

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 1012081), therefore it should have no adverse effect on the surrounding environment.

2) Human exposure to excess levels of radiofrequency radiation.

The proposed facility uses a 3-bay circularly polarized full wave spaced antenna.

As can be seen in Exhibit 24-A, the maximum theoretical RF value would be 21.18 $\mu\text{W}/\text{cm}^2$ at a distance of 50 meters from the tower, which is 10.59% of the 200 $\mu\text{W}/\text{cm}^2$ permitted for public (uncontrolled) exposure, and 2.12% 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 17-A
RF Analysis: KTSL Medical Bay, WA

KTSL.P

Site type: Proposed

Channel: 270

Class: C2

ERP: 31 kw

Antenna: SHI 6814

EPA Type 6

3 bay

full space

COR AGL: 96 m

Polorization: circular

Distance From Tower (m)	KTSL.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	1.1238	1.12	0.56
1	1.2121	1.21	0.61
2	1.3052	1.31	0.65
3	1.4029	1.40	0.70
4	1.5053	1.51	0.75
5	1.6122	1.61	0.81
6	1.7233	1.72	0.86
7	1.8387	1.84	0.92
8	1.9580	1.96	0.98
9	2.1609	2.16	1.08
10	2.4354	2.44	1.22
11	2.7319	2.73	1.37
12	3.0498	3.05	1.52
13	3.3881	3.39	1.69
14	3.7460	3.75	1.87
15	4.1224	4.12	2.06
16	4.5165	4.52	2.26
17	4.9408	4.94	2.47
18	5.5669	5.57	2.78
19	6.2233	6.22	3.11
20	6.9079	6.91	3.45
21	7.6182	7.62	3.81
22	8.3515	8.35	4.18
23	9.1050	9.11	4.55
24	9.8760	9.88	4.94
25	10.6612	10.66	5.33
26	11.3901	11.39	5.70
27	11.9433	11.94	5.97
28	12.4908	12.49	6.25
29	13.0303	13.03	6.52
30	13.5598	13.56	6.78
31	14.0769	14.08	7.04
32	14.5796	14.58	7.29
33	15.0657	15.07	7.53
34	15.5330	15.53	7.77
35	15.9894	15.99	7.99
36	16.5818	16.58	8.29
37	17.1501	17.15	8.58
38	17.6915	17.69	8.85
39	18.2035	18.20	9.10
40	18.6835	18.68	9.34
41	19.1293	19.13	9.56
42	19.5387	19.54	9.77
43	19.9097	19.91	9.95
44	20.2406	20.24	10.12
45	20.5233	20.52	10.26

Distance From Tower (m)	KTSL.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	20.7427	20.74	10.37
47	20.9187	20.92	10.46
48	21.0504	21.05	10.53
49	21.1375	21.14	10.57
50	21.1795	21.18	10.59
51	21.1764	21.18	10.59
52	21.1284	21.13	10.56
53	21.0359	21.04	10.52
54	20.8995	20.90	10.45
55	20.7202	20.72	10.36
56	20.4874	20.49	10.24
57	20.2065	20.21	10.10
58	19.8877	19.89	9.94
59	19.5329	19.53	9.77
60	19.1440	19.14	9.57
61	18.7228	18.72	9.36
62	18.2717	18.27	9.14
63	17.7928	17.79	8.90
64	17.2885	17.29	8.64
65	16.7612	16.76	8.38
66	16.2135	16.21	8.11
67	15.6478	15.65	7.82
68	15.0579	15.06	7.53
69	14.4538	14.45	7.23
70	13.8406	13.84	6.92
71	13.2210	13.22	6.61
72	12.5974	12.60	6.30
73	11.9722	11.97	5.99
74	11.3478	11.35	5.67
75	10.7263	10.73	5.36
76	10.1101	10.11	5.06
77	9.5011	9.50	4.75
78	8.9014	8.90	4.45
79	8.3128	8.31	4.16
80	7.7370	7.74	3.87
81	7.1682	7.17	3.58
82	6.6083	6.61	3.30
83	6.0684	6.07	3.03
84	5.5497	5.55	2.77
85	5.0530	5.05	2.53
86	4.5789	4.58	2.29
87	4.1282	4.13	2.06
88	3.7012	3.70	1.85
89	3.2984	3.30	1.65
90	2.9200	2.92	1.46
91	2.5661	2.57	1.28
92	2.2368	2.24	1.12
93	1.9319	1.93	0.97
94	1.6514	1.65	0.83
95	1.3949	1.39	0.70
96	1.1620	1.16	0.58
97	0.9525	0.95	0.48
98	0.7657	0.77	0.38
99	0.6011	0.60	0.30
100	0.4582	0.46	0.23