

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 1065936). Thus, the proposed facility will not have an effect on the surrounding environment

2) Human exposure to excess levels of radiofrequency radiation.

The proposed facility is to be built using a 2-bay circularly polarized full-wave spaced antenna.

As can be seen in Exhibit 22-A, the maximum theoretical RF value would be 10.90 $\mu\text{W}/\text{cm}^2$ at a distance of 30 meters from the tower, which is 5.45% of the 200 $\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 1.09% 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 22-A

F Analysis: WWLA.P 207A South Charleston, WV

WWLA.P

Site type: Proposed

Channel: 207

Class: A

ERP: 2.3kw

Antenna: ERI

Rototiller

2-bay

full wave

COR AGL: 45 m

Polarization: Circular

Distance From Tower (m)	WWLA.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	2.2767	2.28	1.14
1	2.2756	2.28	1.14
2	2.2722	2.27	1.14
3	2.2665	2.27	1.13
4	2.2795	2.28	1.14
5	2.6125	2.61	1.31
6	2.9612	2.96	1.48
7	3.3234	3.32	1.66
8	3.7007	3.70	1.85
9	4.1537	4.15	2.08
10	4.6197	4.62	2.31
11	5.0943	5.09	2.55
12	5.5729	5.57	2.79
13	6.0173	6.02	3.01
14	6.4527	6.45	3.23
15	6.8765	6.88	3.44
16	7.2846	7.28	3.64
17	7.6987	7.70	3.85
18	8.1048	8.10	4.05
19	8.4828	8.48	4.24
20	8.8288	8.83	4.41
21	9.1407	9.14	4.57
22	9.4890	9.49	4.74
23	9.7950	9.79	4.90
24	10.0561	10.06	5.03
25	10.2702	10.27	5.14
26	10.4376	10.44	5.22
27	10.6330	10.63	5.32
28	10.7749	10.77	5.39
29	10.8632	10.86	5.43
30	10.8988	10.90	5.45
31	10.8830	10.88	5.44
32	10.7584	10.76	5.38
33	10.5336	10.53	5.27
34	10.2758	10.28	5.14
35	9.9882	9.99	4.99
36	9.6744	9.67	4.84
37	9.3379	9.34	4.67
38	8.9800	8.98	4.49
39	8.6007	8.60	4.30
40	8.2103	8.21	4.11
41	7.8118	7.81	3.91
42	7.4083	7.41	3.70
43	7.0026	7.00	3.50
44	6.5974	6.60	3.30
45	6.1951	6.20	3.10

Distance From Tower (m)	WWLA.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	5.7869	5.79	2.89
47	5.3878	5.39	2.69
48	4.9993	5.00	2.50
49	4.6230	4.62	2.31
50	4.2599	4.26	2.13
51	3.9109	3.91	1.96
52	3.5770	3.58	1.79
53	3.2587	3.26	1.63
54	2.9592	2.96	1.48
55	2.6795	2.68	1.34
56	2.4149	2.41	1.21
57	2.1655	2.17	1.08
58	1.9314	1.93	0.97
59	1.7126	1.71	0.86
60	1.5091	1.51	0.75
61	1.3206	1.32	0.66
62	1.1469	1.15	0.57
63	0.9876	0.99	0.49
64	0.8423	0.84	0.42
65	0.7084	0.71	0.35
66	0.5878	0.59	0.29
67	0.4808	0.48	0.24
68	0.3865	0.39	0.19
69	0.3044	0.30	0.15
70	0.2338	0.23	0.12
71	0.1738	0.17	0.09
72	0.1239	0.12	0.06
73	0.0834	0.08	0.04
74	0.0516	0.05	0.03
75	0.0279	0.03	0.01
76	0.0118	0.01	0.01
77	0.0027	0.00	0.00
78	0.0000	0.00	0.00
79	0.0032	0.00	0.00
80	0.0119	0.01	0.01
81	0.0257	0.03	0.01
82	0.0441	0.04	0.02
83	0.0667	0.07	0.03
84	0.0933	0.09	0.05
85	0.1234	0.12	0.06
86	0.1566	0.16	0.08
87	0.1928	0.19	0.10
88	0.2315	0.23	0.12
89	0.2725	0.27	0.14
90	0.3155	0.32	0.16
91	0.3603	0.36	0.18
92	0.4066	0.41	0.20
93	0.4542	0.45	0.23
94	0.5029	0.50	0.25
95	0.5525	0.55	0.28
96	0.6028	0.60	0.30
97	0.6525	0.65	0.33
98	0.7013	0.70	0.35
99	0.7500	0.75	0.37
100	0.7985	0.80	0.40