

**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, therefore it should have no adverse 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 on the same site as the following:

Status	Call	Licensee/Permittee	Channel	City	FIN
LIC	K268BX	Brahmin Broadcasting Corp.	268D	Cheyenne, WY	149712

See Exhibit 22-A for antennas that were specified by each licensee/permittee.

As can be seen in Exhibit 22-A, the maximum theoretical RF value would be 46.67  $\mu\text{W}/\text{cm}^2$  at a distance of 13 meters from the tower, which is 23.34% of the 200  $\mu\text{W}/\text{cm}^2$  permitted for public (uncontrolled) exposure, and 4.67% 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**  
**RF Analysis: KAIX Cheyenne, WY**

	<b>KAIX</b>	<b>K268BX</b>
<b>Site type:</b>	Proposed	LIC FM
<b>Channel:</b>	201	268
<b>Class:</b>	A	D
<b>ERP:</b>	1.9kw	0.099kw
<b>Antenna:</b>	SHI	NIC
	EPA Type 6	EPA type 2
	2 bay	1 bay
	full wave	
<b>COR AGL:</b>	19m	38m
<b>Polorization:</b>	circular	circular

Distance From Tower (m)	KAIX Facility	K268BX Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	1.7584	0.3207	2.08	1.04
1	2.5316	0.3265	2.86	1.43
2	3.8598	0.3326	4.19	2.10
3	6.5621	0.3389	6.90	3.45
4	11.1235	0.3614	11.48	5.74
5	17.3154	0.3919	17.71	8.85
6	22.2567	0.4227	22.68	11.34
7	27.0289	0.4553	27.48	13.74
8	32.7639	0.4929	33.26	16.63
9	37.8415	0.5312	38.37	19.19
10	41.7731	0.5700	42.34	21.17
11	44.5552	0.6107	45.17	22.58
12	45.8814	0.6523	46.53	23.27
13	45.9770	0.6938	46.67	23.34
14	44.8118	0.7358	45.55	22.77
15	42.6321	0.7808	43.41	21.71
16	39.6589	0.8260	40.48	20.24
17	35.7582	0.8711	36.63	18.31
18	31.6374	0.9126	32.55	16.28
19	27.4697	0.9453	28.42	14.21
20	23.3991	0.9763	24.38	12.19
21	19.5418	1.0053	20.55	10.27
22	15.9818	1.0327	17.01	8.51
23	12.7592	1.0621	13.82	6.91
24	9.9077	1.0897	11.00	5.50
25	7.4686	1.1155	8.58	4.29
26	5.4310	1.1393	6.57	3.29
27	3.7733	1.1566	4.93	2.46
28	2.4640	1.1650	3.63	1.81
29	1.4746	1.1718	2.65	1.32
30	0.7692	1.1770	1.95	0.97
31	0.3115	1.1807	1.49	0.75
32	0.0663	1.1848	1.25	0.63
33	0.0006	1.2018	1.20	0.60
34	0.0836	1.2170	1.30	0.65
35	0.2860	1.2303	1.52	0.76
36	0.5824	1.2418	1.82	0.91
37	0.9504	1.2516	2.20	1.10
38	1.3712	1.2598	2.63	1.32
39	1.8287	1.2603	3.09	1.54
40	2.3096	1.2596	3.57	1.78
41	2.8055	1.2578	4.06	2.03
42	3.3141	1.2550	4.57	2.28
43	3.8216	1.2513	5.07	2.54
44	4.3217	1.2468	5.57	2.78
45	4.8097	1.2414	6.05	3.03

Distance From Tower (m)	KAIX Facility	K268BX Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	5.2815	1.2313	6.51	3.26
47	5.7344	1.2192	6.95	3.48
48	6.1662	1.2067	7.37	3.69
49	6.5754	1.1939	7.77	3.88
50	6.9610	1.1808	8.14	4.07
51	7.3224	1.1675	8.49	4.24
52	7.6595	1.1540	8.81	4.41
53	7.9579	1.1403	9.10	4.55
54	8.2283	1.1266	9.35	4.68
55	8.4749	1.1121	9.59	4.79
56	8.6988	1.0974	9.80	4.90
57	8.9007	1.0827	9.98	4.99
58	9.0817	1.0680	10.15	5.07
59	9.2428	1.0534	10.30	5.15
60	9.3851	1.0388	10.42	5.21
61	9.5095	1.0244	10.53	5.27
62	9.6172	1.0100	10.63	5.31
63	9.7092	0.9958	10.70	5.35
64	9.7863	0.9816	10.77	5.38
65	9.8497	0.9676	10.82	5.41
66	9.9002	0.9537	10.85	5.43
67	9.9386	0.9396	10.88	5.44
68	9.9659	0.9256	10.89	5.45
69	9.9829	0.9118	10.89	5.45
70	9.9902	0.8983	10.89	5.44
71	9.9877	0.8849	10.87	5.44
72	9.9675	0.8718	10.84	5.42
73	9.9401	0.8588	10.80	5.40
74	9.9061	0.8460	10.75	5.38
75	9.8661	0.8335	10.70	5.35
76	9.8206	0.8211	10.64	5.32
77	9.7700	0.8089	10.58	5.29
78	9.7150	0.7970	10.51	5.26
79	9.6558	0.7852	10.44	5.22
80	9.5930	0.7737	10.37	5.18
81	9.5268	0.7623	10.29	5.14
82	9.4577	0.7508	10.21	5.10
83	9.3858	0.7392	10.13	5.06
84	9.3117	0.7278	10.04	5.02
85	9.2354	0.7166	9.95	4.98
86	9.1574	0.7057	9.86	4.93
87	9.0777	0.6949	9.77	4.89
88	8.9967	0.6844	9.68	4.84
89	8.9145	0.6741	9.59	4.79
90	8.8313	0.6640	9.50	4.75
91	8.7473	0.6541	9.40	4.70
92	8.6627	0.6444	9.31	4.65
93	8.5776	0.6349	9.21	4.61
94	8.4921	0.6255	9.12	4.56
95	8.4063	0.6164	9.02	4.51
96	8.3204	0.6074	8.93	4.46
97	8.2345	0.5986	8.83	4.42
98	8.1487	0.5900	8.74	4.37
99	8.0629	0.5816	8.64	4.32
100	7.9775	0.5733	8.55	4.28