Hardness mg/l as CaCO3	CCC 4-Day Ave. (ug/l)	CMC 1-Hour Ave. (ug/l)	0.637CCC	0.432CMC	Nickel Concentration Limitations (Total Recoverable) AMEL (µg/L)	MDEL (µg/L)
5	4.1	37.2	2.6	16.1	3.6	6.1
10	7.4	66.9	4.7	28.9	6.5	11.0
15	10.5	94.3	6.7	40.7	9.1	15.5
20	13.4	120.2	8.5	51.9	11.7	19.8
25	16.1	145.2	10.3	62.7	14.1	23.9
30	18.8	169.4	12.0	73.2	16.4	27.8
35	21.5	193.0	13.7	83.4	18.7	31.7
40	24.0	216.1	15.3	93.4	21.0	35.5
45	26.5	238.8	16.9	103.1	23.2	39.2
50	29.0	261.0	18.5	112.8	25.3	42.9
55	31.5	282.9	20.0	122.2	27.5	46.5
60	33.9	304.5	21.6	131.6	29.5	50.0
65	36.2	325.9	23.1	140.8	31.6	53.5
70	38.6	347.0	24.6	149.9	33.7	57.0
75	40.9	367.8	26.0	158.9	35.7	60.4
80	43.2	388.5	27.5	167.8	37.7	63.8
85	45.5	408.9	29.0	176.6	39.7	67.2
90	47.7	429.2	30.4	185.4	41.6	70.5
95	49.9	449.3	31.8	194.1	43.6	73.8
100	52.2	469.2	33.2	202.7	45.5	77.1
105	54.4	488.9	34.6	211.2	47.4	80.3
110	56.5	508.6	36.0	219.7	49.3	83.6
115	58.7	528.1	37.4	228.1	51.2	86.8
120	60.9	547.4	38.8	236.5	53.1	89.9
125	63.0	566.7	40.1	244.8	55.0	93.1
130	65.1	585.8	41.5	253.1	56.8	96.2
135	67.2	604.8	42.8	261.3	58.7	99.4
140	69.3	623.7	44.2	269.4	60.5	102.5
145	71.4	642.5	45.5	277.5	62.3	105.6
150	73.5	661.2	46.8	285.6	64.1	108.6
155	75.6	679.8	48.1	293.7	66.0	111.7
160	77.6	698.3	49.5	301.6	67.7	114.7
165	79.7	716.7	50.8	309.6	69.5	117.8
170	81.7	735.0	52.1	317.5	71.3	120.8
175	83.7	753.3	53.3	325.4	73.1	123.8
180	85.8	771.4	54.6	333.3	74.8	126.8
185	87.8	789.5	55.9	341.1	76.6	129.7
190	89.8	807.5	57.2	348.9	78.4	132.7
195	91.8	825.5	58.5	356.6	80.1	135.6
200	93.8	843.3	59.7	364.3	81.8	138.6
205	95.7	861.1	61.0	372.0	83.6	141.5
210	97.7	878.9	62.2	379.7	85.3	144.4
215	99.7	896.6	63.5	387.3	87.0	147.3
220	101.6	914.2	64.7	394.9	88.7	150.2
225	103.6	931.7	66.0	402.5	90.4	153.1
230	105.5	949.2	67.2	410.1	92.1	156.0
235	107.5	966.6	68.5	417.6	93.8	158.8
240	109.4	984.0	69.7	425.1	95.5	161.7
245	111.3	1001.3	70.9	432.6	97.2	164.5
250	113.2	1018.6	72.1	440.0	98.8	167.4
255	115.2	1035.8	73.4	447.5	100.5	170.2
260	117.1	1052.9	74.6	454.9	102.2	173.0
265	119.0	1070.0	75.8	462.3	103.8	175.8
270	120.9	1087.1	77.0	469.6	105.5	178.6
275	122.8	1104.1	78.2	477.0	107.1	181.4
280	124.6	1121.1	79.4	484.3	108.8	184.2
285	126.5	1138.0	80.6	491.6	110.4	187.0
290	128.4	1154.8	81.8	498.9	112.0	189.7
295	130.3	1171.7	83.0	506.2	113.7	192.5
300	132.1	1188.4	84.2	513.4	115.3	195.3
310	135.8	1221.9	86.5	527.8	118.6	200.8
320	139.5	1255.1	88.9	542.2	121.8	206.2
330	143.2	1288.2	91.2	556.5	125.0	211.7
340	146.9	1321.2	93.6	570.8	128.2	217.1
350	150.5	1354.0	95.9	584.9	131.4	222.5
360	154.2	1386.6	98.2	599.0	134.5	227.8
370	157.8	1419.2	100.5	613.1	137.7	233.2
380	161.4	1451.5	102.8	627.1	140.8	238.5
400	168.5	1515.9	107.4	654.9	147.1	249.1
>400	30.5	51.7	17.1	18.3	25.5	48.5

CCC = Criteria Continuous Concentration
= exp {0.8460[ln(hardness)] + 0.0584}

CMC = Criteria Maximum Concentration
= exp {0.8460[ln(hardness0] + 2.255}

AMEL = Average Monthly Effluent Limitation
= 1.37[min(0.637CCC,0.432CMC)]

MDEL = Maximum Daily Effluent Limitation
= 2.32[min(0.637CCC,0.432CMC)]

Hardness – hardness of the receiving water at the time the discharge is sampled.

Attachment E-4 Hardness-dependent Effluent Limitations for Nickel