ARTICLE III. NOISE

Sec. 12-71. Purpose of article.

The purpose of this article is to regulate or prohibit noise which either annoys, injures, or endangers the comfort, repose, health, or safety of others unless the making and continuing of the noise is necessary for the protection or preservation of property or the health, safety, life or limb of a person.

Sec. 12-72. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Construction means any site preparation, assembly, erection, substantial repair, alteration, or similar action, but excluding demolition, for or on public or private right-of-way, structures, utilities, or similar property.

dB(A) means the sound pressure level in decibels measured on the "A" scale of a standard sound level meter having characteristics defined by the American National Standards Institute, Publication ANSI s1.4-1971.

Decibel means a unit used to express the magnitude of sound pressure and sound intensity. The difference in decibels between two sound pressures is 20 times the common logarithm of their ratio. In sound pressure measurements, the sound pressure level of a given sound is defined to be 20 times the common logarithm of the ratio of that sound pressure to a reference pressure of a $2 \times 10^{-5}$N/m$^2$ (Newtons per meter squared). As an example of the effect of this formula, a three decibel change in the sound pressure level corresponds to a doubling or halving of the sound intensity, and a ten decibel change corresponds to a ten-fold increase or decrease to one-tenth the former intensity.

Emergency work means any work performed for the purpose of preventing or alleviating the physical trauma of property damage threatened or caused by an emergency.

Motor vehicle means every vehicle defined as a motor vehicle in the traffic chapter of this Code (chapter 34).

Motorcycle means every vehicle defined as a motorcycle in the traffic chapter of this Code (chapter 34).

Motor-driven cycle means every vehicle defined as a motor-driven cycle in the traffic chapter of this Code (chapter 34).

Noise means any sound which annoys or disturbs or which causes or tends to cause an adverse psychological or physiological effect on humans.

Noise disturbance means any sound which:

1. Endangers or injures the safety or health of humans or animals;
2. Annoys or disturbs a reasonable person of normal sensitivities; and
3. Endangers or injures personal or real property.

Person means any individual, association, partnership, or corporation and includes any officer, employee, department, agency, or instrumentality of a state or any political subdivision of a state.

Public right-of-way means any street, avenue, boulevard, highway, sidewalk or alley.

Real property boundary means the property line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another.
Sec. 12-73. Prohibited generally.

In addition to the specific prohibitions outlined in this article, no person shall unreasonably make, continue, or cause to be made, continued or permitted, any noise disturbance. The restriction in this article does not prohibit speech of any kind. This article shall not apply to noncommercial public speaking and public assembly activities conducted on any public space or public right-of-way for which permission has been obtained.

Sec. 12-74. Specific prohibitions.

The following acts, and the causing or permitting thereof, are hereby declared to be in violation of this article:

1. Construction. The operating of any tools or equipment used in construction, drilling, or demolition work between the hours of 9:00 p.m. and 7:00 a.m. such that the sound therefrom creates a noise disturbance across a residential real property boundary, except for emergency work of public service utilities or operation of road maintenance equipment.

2. Explosives, firearms, and similar devices. The use or firing of any explosives, firearms, or similar devices which creates impulsive sound so as to cause a noise disturbance across a real property boundary or on a public space or right-of-way without first obtaining a permit.

3. Loudspeakers/public address systems. The use or operation of any loudspeaker, public address system, mobile sound vehicle or similar device amplifying sound therefrom on a public right-of-way or public space for any commercial purpose.

4. Radios and phonographs; time and use restrictions. Any radio receiving set, musical instrument, phonograph, tape player, television receiving set or other machine or device for the producing or reproducing of sound, including any sound equipment in a vehicle between the hours of 9:00 p.m. and 7:00 a.m. on private or public rights-of-way loudly enough to be clearly heard 50 feet from the source of the sound.

5. Horns and signaling devices. The sounding of any horn or signaling device on any automobile, motorcycle, street car or other vehicle on any street or public place of the township, except as a danger warning. The use of any signaling device, except one operated by hand or electricity; the use of any horn, whistle or other device operated by engine exhaust; and the unreasonable use of any such signaling device when traffic is for any reason held up.

6. Yelling and shouting. Yelling, shouting, hooting, whistling, or singing on the public streets, between the hours of 9:00 p.m. and 7:00 a.m. or at any time or place so as to annoy or disturb the quiet, comfort or repose of any persons in the vicinity.

7. Animals and birds. The keeping of any animal or bird which creates frequent or long continued noise unreasonably disturbing the comfort or repose of any persons in the vicinity.

