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 effects 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 1-bay circularly polarized antenna.

According to OET 65, "Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit. The applicant or licensee then shares responsibility for compliance in any accessible area or areas within this 5% "contour" where the appropriate limits are found to be exceeded."

As can be seen in Exhibit 24-A, the proposed facility's maximum contribution to RF on the site is 2.0803 $\mu W/cm^2$ at a distance of 48 meters from the tower, which is 1.04% of the uncontrolled (public) exposure limit.

Therefore, because the proposed facility will not cause an RF field that is equal to or greater than 5% of the 200 $\mu W/cm^2$ limit for uncontrolled exposure at any point, the proposed facility complies with the requirements of OET 65.

EMF will fully cooperate with other 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 24-A
RF Analysis: KAZK.P Catalina, AZ

KAZK.P
Site type: Proposed
Channel: 208
Class: C2
ERP: 0.25 kw
Antenna: AAT
EPA Type 2
1 bay

COR AGL: 47m
Polorization: circular

Distance From Tower (m)	KAZK.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
0	0.5294	0.53	0.26
1	0.5371	0.54	0.27
2	0.5451	0.55	0.27
3	0.5534	0.55	0.28
4	0.5620	0.56	0.28
5	0.5987	0.60	0.30
6	0.6393	0.64	0.32
7	0.6804	0.68	0.34
8	0.7215	0.72	0.36
9	0.7687	0.77	0.38
10	0.8190	0.82	0.41
11	0.8702	0.87	0.44
12	0.9218	0.92	0.46
13	0.9748	0.97	0.49
14	1.0300	1.03	0.52
15	1.0855	1.09	0.54
16	1.1410	1.14	0.57
17	1.1962	1.20	0.60
18	1.2556	1.26	0.63
19	1.3159	1.32	0.66
20	1.3762	1.38	0.69
21	1.4363	1.44	0.72
22	1.4947	1.49	0.75
23	1.5390	1.54	0.77
24	1.5815	1.58	0.79
25	1.6220	1.62	0.81
26	1.6605	1.66	0.83
27	1.6969	1.70	0.85
28	1.7360	1.74	0.87
29	1.7740	1.77	0.89
30	1.8100	1.81	0.90
31	1.8439	1.84	0.92
32	1.8758	1.88	0.94
33	1.9042	1.90	0.95
34	1.9164	1.92	0.96
35	1.9268	1.93	0.96
36	1.9354	1.94	0.97
37	1.9423	1.94	0.97
38	1.9476	1.95	0.97
39	1.9513	1.95	0.98
40	1.9658	1.97	0.98
41	1.9878	1.99	0.99
42	2.0079	2.01	1.00
43	2.0259	2.03	1.01
44	2.0421	2.04	1.02
45	2.0564	2.06	1.03

Distance From Tower (m)	KAZK.P Facility	Total RF (uW/cm2)	Percent of 200uW/cm2
46	2.0689	2.07	1.03
47	2.0796	2.08	1.04
48	**2.0803**	**2.08**	**1.04**
49	2.0798	2.08	1.04
50	2.0782	2.08	1.04
51	2.0754	2.08	1.04
52	2.0715	2.07	1.04
53	2.0666	2.07	1.03
54	2.0608	2.06	1.03
55	2.0541	2.05	1.03
56	2.0465	2.05	1.02
57	2.0309	2.03	1.02
58	2.0147	2.01	1.01
59	1.9982	2.00	1.00
60	1.9812	1.98	0.99
61	1.9640	1.96	0.98
62	1.9465	1.95	0.97
63	1.9287	1.93	0.96
64	1.9107	1.91	0.96
65	1.8925	1.89	0.95
66	1.8742	1.87	0.94
67	1.8558	1.86	0.93
68	1.8363	1.84	0.92
69	1.8166	1.82	0.91
70	1.7970	1.80	0.90
71	1.7774	1.78	0.89
72	1.7578	1.76	0.88
73	1.7383	1.74	0.87
74	1.7189	1.72	0.86
75	1.6996	1.70	0.85
76	1.6803	1.68	0.84
77	1.6612	1.66	0.83
78	1.6422	1.64	0.82
79	1.6234	1.62	0.81
80	1.6046	1.60	0.80
81	1.5861	1.59	0.79
82	1.5673	1.57	0.78
83	1.5485	1.55	0.77
84	1.5299	1.53	0.76
85	1.5115	1.51	0.76
86	1.4933	1.49	0.75
87	1.4753	1.48	0.74
88	1.4575	1.46	0.73
89	1.4399	1.44	0.72
90	1.4226	1.42	0.71
91	1.4055	1.41	0.70
92	1.3886	1.39	0.69
93	1.3719	1.37	0.69
94	1.3554	1.36	0.68
95	1.3392	1.34	0.67
96	1.3231	1.32	0.66
97	1.3073	1.31	0.65
98	1.2917	1.29	0.65
99	1.2763	1.28	0.64
100	1.2611	1.26	0.63