

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 1246052), therefore it should have no adverse effect on the surrounding environment.

2) Human exposure to excess levels of radiofrequency radiation.

The proposed facility is to be built using a 4-bay circularly polarized full-wave spaced antenna.

As can be seen in Exhibit 24-A, the maximum theoretical RF value would be 179.44 $\mu\text{W}/\text{cm}^2$ at a distance of 6 meters from the tower, which is 89.72% of the 200 $\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 17.94% 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.

Exhibit 24-A
RF Analysis: KLXF, Modesto, CA

KLXF.P

Site type: Proposed

Channel: 213

Class: A

ERP: 5 kw

Antenna: BEX

EPA Type 1

4 bay

full wave

COR AGL: 33m

Polarization: circular

Distance From Tower (m)	KLXF.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	153.3980	153.40	76.70
1	156.4196	156.42	78.21
2	159.1512	159.15	79.58
3	162.0648	162.06	81.03
4	168.8569	168.86	84.43
5	175.0235	175.02	87.51
6	179.4434	179.44	89.72
7	178.8562	178.86	89.43
8	176.9906	176.99	88.50
9	173.5767	173.58	86.79
10	168.1261	168.13	84.06
11	161.0465	161.05	80.52
12	152.3433	152.34	76.17
13	143.2787	143.28	71.64
14	132.6452	132.65	66.32
15	120.6751	120.68	60.34
16	106.8935	106.89	53.45
17	92.3037	92.30	46.15
18	77.8986	77.90	38.95
19	64.0719	64.07	32.04
20	51.4943	51.49	25.75
21	40.0070	40.01	20.00
22	29.8445	29.84	14.92
23	21.1790	21.18	10.59
24	13.9450	13.94	6.97
25	8.4012	8.40	4.20
26	4.4373	4.44	2.22
27	1.8653	1.87	0.93
28	0.4659	0.47	0.23
29	0.0037	0.00	0.00
30	0.2478	0.25	0.12
31	0.9821	0.98	0.49
32	2.0122	2.01	1.01
33	3.1718	3.17	1.59
34	4.3049	4.30	2.15
35	5.3223	5.32	2.66
36	6.1566	6.16	3.08
37	6.7687	6.77	3.38
38	7.1436	7.14	3.57
39	7.2853	7.29	3.64
40	7.3364	7.34	3.67
41	7.2467	7.25	3.62
42	6.9766	6.98	3.49
43	6.5550	6.55	3.28
44	6.0144	6.01	3.01
45	5.3890	5.39	2.69

Distance From Tower (m)	KLXF.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	4.7123	4.71	2.36
47	4.0154	4.02	2.01
48	3.2804	3.28	1.64
49	2.5918	2.59	1.30
50	1.9734	1.97	0.99
51	1.4358	1.44	0.72
52	0.9847	0.98	0.49
53	0.6224	0.62	0.31
54	0.3475	0.35	0.17
55	0.1564	0.16	0.08
56	0.0432	0.04	0.02
57	0.0008	0.00	0.00
58	0.0209	0.02	0.01
59	0.0952	0.10	0.05
60	0.2152	0.22	0.11
61	0.3722	0.37	0.19
62	0.5582	0.56	0.28
63	0.7654	0.77	0.38
64	0.9865	0.99	0.49
65	1.2151	1.22	0.61
66	1.4454	1.45	0.72
67	1.6723	1.67	0.84
68	1.8917	1.89	0.95
69	2.0999	2.10	1.05
70	2.2939	2.29	1.15
71	2.4691	2.47	1.23
72	2.6175	2.62	1.31
73	2.7458	2.75	1.37
74	2.8535	2.85	1.43
75	2.9407	2.94	1.47
76	3.0078	3.01	1.50
77	3.0551	3.06	1.53
78	3.0837	3.08	1.54
79	3.0945	3.09	1.55
80	3.0885	3.09	1.54
81	3.0671	3.07	1.53
82	3.0315	3.03	1.52
83	2.9830	2.98	1.49
84	2.9230	2.92	1.46
85	2.8528	2.85	1.43
86	2.7736	2.77	1.39
87	2.6867	2.69	1.34
88	2.5933	2.59	1.30
89	2.4946	2.49	1.25
90	2.3915	2.39	1.20
91	2.2854	2.29	1.14
92	2.1770	2.18	1.09
93	2.0671	2.07	1.03
94	1.9566	1.96	0.98
95	1.8460	1.85	0.92
96	1.7362	1.74	0.87
97	1.6276	1.63	0.81
98	1.5208	1.52	0.76
99	1.4162	1.42	0.71
100	1.3143	1.31	0.66