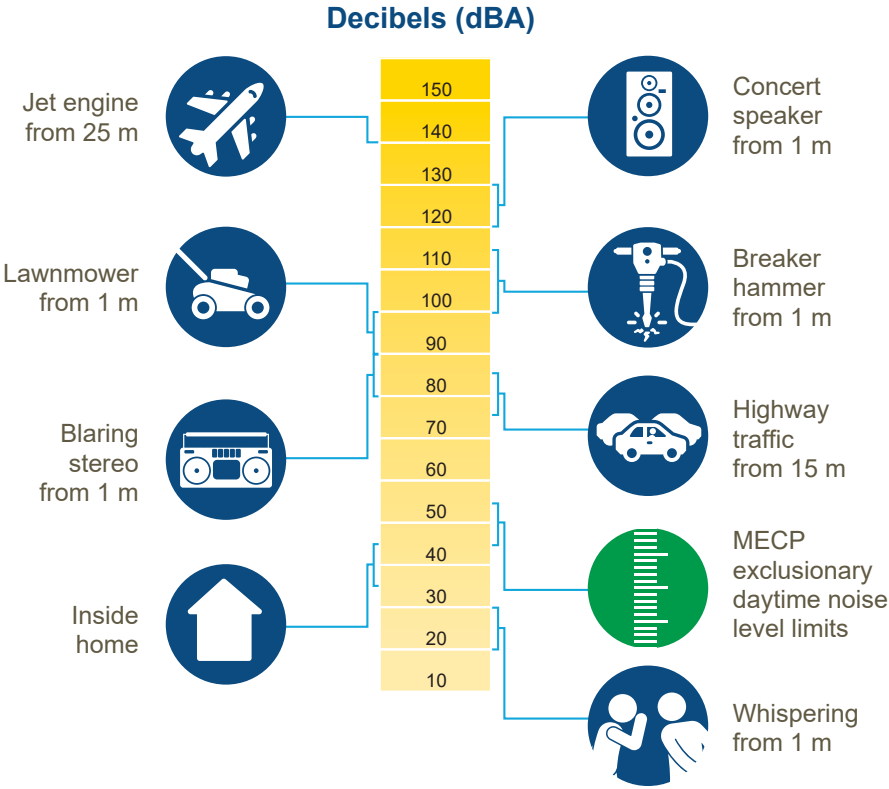
Noise: Basic Concepts

Noise levels are generally expressed on a logarithmic scale, in units called decibels (dB). Environmental noise levels are typically presented as “A-weighted decibels” (or dBA), which approximates the typical hearing response of the human ear. Noise level limits are established by the Ontario Ministry of the Environment, Conservation and Parks (MECP). CBM is required to comply with MECP noise level limits at each receptor location. For your reference, below are common day-to-day noise levels.

Day-to-day noise levels



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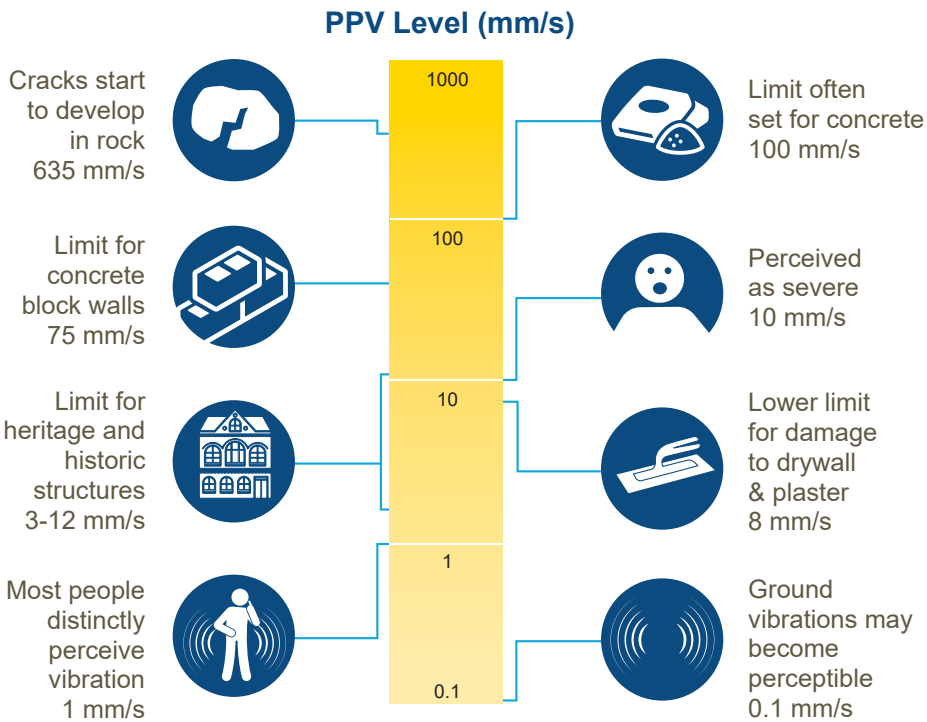
Vibrations: Basic Concepts

The level of vibration is often used as an indicator of the potential to impact people or nearby structures. A common measure of the intensity of ground vibration is Peak Particle Velocity (PPV). This is a measure of the speed of the ground particles caused as a vibration wave passes. The level of vibration is often expressed in units of millimetres per second (mm/s). Equipment will be located at great enough distances where vibration levels are not expected to be perceptible at residences. The effect of different levels of vibration is shown below.

Effects of ground vibration levels



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