

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 1005472) in an established "antenna farm". The site proposed herein has both registered and unregistered towers on the site. According to 47 C.F.R. Section 1.1306 Note 3, such facilities "will be categorically excluded" from environmental processing except for the RF requirements of Section 1.1307(b).

2) Human exposure to excess levels of radiofrequency radiation.

The proposed facility is to be built using a 6-bay vertically polarized .9-wave spaced antenna on the same site as the following:

Status	Call	Licensee/Permittee	Channel	City	FIN
CP	KXFR	Family Stations, Inc.	220C3	Socorro, NM	91553

See Exhibit 22-A for antennas that were specified by each licensee/permittee.

The facilities below were excluded from this study for the following reasons:

1. KQRI is moving off of this site to be built at its CP site, per the licensee :

Status	Call	Licensee/Permittee	Channel	City	FIN
LIC	KQRI	Educational Media Foundation	215C3	Belen, NM	85845

As can be seen in the attached analysis, when both facilities are operational, the maximum theoretical RF value would be $165.41 \mu\text{W}/\text{cm}^2$ at a distance of 1 meter from the tower, which is 82.70% of the $200 \mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 16.54% 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 site users to reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

Exhibit 22-A
RF Analysis: KVLK.P 208A Socorro, NM

KVLK.P	KXFR
Site type: proposed	CP
Channel: 208	220
Class: A	C3
ERP: 10 kw	25 kw
Antenna: Jampro	Shively
dipole	6810
6-bay	3-bay
.9 wave	full wave
COR AGL: 21 m	46 m
Polorization: vertical	circular

Distance From Tower (m)	KVLK.P Facility	KXFR Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	161.4608	3.9473	165.41	82.70
1	160.1321	4.6135	164.75	82.37
2	148.9324	5.3515	154.28	77.14
3	133.1174	6.1574	139.27	69.64
4	105.5356	7.0264	112.56	56.28
5	70.3944	8.9977	79.39	39.70
6	38.1990	11.3232	49.52	24.76
7	14.2219	13.9547	28.18	14.09
8	1.7825	16.8608	18.64	9.32
9	0.9609	21.3490	22.31	11.15
10	9.0603	26.4279	35.49	17.74
11	20.6817	31.8641	52.55	26.27
12	30.4310	37.5675	68.00	34.00
13	35.3054	42.2020	77.51	38.75
14	33.6613	46.1754	79.84	39.92
15	26.3842	49.9871	76.37	38.19
16	16.4021	53.5675	69.97	34.98
17	7.5491	57.1664	64.72	32.36
18	1.8876	61.3251	63.21	31.61
19	0.0032	65.0509	65.05	32.53
20	1.2184	68.2656	69.48	34.74
21	4.1554	70.9014	75.06	37.53
22	7.2192	72.7958	80.02	40.01
23	9.3493	73.9377	83.29	41.64
24	10.0587	74.3963	84.46	42.23
25	9.3881	74.1661	83.55	41.78
26	8.2180	73.2577	81.48	40.74
27	6.3113	71.6323	77.94	38.97
28	4.1452	69.3272	73.47	36.74
29	2.1825	66.4833	68.67	34.33
30	0.7637	63.1648	63.93	31.96
31	0.0655	59.4438	59.51	29.75
32	0.1063	55.3984	55.50	27.75
33	0.7266	51.0463	51.77	25.89
34	1.7159	46.5327	48.25	24.12
35	2.8590	41.9559	44.81	22.41
36	3.9676	37.3916	41.36	20.68
37	4.8894	32.9107	37.80	18.90
38	5.5352	28.5773	34.11	17.06
39	5.8723	24.4000	30.27	15.14
40	5.9044	20.4340	26.34	13.17
41	5.6655	16.7970	22.46	11.23
42	5.2087	13.5123	18.72	9.36
43	4.5963	10.5947	15.19	7.60
44	3.8919	8.0515	11.94	5.97
45	3.1544	5.8826	9.04	4.52

Distance From Tower (m)	KVLK.P Facility	KXFR Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	2.4248	4.0815	6.51	3.25
47	1.7584	2.6361	4.39	2.20
48	1.1837	1.5296	2.71	1.36
49	0.7183	0.7413	1.46	0.73
50	0.3702	0.2473	0.62	0.31
51	0.1399	0.0215	0.16	0.08
52	0.0215	0.0363	0.06	0.03
53	0.0051	0.2634	0.27	0.13
54	0.0775	0.6742	0.75	0.38
55	0.2241	1.2401	1.46	0.73
56	0.4295	1.9314	2.36	1.18
57	0.6787	2.7223	3.40	1.70
58	0.9571	3.5879	4.54	2.27
59	1.2507	4.5049	5.76	2.88
60	1.5487	5.4523	7.00	3.50
61	1.8412	6.4110	8.25	4.13
62	2.1202	7.3639	9.48	4.74
63	2.3793	8.2961	10.68	5.34
64	2.6136	9.1948	11.81	5.90
65	2.8196	10.0492	12.87	6.43
66	2.9952	10.8483	13.84	6.92
67	3.1391	11.5824	14.72	7.36
68	3.2512	12.2497	15.50	7.75
69	3.3320	12.8462	16.18	8.09
70	3.3826	13.3694	16.75	8.38
71	3.4046	13.8178	17.22	8.61
72	3.4001	14.1911	17.59	8.80
73	3.3711	14.4900	17.86	8.93
74	3.3201	14.7158	18.04	9.02
75	3.2495	14.8707	18.12	9.06
76	3.1617	14.9574	18.12	9.06
77	3.0593	14.9792	18.04	9.02
78	2.9444	14.9394	17.88	8.94
79	2.8243	14.8420	17.67	8.83
80	2.6984	14.6802	17.38	8.69
81	2.5656	14.4479	17.01	8.51
82	2.4276	14.1724	16.60	8.30
83	2.2863	13.8581	16.14	8.07
84	2.1431	13.5096	15.65	7.83
85	1.9993	13.1310	15.13	7.57
86	1.8563	12.7265	14.58	7.29
87	1.7152	12.3000	14.02	7.01
88	1.5769	11.8554	13.43	6.72
89	1.4423	11.3962	12.84	6.42
90	1.3120	10.9258	12.24	6.12
91	1.1868	10.4474	11.63	5.82
92	1.0670	9.9640	11.03	5.52
93	0.9532	9.4782	10.43	5.22
94	0.8456	8.9926	9.84	4.92
95	0.7445	8.5095	9.25	4.63
96	0.6500	8.0310	8.68	4.34
97	0.5623	7.5591	8.12	4.06
98	0.4813	7.0953	7.58	3.79
99	0.4072	6.6448	7.05	3.53
100	0.3398	6.2110	6.55	3.28