

# T Z SAWYER TECHNICAL CONSULTANTS

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## ENVIRONMENTAL CONSIDERATIONS

### WJLP - WNWT-LD SHARED FACILITIES CHANNEL 3 DTV 6.96 KW ERP H & V 4 TIMES SQUARE TRANSMISSION FACILITY

The facility was evaluated in terms of potential radiofrequency radiation exposure at roof-top level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields."

Power density contribution from the proposed operation was computed using the appropriate equations of the OET Bulletin 65. The maximum radiated power is 6.96 kilowatts (13.92 kilowatts H & V combined). Using a "worst-case" relative field pattern of 0.25 for all values 30 degrees and greater below the horizon, the power density was computed at a level of 2 meters above the building's rooftop to be 0.0009 mW/cm<sup>2</sup> or 0.01% of the recommended limit of 1.0 mW/cm<sup>2</sup> for a controlled area, and 0.45% of the recommended limit of 0.2 mW/cm<sup>2</sup> for an uncontrolled area. As this level is well below 1% for both controlled and uncontrolled areas, no further study is required.

Therefore, at the building rooftop level (and 2 meters above), at the base of the supporting structure the potential for radiofrequency radiation exposure will be well within the FCC guidelines.

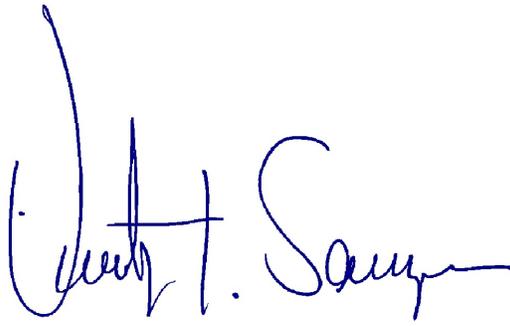
The antenna is 113.6 meters above the building rooftop (a controlled access area). The "worst-case" minimum distance from the antenna using a relative field value of 1.0 at all depression angles below the horizon was computed to be 13.6 meters for a controlled area and 30.5 meters for an uncontrolled area. As the safe-buffer zone distances are 100 meters for a controlled area and 83.1 meters for an uncontrolled area above the building rooftop no exposure in excess of the guidelines to workers or the public is predicted to occur from this proposal on the building rooftop. There are no public access points within the area of concern.

The permittee/licensee/applicant will coordinate with other users of the site and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of the FCC guidelines.

Suitable warning signs are posted, If work is required on the supporting pole, the power to the antenna will be terminated or reduced as required. The applicant will fully comply with the provisions contained within the OET bulletin.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

May 15, 2019

A handwritten signature in blue ink, appearing to read "Timothy Z. Sawyer". The signature is fluid and cursive, with a large initial "T" and "S".

Timothy Z. Sawyer, Consulting Engineer

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