

2130 HUTCHISON GROVE COURT, SUITE 100
FALLS CHURCH, VIRGINIA 22043
TELEPHONE (703) 848-2130 / (202) 642-2130

WMXH-FM	FM	LURAY, VA	FACILITY ID: 12625
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This engineering statement is being prepared for use in the license renewal application of the above-listed stations.

Operation of the facility will not involve the exposure of workers or the general public to levels of radio frequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.

This engineering statement is intended to be filed as an exhibit showing compliance with the Commissions standards concerning non-ionizing R.F. radiation hazards.

WMXH-FM operates on Channel 289A (105.7 MHz) with a maximum ERP of 0.15 kW (H & V) with an antenna height above ground of 56.4 meters.

The installed antenna is an FML-2E, circularly polarized, two-bay, full wavelength spaced antenna. This is an EPA type 2 antenna. Using the FCC's FM Model software program as a evaluation tool predicts that the power density at 2-meters above ground level is well within the Commission guidelines for non-ionizing RF radiation compliance. A full site review and tabulation of all known RF emitters can be found in the attached exhibit to this statement.

CALL SIGN	TYPE	CHANNEL	MAX ERP	POWER DENSITY at 2 m AGL	MPE WORKER	MPE PUBLIC	PASS / FAIL
WMXH-FM	FM	289	0.15 KW H POL 0.15 KW V POL	0.6356 $\mu\text{W} / \text{cm}^2$	0.06 %	0.32 %	PASS
A detailed site analysis is included in the tabulation of facilities.							

WMXH-FM
LURAY, VA

Multiple Use Site Analysis – Close Proximity Facilities

LAND MOBILE AND PART 74 STL MICROWAVE SYSTEMS ARE CO-LOCATED OR
LOCATED WITHIN CLOSE PROXIMITY OF THE WMXH-FM TRANSMISSION FACILITY
(SEE THE DETAILED SITE ANALYSIS TABULATION FOR POWER DENSITY CALCULATIONS)

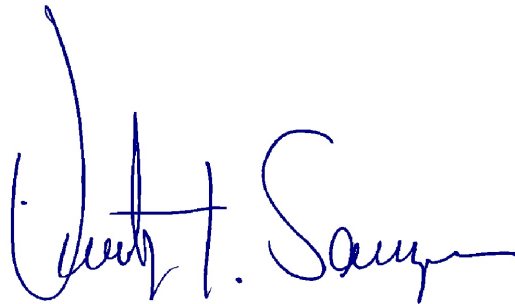
A complete analysis of “other” RF radiators either co-located or in close proximity to this facility is contained within the site tabulation exhibit. The site is in full compliance with the FCC guidelines.

Summary:

RF compliance for non-ionizing radiation is well within the Commission’s standards for workers or the general public. Access to the tower is restricted and suitable warning signs have been posted. The licensee will coordinate all work and/or access to the tower and the general site area with other users at the site as required by the Commission's rules.

Inquiries concerning this statement may be directed to the office of the undersigned.

May 25, 2019



Timothy Z. Sawyer, Consulting Engineer

T Z Sawyer Technical Consultants
2130 Hutchison Grove Court, Suite 100
Falls Church, Virginia 22043
Telephone: (703) 848-2130 / (202) 642-2130
email to: tzsawyer@tzsawyer.com

