

This table is missing the fourth sample collected at South Sunset on 1/20/2012 at 21:00.

water year: sample date: sample time:		2009-10		2010-11		2011- 12				MCL ^c
		2/23/10	3/2/10	12/8/10	2/17/11	10/5/2011 ^a	1/20/12 ^b			
		NR	6:30	10:05	11:05	NR	18:45	19:45	20:45	
Analyte	Units									
pH		6.3 ^d	6.6	6.8	8.1	7.4	7.0	6.9	6.8	
Temperature	°F	52 ^d	56	54	62	62	53	53	53	
Specific Conductance	µmhos/cm	237 ^d	224	197	113	160	209	238	244	900 ^e
Total Dissolved Solids	mg/L	102	62	54	74	96	80	164	132	500 ^e
Turbidity	NTU	49 ⁽⁴⁾	117	28.9	65.2	11	-	-	-	
Total Suspended Solids	mg/L	25	45	20	23	11	<7	7.0	16.5	
Antimony	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	<2.4	<0.5	<0.5	<0.5	6
dissolved ^h	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	<2.4	<0.5	<0.5	<0.5	
Arsenic	µg/L	< 2	< 2	< 2	< 2	<2	<2	<2	<2	10
dissolved	µg/L	< 2	< 2	< 2	< 2	3.7 J	<2	<2	<2	
Barium	µg/L	70.0	108	76.5	59.2	16.0	26.1	38.9	43.5	1000
dissolved	µg/L	50.1	61.1	61.0	32.8	8.2	24.4	34.7	39.5	
Beryllium	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	<0.24	<0.5	<0.5	<0.5	4
dissolved	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	<0.24	<0.5	<0.5	<0.5	
Cadmium	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	<1	<0.25	<0.25	<0.25	5
dissolved	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	<1	<0.25	<0.25	<0.25	
Chromium	µg/L	5.13	12.25	4.11	6.66	<1.5	1.67	4.26	4.83	50
dissolved	µg/L	1.54	0.84	0.90	0.79	<1.5	1.35	3.34	3.55	
Cobalt	µg/L	1.10	2.64	0.87	1.34	<0.53	0.43	1.01	1.16	-
dissolved	µg/L	0.16	0.08	0.19	0.13	<0.53	0.30	0.67	0.75	
Copper	µg/L	4.39	8.99	4.86	4.69	5.80	4.74	5.78	5.87	1000 ^d
dissolved	µg/L	4.32	2.40	3.52	1.40	4.2 J	4.37	5.49	5.52	3.1 ^f
Iron	µg/L	1,387	3,624	1,426	2,440	110	382	1,159	1,240	300 ^e
dissolved	µg/L	15.1	5.50	7.56	10.8	<7.2	262	826	849	
Lead	µg/L	0.64	1.59	0.61	0.91	<1.4	0.51	0.82	0.81	15
dissolved	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	<1.4	<0.5	<0.5	<0.5	
Manganese	µg/L	51.2	144	41.9	66.2	19.0	18.6	37.7	39.7	50 ^e
dissolved	µg/L	2.36	0.37	0.67	0.43	1.8 J	12.7	26.0	25.8	
Mercury	µg/L	< 0.2	< 0.2	< 0.2	< 0.2	<0.036	<0.2	<0.2	<0.2	2
dissolved	µg/L	< 0.2	< 0.2	< 0.2	< 0.2	<0.036	<0.2	<0.2	<0.2	
Molybdenum	µg/L	0.46	0.34	0.31	0.23	<0.67	<0.35	0.66	0.63	-
dissolved	µg/L	0.57	0.42	0.36	0.34	3.9 J	<0.35	0.62	0.65	
Nickel	µg/L	7.57	18.54	5.59	10.3	<0.83	2.15	5.21	6.05	100
dissolved	µg/L	< 1	< 1	< 1	< 1	<0.83	1.72	3.78	4.09	
Selenium	µg/L	< 2	< 2	< 2	< 2	<3.2	<2	<2	<2	50
dissolved	µg/L	< 2	< 2	< 2	< 2	4.5 J	<2	<2	<2	
Silver	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	<0.62	<0.25	<0.25	<0.25	100 ^e
dissolved	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	<0.62	<0.25	<0.25	<0.25	
Thallium	µg/L	< 1	< 1	< 1	< 1	<2.4	<1	<1	<1	2
dissolved	µg/L	< 1	< 1	< 1	< 1	<2.4	<1	<1	<1	
Vanadium	µg/L	3.70	8.83	3.29	4.23	6.40	5.52	4.49	4.38	50 ^g
dissolved	µg/L	1.33	1.31	1.30	0.86	5.10	5.34	3.67	3.48	
Zinc	µg/L	31.4	32.3	21.3	27.1	180	124	86.2	74.2	5000 ^e
dissolved	µg/L	6.40	3.72	7.37	6.13	97	81.2	65.6	54.8	
VOCs	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	
Semi VOCs:										
Bis-(2-ethylhexyl)-phthalate	µg/L	<0.3	0.41 J	1.05	0.76 J	29	57.3	3.97	<0.77	4

Exceeds environmental screening level.
 Exceeds primary MCL.
 Exceeds secondary MCL.

^aNot in LIMS

^fMarine and groundwater screening levels.

^b"First flush" event.

^gCalifornia Dept. Public Health notification level.

^cCalifornia MCL.

^hAll "dissolved" samples were field filtered.

MCL Maximum Contaminant Level

ND Not detected

^dUsed field duplicate value.

NR Not recorded

J Qualified result

^eSecondary MCL.

Samples collected and analyzed by SFPUC.

