

**EXHIBIT 46****COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES**

The proposed KTTM-DT installation will be co-located with other broadcast facilities. The site will, therefore, be considered a “multiple use” site.

The proposed KTTM-DT antenna is an existing ADC Model VTA-12H. The antenna is mounted with its center of radiation 253 meters above ground, making it 251 meters above an observer on the ground, who is assumed to be 2 meters tall. A maximum effective radiated power of 5.0 kW (5,000 watts) has been proposed using horizontal polarization. The antenna is currently used by the KTTM analog system and will simply be connected to the digital transmitter at transition. Therefore, its use for digital service will not require any alteration of the Antenna Structure Registration data for this site.

Equation 10 of OET Bulletin No. 65 can be used to predict the potential exposure to radiofrequency radiation for human observers on the ground as indicated by total power density expressed in units of  $\mu\text{W}/\text{cm}^2$ . This equation states:

$$S = \frac{33.4(F^2)ERP}{R^2}$$

where: S = Total Power Density in units of  $\mu\text{W}/\text{cm}^2$   
 F = Relative Field of Pattern  
 ERP = Effective Radiated Power in Watts  
 R = Distance in Meters

The standard procedure for RF exposure studies considers all locations within 315 meters of the base of the supporting structure. With the proposed antenna mounted 251 meters above an observer on the ground, the depression angle at this distance is  $38.5^\circ$ . Data from the antenna manufacturer was not readily available at the time of the application. Normally, relative field remains below 0.300 throughout the range of relevant depression angles. However, to assure a truly “worst case” scenario, a relative field of 1.000 has been assumed for F in this study. Using an ERP = 5,000 watts and setting R = 251 meters, the above formula computes a worst case S of  $2.6508 \mu\text{W}/\text{cm}^2$ .

Since Channel 12, 204-210 MHz, is within the VHF spectrum, the limit for human exposure to non-ionizing radiofrequency radiation is  $200 \mu\text{W}/\text{cm}^2$  in areas that can be accessed by the general public. The limit for areas classed as occupational exposure is  $1,000 \mu\text{W}/\text{cm}^2$ .

As noted above, the worst case exposure to any person on the ground is  $2.6508 \mu\text{W}/\text{cm}^2$ . This represents 1.33% of the general public limit and 0.27% of the occupational limit.

Chapter 47 of the Code of Federal Regulations, §1.1307(b)(3) states: *“In general, when the guidelines specified in §1.1310 are exceeded in an accessible area due to the emissions from multiple fixed transmitters, actions necessary to bring the area into compliance are the shared responsibility of all licensees whose transmitters produce, at the area in question, power density levels that exceed 5% of the power density exposure limit applicable to their particular transmitter or field strength levels that, when squared, exceed 5% of the square of the electric or magnetic field strength limit applicable to their particular transmitter. Owners of transmitter sites are expected to allow applicants and licensees to take reasonable steps to comply with the requirements contained in §1.1307(b) and, where feasible, should encourage co-location of transmitters and common solutions for controlling access to areas where the RF exposure limits contained in §1.1310 might be exceeded.”* Should the level of radiofrequency radiation at the proposed multiple use site ever exceed the FCC guidelines, the proposed KTTM-DT facility is categorically exempt from responsibility for bringing the shared transmitter site into compliance because its contribution is less than 5.0% of the applicable limit.

The facility will be properly marked with signs, and entry will be restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed. In the event work would be required in proximity to the antenna such that the person or persons working in the area would potentially be exposed to fields in excess of the guidelines, the station will cooperate with other licensees at the site to reduce power or cease operation during the critical period.