

ENVIRONMENTAL AND RADIO FREQUENCY EXPOSURE STATEMENT
MARYLAND PUBLIC BROADCASTING COMMISSION
MODIFICATION OF CONSTRUCTION PERMIT FILE NUMBER 0000025177
WFPT, FREDERICK, MD
GRANTED: CH 21, 35.2 KW-DIRECTIONAL, 148 MTR. AGL
PROPOSED: CH 28, 71.3 KW-DIRECTIONAL, 148 MTR. AGL

The proposed modification of a construction permit for WFPT, file number 0000025177, will not involve any changes to the current tower location or height as stated in Antenna Structure Registration number 1238964 and, therefore, will not result in any environmental impact.

The WFPT facility, operating on channel 28, was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the antenna is located 148 meters above ground level. The proposed operation was evaluated using Far-Field Equation (1) on page 30 of Supplement A to OET Bulletin No. 65 (August 1997). The ERP utilized in the calculations was set to the maximum ERP value of 71.3 kW which is the total power radiated in the horizontal plane. The elevation-plane antenna relative field values ["F" in Equation (1)] were those published by the manufacturer for the specified antenna. The maximum calculated power density at 2 meters (6.6 feet) above ground level is 0.0020 mW/cm² which is 0.11% of the FCC's recommended limit of 1.86 mW/cm² for an occupational/controlled environment and 0.55% of 0.37 mW/cm² for general public/uncontrolled exposure.

The total contribution of all nearby, existing and the proposed facilities, if any, was also evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Total contribution was calculated to be well within the allowable exposure limit for both workers and the general public.

Access to the transmitting tower and any radio frequency generating equipment is restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.