

## Environmental Statement

The proposed site is not in an officially designated wilderness area, wildlife preserve, flood plain, or near a site that is either listed or eligible for listing in the National Register of Historic Places. The proposed construction will not adversely affect any listed or proposed threatened or endangered species or their critical habitats, or any sites significant to Native American Religious practice, and will not involve any significant change in surface features. The applicant does not propose to light the antenna support structure with high intensity white lighting.

The proposed facility's antennas are to be side-mounted on an existing 105 meters AGL guyed tower. The closest significant rise in terrain is 609 meters from the proposed site. The closest residence is 1.7 km from the proposed site at an elevation 244 meters lower than the base of the tower. There is one other broadcast emitter of radio frequency energy (KLWS-FM) top-mounted on the same tower at this site. Access is restricted to maintenance personnel only by a locked fence surrounding the site at ground level, 15 meters below the antennas.

On the same tower is KLWS-FM top mounted 4-bay Jampro antenna with 7.9 kW ERP at 97 m AGL. Page three of this Exhibit is a printout from the Commission's FM Model for Windows software for the antenna. As shown, at ground level RF exposure will be less than 1  $\mu\text{W}/\text{cm}^2$ , or 0.5% of the general population/uncontrolled exposure limit of 200  $\mu\text{W}/\text{cm}^2$  and 0.1% of the occupational/controlled exposure limit of 1,000  $\mu\text{W}/\text{cm}^2$  for FM broadcast frequencies.

By reference to Table 1 of the Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, Evaluating Compliance With FCC Guidelines For Human Exposure to Radio Frequency Electromagnetic Fields, using equation #9, the minimum required distance of the radiation center above ground level for operation at 0.082 kW ERP (0.041 kW horizontal and 0.041 kW vertical) with an omnidirectional antenna with no relative field factor for occupational/controlled exposure is 1.7 meters, assuming worst case conditions. At ground level RF exposure will be 6  $\mu\text{W}/\text{cm}^2$ , or 3.0% of the general population/uncontrolled exposure limit of 200  $\mu\text{W}/\text{cm}^2$  and 0.6% of the occupational/controlled exposure limit of 1,000  $\mu\text{W}/\text{cm}^2$  for FM broadcast frequencies. The actual antennas proposed will be Yagis which will have lower downward radiation figures than the omnidirectional antenna used for these calculations.

The total worst case MPE at the base of the tower will be 3.5% of the general population/uncontrolled limit and only 0.7% of the occupational/controlled limit.

This is *prima facie* evidence of compliance with the MPE requirements in the frequency ranges in use at this site, as regards to general population/uncontrolled and occupational exposure at or near ground levels. Because of the large margin of safety, the applicant does not believe that post construction measurements of the radio frequency power density are necessary.

The applicant is cognizant of its responsibility to protect those workers whose duties require that they be in the vicinity of the antenna from exposure to radio frequency fields in excess of those outlined above. To that end, signage is attached to the base of the antenna support structure and fence warning all workers of the potential for harmful exposure and directing them to contact the responsible person at the proposed broadcast station. That person will ascertain whether the worker will be in areas where there

is an exposure hazard, and if so, arrange to shut down the transmitter. It will be assumed that an exposure hazard may exist on the antenna support structure at elevations above 13 meters, AGL.

For these reasons, the applicant believes that a Commission grant of this application would not have a significant environmental impact.