

Christian Television Radio Ministry
 3204 Travis Ave
 Midland, Texas 79701

Engineering Study

A computerized allocation analysis was performed on the facilities proposed herein using data from the Commission's files and ComStudy 2.2. This analysis included all domestic allocations as well as those notified by the Government of Mexico. A case study, as well as a spacing study to Mexican allocations, was considered. This analysis revealed no assignments, allocations or applications requiring further study. The applicant believes that the facilities proposed herein meet all the Commission's rules of allocation.

ComStudy 2.2 search of channel 205 (88.9 MHz Class A) at 29-33-01.9 N, 104-20-37.3 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
	BALDERAS	CH 206 C	201.12	165.00	324.2	11.49 dB
	CHIHUAHUA	CH 203 C	204.31	95.00	239.1	28.90 dB
	CHIHUAHUA	CH 207 C	204.31	95.00	239.1	28.90 dB
	LAS GARZAS	CH 205 A	112.25	111.00	122.8	3.91 dB
	MEOQUI	CH 205 A	180.40	111.00	218.1	18.15 dB
	VILLA AHUMADA	CH 205 A	262.30	111.00	295.3	32.77 dB
	HERCULES	CI 205 AA	175.53	115.00	162.1	16.16 dB
K06QA-D	ODESSA	TX 6 TV	312.64	0.00	34.8	0.0
KFRI	WEST ODESSA	TX 204 C1	312.66	133.00	34.8	39.70 dB
NCE-MXG-158-AMD	WINK	TX 206 C1	281.75	133.00	24.4	35.51 dB
NCE-MXG-189	TERLINGUA	TX 203 A	74.56	31.00	109.5	39.14 dB
XHDIFM	CHIHUAHUA	CH 203 B	196.95	69.00	239.4	37.40 dB
XHDIFM	CHIHUAHUA	CH 203 B	196.95	69.00	239.4	37.40 dB
XHFAPM	CHIHUAHUA	CH 207 B	196.95	69.00	239.4	37.40 dB
XHFAPM	CHIHUAHUA	CH 207 B	196.95	69.00	239.4	37.40 dB

Mexican allocations are protected. The closest American channels having an impact on the proposed channel are listed above.

In Presidio there is American channel 88.1 which is separated by three channels. There is also Mexican channel 89.7 that is allocated to Ojinaga, Mx; that channel is also separated by three channels. There is vacant co-channel A at Las Garzas that is clear. First adjacent channel C at Balderas that is clear. Second adjacent channel B & C in Chihuahua also clear.

An engineering analysis was performed to determine whether the facilities proposed herein comply with the Maximum Permissible Exposure standards outlined in 47CFR1.1310 as regards human exposure to radiofrequency electromagnetic fields and whether environmental processing would be required. The applicant proposes to operate at 0.5 kilowatts, circularly polarized 2 antennas mounted at the 11-meter level of a proposed 12-meter mast tower. This antenna consists of two radiating elements spaced 0.5 wavelength apart. There are no other significant emitters of radiofrequency energy in the immediate vicinity. The base of the tower is to be enclosed in a locked and fenced compound. The Commission's FM Model computer software was used to calculate the radiofrequency electromagnetic power density in a plane 2 meters AGL as a function of the distance from the antenna support structure. A copy of the graphical output of this program is attached. The highest power density occurs at a point 14.2 meters from the base of the tower and is equal to 49.1 uW/cm^2 . This represents 24% of the general public/uncontrolled MPE standard. See Exhibit 01 FM Model.

The tower does not require registration. Attached is Exhibit 02 Towair indicating tower location is 5 miles or more from nearest airport.

The community of Presidio is within the 60 dBu (Exhibit 3).