

### **Environmental Protection**

The proposed facility is to be built using a 1-bay circularly polarized antenna.

As can be seen in Exhibit 24-A, the maximum theoretical RF value would be  $50.5 \mu\text{W}/\text{cm}^2$  at a distance of 10 meters from the antenna, which is 25.3% of the  $200 \mu\text{W}/\text{cm}^2$  permitted for public (uncontrolled) exposure, and 5.1% 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 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.

## Specific Antenna RF Power Density Calculator

Based on Equation 10 of OET-65  
Exhibit 24-A / Detailed Report

<b>ERP</b>	0.7 kW	% of OET-65
<b>Height above ground</b>	13.0 meters	25.3% Uncontrolled
<b>Height above head</b>	11.0 meters	5.1% Controlled
<b>Antenna Brand Scala</b>		
<b>Antenna Model FMVMP-1</b>		

Horizontal distance from tower (meters)	Angle (°)	Distance (m)	Field	Power (W)	Power Density (uW/cm <sup>2</sup> )
0	90	11.0	0.104	72.8	2.090
10	48	14.9	0.691	483.7	50.514
20	29	22.8	0.918	642.6	37.817
30	20	32.0	0.918	642.6	19.298
40	15	41.5	0.982	687.4	13.100
50	12	51.2	0.982	687.4	8.602
60	10	61.0	0.982	687.4	6.059
70	9	70.9	1	700	4.656
80	8	80.8	1	700	3.585
90	7	90.7	1	700	2.844
100	6	100.6	1	700	2.310

