

ENVIRONMENTAL STATEMENT
K243BN LAVEEN, AZ, CH. 243D
MOUNTAIN COMMUNITY TRANSLATORS, LLC
MINOR CHANGE APPLICATION
OCTOBER 2020

The applicant proposes replacing an antenna on an existing 24 meter un-registered tower. The proposed Center of Radiation is 24 meters Above Ground Level. A single yagi type antenna with circular polarization, Nicom BLK-5 directional antenna system with 0.003 KW ERP (3 watts) is proposed. The antenna replaces the current licensed antenna for K243BN at the same height on the tower. K243BN is also proposing to reduce its ERP from the current 250 watts to 3 watts. 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 $0.249 \mu\text{w}/\text{cm}^2$ at a distance of 6 meters from the base of the tower. This represents 0.12 % 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.

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.