

**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.**

The proposed facility will be built at an existing communications facility. This site is not an "Historic Place" as described in section 1.1307(a) (4). Therefore, this application is excluded from the preparation of an "Environmental Assessment" pursuant to Section 1.1306 Note 1.

**2) Human exposure to excess levels of radiofrequency radiation.**

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

As can be seen in Exhibit 22A, the maximum theoretical RF value would be 63.2259  $\mu\text{W}/\text{cm}^2$  at a distance of 5 meters from the tower, which is 31.61% of the 200  $\mu\text{W}/\text{cm}^2$  permitted for public (uncontrolled) exposure, and 6.31% 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: Lake Havasu, AZ  
KVKL.P  
207 A

KVKL.P

Site type: Application

Channel: 207

Class: A

ERP: 1.7kw

Antenna: ERI

Dipole

4-bay

full wave

COR AGL: 29 m

Polarization: vertical

Distance From Tower (m)	KVKL.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	54.7031	54.70	27.35
1	55.6951	55.70	27.85
2	56.5445	56.54	28.27
3	58.2440	58.24	29.12
4	60.9092	60.91	30.45
5	63.2259	63.23	31.61
6	62.9822	62.98	31.49
7	61.9190	61.92	30.96
8	60.1664	60.17	30.08
9	57.5552	57.56	28.78
10	54.2537	54.25	27.13
11	50.5749	50.57	25.29
12	46.5704	46.57	23.29
13	41.9590	41.96	20.98
14	36.5391	36.54	18.27
15	30.6555	30.66	15.33
16	24.9648	24.96	12.48
17	19.7294	19.73	9.86
18	15.1551	15.16	7.58
19	11.0953	11.10	5.55
20	7.6527	7.65	3.83
21	4.8137	4.81	2.41
22	2.6961	2.70	1.35
23	1.2682	1.27	0.63
24	0.4253	0.43	0.21
25	0.0503	0.05	0.03
26	0.0240	0.02	0.01
27	0.2339	0.23	0.12
28	0.5811	0.58	0.29
29	0.9836	0.98	0.49
30	1.3609	1.36	0.68
31	1.6779	1.68	0.84
32	1.9103	1.91	0.96
33	2.0486	2.05	1.02
34	2.0946	2.09	1.05
35	2.1008	2.10	1.05
36	2.0863	2.09	1.04
37	2.0035	2.00	1.00
38	1.8640	1.86	0.93
39	1.6815	1.68	0.84
40	1.4703	1.47	0.74
41	1.2443	1.24	0.62
42	1.0028	1.00	0.50
43	0.7694	0.77	0.38
44	0.5631	0.56	0.28
45	0.3881	0.39	0.19

Distance From Tower (m)	KVKL.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	0.2465	0.25	0.12
47	0.1387	0.14	0.07
48	0.0634	0.06	0.03
49	0.0184	0.02	0.01
50	0.0006	0.00	0.00
51	0.0065	0.01	0.00
52	0.0322	0.03	0.02
53	0.0737	0.07	0.04
54	0.1274	0.13	0.06
55	0.1896	0.19	0.09
56	0.2573	0.26	0.13
57	0.3275	0.33	0.16
58	0.3979	0.40	0.20
59	0.4664	0.47	0.23
60	0.5314	0.53	0.27
61	0.5916	0.59	0.30
62	0.6459	0.65	0.32
63	0.6921	0.69	0.35
64	0.7308	0.73	0.37
65	0.7622	0.76	0.38
66	0.7863	0.79	0.39
67	0.8035	0.80	0.40
68	0.8139	0.81	0.41
69	0.8180	0.82	0.41
70	0.8161	0.82	0.41
71	0.8090	0.81	0.40
72	0.7969	0.80	0.40
73	0.7806	0.78	0.39
74	0.7605	0.76	0.38
75	0.7371	0.74	0.37
76	0.7110	0.71	0.36
77	0.6827	0.68	0.34
78	0.6526	0.65	0.33
79	0.6211	0.62	0.31
80	0.5884	0.59	0.29
81	0.5548	0.55	0.28
82	0.5210	0.52	0.26
83	0.4873	0.49	0.24
84	0.4539	0.45	0.23
85	0.4210	0.42	0.21
86	0.3889	0.39	0.19
87	0.3577	0.36	0.18
88	0.3276	0.33	0.16
89	0.2986	0.30	0.15
90	0.2708	0.27	0.14
91	0.2445	0.24	0.12
92	0.2194	0.22	0.11
93	0.1959	0.20	0.10
94	0.1737	0.17	0.09
95	0.1531	0.15	0.08
96	0.1339	0.13	0.07
97	0.1161	0.12	0.06
98	0.0998	0.10	0.05
99	0.0849	0.08	0.04
100	0.0713	0.07	0.04