

APPENDIX J
WATER QUALITY DATA

MONITORING PARAMETERS	Receiving Water WQC/WQO		NPDES Industrial Stormwater Multi-Sector Benchmark Values	SMARTS SIC 2875 (2011-2013)	Central Landfill (2012)	Yuba-Sutter (2013)		Cold Canyon (2010)	Hay Road (2009-2013)	Units
	WQC/WQO	Reference			SW-3	S1 (compost pile leachate)	S2 - LF-1 Drainage Ditch)	Compost Runoff Pad	COMP POND	
Field Parameters										
pH ¹	6.5 - 8.5	Basin Plan and USEPA 2nd MCL	6.0 - 9.0	5.1 - 8.9	7.03	6.77	7.7	8.4		
Dissolved Oxygen	7.0 mg/L	Basin Plan/COLD			5.16	9.92	7			
Specific Conductance ¹	700 µS/cm	Ag WQG	200 µS/cm	36 - 2740	2402	2540	1085			umhos/cm
Temperature	None	N/A			54.5 deg F	18.45 deg C	14.34 deg C			
Turbidity ¹	None	N/A	< 10-20% increase over background, depending on region		1147					
Monitoring Parameters										
General Parameters										
Ammonia as Nitrogen (non-ionized)	490 µg/L	USEPA National Recomm. WQ Criteria, 4-day avg, as N (i)	19,000 µg/L		0.059	22.8	4.78	2.4	.3 - 110	mg/L
Biochemical Oxygen Demand, 5-day (BOD ₅)	30/45 mg/L	UEPA TBEL (30/7 day)	30 mg/L		670	570	110	56		mg/L
Fecal Coliform	200 CFU/100 ml - 30-day/5-sample geo. Mean, and < 10% samples in 30 days > 400 CFU/100 ml	USEPA Ambient Water Quality Criteria for Bacteria	Usually determined by basin-specific TMDL							
Nitrite as Nitrogen	1.0 mg/L	DHS - 1st MCL	0.68 mg/L		0.023	0.94	0.47	ND	0.21 - 0.66	mg/L
Ortho-phosphate	100 µg/L	EPA Gold Book, 1986			12					
Phosphorus	0.14 µg/L	USEPA IRIS Reference Dose	2000 µg/L	0.05 - 20		32.5	12.9		6.4 - 150	mg/L
Total Dissolved Solids	500 mg/L	DHS - 2nd MCL		92	2600			4080	740 - 6900	mg/L
Fixed Dissolved Solids									460 - 5200	
Total Kjeldahl Nitrogen (TKN)	None	N/A			81	124	7.6	71	12 - 320	mg/L
Total Organic Carbon	2.5 mg/L	CDPH draft Groundwater Recharge Reuse Regulation	100 mg/L	13 - 102		734	566	460		mg/L
General Minerals										
Alkalinity, Bicarbonate	20 mg/L	USEPA recommended criteria for freshwater aquatic life protection (4-day ave)								
Calcium	None	N/A								
Chloride	250 mg/L	DHS - 2nd MCL							81 - 1600	mg/L
Magnesium	None	N/A								
Nitrate as Nitrogen	10 mg/L	DHS- 1st MCL	0.68 mg/L		ND	6.38	1.24	0.86	0	mg/L
Potassium	None	N/A								

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	WQC/WQO	Reference				S1 (compost pile leachate)	S2 - LF-1 Drainage Ditch)			
Sodium	20 mg/L	USEPA Drinking Water Advisory for persons on restricted sodium diet								
Sulfate as SO ₄	250 mg/L	DHS - 2nd MCL				68.7	110		0 - 320	mg/L
Dissolved Metals (all samples shall be field filtered prior to laboratory analysis)										
Aluminum	200 µg/L	DHS - 2nd MCL	750 µg/L			16.1	19.5			mg/L
Antimony	6 µg/L	DHS - 1st MCL								
Arsenic*	10 µg/L	DHS - 1st MCL						0.024		mg/L
Barium	1 mg/L	DHS- 1st MCL						0.043		mg/L
Beryllium	4 µg/L	DHS- 1st MCL								
Boron	1 mg/L	DPH drinking water notification level								
Cadmium*	5 µg/L	DHS- 1st MCL								
Chromium (III)*	50 µg/L	DHS - 1st MCL						0.019		mg/L
Copper*	1 mg/L	DHS - 2nd MCL & USEPA Nat. Rec. WQ Criteria	0.064 mg/L	0.0083 - 0.028		0.136	0.159	0.037		mg/L
Iron	300 µg/L	DHS-2nd MCL	1000 µg/L	0.22 - 114		20.1	24.4			mg/L
Lead*	15 µg/L	DHS - 1st MCL	82 µg/L	0.0014 - 0.07		0.044	0.072		0 - 0.150	mg/L
Manganese	50 µg/L	DHS - 2nd MCL								
Mercury*	2 µg/L	DHS - 1st MCL								
Molybdenum	35 µg/L	USEPA IRIS Reference Dose						0.033		mg/L
Nickel*	100 µg/L	DHS - 1st MCL						0.06		mg/L
Selenium*	50 µg/L	DHS - 1st MCL						0.021		mg/L
Thallium	2 µg/L	DHS - 1st MCL								
Vanadium	50 µg/L	DPH drinking water notification level						0.009		mg/L
Zinc*	2.1 mg/L	USEPA IRIS Reference Dose	0.117 mg/L	0.11 - 11		0.379	0.459			mg/L
Other										
Chemical Oxygen Demand			120 mg/L	327		1360	890	2400		mg/L
Nitrate + Nitrite				0.16 - 7.6	81			72	0 - 14	mg/L
Total Suspended Solids	30/45 mg/L	USEPA TBEL (30/7 day)	100 mg/L	15 - 2200		1980	1690	72		mg/L

Note: mg/L = milligrams/liter; µg/L = micrograms/liter; NTU = nephelometric turbidity units; µS/cm = microsiemens per centimeter; mmhos/cm = micromhos per centimeter; MPN/100 mL = Most Probable Number per 100 milliliters