.8
Fluoride	mg/L	1.6	NMED WQCC	0.225	0.128J	0.151J	**7.53**	0.304	0.311	0.122J	0.309J	0.256	**7.8**	0.309J	0.307	0.303
Nitrate and Nitrite as N	mg/L	10	NMED WQCC	5.67	7.08	7.76	9.07	5.07	2.04	**12.8**	6.23	4.22	5.58	4.61	1.53	2.3
Orthophosphate	mg/L	NE	--	0.168	0.245	0.119	0.931	0.0443	<0.05	<0.05	<0.05	<0.05	0.393	<0.05	<0.05	<0.05
Sulfate	mg/L	600	NMED WQCC	46	81.3	125	193E	58.5	39.6	147	96.2	55.3	110	60.2	37.1	51.3
Total Alkalinity	mg/L	NE	--	83.1	75.1	122	218	94.8	101	118	76.3	69.2	174	78.7	108	93.9
Total Dissolved Solids	mg/L	1000	NMED WQCC	318	276	388	**1040**	322	216	648	400	340	840	338	236	198
Total Suspended Solids	mg/L	NE	--	<5	9	3.5J	19	<5	<5	<5	<5	<5	25	4J	<5	<5
pH	s.u.	6.0 - 9.0	NMED WQCC	7.94	7.64	7.53	7.53	7.85	7.9	7.48	7.86	8	7.78	7.78	8.11	7.74
Total Arsenic	mg/L	0.1	NMED WQCC	0.0141	0.0141	0.0138	0.0146	0.00372	0.00153	0.0205	0.0127	0.00636	0.0651	0.00264	0.00181	0.00181
Total Barium	mg/L	1	NMED WQCC	0.0683	0.0683	0.0434	0.133	0.114	0.112	0.052	0.113	0.093	0.125	0.065	0.135	0.0787
Total Cadmium	mg/L	0.01	NMED WQCC	<0.0006	<0.0006	<0.0006	**0.0628**	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	**0.0611**	<0.0006	<0.0006	<0.0006
Total Chromium	mg/L	0.05	NMED WQCC	0.00455	0.00312	0.00278	**0.0689**	0.00308	0.0046	0.00289	0.00378	0.00348	**0.0705**	0.00278	0.00468	0.00446
Total Cobalt	mg/L	0.05	NMED WQCC	<0.001	<0.001	<0.001	**0.0648**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.068**	<0.001	<0.001	<0.001
Total Copper	mg/L	1	NMED WQCC	<0.002	<0.002	<0.002	0.0659	<0.002	<0.002	<0.002	<0.002	<0.002	0.0678	<0.002	<0.002	<0.002
Total Lead	mg/L	0.05	NMED WQCC	<0.001	<0.001	<0.001	**0.0655**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0657**	<0.001	<0.001	<0.001
Total Mercury	mg/L	0.002	NMED WQCC	<0.0002	<0.0002	<0.0002	**0.00501**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	**0.00494**	<0.0002	<0.0002	<0.000293
Total Nickel	mg/L	0.2	NMED WQCC	0.00231J	0.00299J	0.00403	0.0683	<0.004	<0.004	0.00623	0.00294J	<0.004	0.0715	<0.00272	<0.004	0.00256J
Total Selenium	mg/L	0.05	NMED WQCC	0.018	**0.0536**	**0.055**	**0.194**	0.0122	0.00157	<0.0500	0.0484	0.0228	**0.0689**	<0.0500	0.00187	0.00157
Total Silver	mg/L	0.05	NMED WQCC	<0.001	<0.001	<0.001	**0.0574**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.057**	<0.001	<0.001	<0.001
Total Thallium	mg/L	0.00241	NMED Tap Water	<0.0002	<0.0002	<0.0002	**0.0626**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	**0.0659**	<0.0002	<0.0002	<0.0002
Total Vanadium	mg/L	0.183	NMED Tap Water	0.00645J	0.00781J	<0.01	**0.506**	<0.01	0.00821	<0.01	<0.01	<0.01	**0.494**	<0.01	0.00851	0.00927J
Total Zinc	mg/L	10	NMED WQCC	<0.02	<0.02	0.0232	0.498	0.00668	0.00676	<0.02	<0.02	<0.02	0.482	<0.02	0.00516	0.0119J
Total Cyanide	mg/L	0.2	NMED WQCC	**0.239**	**0.479**	**0.487**	**0.679**	0.0781	<0.01	**0.305**	**0.282**	0.1	**0.287**	0.0312	<0.01	<0.01
Amenable Cyanide	mg/L	0.2	NMED WQCC	0.236	0.475	0.482	**0.677**	0.076	<0.01	0.302	0.28	0.0967	0.283	0.0298	<0.01	<0.01
Weak Acid Diss Cyanide	mg/L	1.2	NMED WQCC	0.0468	0.0399	0.227	0.249			0.0359	<0.01	0.0293	0.209	0.0184	<0.01	<0.01

