



RADIO FREQUENCY IMPACT, SAFETY & STATEMENT OF COMPLIANCE

The permittee of KMCB is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KMCB antenna and will reduce power or cease operation, when necessary, to ensure protection to personnel.

The KMCB channel 22 facility, as proposed herein, will operate with a maximum ERP of 100 kW from an elliptically polarized directional transmitting antenna with a centerline height of 35 meters above ground level (AGL). Considering the antenna's elevation pattern provided elsewhere in this submission, the vertical plane relative field factor is less than 0.170 at all depression angles greater than 8 degrees. The proposed KMCB channel 22 facility is predicted to produce a worst-case power density at two meters above ground level, at 12 meters from the tower base, of $138.66 \mu\text{W}/\text{cm}^2$, which is 39.92% of the FCC guideline value of $347.33 \mu\text{W}/\text{cm}^2$ for an "uncontrolled" environment, and 7.98% of the FCC's guideline value for "controlled" environments.

The maximum power density does not exceed either FCC guideline, however because the proposed facility is to be located in close proximity to other television and radio broadcast stations, the cumulative power density of all the stations operating from the shared site must be considered.

In light of the above, once the proposed facility is authorized and installed, an RFR measurement survey will be undertaken to determine the effect of the proposed facility on the existing RFR environment. Any changes deemed to be necessary to the existing RFR safety plan will be made accordingly. Further, the Applicant will continue to

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cooperate/coordinate with other site users and reduce power and/or cease operation during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel.

KMCB
Channel 22 - Coos Bay, Oregon
ERP = 100000.00 WATTS

APPENDIX A

Maximum ERP 100 kW

Polarization ----- 2 Circular
 Antenna Height Above Ground -- 35 meters 114.8 feet
 FCC Uncontrolled RFR Limit ---- 347.33 $\mu\text{W}/\text{cm}^2$

Maximum Computed Power Density 138.663 $\mu\text{W}/\text{cm}^2$
 39.92% of limit

Angle Below Horizontal (degrees)	<Point X> Horiz Distance from tower to 2 m AGL (meters)	Slant Distance from antenna to Point X (meters)	Vertical Pattern (REL. FIELD)	KMCB ERP (kW)	KMCB Calculated Power Density $\mu\text{W}/\text{cm}^2$	Percent Limit	Limit Exceeded?
0			1.000	100.0000			
5	377.2	378.6	0.115	1.3225	0.616	0.18%	No
10	187.2	190.0	0.071	0.5041	0.932	0.27%	No
15	123.2	127.5	0.070	0.4900	2.013	0.58%	No
20	90.7	96.5	0.025	0.0625	0.448	0.13%	No
25	70.8	78.1	0.088	0.7744	8.484	2.44%	No
30	57.2	66.0	0.000	0.0000	0.000	0.00%	No
35	47.1	57.5	0.057	0.3249	6.557	1.89%	No
40	39.3	51.3	0.066	0.4356	11.040	3.18%	No
45	33.0	46.7	0.025	0.0625	1.917	0.55%	No
50	27.7	43.1	0.111	1.2321	44.351	12.77%	No
55	23.1	40.3	0.029	0.0841	3.462	1.00%	No
60	19.1	38.1	0.052	0.2704	12.440	3.58%	No
65	15.4	36.4	0.142	2.0164	101.596	29.25%	No
70	12.0	35.1	0.160	2.5600	138.663	39.92%	No
75	8.8	34.2	0.097	0.9409	53.849	15.50%	No
80	5.8	33.5	0.036	0.1296	7.710	2.22%	No
85	2.9	33.1	0.007	0.0049	0.298	0.09%	No
90	0.0	33.0	0.000	0.0000	0.000	0.00%	No

