

**ENVIRONMENTAL AND RADIO FREQUENCY EXPOSURE STATEMENT**  
**GUENTER MARKSTEINER**  
**MINOR MODIFICATION OF CONSTRUCTION PERMIT**  
**FCC FILE NUMBER 0000153397**  
**WHDT-LD, BOSTON, MA**  
**CP: CH 4, 3 KW, NON-DIRECTIONAL, 270.2 m AGL**  
**PROPOSED: CH 4, 3 KW, NON-DIRECTIONAL, 181.4 m AGL**

The transmit antenna for the WHDT-LD will be mounted on top of an existing multi-story building with the building having an overall height 191.7 meters AGL with an Antenna Structure Registration number of 1031648. There will be no environmental impact with the antenna being located on the roof of this existing building and antenna support structure.

The WHDT-LD facility, operating on channel 4, 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 181.4 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 6 kW which is the total power radiated in both the horizontal and vertical planes. 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 0.0006 mW/cm<sup>2</sup> which is 0.06% of the FCC's recommended limit of 1.00 mW/cm<sup>2</sup> for an occupational/controlled environment and 0.3% of 0.20 mW/cm<sup>2</sup> for general public/uncontrolled exposure.

The total contribution of all nearby, existing facilities 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 roof top where the transmitting antenna is located and to any radio frequency generating equipment is restricted and will be appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas, 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 station is at reduced power or shut down.