WMXH-FM SITE COMPLIANCE SUMMARY													
TOTAL SITE MPE VALUE - ALL CONTRIBUTORS										% OF MAXIMUM LIMIT (100%)		RESULTS	
										WORKER LIMIT	PUBLIC LIMIT	PASS/FAIL	
WMXH-FM SITE COMPLIANCE										0.42%	2.09%	PASS	
DETAILED ANALYSIS BY FACILITY TYPE FOLLOWS BELOW													
CO LOCATED OR NEARBY BROADCAST SERVICES - AM, FM, OR TV CONSIDERED													
FM STATION (CO-LOCATED OR NEARBY)			ERP (PWR)		AGL	ELEMENTS	INTER BAY	EPA ANT TYPE	FCC FM MODEL	% OF MAXIMUM LIMITS		RESULTS	ANTENNA
FM OR FMX	STATION	CHANNEL	H KW	V KW	(m)	(BAYS)	SPACING		uW/cm2	WORKER LIMIT	PUBLIC LIMIT	PASS/FAIL	
MAIN	WMXH-FM	289	0.15	0.15	56.4	2	1.0		2	0.6356	0.06%	0.32%	
OTHER FM	NONE												
WMXH-FM ANTENNA SITE COMPLIANCE FM STATIONS CO-LOCATED OR NEARBY										% OF MPE	0.06%	0.32%	PASS
CO-LOCATED OR NEARBY TV OR LPTV STATIONS			ERP (PWR)		AGL	ANT	OET 65 CALCULATED VALUES - POWER DENSITY				RESULTS	ANTENNA	
TV	STATION	FREQ	H KW	V KW	(m)	AZ	CALCULATED MPE		% OF MAXIMUM LIMITS				
LPTV OR DTV	NONE	-	-	-	-	-	uW/cm2	uW/cm2	WORKER LIMIT	PUBLIC LIMIT			PASS/FAIL
CO-LOCATED OR NEARBY FACILITIES TV/LPTV										% OF MPE	0	0	PASS
CO-LOCATED OR NEARBY AM STATIONS			POWER		ANTENNA		OET 65 VALUES MINIMUM FENCE DISTANCES				RESULTS	ANTENNA	
AM	STATION	FREQ	MAX AM KW		WAVELENGTH		MINIMUM		ACTUAL				
AM	NONE	-	-	-	-	-	DISTANCE (m)	DISTANCE (m)	PASS/FAIL				
CO-LOCATED OR NEARBY FACILITIES AM STATIONS										0	0	PASS	
LAND MOBILE/MICROWAVE/PUBLIC OR PRIVATE OR PART 74 AUXILIARY BROADCAST SERVICES													
CO-LOCATED OR NEARBY			ERP (PWR)		AGL	AZ	OET 65 CALCULATED POWER DENSITY				RESULTS	ANTENNA	
OTHER FACILITIES	CALL SIGN	FREQ (MHZ)	DBM	KW	(m)	DEG T	uW/cm2	POL	* MPE uW/cm2	% WORKER LIMIT	% PUBLIC LIMIT		PASS/FAIL
LMS (PAGING)	KNKC693	72.7400	51.8	0.15	56.4	OMNI	1.5750	V	1000	0.16%	0.79%	PASS	VERTICAL WHIP
LMS (LM)	KNKJ606	158.1000	37.8	0.006	25.6	OMNI	0.3058	V	1000	0.03%	0.15%	PASS	VERTICAL WHIP
MW (ISP-WISP)	WQMA418	11325.0000	59.5	0.933	24.0	SECTOR	13.5253	V	37750	0.04%	0.18%	PASS	MW DISH
MW (STL)	WPVJ247	951.5000	54.7	0.295	24.4	61.0	4.1374	V	3172	0.13%	0.65%	PASS	SCA PR950
OTHER TYPES OF FACILITIES SITE COMPLIANCE										% OF MPE	0.35%	1.77%	PASS
LMS= LAND MOBILE SERVICE - PUBLIC OR PRIVATE 2-WAY SERVICES													
MW=MICROWAVE SYSTEMS OR STL PART 74 BROADCAST AUXILIARY SYSTEMS													
* Power Density MPE calculations ABOVE 300 MHZ, the maximum permissible power density is computed as MHZ / 300 for controlled/worker areas and MHZ / 1500 for uncontrolled / public areas. For VHF frequencies at or below 300 MHZ the controlled/worker limit is 1000 uW/cm2 and the uncontrolled /public area limit is 200 uW/cxm2. Elevation relative field values for LMS and MW systems are computed at 0.5 or using antenna data where known.													