

DIVISION 13. M-2, GENERAL INDUSTRIAL DISTRICT

Sec. 32-476. Statement of purpose.

- (a) The M-2, general industrial district is established as a district in which the principal uses allowed would be more intensive in nature than those uses allowed in the M-1, light industrial district.
- (b) The intent of this district is to provide areas for industrial uses, which, because of the nature of their operation, require review and regulation concerning potential adverse appearance, nuisance effects, air pollution and groundwater pollution to ensure that they would minimize impacts with surrounding residential or commercial land uses and to provide areas in the township where industrial uses requiring outdoor storage would locate.
- (c) The M-2, general industrial district is designed primarily for contractor yards, manufacturing, assembling, and fabrication activities including large scale or specialized industrial operations, whose external physical effects will be felt to some degree by surrounding districts. The M-2 district is so structured as to permit the manufacturing, processing, and compounding of semifinished or finished products from raw materials as well as from previously prepared material.
- (d) The M-2 general industrial district is also established to accommodate existing industrial uses established prior to the effective date of the ordinance from which this chapter is derived, not permitted in the M-1 district, but specifically excluding those heavy industrial uses such as, but not limited to, the manufacture or processing of chemicals, cement or rubber products; stockyards; steel mills; or distilleries that are inconsistent with the planned character of the community.

(Code 1992, § 19-466; Ord. No. 156-A88, § 1, 10-17-2001)

Sec. 32-477. Permitted principal uses.

The following uses are permitted in an M-2 district provided any production, processing, cleaning, servicing, testing, repair or storage of materials, goods or products shall conform to the performance standards set forth in section 32-480:

- (1) Any principal use in the M-1 district and as regulated in that district with regard to special land use approval and conditions.
- (2) Construction equipment, heavy equipment sales and service establishments, material handling equipment sales and service establishments, and truck and farm equipment storage and service facilities subject to the following conditions and exemptions:
 - a. All service activities shall be conducted completely within an enclosed building.
 - b. Such uses shall have:
 - 1. Frontage on or direct access to a major thoroughfare; or

2. Instead be so located in a manner which ensures safe and reasonable traffic operating conditions on neighboring streets and intersections after development of the proposed use.

For purposes of this section, such determination shall be made based upon the evidence of a professionally prepared traffic impact study which concludes that the anticipated impact on roadways adjacent to the study site and affected nearby intersections will be comparable to or less than that of other uses permitted by right in the M-2 district.

- c. Any such approved use established prior to the effective date of this chapter is exempt from the locational requirements of this section and is, therefore, considered a conforming use for purposes of this article with such right of use transferable to subsequent purchasers.
- (3) Commercial contracting businesses including, but not limited to, landscape contractors, building contractors, underground water and sewer contractors, and road construction and paving firms.
 - (4) Lumber and planing mills when located in the interior of the district so that no property line shall form the exterior of the M-2 district.
 - (5) Brick and paving block manufacturers, when all processes are conducted within an enclosed building.
 - (6) Public utility service and storage yards.
 - (7) Other uses of a similar and no more objectionable character to the above uses, as determined by the planning commission.

(Code 1992, § 19-467; Ord. No. 156-A88, § 1, 10-17-2001)

Sec. 32-478. Permitted uses after special approval.

The following uses shall be permitted in the M-2 district subject to the conditions hereinafter specified and subject to the requirements of section 32-35 and section 32-586.

- (1) Truck terminals, subject to the following:
 - a. The minimum lot area shall be three acres.
 - b. An obscuring greenbelt buffer shall be provided along the property line where the adjacent property is zoned or used for residential purposes, built to the specifications of subsection 32-587(e).
 - c. The property shall have frontage on, or direct paved access to, a paved major thoroughfare.
 - d. Buildings on site shall be set back from abutting residentially zoned property not less than 100 feet.
 - e. Any repair and maintenance activity shall be conducted within an enclosed building.
- (2) Commercial sale of new and used heavy trucks, farm equipment, and heavy

offroad construction equipment, subject to the following:

- a. The open storage of any such equipment shall comply with the requirements of section 32-480, except that up to five such vehicles and/or equipment may be displayed within the front yard when placed on gravel or concrete pads and made an integral part of the yard's landscaping, provided the booms of such vehicles and equipment are stored in their lowest operable height.
- b. The property shall have frontage on, or direct paved access to, a paved major thoroughfare.

