§ 6.1. I-1 Restricted Industrial District.

Latest version.

6.1.1. Description of district. The I-1 Restricted Industrial District is intended to control the development of lands to be used by industrial firms that have high standards of performance and that can locate in close proximity to residential and business uses without creating nuisances. District regulations are designed to permit the operations of most manufacturing, wholesaling and warehousing activities while providing adequate protection to adjacent district uses and sufficient control of external effects to protect one industry from another. Some retail uses are permitted that service the industrial uses within the industrial district or that do not depend upon intensive visits of retail customers.

6.1.2. Use, lot and bulk regulations. The applicable use, lot and bulk regulations are set forth in Sections 6.1.3 through 6.1.9.

6.1.3. Permitted uses. A permitted use of land or buildings shall be allowed in accordance with the provisions of this ordinance. Unless otherwise specifically set forth, wherever a permitted use is named as a major category, it shall be deemed to include only those enumerated uses. Unless otherwise specifically allowed by this ordinance, no building or zoning lot shall be devoted to any use other than a permitted use and no building or structure shall be erected, altered, enlarged or occupied, except as a permitted use. Uses lawfully established on the effective date of this ordinance, and rendered nonconforming by it, shall be subject to Article 10.

The following uses are permitted in the I-1 District:

A. Industrial.
1. Assembly firms for assembly of completely fabricated parts.
2. Bakeries, production of goods.
3. Bottling works.
4. Contractor and construction offices, shops and yards, such as building, cement, electrical, heating, ventilating and air conditioning, masonry, painting, plumbing, refrigeration and roofing.
6. Dry cleaning and laundry establishments. Plants serving more than one retail outlet are permitted.
7. Industrial launderers.
9. Manufacturing and industrial activities, including fabrication, processing, assembly, disassembly, repairing, cleaning, servicing, testing, packaging and storage of materials, and products and goods that can be conducted wholly within enclosed buildings. Uses must conform with the performance standards of this section and shall not be injurious to the occupants of adjacent premises.
10. Packing and crating services.
12. Printing, publishing or lithography establishments.
13. Stone companies.

B. Wholesale and warehouse.
   1. Automotive storage facilities for vehicles in operating condition.
   2. Beverage distributors.
   3. Frozen food stores, including locker rental and food processing.
   4. Greenhouses and nurseries, wholesale.
   5. Storage facilities, including self-storage and mini-warehouse facilities.

C. Retail business.
   1. Auction rooms.
   2. Automobile accessory stores.
   3. Automobile vehicle sales, new and used.
   4. Bars, taverns and cocktail lounges. Live entertainment and dancing are permitted.
   5. Boat and marine sales.
7. Building material supplies, sales and service.
8. Business machine sales and service.
9. Camper and recreational vehicle sales.
10. Carpet and rug stores.
11. Catalog stores.
12. Drug stores and pharmacies.
13. Extermination shops.
14. Farm supply and feed stores.
15. Furrier shops, including storage.
16. Garden supply and seed stores.
17. Gravestone and monument sales.
18. Greenhouses and nurseries, retail.
19. Ice and milk machine sales.
20. Lumber companies and yards.
22. Mail order houses.
23. Mobile home sales.
24. Model home and garage displays and sales.
25. Motorcycle sales.
26. Plumbing and heating showrooms and sales.
27. Retail outlet stores, accessory to a manufacturing or wholesale establishment.
28. Restaurants. Live entertainment, dancing and serving alcohol are permitted.
29. Roadside stands.
30. Roofing sales and service.
31. Snowmobile sales and service.
32. Swimming pool sales and service.
33. Tire, battery and accessory sales.
34. Trailer sales and service.
35. Truck sales and service.

