

ENVIRONMENTAL STATEMENT
FCC FORM 301
MINOR MODIFICATION OF CONSTRUCTION PERMIT APPLICATION
KMLD CASPER, WYOMING, CH. 233C0
MOUNT RUSHMORE BROADCASTING, INC.
JUNE 2018

The applicant proposes mounting a new antenna on an existing 104 meter tower, with FCC registration number 1001086. The proposed Center of Radiation will be 99 meters Above Ground Level. The ERP will be 18 kilowatts (18,000 watts) circular polarization. A Shively 6810 series 3 bay antenna with 0.5 (half) wavelength spacing 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 $5.28 \mu\text{w}/\text{cm}^2$ at a distance of 284 meters from the base of the tower. This represents 2.6 % of the allowable Maximum Permissible Exposure ("MPE") of $200 \mu\text{w}/\text{cm}^2$ for uncontrolled environments at any point on the ground.

This site is also utilized by KASS(FM) Casper, Wyoming, FCC facility ID 43477, KHOC(FM) Casper, Wyoming, FCC facility ID 15925, and KQLT(FM) Casper, Wyoming, FCC facility ID 47878. An FM Model study for each of these three FM's produced the following results. KASS(FM) $132.88 \mu\text{w}/\text{cm}^2$ at 14 meters, KHOC(FM) $25.71 \mu\text{w}/\text{cm}^2$ at 14 meters, and KQLT(FM) $56.48 \mu\text{w}/\text{cm}^2$. If all four worse case power density calculations were added together, the maximum density at any point on the ground would be $220.35 \mu\text{w}/\text{cm}^2$, which would be slightly over the un-controller limit. However, it is highly un-likely that these combined predicted field strengths would occur at the same locations on the ground because of the different antenna heights and various

antenna models. KMLD(FM) will make power density readings around the affected area to insure compliance with RF density requirements before program tests begin and submit the results to the Commission with its 302-FM license application.

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.