

Exhibit #22

ENVIRONMENTAL PROTECTION ACT

Wichita State University
KMUW
Wichita, Kansas
Auxiliary Application

August 2008

CH 206C1

90 kW H & V

The applicant proposes the use of existing registered tower ASR #1244913, built in 2004. On its application for antenna structure registration, the tower owner, NVT Wichita, LLC answered "No" to the "NEPA" question. The applicant assumes that the necessary environmental evaluation was completed. No further testing was deemed necessary. This tower is surrounded by a locked fence which is posted with RF warning signs and contact numbers in case of emergency. The area is therefore controlled.

The proposed 6-bay antenna will be energized so that it radiates 90 kW in both the horizontal and vertical planes, from a height above ground of 122.8 meters. Based on the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, the existing facility produces a worst-case maximum R.F. non-ionization radiation level at a position six feet above the tower base (head level - based on the C.O.R. of 122.8 meters above ground minus 2 meters) of 412.11 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). This figure is without regard for the antenna's vertical elevation field value toward the nadir, which will cause a reduction in the predicted "worst case" calculations. 412.11 $\mu\text{W}/\text{cm}^2$ is 41.21 percent of the maximum standard value for the frequency in use for this controlled area.

Since "worst case" calculations were used, and since it is well known that the actual RF power density level is considerably reduced at vertical angles toward the nadir the applicant is confident that actual RF contribution of this antenna will be less than is predicted here.

There is one other source of RF emissions on the tower. DTV station KSNW-DT operates with 891 kW ERP on channel 45 from an antenna height above ground of 312 meters. Assuming the use of a UHF high-gain antenna with a relative vertical elevation field value of 0.1 at -90° and using the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, and then by applying a combination of the element and array pattern as defined in E.P.A. study PB85-245868 ("Engineering

Assessment of the Potential Impact of the Federal Radiation Protection Guidance on the AM, FM and TV Broadcast Services”), the level of RF emissions at 2 meters above ground is $3.1 \mu\text{W}/\text{cm}^2$ or 0.14 percent of the maximum level of $2196.7 \mu\text{W}/\text{cm}^2$ for a controlled area. The total contribution for all antennas is $415.21 \mu\text{W}/\text{cm}^2$, or 41.35% of the maximum for a controlled area.

The applicant will protect workers on the tower by either reducing ERP or terminating transmission. Consequently, it appears that the proposed temporary FM station will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.