Section 24.03: POTABLE WATER and SEWAGE DISPOSAL

Any structure for human occupancy and used for dwelling, businesses, industrial, recreational, institutional, mercantile or storage purposes shall not be erected, altered, used or moved upon any premises after the effective date of this Ordinance unless said structure shall be provided with a potable water supply and waste water disposal system that ensures a safe and effective means of collection, treatment, and disposal of human, commercial, and industrial wastes. All on-site sewage disposal and potable water facilities shall be constructed and maintained in accordance with the requirements and standards of the Washtenaw County Environmental Health Department as well as those of other applicable local, county, state, or federal agencies.

Section 24.04: LIGHTING

- **A.** For the purposes of this Section, the following terms and phrases shall be defined as follows:
 - 1. Cut Off Angle: An angle measured upward from nadir at the lowest point of the light source, beyond which no light, or only a limited amount of light, is permitted to penetrate. For example purposes, a cut off angle of ninety (90) degrees would create a horizontal plane at a height equal to the bottom of the light source, while a cut off angle of forty-five (45) degrees would extend from the ground directly below the light source, at nadir, to an angle midway between nadir and a cut off angle of ninety (90) degrees.
 - 2. Light Source: The primary source of a lighting fixture from which light is emanated, such as a light bulb or similar source.
 - 3. Lighting Fixture: All electrical, structural, and accessory parts of a device intended to cast light upon an outdoor area.
 - 4. Nadir: An imaginary vertical line extending from ground level to the bottom of the light source.
- **B.** No lighting shall in any way impair the safe movement of traffic on any street or highway.
- C. Screening shall be erected to prevent headlight glare from commercial or industrial land uses from shining onto adjacent residential property. No screening shall in any way impair safe vertical or horizontal sight distance for any moving vehicles, or be closer than thirty (30) feet to any street right of way line.
- **D.** In addition to 24.04(A) and (B) above, outdoor lighting or lighting designed to be seen from the exterior shall comply with the following standards except as provided for in Section 24.04(E) below:
 - 1. Lighting shall be designed and constructed to insure that direct and reflected light, unless part of a street lighting or access road lighting program, is confined to the lot or parcel upon which the light source is located.
 - 2. Lighting shall be so installed that the surface of the source of light shall be hooded or louvered so that the light source shall not be visible 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 foot candle power of light cross a lot line five (5) feet above the ground in a residential district.
 - 3. Lighting fixtures shall have a one hundred (100) percent cut off angle above the horizontal plane at the lowest part of the light source so that light rays shall not be emitted by the fixture at any angle above this horizontal plane, as may be certified by photometric tests. The intensity of light at any angle above a cut off angle of seventy-five (75) degrees shall be less than ten (10) percent of the peak candle power for the light fixture.
 - 4. No light source shall exceed the height of the tallest structure on the lot or parcel, and in no case shall a light source exceed a height of twenty-five (25) feet, measured from the ground or pavement closest to the light source.
 - 5. All illuminated signage or any lighting associated with a sign shall be turned off between the hours of 10 p.m. and 5 a.m. If a non-residential use is open to patrons or members any time between the hours of 10 p.m. and 5 a.m., illuminated signage or any lighting associated with a sign may be kept on so long as such illumination meets the standards of the Township Ordinances and so long as such illumination is turned off during the hours the use is closed to patrons and members.
- E. Outdoor lighting which need not comply with the standards of Section 24.04(D) above shall be limited to:
 - 1. Residential lawn, dock, and decorative lighting provided the light source is less than six (6) feet in height from the closest ground or pavement.
 - 2. Seasonal lighting associated with holidays, such as Christmas and Halloween.
 - **3.** Outdoor recreation and amusement areas, provided the light sources are mounted at a sufficient height, designed with baffling and glare guards to assure that no more than one foot candle power of light shall cross a lot line five (5) feet above the ground in a residential district, and turned off during hours the facility is closed to the public.
 - **4.** Neon lighting for non-residential uses, provided it is turned off between the hours of 10 p.m. and 5 a.m. If a non-residential use is open to patrons or members any time between the hours of 10 p.m. and 5 a.m., neon lighting may be kept on so long as such illumination meets the standards of the Township Ordinances and so long as such illumination is turned off during the hours the use is closed to patrons and members.

Section 24.05: COMMERCIAL and INDUSTRIAL USES

All land uses and structures within commercial or industrial zoning districts shall conform to the following standards:

- **A.** No major repairs or refinishing shall be done outside of the principal structure.
- **B.** The intensity level of sounds shall not exceed the following decibel levels when adjacent to the following types of uses:

| Decibels (dba) | Adjacent Use | Where Measured |
|----------------|-----------------------|-----------------|
| 55 | Residential Dwellings | Common Lot Line |
| 65 | Commercial | Common Lot Line |
| 70 | Industrial and Other | Common Lot Line |

Objectionable noises due to intermittence, beat frequency, or shrillness, shall be muffled so as not to become a nuisance to adjacent uses.