

**RF Emissions Analysis:**

The applicant proposes to use an authorized and registered tower #1027242. No change is proposed to the height of this tower. There is one other low power FM translator antenna on the tower.

K44FN-D will transmit using a radiated power of 15 kW from an antenna height above ground of 78 meters. The applicant proposes to use the ERI ALP12L2-HSOC-21 . This UHF antenna has a relatively high horizontal gain of 12.64 dB. Using the OET 65 formulas, and a standard vertical elevation field toward the nadir for this type of antenna of 0.2, the facility produces 3.47  $\mu\text{W}$  per  $\text{cm}^2$  at head height, which is 1.01 percent of the maximum for an uncontrolled area.

According to the FCC record for K224CH, the translator has the center of radiation for its single bay Shively 6812, EPA type 6, antenna located 79 meters above ground. This antenna produces 0.0078  $\mu\text{W}$  per  $\text{cm}^2$  at head height and that is 0.00394 percent of the uncontrolled maximum.

Together both antennas produce slightly more than 3.47  $\mu\text{W}$  per  $\text{cm}^2$  which is slightly more than one percent. Consequently, these two antennas are well below the maximum and no further analysis is required.

The applicant will post all appropriate warning signs at the site and will lower the power or terminate transmission as needed to protect workers on the tower.