

**MINOR CHANGE APPLICATION/  
DIGITAL FLASH-CUT  
RAPID BROADCASTING COMPANY  
K40GS LPTV STATION  
CH 40 - 626-632 MHZ - 4.0 KW  
RAPID CITY, SOUTH DAKOTA  
May 2012**

**EXHIBIT B**

**Radio Frequency Assessment**

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. The K40GS digital facility will be located on a tower that is adjacent to several other towers located at a defacto tower farm. This study utilizes the appropriate formulas contained in the OET Bulletin.<sup>1</sup>

The proposed K40GS Channel 40 digital antenna system will be mounted with its center of radiation 144.5 meters (474.0 feet) above ground and will operate with an effective radiated power of 4.0 kilowatts in the horizontal plane. At 2.0 meters above the ground at the base of the tower, the proposed K40ZGS antenna system will contribute 0.0026 mw/cm<sup>2</sup>. Based on exposure limitations for a controlled environment, 0.1% of the allowable ANSI limit is reached at 2.0 meters above the ground. For the uncontrolled environment, 0.6% of the limit is reached at 2.0 meters above the ground.

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1) The contribution of the FM station was calculated with the FMModel program. The EPA dipole antenna was used for calculations unless otherwise noted.

Since this level for controlled and uncontrolled environments is far less than the 5% limit defined by the Commission in §1.1307(b)(3)(i) and since the proposed K40GS facility is located in a de facto tower farm, this proposal is believed to be in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Further, RBC will insure that warning signs are posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, RBC 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.