

**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 a "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 3-bay circularly polarized full-wave spaced antenna or equivalent.

As can be seen in Exhibit 22A, the maximum theoretical RF value would be 52.67  $\mu\text{W}/\text{cm}^2$  at a distance of 15 meters from the tower, which is 26.34% of the 200  $\mu\text{W}/\text{cm}^2$  permitted for public (uncontrolled) exposure, and 5.27% 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:** Belpre, OH  
**WLKP**  
**220**  
**A**  
**WLKP**  
**Site type:** Application  
**Channel:** 220  
**Class:** A  
**ERP:** 5.2 kw  
**Antenna:** Jampro  
Double V  
3-bay  
full wave  
**COR AGL:** 32 m  
**Polarization:** Circular

Distance From Tower (m)	WLKP Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	23.7562	23.76	11.88
1	24.2679	24.27	12.13
2	24.8069	24.81	12.40
3	25.7757	25.78	12.89
4	28.4139	28.41	14.21
5	31.0453	31.05	15.52
6	33.8086	33.81	16.90
7	36.8698	36.87	18.43
8	39.8318	39.83	19.92
9	42.6773	42.68	21.34
10	45.3670	45.37	22.68
11	47.6943	47.69	23.85
12	49.6559	49.66	24.83
13	51.2982	51.30	25.65
14	52.3510	52.35	26.18
15	<b>52.6729</b>	<b>52.67</b>	<b>26.34</b>
16	51.6210	51.62	25.81
17	49.8770	49.88	24.94
18	47.4884	47.49	23.74
19	44.6405	44.64	22.32
20	41.3967	41.40	20.70
21	37.7552	37.76	18.88
22	33.8338	33.83	16.92
23	29.5479	29.55	14.77
24	25.1794	25.18	12.59
25	21.0000	21.00	10.50
26	17.0976	17.10	8.55
27	13.5753	13.58	6.79
28	10.5766	10.58	5.29
29	7.9154	7.92	3.96
30	5.6316	5.63	2.82
31	3.7470	3.75	1.87
32	2.2659	2.27	1.13
33	1.1715	1.17	0.59
34	0.4566	0.46	0.23
35	0.0827	0.08	0.04
36	0.0064	0.01	0.00
37	0.1814	0.18	0.09
38	0.5609	0.56	0.28
39	1.0939	1.09	0.55
40	1.7352	1.74	0.87
41	2.4447	2.44	1.22
42	3.1867	3.19	1.59
43	3.9307	3.93	1.97
44	4.6513	4.65	2.33
45	5.3282	5.33	2.66

Distance From Tower (m)	WLKP Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	5.9443	5.94	2.97
47	6.4855	6.49	3.24
48	6.9477	6.95	3.47
49	7.3269	7.33	3.66
50	7.6218	7.62	3.81
51	7.8333	7.83	3.92
52	7.9643	7.96	3.98
53	8.0191	8.02	4.01
54	8.0031	8.00	4.00
55	7.9225	7.92	3.96
56	7.7813	7.78	3.89
57	7.5873	7.59	3.79
58	7.3496	7.35	3.67
59	7.0748	7.07	3.54
60	6.7698	6.77	3.38
61	6.4406	6.44	3.22
62	6.0931	6.09	3.05
63	5.7329	5.73	2.87
64	5.3647	5.36	2.68
65	4.9932	4.99	2.50
66	4.6222	4.62	2.31
67	4.2553	4.26	2.13
68	3.8955	3.90	1.95
69	3.5441	3.54	1.77
70	3.2030	3.20	1.60
71	2.8765	2.88	1.44
72	2.5660	2.57	1.28
73	2.2727	2.27	1.14
74	1.9973	2.00	1.00
75	1.7405	1.74	0.87
76	1.5025	1.50	0.75
77	1.2836	1.28	0.64
78	1.0835	1.08	0.54
79	0.9022	0.90	0.45
80	0.7394	0.74	0.37
81	0.5946	0.59	0.30
82	0.4673	0.47	0.23
83	0.3570	0.36	0.18
84	0.2630	0.26	0.13
85	0.1846	0.18	0.09
86	0.1211	0.12	0.06
87	0.0718	0.07	0.04
88	0.0359	0.04	0.02
89	0.0127	0.01	0.01
90	0.0014	0.00	0.00
91	0.0013	0.00	0.00
92	0.0114	0.01	0.01
93	0.0311	0.03	0.02
94	0.0595	0.06	0.03
95	0.0960	0.10	0.05
96	0.1397	0.14	0.07
97	0.1901	0.19	0.10
98	0.2464	0.25	0.12
99	0.3081	0.31	0.15
100	0.3747	0.37	0.19