D. Services.
1. Automobile diagnostic centers and clinics.
2. Automobile driving schools.
3. Automobile paint shops.
4. Automobile rentals.
5. Automobile repair shops.
6. Automobile gasoline and service stations, including minor accessories, supplies and services customarily incidental to gasoline and service stations. Oil and lubrication services are permitted only if enclosed in a building.
7. Automobile undercoating services.
8. Banks and savings and loan institutions, with or without drive-in facilities.
10. Cartage and express facilities for trucks not over 1½-ton capacity.
11. Credit unions.
13. Electrical shops.
14. Equipment rental and leasing services.
15. Fix-it shops, for general, minor repairs.
16. Furnace supplies and services.
17. Furniture cleaning, repair and upholstering service shops.
18. Glazing shops.
19. Lawnmower sales and repair shops.
20. Linen, towel, diaper and other similar supply services.
21. Locksmith shops.
22. Motorcycle service and repair shops.
23. Newspaper distribution agencies.
24. Parcel delivery services.
25. Parking lots and garages, other than accessory, subject to Article 11.
27. Radio and television service and repair shops.
29. Refrigeration shops.
30. Sewer and septic tank cleaning and rodding services.
31. Sheet metal shops.
32. Sign contractors.
33. Signs as regulated by Article 12.
34. Taxidermist shops.
35. Tire retreading and repair shops.
36. Towing services.
37. Water softener services.
38. Welding shops.
39. Window cleaning services.

E. Professional offices.
   1. Animal hospitals and veterinary clinics.
   2. Architects.
   3. Engineers.
   4. Labor unions and organizations.
   5. Land surveyors.
   6. Landscape architectural services.
   7. Medical and dental laboratories.
   8. Medical research facilities.

F. Recreation and social facilities.
   1. Clubs.
   2. Community center buildings, clubhouses, recreation buildings, for
      indoor pools and buildings for indoor pools, tennis courts and
      buildings for indoor tennis courts, noncommercial and not-for-profit.
   3. Dance halls.
   5. Health and physical fitness clubs.
   6. Lodges and fraternal organizations.
   7. Theaters, indoor.

G. Public and governmental land and buildings.
   1. Forest preserves.
   2. Historical buildings and landmarks preserved for the public.

H. Public utilities and services.
   1. Bus terminals, turnarounds, garages and lots.
   2.
Electric substations, gas regulator stations, telephone exchanges and other essential public utilities and services.

3. Fire stations.
4. Highway maintenance shops and yards.
5. Parking lots and garages.
6. Police stations.
7. Post office substations.
9. Waterworks, reservoirs, pumping stations, wells and filtration plants.
10. Weight stations operated by the State of Illinois.

I. Educational institutions.
   2. Trade and vocational schools.

J. Agricultural land and buildings.
   1. Agricultural uses.

K. Miscellaneous.
   1. Convention halls and centers.
   2. Exhibition and meeting halls.
   4. Radar installations and towers.
   5. Stadiums, auditoriums and arenas.

6.1.4. Special uses. A special use may be allowed subject to the issuance of a special use permit in accordance with the provisions of Article 13. Unless otherwise specifically set forth, wherever a special use is named as a major category, it shall be deemed to include only those enumerated uses.

The following special uses may be permitted in the I-1 District:

A. Industrial.
   1. Chemical processing and production.
   2. Electroplating.
   5. Research and development laboratory facilities.
7. Woodworking and wood products.
8. Medical cannabis cultivation center, as regulated by 410 ILCS 130/1 et seq.

B. Services.
   1. Automobile testing grounds, excluding competitive racing.
   2. Banks and savings and loans.
   3. Car washes.
   4. Restaurants, drive-in.

C. Residential uses.
   1. Hotels and motels.
   2. Residence of the proprietor.

D. Recreation and social facilities.
   1. Race tracks. Racing activity between 6:00 p.m. and 11:00 a.m. is prohibited in automobile and motor-sport race tracks, raceways and speedways.
   2. Theaters, drive-in.

E. Public and governmental land and buildings.
   1. Parks and playgrounds.
   2. Penal and correctional institutions.

F. Public utilities and services.
   1. Air, railroad and water freight terminals, railroad switching and classification yards, repair shops and roundhouses.
   2. Railroad rights-of-way.
   3. Sewage treatment plants.

G. Planned unit developments.

H. Unique uses as regulated by this ordinance.

I. Miscellaneous.
   1. Airports and heliports, including aircraft landing fields, runways, flight strips and flying schools together with hangers, terminal buildings and other auxiliary facilities.
   2. Artificial lakes.
   3. Landfills, sanitary or solid waste.
Medical cannabis dispensing organization, as regulated by 410 ILCS 130/1 et seq.