(Code 1992, § 19-468; Ord. No. 156-A88, § 1, 10-17-2001)

Sec. 32-479. Accessory buildings, structures, and uses.

The following accessory buildings, structures, and uses may be permitted in the M-2 district:

- (1) Accessory buildings, structures and uses that are customarily incidental to any of the uses in this division when located on the same premises.
- (2) Signs in accordance with section 32-688.

(Code 1992, § 19-469; Ord. No. 156-A88, § 1, 10-17-2001)

Sec. 32-480. Conditions.

Any new use in the M-2 district established after the effective date of the ordinance from which this chapter is derived shall be operated so as to comply with the performance standards set forth in this section; however, whenever any provisions of this article imposes more stringent requirements, regulations, restrictions or limitations that are imposed or required by the provisions of any other law or ordinance, then the provisions of this article shall govern. Whenever the provisions of any other law or ordinance impose more stringent requirements than are imposed or required by this article, then the provisions of such law or ordinance shall govern. The performance standards are as follows:

- (1) *Smoke, dust, dirt and fly ash.* The emission of smoke, dust, dirt and fly ash shall be in no manner unclean, destructive, unhealthful, hazardous or deleterious to the general welfare. Such emission shall be in strict conformance with all applicable state and county health laws pertaining to air pollution and smoke abatement. A person shall not discharge into the atmosphere, from any single source of emission, any smoke of a density equal to, or greater than that density described as no. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, provided that the following exceptions to the provisions of this rule shall be permitted:
 - a. Smoke the shade or appearance of which is equal to but not darker than no. 2 of the Ringelmann Chart for a period or periods aggregating four minutes in any 30 minutes.
 - b. Smoke the shade or appearance of which is equal to but not darker than no. 3 of the Ringelmann Chart for a period or periods aggregating three

minutes in any 15 minutes when building a new fire or when breakdown of equipment occurs such as to make it evident that the emission was not reasonably preventable.

- (2) *Open fires.* A person or industry shall not burn any combustible refuse in any open outdoor fire within the district.
- (3) *Gases.* The escape of or emission of any gas which is injurious, destructive or explosive shall be unlawful and may be summarily caused to be abated. Sulphur dioxide gas, as measured at the property line at ground elevation, shall not exceed an average of 0.3 ppm; hydrogen sulfide likewise shall not exceed one ppm, and carbon monoxide shall not exceed 15 ppm; all as measured as the average intensity during any 24-hour sampling period.
- (4) *Nuisance.* A person or industry shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment or nuisance to the public or which endanger the comfort, repose, health or safety of the public or which cause or have a natural tendency to cause injury or damage to business or property.
- (5) *Light.* Lights for parking lots and buildings shall be so oriented and shielded that they do not shine directly into an abutting property. Exterior spot lighting or other illumination shall be so installed as to eliminate any nuisance to adjoining residential districts or other properties or to traffic on public highways. Compliance with standards of section 32-600, lighting, is required.
- (6) *Glare or heat.* All operations which produce glare, such as welding and acetylene torch cutting, must be performed in such a manner that the glare cannot be seen from any property line. If heat is a result of an industrial operation, it shall be so insulated as to not raise the air temperature at any property line at any time.
- (7) *Open storage.* Open storage shall conform to the following requirements:
 - a. All outdoor storage used in the course of the applicant's business shall be restricted to the rear yard or be set back from the front property line not less than 150 feet, whichever is less restrictive.
 - b. All outdoor storage shall be set back not less than 50 feet along all property lines which abut residential zoned property.
 - c. Except as provided by subsection (7)e of this section, material storage shall not exceed a height of 14 feet.
 - d. Except as provided by subsection (7)b of this section, all outdoor storage shall be set back not less than ten feet along any interior lot line.
 - e. Materials having a propensity for airborne migration off-site such as, but not necessarily limited to, dry ash, loose earth, and light sand may be stored on site provided it is stored in a manner which minimizes its migration onto abutting property. The need for, and the appropriateness of the containment proposed shall be determined by the planning commission in consideration of the type of material being stored, the operational needs of the business, the aesthetic character of neighboring properties and the following additional allowances:

