Data for Chart

Assumptions:

Parameter:	Copper	
Receiving Street Hardness (50th Percentile):	280	mg/l
Receiving Stream Background Copper:	5	ug/l
Mixing Zone:	25%	
Mixing Zone Flow	Qw	
Effluent Design Flow:	10	MGD
Stream Design Flow	(Q7,10) for aquatic life protection	
CMC (see Calculations):	37	ug/l
CCC (see Calculations):	21.3	ug/l
FAV (see Calculations):	74	ug/l

Q7,10 Flow MGD	Qw MGD	Acute CMC ug/l	Chronic CCC ug/l	Acute WLAa ug/l	FAV ug/l	Minimum WLAa or FAV ug/l	Chronic WLAc ug/l	Acute LTAa ug/l	Chronic LTAc ug/l	Minimum LTA ug/l	DML ug/l	AML ug/l
0	0	36.9	21.3	369	73.9	74	21	24	11	11	35.0	15.0
5	1	36.9	21.3	529	73.9	74	23	24	12	12	38.4	16.5
10	3	36.9	21.3	689	73.9	74	25	24	13	13	41.7	17.9
15	4	36.9	21.3	848	73.9	74	27	24	14	14	45.1	19.4
20	5	36.9	21.3	1,008	73.9	74	29	24	16	16	48.4	20.8
25	6	36.9	21.3	1,168	73.9	74	32	24	17	17	51.8	22.2
30	8	36.9	21.3	1,327	73.9	74	34	24	18	18	55.1	23.7
35	9	36.9	21.3	1,487	73.9	74	36	24	19	19	58.5	25.1
40	10	36.9	21.3	1,647	73.9	74	38	24	20	20	61.8	26.6
45	11	36.9	21.3	1,806	73.9	74	40	24	21	21	65.2	28.0
50	13	36.9	21.3	1,966	73.9	74	42	24	22	22	68.5	29.4
60	15	36.9	21.3	2,285	73.9	74	46	24	24	24	73.9	31.8
70	18	36.9	21.3	2,605	73.9	74	50	24	26	24	73.9	31.8
80	20	36.9	21.3	2,924	73.9	74	54	24	28	24	73.9	31.8
90	23	36.9	21.3	3,243	73.9	74	58	24	31	24	73.9	31.8
100	25	36.9	21.3	3,563	73.9	74	62	24	33	24	73.9	31.8
200	50	36.9	21.3	6,756	73.9	74	103	24	54	24	73.9	31.8
300	75	36.9	21.3	9,949	73.9	74	144	24	76	24	73.9	31.8
400	100	36.9	21.3	13,142	73.9	74	184	24	97	24	73.9	31.8
500	125	36.9	21.3	16,336	73.9	74	225	24	119	24	73.9	31.8
750	188	36.9	21.3	24,319	73.9	74	327	24	173	24	73.9	31.8
1,000	250	36.9	21.3	32,302	73.9	74	429	24	226	24	73.9	31.8
2,500	625	36.9	21.3	80,201	73.9	74	1,041	24	549	24	73.9	31.8
5,000	1,250	36.9	21.3	160,033	73.9	74	2,061	24	1,087	24	73.9	31.8
7,500	1,875	36.9	21.3	239,865	73.9	74	3,080	24	1,625	24	73.9	31.8
10,000	2,500	36.9	21.3	319,697	73.9	74	4,100	24	2,162	24	73.9	31.8

Data for Chart

Assumptions:
Parameter:
Receiving Street Hardness (50th Percentile):
Receiving Stream Background Copper:
Mixing Zone:
Mixing Zone Flow
Effluent Design Flow:
Stream Design Flow
CMC (see Calculations):
CCC (see Calculations):
FAV (see Calculations):

				De minimis Calculations based on AML and CCC						
Q7,10 Flow MGD	Qw MGD	Acute CMC ug/l	Chronic CCC ug/l	Total Loading Capacity TLC lbs/day	Used Loading Capacity ULC lbs/day	Unused Loading Capacity lbs/day	Existing AML Loading lbs/day	Maximum *de minimis* Loading lbs/day	Remaining Unused Capacity lbs/day	10% CAP Test NO if <10%
0	0	36.9	21.3	1.78	1.26	0.52	1.26	0.05	0.47	26%
5	1	36.9	21.3	2.67	1.58	1.08	1.38	0.11	0.97	37%
10	3	36.9	21.3	3.56	1.91	1.64	1.50	0.16	1.48	42%
15	4	36.9	21.3	4.44	2.24	2.20	1.62	0.22	1.98	45%
20	5	36.9	21.3	5.33	2.57	2.76	1.74	0.28	2.49	47%
25	6	36.9	21.3	6.22	2.90	3.32	1.86	0.33	2.99	48%
30	8	36.9	21.3	7.11	3.23	3.88	1.98	0.39	3.50	49%
35	9	36.9	21.3	8.00	3.56	4.44	2.10	0.44	4.00	50%
40	10	36.9	21.3	8.89	3.88	5.00	2.22	0.50	4.50	51%
45	11	36.9	21.3	9.78	4.21	5.56	2.34	0.56	5.01	51%
50	13	36.9	21.3	10.67	4.54	6.12	2.46	0.61	5.51	52%
60	15	36.9	21.3	12.44	5.15	7.29	2.65	0.73	6.56	53%
70	18	36.9	21.3	14.22	5.57	8.65	2.65	0.87	7.79	55%
80	20	36.9	21.3	16.00	5.98	10.01	2.65	1.00	9.01	56%
90	23	36.9	21.3	17.78	6.40	11.38	2.65	1.14	10.24	58%
100	25	36.9	21.3	19.55	6.82	12.74	2.65	1.27	11.46	59%
200	50	36.9	21.3	37.33	10.99	26.34	2.65	2.63	23.71	64%
300	75	36.9	21.3	55.11	15.16	39.95	2.65	3.99	35.95	65%
400	100	36.9	21.3	72.88	19.33	53.56	2.65	5.36	48.20	66%
500	125	36.9	21.3	90.66	23.50	67.16	2.65	6.72	60.45	67%
750	188	36.9	21.3	135.10	33.92	101.18	2.65	10.12	91.06	67%
1,000	250	36.9	21.3	179.54	44.35	135.19	2.65	13.52	121.67	68%
2,500	625	36.9	21.3	446.19	106.90	339.29	2.65	33.93	305.36	68%
5,000	1,250	36.9	21.3	890.60	211.15	679.45	2.65	67.95	611.51	69%
7,500	1,875	36.9	21.3	1335.01	315.40	1019.61	2.65	101.96	917.65	69%
10,000	2,500	36.9	21.3	1779.42	419.65	1359.78	2.65	135.98	1223.80	69%