

MINOR CHANGE APPLICATION
PAMAL BROADCASTING, LTD
WAJZ (FM) RADIO STATION
CH 242A - 96.3 MHZ - 0.47 KW
VOORHEESVILLE, NEW YORK
September 2001

EXHIBIT #B

Radio Frequency and Environmental Assessment

Due to the number of either co-located or nearby FM transmitters, the use of the Commission's RF worksheets to demonstrate compliance with the rules could not be made. 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 stations and utilizes the appropriate formulas contained in the Bulletin.

Environmental Analysis

The existing tower does not involve the use of high intensity white lighting (strobes) in a residential neighborhood. The structure is not located in an officially designated wilderness area or wildlife preserve, nor does it threaten the existence or habitat of endangered species. The facility does not affect districts, sites, buildings, structures or objects significant in American history, architecture, archaeology, engineering or culture that are listed in the National Register of Historic Places, or are eligible for listing, nor does it affect Indian religious sites. Further, the site is not located in a floodplain and did not, to the knowledge of the applicant, require significant change in surface features (wetland fill, deforestation or water diversion) at the time of construction.

Radio Frequency Radiation Study

This radio frequency radiation study is being conducted to determine whether this proposal is in compliance with OET Bulletin Number 65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations, specifically co-located WYJB, proposed WZMR² and nearby WPYX³, and utilizes the appropriate formulas contained in the OET Bulletin.⁴

The proposed WAJZ antenna system will be mounted with its center of radiation 61.0 meters (200.0 feet) above the ground at the tower location and will operate with an effective radiated power of 0.47 kilowatt 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 tower, the proposed antenna system will contribute 0.0054 mw.⁵ Based on exposure limitations for a controlled environment, 0.5% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 2.7% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The proposed WZMR antenna system will be mounted with its center of radiation 51.8 meters (170.0 feet) above the ground at the tower location and will operate with an effective radiated power of 0.53 kilowatt 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 tower, the

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- 2) An application for relocate WZMR to the same site proposed for WAJZ is being filed concurrently by Pamal Broadcasting, Ltd., also the licensee of WZMR.
 - 3) WPYX is located 90 meters distant from the proposed WAJZ site, but is considered a contributing factor to the RF environment.
 - 4) The calculation of the FM station contribution was determined using the FMModel program and the EPA dipole default antenna, unless otherwise noted.
 - 5) This level of field occurs at 16 meters out from the base of the tower and is considered worst case.

proposed WZMR antenna system will contribute, 0.0085 mw.⁶ Based on exposure limitations for a controlled environment, 0.9% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 4.25% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The co-located WYJB two bay antenna system is mounted with its center of radiation 71.6 meters (235.0 feet) above the ground at the tower location and operates with an effective radiated power of 12.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WYJB antenna system is an Electronics Research, Inc., rototiller type system (FCC Type #3). At two meters, the height of an average person, above the ground at the base of the tower, the WYJB antenna system contributes 0.0237 mw.⁷ Based on exposure limitations for a controlled environment, 2.4% of the allowable ANSI limit is reached at two meters above the ground at the base of the proposed tower. For uncontrolled environments, 11.9% of the ANSI limit is reached at two meters above the ground at the base of the tower.

The existing WPYX antenna system is located on a tower 90 meters removed from the proposed WJZ site. For the purposes of this analysis, the WPYX antenna will be considered co-located. The WPYX two bay antenna is mounted with its center of radiation 42.0 meters (138.0 feet) above the ground and operates with an effective radiated power of 15.5 kilowatts in the horizontal and vertical planes (circularly polarized). The WPYX antenna is also an Electronics Research, Inc., rototiller type system (FCC Type #3). At two meters, the height of an average person, above the ground at the base of the tower, the WPYX antenna system

6) This level of field occurs at 14.4 meters out from the base of the tower and is considered worst case.

7) This level of field occurs at 46.4 meters out from the base of the tower and is considered worst case.

contributes 0.0899 mw.⁸ Based on exposure limitations for a controlled environment, 9.0% of the allowable ANSI limit is reached at two meters above the ground at the base of the tower. For uncontrolled environments, 45.0% of the ANSI limit is reached at two meters above the ground at the base of the tower.

Combining the contributions of WAJZ, WZMR, WYJB and WPYX, a total of 63.85% of the uncontrolled limit is reached at the base of the tower. Since this level for uncontrolled environments is well below the 100% limit defined by the Commission, the proposed WAJZ antenna system is believed to be in compliance with the radio frequency radiation exposure limits as is required by the Federal Communications Commission. Further, Pamal Broadcasting, Ltd. (PBL) will post warning signs in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, PBL 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.

8) This level of field occurs at 27.2 meters out from the base of the tower and is considered worst case.