

Environmental Protection

There are two main factors that need to be addressed in order to make sure that the environment around a proposed facility is protected.

1) Significant affects to the environment.

EMF's proposed facility will be constructed on an existing tower (tower ID 1059564) and will cause no adverse effects to the surrounding environment at the site.

2) Human exposure to excess levels of radiofrequency radiation.

The proposed facility is to be built using a 1-bay circularly polarized antenna.

There are no other AM, FM, or TV stations on the proposed tower to factor into this study.

As can be seen in Exhibit 24A, the maximum theoretical RF value would be $105.57\mu\text{W}/\text{cm}^2$ at a distance of 13 meters from the tower, which is 52.78% of the $200\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 10.56% of the $1000\mu\text{W}/\text{cm}^2$ permitted for worker (controlled) exposure.

Therefore, the proposed facility complies with the requirements of OET 65.

EMF will fully cooperate with other future site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

RF Analysis: TRUTH OR CONSEQUENCES, NM
 KLCF
 216
 Site type: Application
 Channel: 216
 ERP: 1.2KW
 Antenna: ERI
 EPA TYPE: 3
 1BAY
 COR AGL: 13M
 Polarization: CIRCULAR

Distance From Tower (m)	KLCF Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	14.2329	14.23	7.12
1	14.1492	14.15	7.07
2	20.6274	20.63	10.31
3	30.2118	30.21	15.11
4	40.7054	40.71	20.35
5	51.1376	51.14	25.57
6	61.7275	61.73	30.86
7	73.0241	73.02	36.51
8	84.1042	84.10	42.05
9	94.5526	94.55	47.28
10	99.8785	99.88	49.94
11	103.2461	103.25	51.62
12	104.9684	104.97	52.48
13	105.5659	105.57	52.78
14	104.5726	104.57	52.29
15	102.9315	102.93	51.47
16	101.2262	101.23	50.61
17	99.4728	99.47	49.74
18	97.3349	97.33	48.67
19	94.3063	94.31	47.15
20	90.4659	90.47	45.23
21	86.7154	86.72	43.36
22	83.0767	83.08	41.54
23	80.0145	80.01	40.01
24	77.4574	77.46	38.73
25	74.9089	74.91	37.45
26	72.3902	72.39	36.20
27	69.9174	69.92	34.96
28	67.4029	67.40	33.70
29	64.3053	64.31	32.15
30	61.3917	61.39	30.70
31	58.6506	58.65	29.33
32	56.0710	56.07	28.04
33	53.6424	53.64	26.82
34	51.3548	51.35	25.68
35	49.1989	49.20	24.60
36	47.1845	47.18	23.59
37	45.3260	45.33	22.66
38	43.5662	43.57	21.78
39	41.8991	41.90	20.95
40	40.3191	40.32	20.16
41	38.8207	38.82	19.41
42	37.3991	37.40	18.70
43	36.0495	36.05	18.02
44	34.7675	34.77	17.38
45	33.5491	33.55	16.77

Distance From Tower (m)	KLCF Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	32.3904	32.39	16.20
47	31.2878	31.29	15.64
48	30.2381	30.24	15.12
49	29.2054	29.21	14.60
50	28.1900	28.19	14.10
51	27.2253	27.23	13.61
52	26.3080	26.31	13.15
53	25.4351	25.44	12.72
54	24.6039	24.60	12.30
55	23.8119	23.81	11.91
56	23.0567	23.06	11.53
57	22.3361	22.34	11.17
58	21.6480	21.65	10.82
59	20.9907	20.99	10.50
60	20.3622	20.36	10.18
61	19.7611	19.76	9.88
62	19.1857	19.19	9.59
63	18.6347	18.63	9.32
64	18.1066	18.11	9.05
65	17.6004	17.60	8.80
66	17.1147	17.11	8.56
67	16.6486	16.65	8.32
68	16.2010	16.20	8.10
69	15.7709	15.77	7.89
70	15.3575	15.36	7.68
71	14.9600	14.96	7.48
72	14.5774	14.58	7.29
73	14.2092	14.21	7.10
74	13.8555	13.86	6.93
75	13.5169	13.52	6.76
76	13.1905	13.19	6.60
77	12.8755	12.88	6.44
78	12.5716	12.57	6.29
79	12.2782	12.28	6.14
80	11.9949	11.99	6.00
81	11.7211	11.72	5.86
82	11.4565	11.46	5.73
83	11.2007	11.20	5.60
84	10.9533	10.95	5.48
85	10.7139	10.71	5.36
86	10.4822	10.48	5.24
87	10.2578	10.26	5.13
88	10.0406	10.04	5.02
89	9.8300	9.83	4.92
90	9.6260	9.63	4.81
91	9.4282	9.43	4.71
92	9.2365	9.24	4.62
93	9.0504	9.05	4.53
94	8.8699	8.87	4.43
95	8.6946	8.69	4.35
96	8.5245	8.52	4.26
97	8.3593	8.36	4.18
98	8.1988	8.20	4.10
99	8.0429	8.04	4.02
100	7.8913	7.89	3.95