

**MINOR CHANGE APPLICATION**  
**APEX BROADCASTING, INC.**  
**KBXG (FM) RADIO STATION**  
**CH 258C0 - 99.5 MHZ - 100.0 KW**  
**LAKE CHARLES, LOUISIANA**  
**April 2004**

**EXHIBIT B**

**Radio Frequency Assessment**

Due to the co-location of KBXG with a TV station, it was not possible to certify compliance with the Commission's radio frequency radiation guidelines with the worksheets associated with Form 301. Therefore a study has been made to determine whether this proposal 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, specifically KVHP TV and KVHP-DT, and utilizes the appropriate formulas contained in the OET Bulletin.<sup>2</sup>

The KBXG antenna system will be mounted with its center of radiation 307.9 meters (1,010.0 feet) above the ground at the proposed tower location and will operate with an effective radiated power of 100.0 kilowatts in the horizontal and vertical planes (circularly polarized). At two meters, the height of an average person, above the ground at the base of the proposed existing tower, the KBXG antenna system will contribute 0.0429 mw.<sup>3</sup> Based on exposure limitations for a controlled environment, 4.3% of the allowable limit is reached at two meters

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- 2) The contribution of the FM facility was calculated using the FM Model program. A single bay EPA dipole antenna was used for calculation purposes, unless otherwise noted.
- 3) This level of field occurs at 83.2 meters out from the base of the tower and is considered worst case.

above the ground at the base of the proposed tower. For uncontrolled environments, 21.5% of the limit is reached at two meters above the ground at the base of the tower.

The KVHP TV NTSC Channel 29 antenna system is mounted with its center of radiation 392.9 meters (1,289 feet) above the ground at the tower location and operates with an effective radiated power of 2,510.0 kilowatts in the horizontal plane. As denoted on Page 31, OET Bulletin Number 65, Supplement A, typical UHF antenna systems have a relative field value of 0.1 for downward radiation. As such, a field value of 0.1 or 25.1 kilowatts is used for KVHP's contribution to the radio frequency environment. At two meters, the height of an average person, above the ground at the base of the tower, the KVHP antenna system contributes 0.0034 mw. Based on exposure limitations for a controlled environment, 0.2% of the allowable ANSI limit is reached at two meters above the ground at the base of the proposed tower. For uncontrolled environments, 0.9% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The KVHP-DT Channel 30 antenna system is to be mounted with its center of radiation 313.9 meters (1,029.8 feet) above the ground at the tower location and operate with an effective radiated power of 1,000.0 kilowatts in the horizontal plane. As denoted on Page 31, OET Bulletin Number 65, Supplement A, typical UHF antenna systems have a relative field value of 0.1 for downward radiation. As such, a field value of 0.1 or 10.0 kilowatts is used for KVHP-DT's contribution to the radio frequency environment. At two meters, the height of an average

person, above the ground at the base of the tower, the KVHP-DT antenna system will contribute 0.0014 mw. Based on exposure limitations for a controlled environment, 0.1% of the allowable ANSI limit is reached at two meters above the ground at the base of the proposed tower. For uncontrolled environments, 0.4% of the ANSI limit is reached at two meters above the ground at the base of the tower.

Combining the contributions of KBXG, KVHP and KVHP-DT, a total of 22.8% of the limit is reached at two meters above the ground at the base of the tower. Since this level for uncontrolled environments is below the 100% limit defined by the Commission, the proposed KBXG facility is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, Apex will insure warning signs are posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Apex will reduce the power of the proposed 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. Based on the above factors, this proposal is categorically excluded from environmental processing pursuant to §1.1306 of the Commission's rules.