

RF Emissions Statement

Hubbard Radio
WILV-FM Chicago IL
Aux Antenna

March 2012

CH 262B

6.9 kW H & V

The proposed WILV-FM aux site will utilize the existing WDRV-FM antenna which is mounted 362 meters above ground on the AON building in downtown Chicago. The antenna is an ERI model 1083-3CP-DA (Type #3) mounted 17 meters above the roof of the building. I have used 17 meters as the COR for the RFR calculations since the building is occupied by the general public just below the roof top. Based on the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, the proposed facility produces a maximum R.F. non-ionization radiation level at a position six feet above the roof (head level - based on the C.O.R. of 17 meters above ground minus 2 meters) of 48.28 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). 48.28 $\mu\text{W}/\text{cm}^2$ is 4.8 percent of the maximum permissible level for a controlled area and 24.14 percent of the maximum permissible level for an uncontrolled area.

The tower will also support WDRV-FM on the same antenna at a height of 362 meters above ground. This antenna will operate with 8.3 kW ERP. WDRV will contribute 58.08 $\mu\text{W}/\text{cm}^2$, which is 5.8 percent of the maximum permissible level for a controlled area and 29.0 percent of the maximum permissible level for an uncontrolled area. Together the facilities will contribute 106.36 $\mu\text{W}/\text{cm}^2$, which is 10.63 percent of the maximum permissible level for a controlled area and 53.18 percent of the maximum permissible level for an uncontrolled area.

The proposed FM station will not increase the amount of RF emissions over that which is permissible by Section 1.1307 of the FCC's Rules.

The applicant will protect workers on the tower or roof area by either reducing ERP or terminating transmission.

Consequently, it appears that the proposed FM Station will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.

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