



ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The licensee of KUQI is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KUQI antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

The predicted emissions of KUQI must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For KUQI, which will operate on television Channel 19 (500-506 MHz), the MPE is 335.33 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and 1,676.7 $\mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed KUQI facility will operate with a maximum ERP of 32.9 kW from an elliptically polarized directional transmitting antenna with a centerline height of 242 meters above ground level (AGL). Considering a predicted vertical plane relative field factor of 0.300 the KUQI facility is predicted to produce a power density at two meters above ground level of 3.435 $\mu\text{W}/\text{cm}^2$, which is 1.02% of the FCC guideline value for an “uncontrolled” environment, and 0.204% of the FCC’s guideline value for “controlled” environments. There are no other broadcast facilities that are located at the KUQI site. Therefore the total estimated percentage of the ANSI value at the proposed site, consists only of the contribution of KUQI, which is 1.02% of the limit applicable to “uncontrolled” environments, and 0.204% of the limit for “controlled” environments. (See Appendix A)

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**

KUQI, Corpus Christi, TX
Channel 19, 32.9 kW, 247 m HAAT
May, 2017

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLAR- IZATION</u>	<u>ANTENNA HEIGHT</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)</u>	<u>FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
KUQI	DT	19	503	H & V	242	32.900	0.300	3.435	335.33	1.02%
TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 1.02%										

* For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.