

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.

VRB's proposed facility will be constructed on an existing tower 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 antenna on the same site as the following:

Call	Channel	Status	City, ST	FIN	Licensee
KMLU	207C1	CP	McKee, KY	92949	Educational Media Foundation

See Exhibit 34-A for antennas that were specified by each licensee/permittee.

As can be seen in Exhibit 34-A, the maximum theoretical RF value overall would be 326.10 $\mu\text{W}/\text{cm}^2$ at a distance of 12 meters from the tower, which is 163.05% of the 200 $\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 32.61% of the 1000 $\mu\text{W}/\text{cm}^2$ permitted for worker (controlled) exposure.

The tower is inaccessible by the general public.

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

VRB 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 34-A
RF Analysis: WWLT.P Manchester, KY

	WWLT.P	KMLU
Site type:	Proposed	CP
Channel:	276	207
Class:	A	C1
ERP:	2.1kw	50kw
Antenna:	SHI	ERI
	EPA Type 6	EPA type 3
	1 bay	4 bay
		Full wave
COR AGL:	42m	30m
Polorization:	circular	circular

Distance From Tower (m)	WWLT.P Facility	KMLU Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	0.3977	111.3595	111.76	55.88
1	0.4716	111.2342	111.71	55.85
2	0.5542	110.8399	111.39	55.70
3	0.6449	119.4197	120.06	60.03
4	0.7786	144.4038	145.18	72.59
5	1.0155	170.3693	171.38	85.69
6	1.2923	200.1615	201.45	100.73
7	1.6063	231.1712	232.78	116.39
8	2.0523	260.5036	262.56	131.28
9	2.6212	284.1079	286.73	143.36
10	3.2466	302.5793	305.83	152.91
11	3.9220	314.7776	318.70	159.35
12	4.4824	321.6180	326.10	163.05
13	5.0041	319.7343	324.74	162.37
14	5.5337	308.9249	314.46	157.23
15	6.0675	292.9734	299.04	149.52
16	6.7112	268.6296	275.34	137.67
17	7.4038	237.5144	244.92	122.46
18	8.0979	203.2964	211.39	105.70
19	8.7889	166.7358	175.52	87.76
20	9.4611	129.5700	139.03	69.52
21	10.1053	94.3003	104.41	52.20
22	10.7346	62.0497	72.78	36.39
23	11.3462	36.2943	47.64	23.82
24	11.9375	17.5793	29.52	14.76
25	12.4859	5.8486	18.33	9.17
26	13.0035	0.5373	13.54	6.77
27	13.4957	0.6953	14.19	7.10
28	13.9617	5.1100	19.07	9.54
29	14.4009	12.4687	26.87	13.43
30	14.7977	21.4815	36.28	18.14
31	15.1571	30.8917	46.05	23.02
32	15.4897	39.7624	55.25	27.63
33	15.7957	47.3537	63.15	31.57
34	16.0756	53.1677	69.24	34.62
35	16.3299	56.9357	73.27	36.63
36	16.4932	58.6448	75.14	37.57
37	16.6140	58.4949	75.11	37.55
38	16.7149	56.5210	73.24	36.62
39	16.7965	53.0130	69.81	34.90
40	16.8600	48.3125	65.17	32.59
41	16.9062	42.7816	59.69	29.84
42	16.9361	36.7755	53.71	26.86
43	16.9501	30.5923	47.54	23.77
44	16.9497	24.4334	41.38	20.69
45	16.9356	18.7349	35.67	17.84

Distance From Tower (m)	WWLT.P Facility	KMLU Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	16.9088	13.6679	30.58	15.29
47	16.8702	9.3493	26.22	13.11
48	16.8205	5.8471	22.67	11.33
49	16.7605	3.1861	19.95	9.97
50	16.6910	1.3553	18.05	9.02
51	16.5883	0.3142	16.90	8.45
52	16.4775	0.0005	16.48	8.24
53	16.3605	0.3381	16.70	8.35
54	16.2379	1.2462	17.48	8.74
55	16.1104	2.6386	18.75	9.37
56	15.9784	4.4256	20.40	10.20
57	15.8423	6.5181	22.36	11.18
58	15.7027	8.8301	24.53	12.27
59	15.5600	11.2811	26.84	13.42
60	15.4144	13.7973	29.21	14.61
61	15.2578	16.3128	31.57	15.79
62	15.0997	18.7702	33.87	16.93
63	14.9403	21.1206	36.06	18.03
64	14.7800	23.3236	38.10	19.05
65	14.6190	25.2590	39.88	19.94
66	14.4576	26.9345	41.39	20.70
67	14.2960	28.3780	42.67	21.34
68	14.1344	29.5825	43.72	21.86
69	13.9729	30.5460	44.52	22.26
70	13.8118	31.2715	45.08	22.54
71	13.6512	31.7654	45.42	22.71
72	13.4912	32.0376	45.53	22.76
73	13.3237	32.1001	45.42	22.71
74	13.1335	31.9669	45.10	22.55
75	12.9460	31.6533	44.60	22.30
76	12.7613	31.1754	43.94	21.97
77	12.5793	30.5498	43.13	21.56
78	12.4000	29.7932	42.19	21.10
79	12.2235	28.9222	41.15	20.57
80	12.0498	27.9530	40.00	20.00
81	11.8787	26.9012	38.78	19.39
82	11.7104	25.7817	37.49	18.75
83	11.5448	24.6171	36.16	18.08
84	11.3819	23.4172	34.80	17.40
85	11.2216	22.1873	33.41	16.70
86	11.0640	20.9390	32.00	16.00
87	10.9090	19.6827	30.59	15.30
88	10.7565	18.4278	29.18	14.59
89	10.6066	17.1831	27.79	13.89
90	10.4593	15.9560	26.42	13.21
91	10.3303	14.7536	25.08	12.54
92	10.2042	13.5815	23.79	11.89
93	10.0797	12.4452	22.52	11.26
94	9.9569	11.3490	21.31	10.65
95	9.8357	10.2966	20.13	10.07
96	9.7161	9.2912	19.01	9.50
97	9.5982	8.3352	17.93	8.97
98	9.4819	7.4307	16.91	8.46
99	9.3672	6.5790	15.95	7.97
100	9.2541	5.7811	15.04	7.52