

TECHNICAL SUMMARY
SECOND FILING WINDOW
APPLICATION FOR CONSTRUCTION PERMIT
TV STATION WPCB-TV
GREENSBURG, PENNSYLVANIA
CHANNEL 28 530 KW (DA) 278 m

1. The instant application is a second filing window application for WPCB-TV on channel 28 at Greensburg, Pennsylvania. It is proposed to increase the authorized ERP from 175 kW to 530 kW. There will be no other changes. There will also be no change in the overall structure height of the existing tower (ASRN 1056234).

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 0.2 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 230.4 meters above ground level. The total DTV ERP is 662.5 kW (530 kW-horizontal, 132.5 kW-vertical). A conservative vertical plane relative field value of 0.15 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 9.5 uW/cm^2 which is 2.6% of the FCC's recommended limit of 371.3 uW/cm^2 for channel 28 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. 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.