

## ARTICLE 5: PERFORMANCE STANDARDS

### Section 5.20. NOISE LIMITS

- ~~A. The maximum permissible sound pressure level of any continuous, regular or frequent or intermittent source of sound produced by any activity shall be limited by the time period and land use which it abuts listed below. Sound levels shall be measured at least four (4') feet above ground at the property boundary of the source.~~

Sound Pressure Level Limits Using the Sound Equivalent Level of One Minute (leg 1) (Measured in dB(a) Scale)	
<del>7 a.m. – 7 p.m.</del>	<del>7 p.m. – 7 a.m.</del>
<del>55</del>	<del>45</del>

- ~~B. Noise shall be measured by a meter set on the A-weighted response scale, fast response. The meter shall meet the American National Standards Institute (ANSI S1 4-1961) "American Standard Specification for General Purpose Sound Level Meters."~~
- ~~C. No person shall engage in construction activities, on a site abutting any residential use between the hours of 9 p.m. and 6:30 a.m.~~
- ~~D. The following activities shall be exempt from these regulations. Sounds emanating from:~~
- ~~a. Safety signals;~~
  - ~~b. Warning devices;~~
  - ~~c. Emergency pressure relief valves; and,~~
  - ~~d. Other emergency activities.~~

#### A. Sound Pressure Level Limits

The maximum permissible sound pressure level of any continuous, regular, frequent, intermittent, or impulsive source of sound produced by any activity shall be limited by the time period and use type at the boundary of the receiving property. Sound levels shall be measured at least four (4') feet above ground at the property boundary of the source.

<u>Use Type</u>	<u>7 a.m. – 9 p.m. (Daytime)</u>	<u>9 p.m. – 7 a.m. (Nighttime)</u>
<u>Residential</u>	<u>55 dB(A)</u>	<u>45 dB(A)</u>
<u>Agricultural</u>	<u>60 dB(A)</u>	<u>50 dB(A)</u>
<u>Nonresidential</u>	<u>65 dB(A)</u>	<u>55 dB(A)</u>

## **B. Impulsive and Intermittent Noise**

No single impulsive or intermittent noise event shall exceed 75 dB(A) at the property boundary.

## **C. Measurement Standards**

Noise shall be measured using a sound level meter set to the A-weighted response scale, fast response, and shall comply with ANSI S1.4-2014 or IEC 61672-1 Class 1 standards. Measurements must be conducted under the following conditions:

1. Wind speed below 10 mph;
2. No precipitation;
3. Continuous measurement over a 10-minute period; and,
4. Calibration of equipment before and after measurement.

## **D. Construction Activity Restrictions**

No person shall engage in construction activities on a site abutting any residential use between the hours of 9 p.m. and 7 a.m.

## **E. Noise Studies**

A noise study shall be required under the following circumstances:

1. Enforcement of noise complaints; and,
2. Review of conditional use applications where the Planning Board determines that noise is a basis for prohibiting or limiting a proposed land use.
3. The study must be conducted by a certified acoustical engineer and include:
  - a. 24-hour baseline ambient noise measurement
  - b. Identification and measurement of the noise source
  - c. Impact assessment
  - d. Mitigation recommendations (e.g., barriers, operational changes)

## **F. Enforcement**

The Code Enforcement Officer shall be responsible for investigating complaints and enforcing noise regulations. A formal complaint process shall be established and made available to residents.

## **G. Mitigation Measures**

The Town may require or recommend the following mitigation strategies:

1. Installation of noise barriers;
2. Requirement for noise generating machines and equipment to be building contained;
3. Operational limits (e.g., no rock crushing before 8 a.m.); and/or,
4. Use of quieter machinery or equipment.

## **H. Exemptions**

The following activities are exempt from these regulations:

1. Safety signals and warning devices;
2. Emergency pressure relief valves and emergency activities;
3. Emergency vehicles responding to incidents;
4. Special events with prior Town approval; and,
5. Temporary activities with a special permit.

## ARTICLE 19: DEFINITIONS

### Section 19.1. DEFINITIONS

- A. **Construction of Language:** All words not defined herein shall carry their customary and usual dictionary meanings. Words used in the present tense shall include the future. Words used in the singular shall include the plural. The word "shall" is used to indicate the mandatory and the word "may" is used to indicate the permissive. The words "occupied" or "used" shall be considered as though followed by the words "or intended, arranged, or designed to be used or occupied." Obvious typographical errors may be disregarded in interpretation of this Ordinance. Definitions followed by [brackets] indicate that the words have specific reference to individual articles and do not generally apply to all articles.

Add the following definitions in alphabetical order in Section 19.1:

**A-WEIGHTED SOUND LEVEL (dB(A):** The sound pressure level in decibels as measured using the A-weighting network on a sound level meter; this weighting approximates the response of the human ear.

**DECIBEL (dB):** A unit for expressing the intensity of sound, equal to ten times the logarithm (base 10) of the ratio of the sound power to a reference power.

**EQUIVALENT CONTINUOUS SOUND LEVEL (LEQ):** The constant sound level that, over a specified period, contains the same total sound energy as the fluctuating level occurring during that period.

**NOISE:**

**CONTINUOUS NOISE:** A steady sound level that remains relatively constant over a period of time.

**IMPULSIVE NOISE:** A sound of short duration, usually less than one second, with an abrupt onset and rapid decay, such as from hammering or gunfire.

**INTERMITTENT NOISE:** A noise whose levels increase and decrease rapidly with time, such as from passing vehicles or machinery cycling on and off.

**SOUND LEVEL METER:** An instrument meeting ANSI S1.4-2014 or IEC 61672-1 Class 1 standards used for the measurement of sound pressure levels.

**SOUND PRESSURE LEVEL (SPL):** The level, in decibels (dB), of the root-mean-square sound pressure of a sound measured relative to a reference pressure of 20 micropascals.