- i. Mulch may be stored up to a maximum height of 18 feet.
 - ii. Top soil being processed on site (screened) for sale may be stored up to a maximum height of 24 feet.
 - iii. For purposes of this section, containment shall be defined to mean the device or technique proposed to limit or prevent the migration of stored material off site including, but not necessarily limited to, a tarp, storage corral, bulk storage building, native vegetation cover or additional yard setback distance.
- f. Combustible material stored on site shall be arranged to prevent the spread of fire in accordance with the following standards:
 - i. Individual combustible material storage areas shall not occupy a land area greater than 2,000 square feet or a diameter of 50 feet.
 - ii. Combustible material storage areas shall not be located closer than ten feet to other combustible storage areas, buildings, loading zones, and off-street parking areas.
 - iii. Combustible material storage areas shall be located not closer than 50 feet to all above ground flammable liquid materials storage tanks.
- g. Licensed motor vehicles and trailers and operable equipment related to the activities of a permitted use may be stored on site provided they are not used as permanent storage facilities for the principal use. This restriction shall not be construed to prohibit the storage of unlicensed or inoperable vehicles, trailers or equipment on site for the purpose of cannibalization for parts, provided such vehicles, trailers, or equipment are kept within an enclosed building or screened on all sides in accordance with subsection (7)k of this section.
- h. Equipment, vehicle, or trailer storage shall be permitted outside subject to the following conditions:
 - i. Equipment, vehicles, or trailers are stored at their lowest operable height.
 - ii. Equipment, vehicles or trailers which exceeding 14 feet in height when stored at their lowest operable height shall only be permitted when setback distances are increased above those specified in subsection (7)d and subsection (7)e of this section by one foot for each foot or portion thereof, the equipment, vehicles or trailer height exceeds 14 feet in height.
- i. An all weather durable roadway shall be provided and maintained from the street to the rear of the outside storage to permit fire access of emergency vehicles at any time. Any portion of roadway open to the general public shall be paved.
- j. All open storage areas shall be screened from all streets, screened from private road easements serving two or more parcels of property,

screened on all sides abutting a non-industrial district, and screened to prevent visibility from all horizontal lines of sight from neighboring residentially zoned property. The options for screening shall consist of a solid eight-foot tall wall or fence with an adjacent greenbelt, or by an earth berm, in accordance with the following requirements; however, alternatives to the required screening walls or fences and berms may be approved by the planning commission pursuant to subsection 32-587(f)(3).

- i. The screening wall or fence shall be constructed of masonry, decorative concrete, or weather treated wood materials. Any screening wall or fence shall be constructed in such a manner that all structural members, including braces, posts, poles, and other projections are on the interior side of the fence or wall.
- ii. Greenbelts shall be installed between the property line of the subject site and the screening wall or fence. Greenbelts shall not be less than 20 feet wide and may be only interrupted to provide for roads or driveways for vehicular access. Grass, ground cover or other suitable plant material shall be placed over the entire greenbelt area. A minimum of one deciduous tree or evergreen tree shall be planted for each 30 feet or portion thereof of required greenbelt length. Required trees may be planted at uniform intervals, at random, or in groupings. Required greenbelt length shall be defined as the horizontal straight line measurement of the greenbelt, scaled at its midpoint, along a line parallel to the screening wall or fence.
- iii. An earth berm may be used in lieu of a screening wall or fence and its adjoining greenbelt, in all or in part. The berm shall be at least three feet above grade elevation, and shall be constructed with slopes no steeper than one foot vertical for each three feet horizontal with at least a two-foot flat area at the top. For purposes of this provision, grade elevation shall be the ground elevation at the property line adjacent to the proposed berm. The berm shall be planted with grass or other suitable groundcover to ensure that it withstands wind and weather and retains its height and shape. Evergreen trees shall be planted in a staggered pattern on the crown of the berm. Such evergreen trees shall consist of closely spaced plantings not less than five feet in height at the time of their installation so as to form a complete visual barrier within two years of planting.

