

TECHNICAL SUMMARY  
SECOND FILING WINDOW  
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT  
TV STATION WQHS-DT  
CLEVELAND, OHIO  
CHANNEL 36 780 KW (MAX-DA) 353 m

1. The instant application is a second filing window application for WQHS-DT on channel 36 at Cleveland, Ohio. It is proposed to change the directional antenna system, increase the ERP from 360 kW to 780 kW and increase the RCAMSL from 615.5 meters to 616.1 meters. There will be no other changes. There will also be no change in the overall structure height of the existing tower (ASRN 1012992).

2. As demonstrated in the *TVStudy* analysis exhibit, the proposal complies with the FCC's interference protection requirements based on a cell size of 2.0 km and profile resolution of 1.0 points/km.

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 305.5 meters above ground level. The total DTV ERP is 1014 kW (780 kW-horizontal, 234 kW-vertical). A conservative vertical plane relative field value of 0.1 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles below 60 degrees downward, see attached antenna information). The calculated power density at a point 2 meters above ground level is  $3.7 \text{ uW/cm}^2$  which is 0.92% of the FCC's recommended limit of  $403.3 \text{ uW/cm}^2$  for channel 36 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 markets with RFR warning signs. Also, 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.