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DTV AMERICA

PERMITTEE OF W31EM-D (W26DT-D) Myrtle Beach, SC

FCC FILE # 0000087112

APPLICATION FOR AN STA TO RESUME OPERATIONS WITH REDUCED FACILITIES UNTIL A SUITABLE TRANSMISSION SITE CAN BE OBTAINED

ALL PURPOSE EXHIBIT

FACILITIES REQUESTED

Request is hereby sought for an "Emergency STA" for resumption of digital translator W26DT-D on the displacement channel 31 (permitted as W31EM-D) at an alternate location and utilizing temporary equipment because the permanent facilities specified in the permit are currently unavailable.

W31EM-D (W26DT-D) has a granted CP to operate with an ERP of 7 kW with an antenna center of radiation at 15 meters AGL. In preparing to build the permitted facilities, the engineering manager reached out to the tower owner for access. On Wednesday, November 6th, 2019, the tower structure owner informed the engineering manager that a recent structural study found that the tower was overloaded, thus the installation could not go forward until the tower was made structurally acceptable for same. Construction of W31EM-D at the permitted site is now on indefinite hold through no fault of the permittee.

Unfortunately, W26DT-D (W31EM-D) has been silent since November 17, 2018 and must resume operations ASAP. Because the permitted facility is suddenly unavailable, this STA is necessary to resume operation until the tower is accessible or an alternate tower may be found. Grant of STA to prevent loss of license is in the public interest.

PROPOSED W31EM-D CH 31 STA TECHNICAL PARAMETERS

Channel: 31

Coordinates: 33-35-27.5N, 79-02-54.2 W, NAD83.

ERP: 7.0 kW Non-D with horizontal polarization.

Antenna: PSI Model PSILP8OI-31.

Tower Registration: N/A.

Site Location: 6.1 meters AMSL

Supporting structure height: 24.4 meters AGL.

Radiation Center AMSL: 15.3 meters

Radiation Center AGL: 21.4 meters.

TOWAIR Results

DETERMINATION Results

Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.

Your Specifications

NAD83 Coordinates

Latitude	33-35-27.4 north
Longitude	079-02-54.2 west

Measurements (Meters)

Overall Structure Height (AGL)	18.3
Support Structure Height (AGL)	12.2

Site Elevation (AMSL) 6.1

Structure Type

UPOLE - Utility Pole/Tower used to provide service (Electric, Telephone, etc)

RFR STATEMENT

PROPOSED STA OPERATION OF W31EM-D

W31EM-D, Channel 31, is proposing to utilize an average ERP of 7.0 kilowatts Non-D with horizontal polarization.

The proposed W31EM-D, CH 31 transmitting antenna is a low gain unit with an elevation power gain of 7.0X side mounted with a base approximately 12.2 meters above ground. Because of the low gain, the ERP at angles departing +/- 30 degrees from the horizon is attenuated by a minimum of 0.01 times the main lobe power or 70 watts. For occupational/controlled environment (1.92 mW/cm^2 at 509 MHz) and utilizing Equation 10 of OET Bulletin 65 and allowing for the reduction at steep angles, the required physical separation is 1.22 meters. For general population/uncontrolled environment (0.384 mW/cm^2), the required physical separation is 2.5 meters. Since the base of the antenna is 12.2 meters above ground, the height of the structure limits the possible excessive radiation values to at least 20.3 meters above the ground. Again using Equation 10 of OET Bulletin 65, and using the total RF power corrected for steep angles, the *actual predicted RF level at 2 meters above the ground from the proposed W31EM-D is 36.5 uW/cm^2 or 9.5 % of the total allowable at 509 MHz.*

Thus the W31EM-D CH 20 antenna is calculated to contribute less than 10% of the allowable RFR energy at ground level in the vicinity of the existing tower for the general public/uncontrolled space.

In addition to W31EM-D, W26DS-D is also located with W20CGZ-LD. However, the FCC LMS system shows that facility as Licensed and Silent and there is no actual transmitting equipment for that facility present on the proposed site for W31EM-D and that facility is not considered here.

The proposed facilities for CH 31 operation are outlined in the above Tech Box summary and result in coverage that does not exceed that of the facilities as proposed in the outstanding W31EM-D Construction Permit, File No. BLDTL-0000087122. A current output file from tvStudy is also uploaded.