

## **R.F. RADIATION COMPLIANCE STATEMENT**

Wisconsin ECB

**W22CI, 1.35 kW ERP**

January 2008

The calculations below were derived from the formulas in the OET #65 bulletins as updated. The proposed 1.35 kW facility will transmit. Using a worst case calculation this station will produce 2.06 microwatts per square centimeter which for a controlled area amounts to 0.119 percent of the maximum of 1,736.7 microwatts per square centimeter. This percentage increases to 0.593 percent for an uncontrolled environment. OET #65 provides for the application of vertical field attenuation toward the nadir of 10%. (Since a high gain antenna will be used, this reduces the RF emission level at the base of the tower to 0.021 microwatts per square centimeter which is 0.0011 percent for a controlled area and 0.006 percent for an uncontrolled area.)

### ***Other emitters:***

A search by tower registration number of the ULS database found several licenses, WPUY436, KNDM577, WNRD866 and WQGZ890. Researching these licenses, we find that all are exempt from further study usually because of their ERP or antenna height above ground.

The tower is also the location of U.S. Weather transmitter WWG86. This station transmits on 162.5 MHz with 7.78 kW of power radiated by its vertically polarized 8-bay antenna which is 131.1 meters above ground. Using the OET we calculate that this station contributes 6.09 microwatts per square centimeter which is 3.05 percent for an uncontrolled area and 0.61 percent for a controlled area.

Together, under worst case OET #65, the emitters on this tower produce 3.64 percent of the maximum for an uncontrolled environment and 0.73 percent for a controlled environment.

The State of Wisconsin ECB will reduce power to safe levels or terminate transmissions in the event a worker must go on to the tower and be at a distance from the antenna such that over exposure would result.

Consequently, it appears that the proposed transmitter site will be in full compliance with the Commission's human exposure to radio frequency electromagnetic field rules and regulations.

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