

Environmental Protection

The proposed facility will be built at an existing communications facility. This site is not an "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.

The proposed modification to WAKL is to be built on the same site as station WCRZ, Channel 300B, Flint, MI. WCRZ uses a 6-bay Dielectric DCR-C6, circularly polarized antenna.

As can be seen in the attached analysis (see Exhibit 22A), when the RF contributed by both facilities is combined, the maximum RF at two meters above ground level is $37.59\mu\text{W}/\text{cm}^2$ at 31 meters from the tower. This is only 18.79% of the $200\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure.

Therefore, this application fully complies with the uncontrolled exposure limits of OET 65. Further, EMF will cooperate with other site users to reduce power or cases broadcasting as necessary to protect workers and others having access to the site from excessive levels of RF Radiation.

Exhibit 22A
RF Analysis: WAKL Modification

	WAKL.P	WCRZ		WAKL.P	WCRZ
Site type:	Station	Station	Antenna:	ERI	Dielectric
Channel:	205	300		Dipole	DCR-C6
Class:	A	B		1-bay	6-bay
ERP:	0.38 kw	50.0 kw		full wave	full wave
			COR AGL:	83.1m	104m

Distance From Tower (m)	WAKL.P Facility	WCRZ Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	1.4892	20.0780	21.57	10.78
1	1.4990	20.2413	21.74	10.87
2	1.5084	20.4018	21.91	10.96
3	1.5174	20.5595	22.08	11.04
4	1.5259	20.7137	22.24	11.12
5	1.5341	20.8640	22.40	11.20
6	1.5417	21.0098	22.55	11.28
7	1.5490	21.1500	22.70	11.35
8	1.5712	21.2839	22.86	11.43
9	1.5989	21.4104	23.01	11.50
10	1.6262	22.1904	23.82	11.91
11	1.6530	23.0477	24.70	12.35
12	1.6795	23.9076	25.59	12.79
13	1.7055	24.7666	26.47	13.24
14	1.7310	25.6212	27.35	13.68
15	1.7481	26.4672	28.22	14.11
16	1.7499	27.3003	29.05	14.53
17	1.7512	28.1156	29.87	14.93
18	1.7520	28.9082	30.66	15.33
19	1.7523	29.7456	31.50	15.75
20	1.7520	30.5857	32.34	16.17
21	1.7513	31.3847	33.14	16.57
22	1.7500	32.1362	33.89	16.94
23	1.7466	32.8334	34.58	17.29
24	1.7421	33.4696	35.21	17.61
25	1.7372	34.0378	35.77	17.89
26	1.7318	34.5314	36.26	18.13
27	1.7260	34.9438	36.67	18.33
28	1.7198	35.2784	37.00	18.50
29	1.7133	35.5820	37.30	18.65
30	1.7063	35.7847	37.49	18.75
31	1.7048	35.8811	37.59	18.79
32	1.7046	35.8663	37.57	18.79
33	1.7039	35.7365	37.44	18.72
34	1.7028	35.4888	37.19	18.60
35	1.7012	35.1211	36.82	18.41
36	1.6992	34.6325	36.33	18.17
37	1.6967	34.0234	35.72	17.86
38	1.6938	33.3324	35.03	17.51
39	1.6874	32.7288	34.42	17.21
40	1.6717	31.9928	33.66	16.83
41	1.6560	31.1282	32.78	16.39
42	1.6401	30.1406	31.78	15.89
43	1.6242	29.0371	30.66	15.33
44	1.6082	27.8263	29.43	14.72
45	1.5922	26.5183	28.11	14.06

Distance From Tower (m)	WAKL.P Facility	WCRZ Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	1.5761	25.1245	26.70	13.35
47	1.5600	23.6573	25.22	12.61
48	1.5441	22.1306	23.67	11.84
49	1.5364	20.4716	22.01	11.00
50	1.5284	18.7219	20.25	10.13
51	1.5201	16.9895	18.51	9.25
52	1.5117	15.2884	16.80	8.40
53	1.5031	13.6317	15.13	7.57
54	1.4943	12.0322	13.53	6.76
55	1.4853	10.5018	11.99	5.99
56	1.4762	9.0517	10.53	5.26
57	1.4669	7.6914	9.16	4.58
58	1.4575	6.4297	7.89	3.94
59	1.4396	5.2736	6.71	3.36
60	1.4199	4.2289	5.65	2.82
61	1.4005	3.3057	4.71	2.35
62	1.3813	2.4975	3.88	1.94
63	1.3624	1.8058	3.17	1.58
64	1.3436	1.2307	2.57	1.29
65	1.3251	0.7706	2.10	1.05
66	1.3068	0.4226	1.73	0.86
67	1.2888	0.1822	1.47	0.74
68	1.2710	0.0436	1.31	0.66
69	1.2534	0.0000	1.25	0.63
70	1.2360	0.0433	1.28	0.64
71	1.2188	0.1647	1.38	0.69
72	1.2019	0.3546	1.56	0.78
73	1.1852	0.6028	1.79	0.89
74	1.1688	0.8966	2.07	1.03
75	1.1525	1.2262	2.38	1.19
76	1.1365	1.5811	2.72	1.36
77	1.1208	1.9510	3.07	1.54
78	1.1052	2.3262	3.43	1.72
79	1.0899	2.6976	3.79	1.89
80	1.0749	3.0570	4.13	2.07
81	1.0600	3.3967	4.46	2.23
82	1.0454	3.7102	4.76	2.38
83	1.0310	3.9919	5.02	2.51
84	1.0127	4.2369	5.25	2.62
85	0.9944	4.4418	5.44	2.72
86	0.9765	4.6037	5.58	2.79
87	0.9589	4.7212	5.68	2.84
88	0.9417	4.8087	5.75	2.88
89	0.9249	4.8565	5.78	2.89
90	0.9085	4.8595	5.77	2.88
91	0.8924	4.8190	5.71	2.86
92	0.8766	4.7368	5.61	2.81
93	0.8612	4.6156	5.48	2.74
94	0.8461	4.4585	5.30	2.65
95	0.8313	4.2694	5.10	2.55
96	0.8168	4.0521	4.87	2.43
97	0.8027	3.8110	4.61	2.31
98	0.7888	3.5507	4.34	2.17
99	0.7753	3.2758	4.05	2.03
100	0.7742	2.9909	3.77	1.88