Parameter	units	Screening Level	Screening Level Source	MPL-020 1/13/2011	MPL-021 2/15/2011	MPL-022 2/14/2011	MPL-023 2/10/2011	MPL-024 1/20/2011	MPL-025 2/10/2011	MPL-026 2/8/2011	MPL-028 1/21/2011	MPL-029 1/13/2011	MPL-030 1/31/2011	T-40 1/20/2011	SMW-01 1/12/2011	SMW-04 1/11/2011
Chloride	mg/L	250	NMED WQCC	74.7	19.6	14.1	12.8	37.9E	48.6	167	80.9	53.7	61.8	27.6	17.4	21.4
Fluoride	mg/L	1.6	NMED WQCC	0.191J	8.03	0.408	0.314	0.260J	0.219	<0.6	0.171J	0.142J	0.235	0.181J	0.337	0.323
Nitrate and Nitrite as N	mg/L	10	NMED WQCC	7.28	1.97	1.24	1.48	4.64	5.04	7.87	8.61	6.07	8.33	2.08	2.43	3.01
Orthophosphate	mg/L	NE	--	<0.05	0.382	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0367J	0.11	0.0413	0.0595
Sulfate	mg/L	600	NMED WQCC	111	87.9	31.7	52.4	72.4	58.8	494	141	136	119	35.9	59.5	55.4
Total Alkalinity	mg/L	NE	--	78.7	185	76.4	100	82	107	67.6	91.6	148		113	96.2	103
Total Dissolved Solids	mg/L	1000	NMED WQCC	452	714	138	232	326	284	**1170**	546	496	374	294	224	260
Total Suspended Solids	mg/L	NE	--	<5	25	<5	<5	<5	<5	12.5	<5	<5	<5	<5	<5	<5
pH	s.u.	6.0 - 9.0	NMED WQCC	7.53	7.9	8.46	7.93	7.77	7.65	7.34	7.64	7.43	7.67	7.5	7.59	7.93
Total Arsenic	mg/L	0.1	NMED WQCC	0.00845	0.0639	0.00863	0.00164	0.00759	0.00084	0.00121	0.022	0.0153	0.0153	0.00242	0.000636	0.00129
Total Barium	mg/L	1	NMED WQCC	0.0686	0.116	0.076	0.0199	0.0984	0.0636	0.0617	0.0779	0.0496	0.11	0.131	0.0735	0.0759
Total Cadmium	mg/L	0.01	NMED WQCC	<0.0006	**0.0607**	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	0.000304	<0.0006
Total Chromium	mg/L	0.05	NMED WQCC	0.00333	**0.074**	0.00139	0.00582	0.00353	0.00159J	0.00553	0.0032	0.0028	0.00514	0.00871	0.00109	0.0683
Total Cobalt	mg/L	0.05	NMED WQCC	<0.001	**0.0704**	<0.001	<0.001	<0.001	<0.001	0.00056J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Copper	mg/L	1	NMED WQCC	<0.002	0.0693	<0.002	<0.002	0.00102J	<0.002	0.00208	0.00107J	<0.002	0.00151J	<0.002	0.00171	0.0022
Total Lead	mg/L	0.05	NMED WQCC	<0.001	**0.0646**	<0.001	<0.001	<0.001	<0.001	0.00061J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Mercury	mg/L	0.002	NMED WQCC	<0.0002	**0.0049**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Nickel	mg/L	0.2	NMED WQCC	0.00406	0.0703	<0.004	<0.004	0.00219J	0.00226J	0.0081	0.0046	0.00659	0.00347J	0.00956	0.00556	0.0827
Total Selenium	mg/L	0.05	NMED WQCC	0.031	**0.0581**	0.00222	0.00181	0.0281	0.0028	0.00896	0.0358	**0.0566**	**0.0556**	0.00254	0.00216	0.00398
Total Silver	mg/L	0.05	NMED WQCC	<0.001	**0.0533**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Thallium	mg/L	0.00241	NMED Tap Water	<0.0002	**0.0648**	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Vanadium	mg/L	0.183	NMED Tap Water	<0.01	**0.492**	0.017	0.00821J	<0.01	<0.01	<0.01	0.138	<0.01	0.0107	<0.01	<0.01	<0.01
Total Zinc	mg/L	10	NMED WQCC	0.0216	0.481	<0.02	<0.02	0.0145J	0.0148J	<0.02	0.142	0.00862J	<0.02	<0.02	0.0324	0.0131
Total Cyanide	mg/L	0.2	NMED WQCC	0.115	<0.01	<0.01	0.00969	**0.249**	<0.01	0.034	**0.47**	0.148	**0.4**	<0.01	0.00752	<0.01
Amenable Cyanide	mg/L	0.2	NMED WQCC	0.0918	0.199	<0.01	<0.01	0.245	<0.01	0.0311	0.466	0.119	0.397	<0.01	<0.01	<0.01
Weak Acid Diss Cyanide	mg/L	1.2	NMED WQCC	0.0357	0.198	<0.01	0.00838J	0.0286	<0.01	0.0103	0.0537	0.0373	0.041	<0.01		

< - Less than the indicated laboratory reporting limit. Bold – Analyte concentration exceeded the screening level. J – Estimated value.