

ENVIRONMENTAL STATEMENT
K281BW, CHEYENNE, WY, CH. 281D
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FCC FORM 349
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The applicant proposes mounting a new antenna on an existing 55 meter registered tower (1008318). The proposed Center of Radiation will be 21 meters Above Ground Level. The ERP will be 0.12 kilowatts (120 watts) with horizontal and vertical polarization. A one bay Nicom BKG 77, directional antenna is proposed. Calculations were made using FM Model for Windows, version 2.10. The proposed antenna Center of Radiation, above ground, was reduced by 2 meters to allow for the average height of a human on the ground. FM Model predicts a peak exposure of $13.3 \mu\text{w}/\text{cm}^2$ at a distance of 6 meters from the base of the tower. This represents 6.7 % of the allowable Maximum Permissible Exposure ("MPE") of $200 \mu\text{w}/\text{cm}^2$ for uncontrolled environments at any point on the ground. Since the Nicom antenna is not specifically listed in the FM Model program, the worse case "Type 1" antenna was used for the study.

There are three other users at this site, KRAN Warren Air Force Base, WY, facility ID 16601, K245BP(CP) Cheyenne, WY, facility ID 158012, and K296FZ Cheyenne, WY, facility ID 157711. From FCC records, KRAN produces a worse case peak exposure of $76.3 \mu\text{w}/\text{cm}^2$ at any point on the ground. K296FZ produces a worse case peak exposure of $10.1309 \mu\text{w}/\text{cm}^2$ at any point on the ground. K245BP would produce a worse case peak exposure of $23.75 \mu\text{w}/\text{cm}^2$ at any point on the ground. Even if all four of these facilities were directly added together, the worse case peak exposure on the ground would be $123.5 \mu\text{w}/\text{cm}^2$ at any point on the ground, or still well below the $200 \mu\text{w}/\text{cm}^2$ limit for un-controlled areas.

The applicant will ensure that the public access to the tower is restricted by fencing, anti-climb devices or other appropriate measures. The site will be posted with RF warning signs. If climbing of the tower by authorized personnel becomes necessary, transmitter power will be reduced to safe operating levels, or transmission even terminated, as necessary as not to exceed the RF exposure limits to tower workers. The licensee will cooperate with other users at the site with the scheduling of such tower or antenna maintenance.

No modification of the existing tower is proposed, other than the proposed side mounting of the antenna system and addition of a transmission line. The tower was constructed prior to March 16, 2001. The National Programmatic Agreement generally allows such a collocation without consultation or review under Section 106 and Subpart B of 36 CFR §800. The applicant believes that it is in full compliance with the Agreement, and that no further study is required.