

Comprehensive Engineering Exhibit
KDZA-FM Facility ID 40848
Minor Modification BPH-20030602ACT
August 27, 2007

By this application it is sought to modify the construction permit of KDZA-FM to specify a location upon different tower. The location authorized in construction permit BPH-20030601ACT is no longer usable; this requested modification is to utilize a tower approximately 200 meters from the previously specified tower.

The proposed KDZA-FM antenna is to be directional and will be located 52 meters above ground level upon a tower which does not require registration. This tower has an overall height of 60.7 meters, with a base elevation of 2876 meters above mean sea level, located at 38-44-41.0 N 104-51-46.0 W.

From this location KDZA-FM is fully spaced as a Class C0 facility in accordance with Section 73.207 to all known facilities, applications and allocations, with the exception of KPAW, Fort Collins, CO for which a contingent application was filed and granted construction permit BPH-20030602ACS. This application requests processing pursuant to Section 73.215 with respect to KPAW. Prohibited contour overlap will be prevented by use of a directional antenna as well as a reduction in effective radiated power. A map below demonstrates this compliance.

The proposed facility is at a Height Above Average Terrain (HAAT) 224 meters greater than maximum for Class C0, the web tool "FMpower" was utilized to determine the equivalent maximum power of 33 kW

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is an EPA type 3, 6- bay, 0.5 wave spaced "Roto Tiller" style antenna, mounted with its center of radiation 52 meters above ground level. This proposal will operate with an effective radiated power of 32 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 300 meters from the base of the tower, this proposal will contribute worst case 9.64 microwatts per square centimeter, or 0.96 percent of the allowable ANSI limit for controlled exposure, and 4.8 percent of the allowable limit for uncontrolled exposure. This figure is less than 5% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

