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 for the proposed facility:

P= 0.495 kwatts

R=Radiation center above ground level – 2 meters)
= 4 meters

F= 0.1 for UHF antennas

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

9.85 μwatts/cm^2

which is 2.97 % of the general population exposure limit of 331 μw/cm^2 for this channel. Other radiators exist at this site so additional calculations to determine the maximum exposure are provided.

K49ET (CH49)

P= 1.0 kwatts

R=Radiation center above ground level – 2 meters)
= 4 meters

F= 0.1 for UHF antennas

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

19.9 μwatts/cm^2

which is 4.37 % of the general population exposure limit of 455 μw/cm^2 for this channel.

K38JX-D (CH38)

P= 1.0 kwatts

R=Radiation center above ground level – 2 meters)
= 4 meters

F= 0.1 for UHF antennas

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

19.9 μwatts/cm^2

which is 4.84 % of the general population exposure limit of 411 μw/cm^2 for this channel.

K32FK (CH32 Analog)

P= 1.78 kwatts

R=Radiation center above ground level – 2 meters)
= 4 meters

F= 0.1 for UHF antennas

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

17.7 μwatts/cm^2

which is 4.57 % of the general population exposure limit of 387 μw/cm^2 for this channel.

K30GL (CH30 Analog)

P= 5.1 kwatts

R=Radiation center above ground level – 2 meters)
= 5 meters

F= 0.1 for UHF antennas

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

33.9 μwatts/cm^2

which is 8.94 % of the general population exposure limit of 379 μw/cm^2 for this channel.

To get the maximum RF exposure for this facility, all of the percentages are summed. In this case the maximum RF exposure is 2.97 + 4.37 + 4.84 + 4.57 + 8.94 = 25.69 % of the General Population Exposure rate prescribed by OET-65 so no hazard is identified.

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

Sincerely,

Gregory L. Best, PE

President