- (8) *Vibration.* The intent of this section is to ensure that no operation shall generate any ground or structure borne vibrational motion that is perceptible to the human sense of touch beyond the property line of the site on which the operation is located. This shall be determined by the following standard: machines or operations producing ground transmitted oscillations resulting in an impact vibration or ground displacement which exceeds 0.003-inch amplitude at 960 cycles per minute of vibration as measured at the property line are prohibited. Vibrations resulting from temporary construction activity that occur between 7:00

a.m. and 9:00 p.m. from Monday through Saturday shall be exempt from the aforementioned maximum permitted vibration levels, provided that such activity occurs in a legally accepted manner.

- (9) *Radio transmission.* For electronic equipment required in an industrial operation, the equipment shall be so shielded that its operation will not interfere with radio, television or other electronic equipment.
- (10) *Storage of flammable materials.* Any activity involving the use or storage of flammable or explosive materials shall be subject to standards adopted by the state including protection by adequate firefighting and fire suppression equipment and such safety devices as are normally used in the handling of any such material. Such hazards shall be kept removed from adjacent activities to a distance which is compatible with the potential danger involved.
- (11) *Radioactive materials.* No activity shall emit dangerous radioactivity at any point.
- (12) *Noise.* The measurable noise emanating from the premises shall be in accordance with section 32-591.
- (13) *Fire and safety hazards.* The storage and handling of flammable liquids, liquefied petroleum gases, and explosives shall comply with all state and federal rules and regulations, including those of the state department of environmental quality and the federal Environmental Protection Agency, and regulations as established by the state fire prevention code, Public Act. No. 207 of 1941 (MCL 29.1 et seq.). Further, all storage tanks for flammable liquid materials above ground shall be located at least 150 feet from all property lines, and shall be completely surrounded by earth embankments, dikes and other types of retaining walls which will contain the total capacity of all tanks so enclosed. See also section 32-593 for fire protection requirements.
- (14) *Electromagnetic radiation.* Applicable rules and regulations of the Federal Communications Commission in regard to propagation of electromagnetic radiation are hereby made a part of this chapter.
- (15) *Drifting and airborne matter.* The drifting or airborne transmission beyond the lot line of dust, particles or debris from any method of operation shall be unlawful and shall be summarily caused to be abated.
- (16) *Odor.* The emission of noxious, odorous matter in such quantities as to be readily detectable at a point along any property line is prohibited. Air quality must be protected and all standards of the state department of environmental quality shall be observed.
- (17) *Storage of hazardous substances, including petroleum products.* Hazardous substance storage shall be in accordance with section 32-598.
- (18) *Requirements on equipment and machinery.* In the M-2 district, any machine or equipment which is determined by the planning commission from their review of its operational characteristics and specifications to be capable of creating intense earth-shaking vibrations or noise such as are caused by heavy drop forges, or heavy hydraulic surges, shall be set back at least 300 feet from any lot line which abuts nonindustrial zoned land. The planning commission may waive this requirement upon finding that such impact caused by the operation of the

machine or equipment will be controlled through such techniques as the installation of sound absorbing devices and barriers or their placement on shock absorbing mountings located on suitable reinforced concrete footings such as to prevent the transmission beyond the lot line of noise and vibration in excess of the standards specified within this section.

(Code 1992, § 19-470; Ord. No. 156-A88, § 1, 10-17-2001; Ord. No. 156-A-126, § 1, 11-21-2007; Ord. No. 156-A-127, § 1, 1-16-2008)

Sec. 32-481. Site plan review.

For all uses permitted in an M-2 district, there must be site plan review as required under section 32-586.

(Code 1992, § 19-471; Ord. No. 156-A88, § 1, 10-17-2001)

Sec. 32-482. Density, area, height, bulk, placement requirements.

The density, area, height, bulk, and placement requirements in the M-2 district shall be in accordance with the schedule of regulations, division 15 of this article.

(Code 1992, § 19-472; Ord. No. 156-A88, § 1, 10-17-2001)

Secs. 32-483--32-502. Reserved.