

## Department of Environment and Local Government

# Noise Complaint Response Guidelines

### INTRODUCTION:

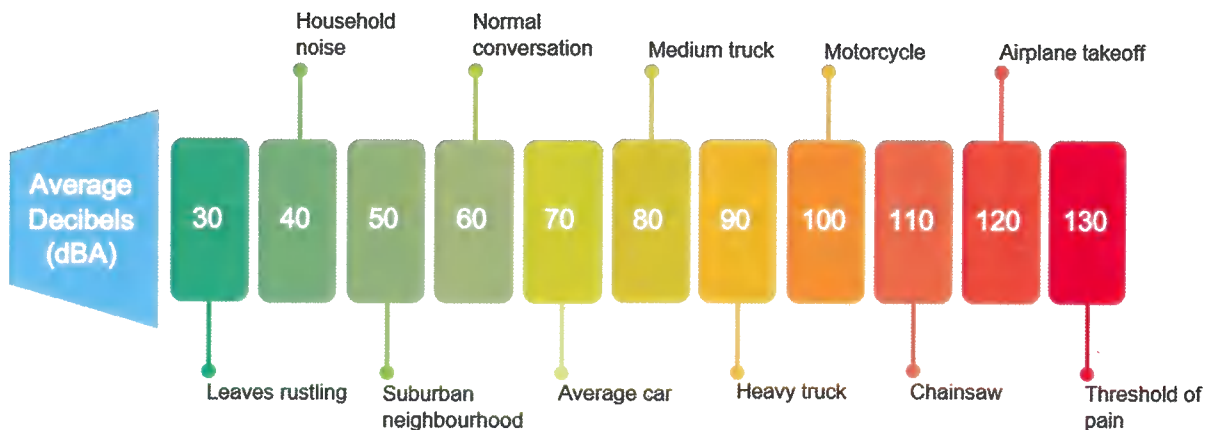
When a sound is loud, unpleasant, unexpected, or undesired it is generally referred to as “noise”. This definition applies when the sound is created by human activity, such as but not limited to noise emitted by means of transport, agricultural, recreational, and industrial activity.

Detrimental levels of noise can affect people both physiologically and psychologically by interfering with basic activities such as sleep, rest, study, and communication. At high levels, and/or when sustained for long periods, sound can also cause long term health effects, including permanent hearing loss or impairment.

This document is to provide guidance to address noise complaints affecting off-site receptors (i.e. public, private or environmental receptors outside the property line of the facility producing the noise). Noise can be reasonably managed but cannot necessarily be eliminated.

### NOISE MEASUREMENT PARAMETERS:

The human ear can generally detect sounds as low as 1 dB and as loud as 130 dB (levels above this damage the ear). The range of human hearing is approximately 16 to 20,000 Hz. Many sound meters will use a filter that mimics the human ear and phases out these very low or high frequency sounds. This provides a more accurate measurement of what is heard by the human ear. When this filter is used, the sound is reported in **dB(A)**. The diagram below provides examples of the volume or ‘loudness’ of common sounds and their average measured decibel level.



**Figure 1: Decibel Scale Comparison**

The parameters used in the provincial noise guidelines to measure sound levels are **dBA** and **Leq** (Equivalent Sound Level), which quantifies the noise environment to a single value of sound level for any desired duration. It is designed to represent a varying sound source over a given time as a single number.

**SCREENING LEVELS:**

The time of day is known to have a significant impact on how noise is perceived, as sound at night is often less tolerable than the same sound occurring during the day. To account for this, the NB Noise Emission Levels are broken up into three time periods as shown in the table below:

| Level       | Hours        |
|-------------|--------------|
| Leq ≤ 60dBA | 0700 to 1900 |
| Leq ≤ 55dBA | 1900 to 2300 |
| Leq ≤ 50dBA | 2300 to 0700 |

**APPLICABILITY**

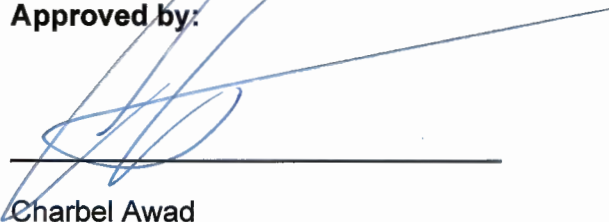
These guidelines stand primarily as a procedure to address noise complaints against industrial facilities in order to ensure the comfort and wellbeing of recipients throughout the province and apply only to those sites regulated by an Approval to Operate issued under the *Clean Air or Clean Environment Acts*. These guidelines do not supersede existing approval conditions or apply to impulse noise pollution (such as blasting).

If the department finds that the noise produced by a regulated facility exceeds these levels (at or beyond the property line of the facility) during a one-hour survey, then the responsible party must make every effort to self-rectify the problem or will be required to engage a qualified professional to perform a Noise Impact Assessment.

**CLOSURE**

This document has been prepared by the Authorizations Branch. For additional information on this Guideline, please contact the Department of Environment and Local Government's Authorizations Branch.

**Approved by:**



Charbel Awad

July 21<sup>st</sup>, 2023

Date

Acting Deputy Minister of Environment and Local Government  
 Department of Environment and Local Government