

ENVIRONMENTAL STATEMENT
WILQ WILLIAMSPORT, PA, CH. 286B
BACKYARD BROADCASTING OF PENNSYLVANIA, LLC
MINOR CHANGE APPLICATION
SEPTEMBER 2021

The applicant proposes to install a new antenna on an existing 91.4 meter registered tower, FCC # 1025012. The proposed Center of Radiation will be 89.1 meters Above Ground Level. A four bay, with half wavelength spacing (0.5), with circular polarization, Nicom BKG-77/4M, antenna is proposed, with a maximum Effective Radiated Power of 6,800 watts (6.8kw). 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 $2.01 \mu\text{W}/\text{cm}^2$ at a distance of 7.18 meters from the base of the tower. This represents 1.0 % of the allowable Maximum Permissible Exposure (“MPE”) of $200 \mu\text{W}/\text{cm}^2$ for uncontrolled environments at any point on the ground.

While the site is current empty, the licensee has Construction Permits to relocate to other facilities to this same site, WBZD-FM Muncy, PA facility ID 72793, and W269DX Williamsport, PA, facility ID 106674. From the CP records, the worst case peak exposure for WBZD-FM will be $1.466 \mu\text{W}/\text{cm}^2$ and W269DX will be $1.16 \mu\text{W}/\text{cm}^2$. Thus, even if all three power densities are added together the total would be $4.636 \mu\text{W}/\text{cm}^2$ or still well below the un-controlled 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.