

## Environmental Considerations

Application for Construction Permit  
Minor Modification  
W08EI-LD  
DTV Channel 8  
Guaynabo, Puerto Rico

Alejandro Luciano licensee of Station W08EI-LD, Guaynabo, Puerto Rico, hereby propose a minor modification to the licensed parameters of W08EI-LD. The proposal will relocate W08EI-LD to a different tower, increase effective radiated power to 3.0 kW, change antenna system and radiation center above ground.

The new tower is located 16 km east of the present licensed site, distance that is within the 30 Miles allowed for LPTV minor modifications.

There is ample overlap between the proposed and presently authorized contours

TVStudy Version 2.2.5 was used for the interference study specifying full service DTV mask, cell size of 1 km and terrain distance increments of 0.11 km.

The proposed minor modification is predicted not to cause interference to any full power, or LPTV Station.

The proposed operation will provide the necessary protection to radio astronomy installations and FCC monitoring station. Concurrently with the filling of this application the Arecibo observatory in Puerto Rico is been notified of the proposed modification.

The proposed channel 8 operation of W08EI-D was evaluated for potential radio frequency exposure to workers and general public. Based on a radiation center at 30.5 meters above ground, a maximum relative antenna field of 0.17 between 60 and 90 degrees from horizontal and a total ERP of 3.0kW, the calculated RF exposure at two meters above ground will not exceed **3.022  $\mu\text{w}/\text{cm}^2$  or 1.51%** of the 200  $\mu\text{w}/\text{cm}^2$  general population uncontrolled limit applicable to DTV channel 8.

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 W08EI-LD 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.

Alejandro Luciano PE  
PO Box 194528  
San Juan, Puerto Rico 00919-4528  
(787)717-6984  
07/15/2018  
aluciano@aluciano.com