J. Uses similar and compatible to those allowed in this district.

6.1.5. Temporary uses. A temporary use may be allowed upon issuance of a permit by the Cook County Department of Building and Zoning, unless this ordinance specifically states that a permit is not required.

A. Temporary buildings or yards. For construction materials and equipment, both incidental and necessary to construction in the zoning district. Permits shall specify the location of the building or yard and the area of permitted operation. Permits shall be valid for not more than six months and shall not be renewed for more than four successive periods. The building or yard shall not interfere with the use and enjoyment of neighboring property.

B. Temporary sales offices. Permits shall specify the location of the office and the area of permitted operation. Permits shall be issued in six-month increments for a period of not more than two years, unless otherwise authorized by the Building Commissioner.

C. [Real estate signs.] Temporary real estate signs as regulated by Article 12.

D. [Portable signs.] Portable signs as regulated by Article 12.

E. Portable storage containers. Portable storage containers as regulated by Article 8.

6.1.6. Accessory uses. A use, building or other structure customarily incidental to and commonly associated with a principal, permitted or special use may be allowed as an accessory use, provided it is operated and maintained under the same ownership and on the same lot as the permitted use. Accessory uses shall not include structures or features inconsistent with the permitted use or involve the conduct of any business, profession, trade or industry. Accessory uses may include the following and similar uses:

A. Agricultural buildings and structures.

B. Fallout shelters as regulated by this ordinance.

C. Garages, carports or other parking spaces. Truck parking shall be limited to vehicles not more than 1½-ton capacity when located within 150 feet of a residence district.
D. Gardens.
E. Retail outlet stores, accessory to a manufacturing or wholesale establishment.
F. Roadside stands. For the display and sale of agricultural products only, on lots where the principal use is agriculture.
G. Sewage disposal units and water systems as regulated by this ordinance.
H. Signs as regulated by Article 12.
I. Tool houses, sheds and other similar buildings. For storage of supplies and equipment.
J. Vending machines.
K. Water retention and detention areas.

6.1.7. Prohibited uses. All uses not expressly authorized in Sections 6.1.3 through 6.1.6 are prohibited.

6.1.8. Site and structure provisions. The uses in the I-1 Restricted Industrial District shall conform to the following requirements:

A. Minimum lot area. Minimum area of 10,000 square feet is required for each permitted or special use, except that agricultural buildings and structures require a minimum lot area of five acres and hotels and motels require a minimum of 500 square feet of lot area per suite.
B. Minimum lot width. Minimum lot width of 60 feet shall be provided for each lot used for a permitted or special use, except that agricultural buildings and structures require a minimum lot width of 300 feet.
C. Front yard. Buildings and structures shall be set back from the front lot line at least 30 feet.
D. Interior side yard (adjacent to a zoning lot). Interior side yard is not required.
E. Corner side yard (adjacent to a street). Buildings and structures shall be set back from the side lot line adjacent to the street right-of-way at least 30 feet.
F. Rear yard. Buildings and structures shall be set back from the rear lot line at least ten feet, except that agricultural buildings and structures require a minimum rear yard setback of 75 feet.
G. Transitional yard. Minimum transitional yard requirements for all buildings and structures shall be not less than those specified below:
1. Side lot lines that abut a side or rear lot line in a commercial or residence district shall provide a yard along the side lot line. The yard shall be at least 30 feet in width.

2. Rear lot lines that abut a side lot line in a commercial or residence district shall provide a yard along the rear lot line. The yard shall be at least 30 feet in depth.

3. Rear lot lines that abut a rear lot line in a commercial or residence district shall provide a yard along the rear lot line. The yard shall be at least 30 feet in depth.

H. Floor area ratio. Maximum floor area ratio shall be 1:2.

6.1.9. Special provisions. The uses in the I-1 Restricted Industrial District shall conform to the following requirements:

A. Parking and loading. Uses shall conform to Article 11.

B. Signs. Uses shall conform to Article 12.

C. Sewer and water. Uses requiring sanitary facilities shall be served by either a municipal or private community sewer and water system, or a private individual sewage disposal and water supply system. The system used must be approved by the Cook County Health Department. Hotels and motels must be served by either a municipal or private sewage disposal system.

