

ARX Wireless
110 Washington Avenue
North Haven, CT 06473
ATTN: Mr. Keith Coppins

August 13, 2022

**RE: NOISE LETTER
PROPOSED TELECOMMUNICATIONS FACILITY
APX WIRELESS SITE: CHESTER DPW
CO HWY 45, TOWN OF CHESTER, ORANGE COUNTY, NY 10950
TECTONIC W.O. 11137.002**

Dear Mr. Coppins:

Tectonic Engineering was asked to provide a noise analysis/comparison letter for the proposed Verizon Wireless emergency backup power generator that is part of the above referenced project. We obtained noise specifications from the manufacturer MTU for their proposed standard 50kW outdoor diesel fueled AC generator including a sound-attenuating enclosure. The average sound pressure level for the generator is 65.0 dBA at a reference distance of 23.0 feet.

We understand that consistent with normal Verizon Wireless procedure, absent exigent circumstances, the generator is expected to run once every two weeks during daytime hours for approximately 45 minutes for routine testing purposes.

Sound attenuation for a point source (stationary source) equals a sound level reduction of 6 dBA per doubling of distance between a noise source and a receptor when there are no obstructions present between the two elements. Using this information we can deduce the following noise levels that one would anticipate when the equipment is in use:

- The nearest property line to the generator is located approximately 122-feet away to the west; the anticipated noise level at this point would be approximately 51.0 dBA.
- The nearest adjoining residence to the generator is located approximately 450-feet away to the south; the anticipated noise level at this point would be approximately 39.7 dBA.

For comparison purposes, approximate decibel levels for normal conversation equal 60 dBA, for vehicular traffic equal 85 dBA, and for a running lawnmower equal 107 dBA. Based on the calculated values for the equipment, the anticipated noise levels at the nearest property line and residence will be much lower than that experienced for normal conversation. It should be noted that the calculations above do not take any obstructions into account. Since the existing land cover surrounding the facility is completely wooded, the generator will be essentially inaudible from any nearby receptors.

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Equal Opportunity Employer

Should you have any questions, please do not hesitate to contact the undersigned at (518) 783-1630.

Sincerely,
Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C.

A handwritten signature in blue ink, appearing to read 'S. Matthews', with a stylized flourish extending to the right.

Steven M. Matthews, PE
Director of Engineering