

**KQHE(FM), Fairbanks, AK, FCC Facility ID#190428  
License Application Covering Construction Permit BNPH-20120529AFH  
Statement Regarding RF Exposure**

## **Introduction**

The Construction Permit (CP) includes a requirement for a field RF exposure survey, apparently based on a statement in the application indicating that the worst case antenna would exceed the 200uW/cm<sup>2</sup> for casual / uncontrolled exposure. Applicant submits this evaluation of the situation in lieu of the survey to show that exposure levels will be well under the limit, and to establish the fact that the site is inaccessible to the general public.

## **RF Exposure Levels**

This would be the only FM station that would exist at this site. Applicant is utilizing a Shively 6813, circularly polarized, 4 bay, full-wave antenna. Centered at 22 m AGL. The ERP IS 2.0kW (H) + 2.0kW (V), Antenna Gain is 3.26 with a Numerical Gain of 2.11. Using the calculation  $2.11(4,000)/22^2 = 8.67\text{uW/cm}^2$ .  $8.67/200 \times 100 = 4.4\%$  of the allowable limit for casual/ uncontrolled exposure in the near field.

## **Site Access**

The site is inaccessible to the general public. It is on high ground, privately owned. It has a locked, 8 foot fence around the parameter with 1 foot of barbed wire at the top. Area is posted against trespassing and provided with appropriate safety signage. Only safety trained personal are authorized at this facility. This antenna site is approximately 7 miles from the edge of nearest town and accessible only by a dirt road.

## **Conclusion**

This site is inaccessible to the public, and even if someone were to stray into the area, the RF exposure levels are well below the 200uW/cm<sup>2</sup> limit for casual/uncontrolled exposure. Applicant submits that, given these facts, a field RF exposure study should not be required. Applicant also submits that if at any time power needs to be reduced or ceased as neccessary for the safety of persons having access to site, applicant will comply.