D. Businesses.

1. Enclosure of use. Uses shall be conducted within enclosed buildings, unless otherwise provided.

2. Outdoor storage. Outdoor storage of fuel, raw materials and products shall be screened and enclosed by a fence, wall or plant materials adequate to conceal the storage from adjacent properties and public rights-of-way. Outdoor storage of uncontained bulk material is prohibited.

3. Surfacing. Outdoor sales space shall have a permanent, durable, dustless surface and shall be graded and drained to dispose of all surface water.

4. Spacing. Uses located across the street from a commercial or residence district having any point on the structure surface greater than 35 feet above curb level shall be located at least 1½ times its height above curb level from the commercial or residence district
boundary line. However, stacks, tanks, bulkheads or ventilating equipment, including enclosing towers, shall be exempt from such limitation if not exceeding in the aggregate 25 feet in linear dimension parallel to the street for any 100 feet of street frontage. Parapets not exceeding three feet in height shall also be exempt from this spacing limitation.

Uses located adjacent to a side or rear property line in a commercial or residence district having any point on the structure surface greater than 35 feet above curb level shall be located at least a distance equal to its height above curb level from the commercial or residence district lot line. However, stacks, tanks, bulkheads or ventilating equipment, including enclosing towers shall be exempt from this limitation if not exceeding in the aggregate 25 feet in linear dimension parallel to the commercial or residence district lot line for any 100-foot lot line. Parapets not exceeding three feet in height shall also be exempt from this spacing limitation.

E. Performance standards.

1. Purpose.
   a. Permit industrial nuisances to be measured factually and objectively.
   b. Ensure that all industries will provide methods to protect the community from hazards which can be prevented by processes of control and nuisance elimination.
   c. Protect industries from arbitrary exclusion based upon past nuisance protection of a particular type of industry.

2. Application.
   a. Any use established, any building or structure constructed or tract of land developed for any permitted, special or accessory use shall comply with all performance standards with the exception of airports, heliports and automobile or motorcycle race tracks for which compliance with noise performance standards may be waived by the Cook County Board of Commissioners.
   b. The performance standards shall apply to any existing use or structure that is extended, enlarged, moved, altered or reconstructed.

3. Procedure.
a. Initiation. Where there may be substantial doubt as to whether an existing or proposed land use complies with the standards of this ordinance, a report shall be filed with the Cook County Department of Environment and Sustainability by an authorized enforcement officer of the State of Illinois, Cook County or any municipality within Cook County, stating that there may be noncompliance.

b. Investigation. Subsequent to a study of an existing or proposed use, the Cook County Department of Environment and Sustainability, upon receipt of information concerning the use from the Cook County Department of Building and Zoning, may determine that there are reasonable grounds to believe that the use may violate the standards of this section and may initiate an investigation.

c. Required data. Following the initiation of an investigation, the Cook County Department of Building and Zoning, upon request from the Cook County Department of Environment and Sustainability, may require the owner or operator of any existing or proposed use to submit data and evidence needed to make an objective determination. Evidence may include, but is not limited to, the following:
   i. Plans of the existing or proposed construction and development.
   ii. Description of the existing or proposed machinery, processes and products.
   iii. Specifications for mechanisms and techniques used or proposed in restricting the possible emission of dangerous or objectionable elements.
   iv. Measurements of the amounts or rates of emission of dangerous or objectionable elements.

d. Failure to submit data. The failure to provide data requested by the Cook County Department of Building and Zoning shall constitute grounds for denying a permit. All data shall be submitted to the Cook County Department of Environment and Sustainability.

e. Consultant reports. The Cook County Department of Building and Zoning and/or the Cook County Department of Environment
and Sustainability may require any person, firm or corporation to retain expert consultants to study and report as to compliance with performance standards. Consultants shall be qualified and mutually agreed upon by the Cook County Department of Building and Zoning, Cook County Department of Environment and Sustainability and the owner or operator of the use in question. In the event the parties are unable to select mutually agreeable consultants, the Cook County Zoning Board of Appeals shall make the selection. The cost of consultant services shall be borne by the property owner or operator.