8. Motor vehicles, motorcycles, motorized vehicles, motor-driven cycles. The operation of any motor vehicle, motorcycle, motorized vehicle or motor-driven cycle on private property or public right-of-way so as to cause loud and unreasonable noise, including noise from exhaust, which is clearly audible from nearby property and unreasonably disturbs the comfort or repose of any persons in the vicinity. The modification of any motorized vehicle, motorcycle or motor-driven cycle, or the failure to maintain any such vehicle which results in an increase in emitted noise above that as emitted by such vehicle when manufactured is a violation of this section.

Sec. 12-75. Exceptions to article provisions.

This article shall not apply to any police vehicle, ambulance, fire engine or emergency vehicle while engaged in necessary emergency activities.
ARTICLE VI. SUPPLEMENTAL REGULATIONS

Sec. 38-634. Performance standards.

(a) **Purpose.** No use otherwise allowed shall be permitted within the township which does not conform to the following standards of use, occupancy and operation, which standards are hereby established as the minimum requirements maintained within the township.

(b) **Minimum standards.** It shall be unlawful to conduct any use in the township which does not meet or exceed these minimum performance standards as hereafter listed:

(1) **Atmospheric discharge.** It shall be unlawful to discharge into the atmosphere from any single source of emission whatsoever any air contaminator for a period aggregating more than four minutes in any one-half hour which is:

   a. **Smoke.** As dark or darker in shade as that designated as No. 2 on the Ringelmann chart, as published by the United States Bureau of Mines, which is hereby made a part of this section. However, the Umbrascope readings of smoke densities may be used when correlated with the Ringelmann chart. A Ringelmann chart shall be on file in the office of the building department.

   b. **Other airborne solids.** Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in subsection (b)(1)a of this section, except when the emission consists only of water vapor. The quantity of gasborne or airborne solids shall not exceed 0.20 grains per cubic foot of the carrying medium at a temperature of 500 degrees Fahrenheit.

(2) **Debris on public roads.** The owner and/or permit holder of any site where there is soil removal and/or any filling shall take whatever steps are necessary to avoid any motor vehicle carrying or tracking onto any public right-of-way from the site any mud, dirt, clay, refuse, etc.

   a. **Obligation to clean.** If mud, dirt, clay, refuse, etc. is carried or tracked onto a public right-of-way, and it does, or might, constitute a nuisance or hazard to public safety, the owner and/or permit holder shall not leave any such debris on a public right-of-way after the end of any working day.

   b. **Notice from township.** If notified during a working day by the township of a condition which requires cleaning, the matter shall be taken care of within one hour, weather permitting.

   c. **Violations.** If a nuisance or hazardous condition is left after a working day, or not cleaned up within one hour after receiving a request from the township, and weather does not prevent the cleanup, the township may issue a citation for a violation of this subsection due to the allowance of such condition to remain on the highway, and/or clean the right-of-way and charge the owner and/or permit holder with the cost thereof, which may be collected in any court having general jurisdiction.

(3) **Drainage.** Natural drainage shall not be blocked or diverted, or altered, or altered in such a manner as to cause the natural water flow to back up onto adjacent property, or to flow in a different course or rate of flow upon leaving the property upon which the blocking diversion, or alteration occurs, unless an application is made and a permit is issued by the ordinance enforcement officer pursuant to plans which provide for a drainage flow which will not be determined to surrounding properties.

   a. **Retention areas.** No area designated for and/or used as a drainage retention area shall be altered, filled in, abandoned or used for other purposes, unless it is done pursuant to a permit issued under this subsection.
b. Permit. A permit shall be required under this subsection notwithstanding a permit is not otherwise required by this chapter. Permit requirements and procedures shall be as adopted by the township board, from time to time, by resolution.

(4) Drifting and blown material. The drifting or airborne transmission beyond the property line of dust, particles or debris from any open stockpile, working areas or unplanted areas shall be unlawful and may be summarily caused be abated.

(5) Electromagnetic radiation. Applicable rules and regulations of the Federal Communication Commission in regard to propagation of electromagnetic radiation are hereby made a part of this Code and shall be on file in the office of the building department.

(6) Gases. The escape of or emission of any gas in concentrations so as to be injurious, destructive or explosive shall be unlawful and may be summarily caused to be abated.

(7) Glare or heat. Any operation producing intense glare or heat shall be performed within an enclosure so as to completely obscure and shield such operation from direct view from any point along the lot line, except during the period of construction of the facilities to be used and occupied.

(8) Light. Exterior lighting shall be so installed that the surface of the source of light shall not be visible from any bedroom window, and shall be so arranged as far as practical to reflect light away from any residential use, and in no case shall more than one footcandle power of light cross a lot line five feet above the ground in a residential district.

