# GREG BEST CONSULTING, INC.

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September 3, 2008

Federal Communications Commission Media Bureau 445 12<sup>th</sup> 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 KJEO:

P= 15 kwatts

R=Radiation center above ground level - 2 meters)

= 26 meters

F= 0.1 for UHF antennas

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

7.39 µwatts/cm<sup>2</sup>

which is 1.9 % of the general population exposure limit of 390 μw/cm<sup>2</sup>

In addition to the proposed facilities, there are other sources of RF radiation on that tower. In particular, radiation comes from KFAZ, KJKZ, KBID, and KGMC. The contributions from each source are calculated below and then summed to get the total RF exposure for this tower.

## **KFAZ-CD**

P= 139 watts

R=Radiation center above ground level – 2 meters)

= 26 meters

F= 0.2 for VHF antennas

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

0.24 µwatts/cm<sup>2</sup>

which is 0.12 % of the general population exposure limit of 200 μw/cm<sup>2</sup>

#### **KJKZ-LD**

P= 3.5 kwatts

R=Radiation center above ground level - 2 meters)

= 26 meters

F= 0.1 for UHF antennas

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

1.72 µwatts/cm<sup>2</sup>

which is 0.48 % of the general population exposure limit of 360 μw/cm<sup>2</sup>

## **KBID-LP**

P= 150 kwatts

R=Radiation center above ground level – 2 meters)

= 26 meters

F= 0.1 for UHF antennas

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

36.9 µwatts/cm<sup>2</sup>

which is 9.64 % of the general population exposure limit of 380 μw/cm<sup>2</sup>

## KGMC-DT

P= 335 kwatts

R=Radiation center above ground level – 2 meters)

= 29 meters

F= 0.1 for UHF antennas

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

132 µwatts/cm<sup>2</sup>

which is 30.7 % of the general population exposure limit of 430 μw/cm<sup>2</sup>

## **TOTAL RF EXPOSURE**

The total RF exposure can be obtained by summing the individual percentages. Thus the total RF exposure predicted is 1.9 + 0.12 + 0.48 + 9.64 + 30.7 = 42.84% of the General Population Exposure limit. This is 8.59% of the Occupational Controlled limit according to OET-65.

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

Sincerely,

Steegony 2 Best PE President