

## **Town of Readfield**

### **Noise Standard**

#### **Section 1. Purpose**

The purpose of this standard is to protect the public from unreasonable increases in noise from certain commercial, industrial, manufacturing and assembly operations. Proposed uses that involve the use of machinery, outdoor processing, repair services such as auto body, truck and auto repair shops, sawmills, sand and gravel operations are required to design projects that do not create excessive noise for the area in which they are proposed.

#### **Section 2. Applicability**

These standards shall apply to all proposed or currently existing commercial, industrial, and manufacturing uses that require Planning Board site review and which propose the use or expansion of machinery, fabrication, assembly, outdoor processing and manufacturing. Examples of such uses include but are not limited to the following: machine shops, sawmills, auto and truck repair facilities, welding shops, manufacturing and assembly operations, sand and gravel operations, junk yards, outdoor recycling operations, livestock confinement feeding operations and processing of agricultural products raised off-site.

Retail and professional office, residential, forest management activities and traditional agricultural uses are not required to meet these standards.

#### **Section 3. Procedure**

The applicant is required to take background noise readings along the boundary lines of the site prior to any development or any expansion requiring site review. The proposed development shall be designed so that the average background noise level will not be exceeded by 10 dBA during the day and 5 dBA at night due to the new or expanded development. The applicant shall submit a noise mitigation plan with the site review application that shows how noise from the development will not exceed the noise levels established in this section.

The Planning Board may vote to hire a consultant to confirm the background noise readings and/or confirm that the noise reduction measures proposed will meet the ordinance requirements. The cost of a professional consultant shall be borne by the applicant.

The Technical Standards Section establishes an absolute noise criteria for the Town in order to protect the public in those locations where the ambient noise levels are already high.

#### **Section 4. Submission Requirements**

The applicant shall include the following information with the site review application:

1. Written certification by the person taking the background noise readings that they were performed according to this Ordinance.
2. A map of the site showing the location where the noise reading was taken for each property line.
3. The noise level reading at each location including the date and time of day.
4. The average background day and nighttime noise level reading for the site.
5. A description of the general environmental conditions of each recording location including the following: weather conditions, traffic conditions and construction activity within 500 feet of the site.
6. A description of the proposed development including all major noise producing activities anticipated for the site. The description shall include both constant and infrequent sources of noise.
7. A noise reduction plan developed by a registered engineer that outlines how the noise level at the site shall be mitigated in order to meet the ordinance standard.
8. Written certification by a registered engineer that the site was constructed according to plans submitted in the application and that the noise levels upon occupancy of the site conforms to the ordinance. This certification shall be submitted to the Code Enforcement Officer (CEO) upon completion of the development.

#### **Section 5. Noise Mitigation Plan**

It shall be the responsibility of the applicant to conduct all noise level readings and to develop a noise reduction plan for the site in order to conform to these standards. The applicant may use a variety of techniques such as buffers, structure location and other measures to conform to the standard. All noise mitigation measures must be installed and functioning upon occupancy of the site or operation under the approved permit. The applicant shall submit to the CEO within 30 days of receiving the permit from the CEO a written certification from a registered engineer that all of the noise mitigation measures are working according to the plan and that the noise levels specified in the standard are being met.

## **Section 6. Technical Standards**

1. Noise shall be measured with a sound-level meter meeting the standards of the American National Standards Institute, ANSI S1.2-1962 American Standards meter for the Physical Measurements of Sound.

2. Noise level readings shall be taken at a height of 4 feet above the ground.

3. Background noise level readings shall be taken at a point along each property line of the site. A noise level reading shall be taken at a point along a property line that is adjacent to an abutting developed site whenever possible.

Noise level readings for a property line along a roadway shall be taken at the road right-of-way line.

4. An average background noise level reading shall be determined by adding the individual readings taken for the site and dividing by the number of property line readings taken. An average day and night time reading shall be established. At least one noise level reading shall be taken on each property line and where the property line exceeds 500 feet, a noise level reading shall be made for each 500 feet along the property line or portion thereof.

5. A noise level reading for each property line shall be taken for both day and night conditions. The daytime reading shall be taken between the hours of 6 a.m. and 10 p.m. The nighttime readings shall be taken between the hours of 10 p.m. and 6 a.m. The day and night time readings shall be taken at the same locations along the property line.

6. The background noise readings shall establish the normal background noise level for the site. Readings shall not be taken when construction activity, abnormal traffic conditions or other extraordinary conditions are occurring within 500 feet of the property boundary lines of the site.

7. The proposed development shall not cause the noise level to exceed the background noise level by an increase of 10 dBA during the day and an increase of 5 dBA at night. The increase in noise level shall be measured from the average day and night readings established for the site. In no case shall the ambient noise level as measured from the property line exceed the absolute noise criteria established below.

In order to protect the public health and welfare and to take into account potential locations where there are high ambient noise levels, the following maximum criteria are established:

Daytime levels (6 a.m. - 10 p.m.) 55 dBA  
Nighttime levels (10 p.m. - 6 a.m.) 40 dBA

The applicant is required to develop the noise mitigation plan based upon the lowest ambient noise level for the site. This situation may occur when the average background noise level for the site and the allowed increase in noise levels establish an ambient noise level that are below the absolute criteria.

### **Section 7. Enforcement**

Enforcement of these noise standards shall be in conformance with the Town's Land Use Ordinance.

### **Section 8. Definitions**

1. Ambient Noise Level - Ambient noise level includes all existing and proposed sound sources in an area.
2. Background Noise Level - Background noise level is a level of sound monitored in an area except for the development proposed in the Site Review Application.
3. dBA - Decibel, the adjusted unit used to measure noise.