

## Engineering Statement and Environmental Considerations

Application for Construction Permit  
Minor Change  
W20DS-LD  
DTV Channel 20  
Caguas, Puerto Rico

With this application W20DS-LD, facility id 188781, is requesting to relocate to a site 30.657 Km (19.050 miles) south of the present site. That distance is within the allowed 30 miles for LPTV relocation. The proposed operation of W20DS-D will not cause prohibited interference to any LPTV and/or full service TV station.

### Environmental Considerations

The proposed channel 20 operation of W20DS-LD was evaluated for potential radio frequency exposure to workers and general public. Based on a radiation center at 53.7 meters above ground, a maximum relative antenna field of 0.20 between 60 and 90 degrees from horizontal and a total ERP of 10.0kW, the calculated RF exposure at two meters above ground will not exceed  $4.67\mu\text{w}/\text{cm}^2$  or 1.376% of the  $339.33\mu\text{w}/\text{cm}^2$  general population uncontrolled limit applicable to DTV channel 20.

The transmitter site is restricted from access. The tower is not located in flood plain, a wilderness area or in a wildlife preserve that might affect threatened and endangered species or their habitat, it is not located in an Indian religious and/or cultural site. No significant changes in surface features will take place.

In the event that workers are required to climb the tower the W20DS-LD site emission shall be reduced or terminated as necessary to prevent RF radiation exposure above the FCC limits.

As described above the proposed modifications will not have a significant environmental effect.

With this application the Arecibo Observatory at Arecibo, PR is been notified of the proposed modification.

Alejandro Luciano PE  
PO Box 194528  
San Juan, Puerto Rico 00919-4528  
(787)717-6984  
05/13/2018