

Engineering Exhibit  
WMRN-FM  
Facility ID 40170  
Minor Change Application  
July 2005

This application is being filed concurrently with and is contingent upon an application to modify station WSRW-FM, Chillicothe, Ohio. Processing pursuant to Section 73.3517 is requested; no agreement between the licensees of WMRN-FM and WSRW-FM is necessary because the licensees of these stations are affiliates under common control. By this application it is sought to modify the facility of WMRN-FM to specify a new antenna height, power and location, as well as changes in channel, class, and community, in conformance to "Report and Order," DA 05-764 in MB Docket No. 02-266 (released March 25, 2005).

The proposed WMRN-FM antenna is non-directional and is to be located 180 meters above ground level upon a tower described by Antenna Structure Registration (ASR) No. 1054358. From this location WMRN-FM is fully spaced as a Class B1 facility in accordance with Section 73.207 to all known facilities, applications and allocations, with the exception of stations WDSJ, and the new allocation for WSRW-FM at Chillicothe, OH. Attached as Figure 1 is a study of spacings at the proposed location. Processing pursuant to Section 73.215 to stations WDSJ, and WSRW-FM (as proposed in the contingent modification application) is requested. The proposed facility is at a Height Above Average Terrain (HAAT) 80 meters greater than maximum for Class B1, the web tool "FMpower" was utilized to determine the equivalent power of 7.5 kW. This proposal requests a power level of 7.3 kW, which will result in no prohibited contour overlap. Figure 2 is a map depicting the relevant contours.

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is an EPA type 3, 4- bay, 1.0 wave spaced "Roto Tiller" style antenna, mounted with its center of radiation 180 meters above ground level. This proposal will operate with an effective radiated power of 7.3 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 73 meters from the base of the tower, this proposal will contribute worst case 1.33 microwatts per square centimeter, or 0.13 percent of the allowable ANSI limit for controlled exposure, and 0.65 percent of the allowable limit for uncontrolled exposure. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

Figure 1

ComStudy 2.2 search of channel 294 (106.7 MHz Class B1) at 40-09-33.0 N, 82-55-23.0 W.

Callsign	State	City	Freq	Chanl	ERP_w	Class	Status	Dist_km	Sep	Clr
WMRN-FM	OH	MARION	106.9	295	25000	B	LIC	53.46	145	-91.5 <sup>1</sup>
WSRW-FM-md	OH	Chillicothe	106.5	293	2850	A	LIC	92.15	96	-3.8 <sup>23</sup>
WDSJ	OH	GREENVILLE	106.5	293	50000	B	LIC	143.74	145	-1.3 <sup>4</sup>
WVNO-FM	OH	MANSFIELD	106.1	291	40000	B	LIC	71.97	71	1
	OH	CHILLICOTHE	106.5	293	0	A	ADD	96.43	96	0.4
WRQK-FM	OH	CANTON	106.9	295	27500	B	CP	146.63	145	1.6
WRQK-FM	OH	CANTON	106.9	295	27500	B	LIC	146.57	145	1.6
WJYD	OH	LONDON	106.3	292	6000	A	LIC	52.45	48	4.4
WAZU	OH	CIRCLEVILLE	107.1	296	3000	A	LIC	55.27	48	7.3

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<sup>1</sup> Previous allocation this station

<sup>2</sup> Concurrent and contingent application

<sup>3</sup> 73.215 processing requested

<sup>4</sup> 73.215 processing requested

Figure 2

