

TECHNICAL SUMMARY  
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)  
TV STATION WMFD-TV  
MANSFIELD, OHIO  
CHANNEL 12 1.9 KW (ND) 155 m

1. The instant request is for Special Temporary Authority (STA) for WMFD-TV, Mansfield, Ohio, which is licensed (BLCDT-20081112ALJ) for operation on channel 12. The WMFD-TV STA facility will operate on channel 12 at reduced ERP of 1.9 kW with a temporary nondirectional (ND) antenna side-mounted at a height of 112 meters above ground level on the existing tower. There will be no change in the overall structure height of the existing tower (ASRN 1013230).

2. The proposed STA operation has been designed such that there will be no extension of the predicted noise-limited service contour of the STA facility beyond that of the main facility (see Figure 1 attached).

3. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 112 meters above ground level. The total DTV ERP is 1.9 kW (horizontal polarization). A worst-case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation. The calculated power density at a point 2 meters above ground level is  $5.24 \text{ uW/cm}^2$  which is 2.6% of the FCC's recommended limit of  $200 \text{ uW/cm}^2$  for channel 12 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

Figure 1

