

KWSU Minor Modification

Attachment 3, Environmental Statement

Washington State University

The site, Kamiak Butte, is located on an unpaved private road 9 miles north of Pullman, WA. The transmitter is located in a locked building. The tower and transmitter building are within an enclosed, secured fenced area, with no access available to the general public. At its closest point, the chain link fence is 6.1 m (20 ft) from the tower base. Additionally, there is a locked gate where the private road to the site accesses the county road, approximately 1 mile from the site. Signs advising possible radiation hazard are posted within and about the 6ft. chain link fenced area. Access to the fenced area and to the transmitter building is available only to authorized technical and maintenance personnel. There is only one significant rise in terrain of 30 meters located 650 meters to the East, which is tree covered and unpopulated.

The tower is not located in an officially designated wilderness area, nor is it in an officially designated wildlife preserve. It is also not located near any site listed in the National Register of Historic Places and is not near an Indian religious site. High intensity strobe lighting is not proposed for the tower.

Using elevation data for the antenna and OET Bulletin 65¹, Equation (10), maximum exposure 2 meters above ground level was determined and is plotted in Figure 1. The Ampex BR12-S antenna is horizontally polarized. This provides a total power for the calculations of 35kW. The greatest exposure occurs at a distance of 39 meters from the base of the tower, and is $0.495\mu\text{W}/\text{cm}^2$. This is 0.25% of the general population limit of $200\mu\text{W}/\text{cm}^2$ at the center frequency of 195MHz. Therefore, the proposed facility is not expected to result in RF exposure to the general public that would exceed the Commission's standards, and any increase in exposure should be considered de-minimus.

The applicant is cognizant of their 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 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.

¹ OET Bulletin 65, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", Edition 97-1, August 1997

Washington State University has published guidelines for all sites, which includes procedures that protect employees from high levels of radiation. All employees required to work in hazardous conditions are thoroughly trained in RF hazard prevention.

