

ENVIRONMENTAL STATEMENT
K281DD CHEYENNE, WY, CH. 281D
MOUNTAIN COMMUNITY TRANSLATORS, LLC
FCC FORM 349
JANUARY 2019

The applicant proposes to mount its current antenna on an existing 31 meter registered tower, 1273503. The proposed Center of Radiation will be 30 meters Above Ground Level. A Nicom BKG-77 two bay non-directional antenna with 0.85 wavelength spacing between the bays is being proposed, with a maximum Effective Radiated Power of 250 watts with circular polarization. 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 $9.58 \mu\text{w}/\text{cm}^2$ at a distance of 5 meters from the base of the tower. This represents 4.8% of the allowable Maximum Permissible Exposure ("MPE") of $200 \mu\text{w}/\text{cm}^2$ for uncontrolled environments at any point on the ground.

The tower is utilized by K266CC Cheyenne, WY, facility ID 71836. From FCC records the K266CC worse case power density is $9.495 \mu\text{w}/\text{cm}^2$ at a distance of 6 meters. The tower is utilized by K246CI Cheyenne, WY, facility ID 158012. From FCC records the K246CI worse case power density is $30.8 \mu\text{w}/\text{cm}^2$ at a distance of 15.6 meters. The tower is utilized by K248CZ Cheyenne, WY, facility ID 148078. From FCC records the K248CZ worse case power density is $10.93 \mu\text{w}/\text{cm}^2$ at a distance of 4 meters. The tower is utilized by KWYG-LP Cheyenne, WY, facility ID 196034. From FCC records the KWYG-LP worse case power density is $6.65 \mu\text{w}/\text{cm}^2$ at a distance of 6 meters. Even if all

these five power densities were directly added, it would add up to $67.455 \mu\text{w}/\text{cm}^2$, or still be well below the maximum allowable uncontrolled limit.

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.