



## Department of Environmental Protection

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### Noise Pollution Policy Interpretation

Noise is a public health concern that falls within the scope of Massachusetts Department of Environmental Protection (MassDEP) authority as a form of regulated air pollution. See the related law, regulations, and policy: [M.G.L. Chapter 111, Sections 142A-M](#), [310 CMR 7.00: Air Pollution Control](#), and [MassDEP Noise Policy](#)

#### Definitions (310 CMR 7.00)

- *Noise* is defined as "sound of sufficient intensity and/or duration as to cause a condition of air pollution."
- *Air pollution* means "the presence in the ambient air space of one or more air contaminants or combinations thereof in such concentrations and of such duration as to: (a) cause a nuisance; (b) be injurious, or be on the basis of current information, potentially injurious to human health or animal life, to vegetation, or to property; or (c) unreasonably interfere with the comfortable enjoyment of life and property or the conduct of business."

#### When Does MassDEP Evaluate Noise Impacts?

MassDEP evaluates how noise may affect people when 1) the agency reviews applications for approval under its air pollution regulations (310 CMR 7.02) for construction of facilities that will generate more than threshold amounts of pollutants such as nitrogen dioxide, sulfur dioxide, carbon monoxide, volatile organic compounds, particulate matter, and substances that are toxic in air; and 2) the agency responds to complaints from the public about noise generated by an existing source:

- When reviewing applications for pre-construction approval of new sources of air pollution, MassDEP examines the potential increase in sound levels over ambient conditions and the impacts of noise at both the source's property line and at the nearest residence or other sensitive receptor (e.g., schools, hospitals) located in the area surrounding the facility and occupied at the time of the permit review. *Please note: MassDEP requires that an air approval be obtained when a proposed facility is expected to emit more than threshold amounts of specific pollutants. If noise is the only air pollutant expected to be emitted by a facility, a pre-construction air approval is not required.*
- When MassDEP responds to a complaint about an existing source of noise, it focuses on protecting affected people at their residences and in other buildings that are occupied by sensitive receptors from nuisances and the public health effects of the noise. *Please note: An existing source of sound may or may not have needed a MassDEP air approval before it was built.*

## **Where Are MassDEP's Noise Criteria Applied?**

The MassDEP noise pollution policy describes criteria that MassDEP uses to evaluate noise impacts at both the property line and the nearest occupied residence or other sensitive receptor. When noise is found to be a nuisance or a threat to health, MassDEP requires the source to mitigate its noise.

Noise levels that exceed the criteria at the source's property line by themselves do not necessarily result in a violation or a condition of air pollution under MassDEP regulations (see 310 CMR 7.10 U). The agency also considers the effect of noise on the nearest occupied residence and/or building housing sensitive receptors:

- In responding to complaints, MassDEP measures noise levels at the complainant's location and at other nearby locations that may be affected (e.g., residences and/or buildings with other sensitive receptors). If the noise level at a sensitive receptor's location is more than 10 dB(A) above ambient, MassDEP requires the noise source to mitigate its impact.
- A new noise source will be required to mitigate its sound emissions if they are projected to cause the broadband sound level at a residence or building housing sensitive receptors to exceed ambient background by more than 10 dB(A).
- A new noise source that would be located in an area that is not likely to be developed for residential use in the future (e.g., due to abutting wetlands or similarly undevelopable areas), or in a commercial or industrial area with no sensitive receptors may not be required to mitigate its noise impact on those areas, even if projected to cause noise levels at the facility's property line to exceed ambient background by more than 10 dB(A). However, a new noise source that would be located in an area in which housing or buildings containing other sensitive receptors could be developed in the future may be required to mitigate its noise impact in these areas.

This policy has been designed to protect affected residents and other sensitive occupants of nearby property, but not necessarily uninhabited areas in and around the source's property. Sources of noise may need to implement mitigation if residences or buildings occupied by sensitive receptors are developed where they may be affected by the source's noise.