

**MINOR CHANGE APPLICATION**  
**CUMULUS LICENSING LLC**  
**KTCX (FM) RADIO STATION**  
**CH 273C2 -102.5 MHZ - 50.0 kW**  
**BEAUMONT, TEXAS**  
**October 2015**

**EXHIBIT B**

**Radio Frequency Assessment**

A study has been made to determine whether this station is in compliance with 47 C.F.R. §1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997 ("Bulletin"), regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations and uses the appropriate formulas contained in the OET Bulletin.<sup>1</sup>

The KTCX antenna is mounted with its center of radiation 146.0 meters (479 feet) above the ground at the tower location and operates with an effective radiated power of 50.0 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the fence perimeter, the KTCX antenna contributes 0.097 mw/cm<sup>2</sup>.<sup>2</sup> Based on exposure limitations for a controlled environment, 9.7% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 48.5% of the ANSI limit is reached at 2.0 meters above the ground at the fence perimeter.

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- 1) The contributions of the FM stations were calculated with the FMModel program. The EPA single bay dipole antenna was used for calculations unless otherwise noted.
  - 2) This level of signal falls 39.0 meters from the base of the tower and is assumed as a worst case scenario.

The KAYD-FM auxiliary antenna is mounted with its center of radiation 109.7 meters (360 feet) above the ground at the tower location and operates with an effective radiated power of 0.11 kilowatt in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the fence perimeter, the KAYD-FM auxiliary antenna contributes  $0.0004 \text{ mw/cm}^2$ .<sup>3</sup> Based on exposure limitations for a controlled environment, less than 1.0% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 0.2% of the ANSI limit is reached at 2.0 meters above the ground at the fence perimeter.

Combining the contributions of KTCX and KAYD-FM auxiliary antenna, a total less than 50% of the FCC limit for uncontrolled exposure is reached at the base of the tower. Since this level of signal is significantly less than the maximum for uncontrolled environments, as specified by the Commission, it is believed that KTCX is in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Cumulus will insure that warning signs have been posted in the vicinity of the tower and at the fence perimeter warning of potential radio frequency radiation hazards at the site. In addition, Cumulus will reduce the power of the facility or cease operation in cooperation and coordination with other tower users, as necessary, to protect persons having access to the site, tower, or antenna from radio frequency radiation in excess of FCC guidelines.

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3) This level of signal falls 30.0 meters from the base of the tower and is assumed as a worst case scenario.