

ENVIRONMENTAL STATEMENT
K294CH FOUNTAIN, CO, CH. 297D
TIMOTHY C. CUTFORTH
FCC FORM 349
DECEMBER 2014

The applicant proposes mounting a new antenna on an existing 20 meter non-registered tower. The proposed Center of Radiation will be 11 meters Above Ground Level. The ERP will be 0.25 kilowatts (250 watts) watts with horizontal and vertical polarization. A DB APFM/78FM directional panel antenna system 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 123.33 $\mu\text{w}/\text{cm}^2$ at a distance of 2 meters from the base of the tower. This represents 61.6 % of the allowable Maximum Permissible Exposure (“MPE”) of 200 $\mu\text{w}/\text{cm}^2$ for uncontrolled environments at any point on the ground. Since the DB antenna is not specifically listed in the FM Model program, the worse case “Type 1” antenna was used for the study.

This site is also utilized by K253AH Colorado Springs, CO, facility ID 139087. From FCC records this translator produces a worse case power density of 42.75 $\mu\text{w}/\text{cm}^2$ at 4 meters from the tower base. Even if these two facilities are directed added, the maximum power density would be 166.08, or still well below the 200 $\mu\text{w}/\text{cm}^2$ limit at any point on the ground.

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.