

ENVIRONMENTAL STATEMENT
NEW FM TRANSLATOR, BRECKENRIDGE, CO, CH. 280D
MITCHELL A. BERANEK
FCC FORM 349
AUGUST 2013

The applicant proposes mounting a new antenna on an existing 52 meter non-registered tower. The proposed Center of Radiation will be 39 meters Above Ground Level. The ERP will be 0.023 kilowatts (23 watts) with vertical and horizontal polarization. A Nicom BKG77, one bay 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 $0.676 \mu\text{w}/\text{cm}^2$ at a distance of 10 meters from the base of the tower. This represents 0.3% 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.

Since the proposed operation is less than 100 watts, it should be categorically exempt from environmental processing.

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.