(9) Odors. The emission of noxious, odorous matter in such quantities as to be readily detectable at any point along lot lines, when diluted in the ratio of one volume of odorous air to four or more volumes of clean air, or as to produce a public nuisance or hazard beyond lot lines, is prohibited.

(10) Radioactive materials. Radioactive materials shall not be emitted to exceed quantities established as safe by the U.S. Bureau of Standards, as amended from time to time.

(11) Sound. The pressure level of sounds shall not exceed the following decibel levels when adjacent to the following types of uses:

<table>
<thead>
<tr>
<th>TABLE INSET:</th>
<th>Sound Level</th>
<th>Adjacent Use</th>
<th>Where Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 dB(A)</td>
<td>Residential</td>
<td>Common property line</td>
<td></td>
</tr>
<tr>
<td>86 dB(A)</td>
<td>Commercial</td>
<td>Common property line</td>
<td></td>
</tr>
<tr>
<td>90 dB(A)</td>
<td>Industrial and other</td>
<td>Common property line</td>
<td></td>
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</tbody>
</table>

The sound levels shall be measured using a weighted decibel measurements (referenced to 20 micropascals) and with a type of audio output meter approved by the U.S. Bureau of Standards. Objectionable noises due to intermittence, beat, frequency, or shrillness, shall be muffled so as not to become a nuisance to adjacent uses.

Harmonic or pure tones, and periodic or repetitive impulse sound shall be in violation when such sounds are at a sound pressure level of five dB(A) less than those listed above.

Where property is partly in two zoning districts or adjoins the boundary of a zoning district, the dB(A) levels of the zoning district of the property where the noise is emanating shall control.

The following exceptions shall apply to the regulations under this section:

a. Construction projects shall be subject to the maximum permissible noise levels specified for industrial districts as long as a valid building permit has been issued by the township and is currently in effect.
b. All railroad operations shall be subject to the maximum permissible noise levels allowed in industrial districts, regardless of the zone where they are located.

c. Noises occurring between 7:00 a.m. and 9:00 p.m. caused by home or building repairs or from maintenance of grounds are excluded, provided that such noise does not exceed the limitations specified in section 12-74(1) by more than 20 dB(A).

d. Noises emanating from the discharge of firearms are excluded, provided that the discharge of the firearms was authorized under state law and all local ordinances.

e. Any commercial, agricultural or industrial use of property which exists now or in the future as a legal nonconforming use (as defined in this chapter) in a higher zoning classification shall be allowed to emit noise in excess of these limitations for the particular zoning classification where such use is located, provided that such noise does not exceed either of the following limitations:

1. The noise level emitted by such use at the time it became a legal nonconforming use as a result of the enactment of an amendment of this zoning chapter, if available.

2. The limitations contained in this section based upon such a use being located in the highest zoning district (either commercial and agricultural or industrial) where such a use is specifically allowed as a permissible use.

(12) Vibration. All machinery shall be so mounted and operated as to prevent transmission of ground vibration exceeding a displacement of 0.003 of one inch measured at any property line of its source.

(13) Roads. Roads on landfill and soil excavation sites shall be designed and constructed so that traffic will flow smoothly and will not be interrupted by inclement weather. Nonpaved roads between the site and the nearest paved roads, paved roads off of site within one-quarter mile of the site entrance which are used by vehicles and/or equipment traveling to or from the site, and all roads on site shall not be used unless they are treated by sufficient oil, water and/or chemical substance, whichever would be appropriate for the surface, and frequent enough so that they are dustfree whenever used by vehicles and/or equipment.

(14) Soil erosion. If a soil erosion permit is required by Part 91 of Public Act No. 451 of 1994 (MCL 324.9101 et seq.), no operation shall take place until a permit has been obtained. There shall be compliance at all times with the requirement of the soil erosion permit.

(c) Waiver of provisions. Any provision of subsection (b)(5)--(10) of this section may be waived with the following conditions met:

(1) Written request of the applicant;

(2) Review and recommendation of planning commission; and

(3) A determination by the township board of the following:

a. The waiver will not cause or tend to cause a blight, nuisance, danger or hazard to the surrounding area by virtue of sight, noise, odor, shifting earth, standing water, filtration into the underground water systems or drainage.

b. The waiver creates a more harmonious aesthetic condition with the surrounding area.

c. The waiver is in the best interests of the health, safety and welfare of the township; and

(4) If a provision is waived, the township board may impose alternatives or lesser restrictions that are reasonable.

(Ord. No. 62, ch. 5-02, 8-11-1984; Ord. No. 38, § 5-08.08, 2-18-1981; Ord. No. 49, ch. 5-02, 8-16-1981; Ord. No. 83, § 6-07.05, 7-17-1990)