

MINOR CHANGE APPLICATION
WSAA, LLC
WSAA (FM) RADIO STATION
CH 226A - 93.1 MHZ - 3.5 KW
BENTON, TENNESSEE
June 2008

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. This study considers all nearby contributing stations, specifically co-located WBAC AM, and utilizes the appropriate formulas contained in the OET Bulletin.¹

The proposed WSAA antenna system is to be mounted with its center of radiation 94.4 meters (310.0 feet) above the ground at the tower location and will operate with an effective radiated power of 3.5 kilowatts in the horizontal and vertical planes (circularly polarized). At 2.0 meters above the ground at the base of the tower, the height of an average person, the WSAA antenna system will contribute 0.0164 mw/cm^2 .² Based on exposure limitations for a controlled environment, 1.6% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 8.2% of the ANSI limit is reached at 2.0 meters above the ground at the base of the tower.

-
- 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 field occurs at 106.0 meters out from the base of the tower and is considered worst case.

The WBAC AM daytime radiator on which the WSAA antenna is to be installed is, electrically, 156.9° in height at 1340 kHz and operates with a power of 1.0 kilowatt. Access to the radiating structure is limited to no less than 2.0 meters from the tower. By reference to Figure 2 of OET 65-A, the WBAC tower will deliver 139.3 V/m (Electric Field) or 0.172 A/m (Magnetic Field). Since WBAC operates on a frequency at or below 1340 kHz, the contribution levels for controlled and uncontrolled environments are the same. As such, the electrical field contribution is 22.7% and the magnetic field contribution is 10.5%. Since the electrical field contribution is the greatest, it will be used as a worst case contribution.

Combining the contributions of WSAA and WBAC, a total of 30.9% of the limit for uncontrolled environments is reached at 2.0 meters from the base of the tower. Since the contribution level is less than the limit for uncontrolled environments, it is believed that the WSAA facility is in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. WL will also insure that warning signs have been posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, WL 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.