

**GREG BEST
CONSULTING, INC.**

9223 N. Manning Avenue
Kansas City, MO 64157
816-792-2913

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Federal Communications Commission
Media Bureau
445 12th Street SW
Washington, DC 20554

Dear Sir,

This will serve as the exhibit for the RF Radiation Hazard calculation for this proposed facility.

The RF radiation near the ground (2 meters above ground) can be calculated using the OET-65 formula for broadcast television stations taking into account the following factors

S= power density in watts per square meter

P= total Effective Radiated Power from the antenna

F= field radiated on the axis to the ground level

R= distance to the ground level (actually 2 meters above ground)

Therefore, given the following data:

P= 13.2 kwatts

R=Radiation center above ground level – 2 meters)
= 119.9 meters

F= 0.1 for UHF antennas

The RF radiation near the ground level can be calculated with the following result:

0.31 $\mu\text{watts}/\text{cm}^2$

which is 0.07 % of the general population exposure limit of 431 $\mu\text{w}/\text{cm}^2$

In addition, there are 3 other sources of RF radiation from other antennas authorized for operation at the same location. The calculations from those 3 radiators are presented below and then those amounts and the amount from the proposed facility are summed to get the composite RF exposure for this location.

WSFX (Digital 30)

P= 170.6 kwatts

R=Radiation center above ground level – 2 meters)
= 585 meters

F= 0.1 for UHF antennas

The RF radiation near the ground level can be calculated with the following result:

0.17 $\mu\text{watts}/\text{cm}^2$

which is 0.04 % of the general population exposure limit of 379 $\mu\text{w}/\text{cm}^2$

WECT (Digital 44)

P= 710 kwatts

R=Radiation center above ground level – 2 meters)
= 585 meters

F= 0.1 for UHF antennas

The RF radiation near the ground level can be calculated with the following result:

0.69 $\mu\text{watts}/\text{cm}^2$

which is 0.16 % of the general population exposure limit of 435 $\mu\text{w}/\text{cm}^2$

WWAY (Digital 46)

P= 1000 kwatts

R=Radiation center above ground level – 2 meters)
= 585 meters

F= 0.1 for UHF antennas

The RF radiation near the ground level can be calculated with the following result:

0.98 $\mu\text{watts}/\text{cm}^2$

which is 0.22 % of the general population exposure limit of 443 $\mu\text{w}/\text{cm}^2$

Thus the total RF exposure from the combination of the 4 stations is $0.07 + 0.04 + 0.16 + 0.22 = 0.49\%$ of the General Population Exposure maximum level according to OET-65 and does not constitute an RF Exposure Hazard.

Should you have any questions regarding this information please contact me.

Sincerely,



President