

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 1061810) 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 6-bay circularly polarized full waved spaced antenna.

As can be seen in Exhibit 24A, the maximum theoretical RF value would be $15.7828 \mu\text{W}/\text{cm}^2$ at a distance of 54 meters from the tower, which is 7.8914% of the $200 \mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 1.57% 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: North Myrtle Beach, SC
WKVC
205
C1
WKVC
Site type: Application
Channel: 205
Class: C1
ERP: 100kw
Antenna: ERI Rototiller

6 bau
 Full Waved

COR AGL: 170M
Polarization: Circular Pol

Distance From Tower (m)	WKVC Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	6.9359	6.9359	3.4679
1	6.9356	6.9356	3.4678
2	6.9349	6.9349	3.4675
3	6.9337	6.9337	3.4669
4	6.9320	6.9320	3.4660
5	6.9297	6.9297	3.4649
6	6.9269	6.9269	3.4635
7	6.9236	6.9236	3.4618
8	6.9196	6.9196	3.4598
9	6.9149	6.9149	3.4575
10	6.9096	6.9096	3.4548
11	6.9035	6.9035	3.4518
12	6.8966	6.8966	3.4483
13	6.8888	6.8888	3.4444
14	6.8801	6.8801	3.4401
15	6.9044	6.9044	3.4522
16	7.1638	7.1638	3.5819
17	7.4259	7.4259	3.7129
18	7.6905	7.6905	3.8452
19	7.9573	7.9573	3.9786
20	8.2259	8.2259	4.1129
21	8.4960	8.4960	4.2480
22	8.7673	8.7673	4.3836
23	9.0392	9.0392	4.5196
24	9.3114	9.3114	4.6557
25	9.5835	9.5835	4.7917
26	9.8548	9.8548	4.9274
27	10.1250	10.1250	5.0625
28	10.3934	10.3934	5.1967
29	10.6595	10.6595	5.3298
30	10.9241	10.9241	5.4620
31	11.2376	11.2376	5.6188
32	11.5485	11.5485	5.7743
33	11.8560	11.8560	5.9280
34	12.1593	12.1593	6.0797
35	12.4575	12.4575	6.2288
36	12.7499	12.7499	6.3749
37	13.0354	13.0354	6.5177
38	13.3133	13.3133	6.6566
39	13.5826	13.5826	6.7913
40	13.8425	13.8425	6.9212
41	14.0919	14.0919	7.0459
42	14.3300	14.3300	7.1650
43	14.5558	14.5558	7.2779
44	14.7685	14.7685	7.3842
45	14.9670	14.9670	7.4835

Distance From Tower (m)	WKVC Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	15.1394	15.1394	7.5697
47	15.2825	15.2825	7.6412
48	15.4090	15.4090	7.7045
49	15.5183	15.5183	7.7592
50	15.6097	15.6097	7.8048
51	15.6824	15.6824	7.8412
52	15.7359	15.7359	7.8679
53	15.7695	15.7695	7.8848
54	15.7828	15.7828	7.8914
55	15.7753	15.7753	7.8876
56	15.7465	15.7465	7.8733
57	15.6963	15.6963	7.8481
58	15.6242	15.6242	7.8121
59	15.5302	15.5302	7.7651
60	15.4142	15.4142	7.7071
61	15.2762	15.2762	7.6381
62	15.1190	15.1190	7.5595
63	14.9592	14.9592	7.4796
64	14.7768	14.7768	7.3884
65	14.5721	14.5721	7.2861
66	14.3455	14.3455	7.1727
67	14.0975	14.0975	7.0487
68	13.8287	13.8287	6.9143
69	13.5398	13.5398	6.7699
70	13.2317	13.2317	6.6159
71	12.9053	12.9053	6.4527
72	12.5615	12.5615	6.2808
73	12.2014	12.2014	6.1007
74	11.8263	11.8263	5.9131
75	11.4372	11.4372	5.7186
76	11.0356	11.0356	5.5178
77	10.6229	10.6229	5.3115
78	10.2005	10.2005	5.1002
79	9.7698	9.7698	4.8849
80	9.3473	9.3473	4.6737
81	8.9234	8.9234	4.4617
82	8.4936	8.4936	4.2468
83	8.0597	8.0597	4.0298
84	7.6233	7.6233	3.8117
85	7.1862	7.1862	3.5931
86	6.7501	6.7501	3.3750
87	6.3166	6.3166	3.1583
88	5.8874	5.8874	2.9437
89	5.4641	5.4641	2.7321
90	5.0484	5.0484	2.5242
91	4.6418	4.6418	2.3209
92	4.2457	4.2457	2.1229
93	3.8617	3.8617	1.9308
94	3.4910	3.4910	1.7455
95	3.1348	3.1348	1.5674
96	2.7944	2.7944	1.3972
97	2.4708	2.4708	1.2354
98	2.1650	2.1650	1.0825
99	1.8810	1.8810	0.9405
100	1.6158	1.6158	0.8079