

**ORDINANCE NO. \_\_\_\_ OF 2023**

**AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF SHREVEPORT TO ADD AN ARTICLE XII TO CHAPTER 78, RELATIVE TO NOISE MEASUREMENT PROCEDURES, AND TO OTHERWISE PROVIDE WITH RESPECT THERETO**

**BY: COUNCILMAN**

**BE IT ORDAINED** by the City Council of the City of Shreveport in due, regular and legal session convened that Chapter 78, Article XII, of the Code of Ordinances is hereby enacted to read as follows:

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**ARTICLE XII. NOISE MEASUREMENT PROCEDURE**

**DIVISION 1. GENERALLY**

**Secs. 78-514. Procedures for measuring noise.**

- (a) Testing shall be conducted in accordance with methods set forth hereinafter. Alternative methods, procedures, or instruments may be used subject to approval and conditions prescribed by the NCO. The NCO may itself employ such alternatives when warranted by test conditions or other circumstances. Acceptable measurement methods [are as follows].
- (b) Measurements shall be conducted by the NCO or other qualified professional in environmental noise in accordance with methods set forth hereinafter.
- (c) Operating conditions of the noise source during the measurement will vary based on the noise source of interest. Insofar as practicable, measurements shall be conducted under representative conditions to those that initiated the investigation. Relevant operational conditions may include but are not limited to typical, design, maximum, and fluctuating conditions.
- (d) If short-term background sounds increase the monitored sound levels, the measurements should be postponed until these extraneous sounds do not increase the monitored sound levels of interest or these periods of noise should be removed during post-processing of the measurement data.
- (e) General requirements. The investigator shall, to the extent practicable, conduct all measurements in accordance with the following procedures and report related information:
  - (1) Identify all measurement equipment by manufacturer, model number, and serial number.
  - (2) Report the date, day of week, and time of day.
  - (3) Identify all sources contributing sound to the point of measurement—characterize and localize sound sources.
  - (4) Conduct measurements at or within the property line of any affected person or entity. Report the distance and direction to the noise source in question.
    - a. For noise due to temporary activities, measurements shall be conducted at least ten feet from the receptor on the side of the receptor where the sound levels are most representative of the noise source in question.

- b. For noise due to lasting activities, measurements shall be conducted at or within the property line as appropriate for the noise source in question.
- (5) The measurement session should consist of three individual measurement periods. A minimum measurement period should be sufficient to ensure that the sound levels measured are typical of the source of interest but in no event should the duration of the measurement period be less than five minutes, unless the duration or duty cycle of the sound source under observation is less than five minutes.
- (6) Background sound level measurements intended for the purpose of planning or permitting shall be conducted for a minimum measurement period of three consecutive days (72 consecutive hours) and include at least 24 hours during either Saturday or Sunday. Measurements must be processed to eliminate the contributions of short-term background sounds as identified in this section.
- (7) Calibrate the measuring device before and after each series of readings. Report calibration results.
- (8) Report environmental conditions during measurements including wind speed and direction.
- (9) Describe relevant source operational condition(s).
- (10) Outdoor sound measurements made under the following conditions shall not be used to determine compliance:
  - a. Measurements without a wind screen properly attached to the measuring device.
  - b. Measurements when the wind speed exceeds 11 miles per hour (including gusts).
  - c. Measurements under any condition which allows the measuring device to become wet, such as rain, snow, or condensation.
  - d. When the ambient temperature is below 14 degrees F (-10 degrees C) or above 122 degrees F (50 degrees C).
- (11) Background sound level measurement values to be reported:
  - a. For the purpose of compliance, report the A-weighted, time-interval equivalent 15 minute sound pressure level,  $L_{Aeq15min}$ , measured in accordance with this section.
  - b. For the purpose of planning or permitting, report the A-weighted, time-interval equivalent three day sound pressure level,  $L_{Aeq3day}$ , after the measurements have been processed for removal of short-term background sounds and measured in accordance with this section.
- (f) Measurement instrumentation.
  - (1) The sound level meter must be able to measure the continuous energy equivalent sound level of steady, intermittent, and fluctuating sources. Any instrument used for sound pressure level measurement must be able to measure A-weighted sound pressure levels with a slow, exponential time-averaging setting and meet requirements for a Type 1 sound level meter as specified in the American National Standards Institute specifications for sound level meters (ANSI S1.4-1983 (R2006)), or the latest approved revision thereof.
  - (2) To investigate impulsive noise limits, the sound level meter must be able to measure A-weighted sound pressure levels with a fast, exponential time-averaging setting.

- (3) To investigate the presence of tonal components, the sound level meter must be able to measure 1/3 octave band sound pressure levels. The meter must meet the minimum technical specification in the American National Standards Institute (ANSI) publication S1.11-2004 or latest revision for Class 2 filter sets.
- (4) The calibrator must meet the requirements for ANSI S1.40-2006 or latest revision.
- (5) The sound level meter must be recalibrated at least every two years and the field calibrator must be recalibrated at least once per year by the manufacturer or by a laboratory accredited for such calibrations by either the American Association for Laboratory Accreditation or the National Institute of Standards and Technology. A copy of written documentation of such recalibration, in a form approved by the city, shall be kept with the equipment to which it refers.

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**BE IT FURTHER ORDAINED** that if any provision or item of this Ordinance or the application thereof is held invalid, such invalidity shall not affect other provisions, items or applications of this Ordinance which can be given affect without the invalid provisions, items or applications and to this end the provisions of this Ordinance are hereby declared severable.

**BE IT FURTHER ORDAINED** that all Ordinances or parts thereof in conflict herewith are hereby repealed.

**BE IT FURTHER ORDAINED** that this Ordinance shall become effective in accordance with the provisions of [Shreveport City Charter Section 4.23](#).

**THUS DONE AND ORDAINED** by the City Council of the City of Shreveport, Louisiana.

**APPROVED AS TO LEGAL FORM:**

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City Attorney's Office