

KAOX Environmental Protection Act Study

The proposed FM Facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (OET Bulletin 65, Second Edition 97-01, August, 1997). The Commissions FM Model Power Density Prediction program was employed to determine the Field.

KAOX utilizes an SWR FM10/8 "double V" antenna. Using this "Double V" EPA Type 2 antenna with 8 sections with 1 wavelength between sections, and the AGL height and ERP proposed in the instant KAOX application (13.5 kW at a CORAGL of 38 meters), the highest predicted power density 2 meters above ground is less than 35% of the Uncontrolled Standard with a Power Density of 69.3 microwatts per square centimeter at a location 9 meters away from the base of the tower.

It should be noted that radio station KDWY (FM) 287C2 Diamondville, WY, is co-located with the instant KAOX application. KDWY utilizes an SWR FM 10/6 "double V" antenna Using the "double V" EPA Type 2 antenna with 6 sections with .5 wavelengths between sections, an ERP of 16 kW and a radiation center of 19 meters above ground level, the highest predicted power density 2 meters above ground is less than 22% of the Uncontrolled Standard with a Power Density of 42.9 microwatts per square centimeter at a location 30 meters away from the base of the tower.

Therefore, the combined predicted power density 2 meters above the ground is less than 57% of the Uncontrolled Standard with a combined Power Density of 112.2 microwatts per square centimeter. There are no other emitters located within 100 meters of the KAOX/KDWY tower.

Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

The proposal would not be subject to environmental processing in accordance with Section 1.1306. The proposed construction would not constitute a major action as defined in the Commission's Rules and Regulations. During operation, the facility will produce no chemical or significant thermal pollution, and no ionizing radiation will be generated. Areas of high intensity radiofrequency fields will be confined to the immediate area of the transmitting antenna, far above the ground and away from any human and wildlife protection. The area is not officially designated as a wilderness area or wildlife preserve and is not pending consideration. The area has no significant value in American history, architecture, archaeology, or culture, which is listed in the Register of Historic Places, and it is not eligible for listing. It is not recognized either nationally or locally for special scenic or recreational value.