Table B-3
Results of Synthetic Turf Runoff or Leachate Sampling, South Sunset Playground, 2010-2012

water year: sample date: sample time:		2009-10		2010-11		2011-12				MCL ^{cMCL}
		2/24/10	3/2/10	12/22/10	2/17/11	1/5/2011 ^{a10/5/20}	1/20/12 ^{b1/20/12b}			
		NR	8:20	8:15	11:40	NR	6:35	7:30	8:40	
Analyte	Units									
pH		7.2	7.1	7.78	7.5	7.5	7.0	7.0	7.2	
Temperature	°F	56	58	54	60	62	54	52	52	
Specific Conductance	µmhos/cm	382	390	304	228	330	648	374	373	900 ^{d900d}
Total Dissolved Solids	mg/L	212	152	136	126	250	468	282	294	500 ^{d500d}
Turbidity	NTU	1	43	2	13.8	13	-	-	-	
Total Suspended Solids	mg/L	< 7	28.5	7.0	7.0	< 5	< 7	< 7	< 7	
Antimony	µg/L	0.67	0.70	0.59	0.54	< 2.4	0.52	0.67	0.70	6
dissolved ^{gdissolvedg}	µg/L	0.61	0.62	0.57	< 0.5	< 2.4	0.55	0.71	0.69	
Arsenic	µg/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	10
dissolved	µg/L	< 2	< 2	< 2	< 2	< 2.4	< 2	< 2	< 2	
Barium	µg/L	56.7	138	59.2	56.1	120	196	65.5	80.7	1000
dissolved	µg/L	54.6	68.8	55.8	39.8	94.0	183	67.2	71.7	
Beryllium	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.24	< 0.5	< 0.5	< 0.5	4
dissolved	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.24	< 0.5	< 0.5	< 0.5	
Cadmium	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 1.0	< 0.25	< 0.25	< 0.25	5
dissolved	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 1.0	< 0.25	< 0.25	< 0.25	
Chromium	µg/L	< 0.5	1.81	< 0.5	< 0.5	< 1.5	0.76	< 0.5	0.75	50
dissolved	µg/L	< 0.5	0.54	< 0.5	< 0.5	1.5 J	0.75	< 0.5	0.59	
Cobalt	µg/L	0.22	1.72	0.20	0.57	< 0.53	0.31	0.55	0.84	-
dissolved	µg/L	0.22	0.18	0.16	0.19	1.1 J	0.31	0.55	0.58	
Copper	µg/L	5.48	8.91	5.70	5.75	26.0	12.0	14.4	15.8	1000 ^d
dissolved	µg/L	5.90	4.67	5.49	4.82	23.0	11.7	14.4	15.7	3.1 ^e
Iron	µg/L	14.4	1,742	15.0	188	160	47.8	47.2	255	300 ^d
dissolved	µg/L	< 2.5	< 2.5	2.98	5.99	< 7.2	26.9	36.9	39.3	
Lead	µg/L	< 0.5	1.69	< 0.5	< 0.5	< 1.4	< 0.5	< 0.5	< 0.5	15
dissolved	µg/L	< 0.5	< 0.5	< 0.5	< 0.5	< 1.4	< 0.5	< 0.5	< 0.5	
Manganese	µg/L	0.87	35.0	0.68	5.00	7.00	3.08	1.81	6.97	50 ^d
dissolved	µg/L	1.87	0.53	0.30	1.50	2.6 J	1.88	1.73	3.87	
Mercury	µg/L	< 0.2	< 0.2	< 0.2	< 0.2	0.38	< 0.2	< 0.2	< 0.2	2
dissolved	µg/L	< 0.2	< 0.2	< 0.2	< 0.2	0.28	< 0.2	< 0.2	< 0.2	
Molybdenum	µg/L	8.69	8.26	9.35	7.32	13.0	6.13	10.7	10.6	-
dissolved	µg/L	8.44	7.37	9.51	7.83	11.0	6.17	10.6	10.0	
Nickel	µg/L	3.80	7.34	4.01	3.58	8.00	6.00	4.95	7.09	100
dissolved	µg/L	3.64	3.89	3.78	2.53	6.20	5.79	4.97	6.05	
Selenium	µg/L	< 2	< 2	< 2	< 2	< 3.2	< 2	< 2	< 2	50
dissolved	µg/L	< 2	< 2	< 2	< 2	8.7 J	< 2	< 2	< 2	
Silver	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 6.2	< 0.25	< 0.25	< 0.25	100 ^{d100d}
dissolved	µg/L	< 0.25	< 0.25	< 0.25	< 0.25	< 6.2	< 0.25	< 0.25	< 0.25	
Thallium	µg/L	< 1	< 1	< 1	< 1	< 3.0	< 1	< 1	< 1	2
dissolved	µg/L	< 1	< 1	< 1	< 1	< 3.0	< 1	< 1	< 1	
Vanadium	µg/L	1.60	6.52	1.62	2.07	5.70	4.68	1.53	2.45	50 ^{50f}
dissolved	µg/L	1.49	2.14	1.34	1.39	3.8 J	4.47	1.54	1.89	
Zinc	µg/L	58.5	137	51.6	41.0	82.0	140	46.6	104	5000 ^{d5000}
dissolved	µg/L	42.2	72.8	60.3	29.5	63.0	127.3	52.1	87.9	
VOCs	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	
Semi VOCs	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	

Exceeds environmental screening level.

Exceeds secondary MCL.

^aNot in LIMS

^b"First flush" event.

^eMarine and groundwater screening levels.

^fCalifornia Dept. Public Health notification level.

MCL Maximum Contaminant Level ND Not detected

^cCalifornia MCL.

^gAll "dissolved" samples were field filtered.

NR Not recorded

J Qualified result

^dSecondary MCL.

Samples collected and analyzed by SFPUC.

Table B-4
Results of Synthetic Turf Runoff or Leachate Sampling, Garfield Square Park, 2010-2012