f. Cook County Department of Environment and Sustainability action. Within 30 days following the receipt of the required evidence, or receipt of the reports of expert consultants, the Cook County Department of Environment and Sustainability shall make a determination as to compliance with performance standards. If the Cook County Department of Environment and Sustainability determines the existing or proposed use is in compliance, it shall authorize the Cook County Department of Building and Zoning to issue any permits which may have been withheld pending the determination.

g. Issuance or denial of permits. Within 15 days of receiving the Cook County Department of Environment and Sustainability's report summarizing its determination, the Cook County Department of Building and Zoning shall issue or deny permits based on the report.

h. Required alterations. Upon request of the Cook County Department of Environment and Sustainability, the Cook County Department of Building and Zoning may require alterations of the existing or proposed construction or the operational procedures to ensure that compliance with performance standards will be maintained. The operator shall be given a reasonable length of time to implement changes prescribed by the Department of Building and Zoning for purposes of securing compliance with the performance standards.

i. Appeal. Within 30 days following action by the Cook County Department of Building and Zoning with respect to the performance standards procedure, an appeal may be taken to
the Cook County Zoning Board of Appeals. In the absence of an appeal, the Cook County Department of Building and Zoning's determination shall be final.

j. Continued enforcement. The Cook County Department of Environment and Sustainability shall investigate any purported violation of performance standards. The Cook County Department of Environment and Sustainability may employ qualified experts to investigate. The Cook County Department of Environment and Sustainability shall conduct a hearing, with notice to the owner or operator, on the alleged violation. If the Department of Environment and Sustainability finds that a violation occurred or exists, a copy of the Department's findings shall be forwarded to the owner or operator with instructions to correct the violation. Services of qualified experts who are employed by the Cook County Department of Environment and Sustainability shall be paid by the violator if a violation is established. If no violation is established, Cook County shall be responsible for payment of expert fees.

k. Cancellation of permits. If the owner or operator fails to implement changes within the time allotted for compliance with performance standards, any permits previously issued shall be void and the operator shall cease operation until the violation is remedied.

4. Industrial performance standards. Uses shall comply with the following standards:

   a. Noise. For purposes of measuring the intensity and frequency of sound, the sound level meter, the octave band analyzer and the impact noise analyzer shall be employed. The flat network and the fast meter response of the sound level meter shall be used. Sounds of short duration, which cannot be measured accurately with the sound level meter, shall be measured with the impact noise analyzer. Octave band analyzers calibrated in the preferred frequencies (using American Standards Association Preferred Frequencies for Acoustical Measurements) shall be used with the following tables:
At no point along the boundary of a residential district or along an adjacent lot shall the sound pressure level of any operation or plant exceed the decibel limits in the octave bands designated below.

### MAXIMUM PERMITTED SOUND LEVEL TABLES

*(In Decibels)*

#### TABLE I

**DAYTIME HOURS - 7:00 A.M.—10:00 P.M. LOCAL TIME**

<table>
<thead>
<tr>
<th>Octave Band Preferred Center Frequency (Hertz)</th>
<th>Along Residence District Boundaries</th>
<th>Along Adjacent Lot Boundaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.5</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>63</td>
<td>71</td>
<td>74</td>
</tr>
<tr>
<td>125</td>
<td>65</td>
<td>69</td>
</tr>
<tr>
<td>250</td>
<td>57</td>
<td>64</td>
</tr>
<tr>
<td>500</td>
<td>51</td>
<td>58</td>
</tr>
<tr>
<td>1000</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>2000</td>
<td>39</td>
<td>47</td>
</tr>
<tr>
<td>4000</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>8000</td>
<td>32</td>
<td>40</td>
</tr>
</tbody>
</table>

#### TABLE II

**NIGHTTIME HOURS - 10:00 P.M.—7:00 A.M. LOCAL TIME**

<table>
<thead>
<tr>
<th>Octave Band Preferred Center Frequency (Hertz)</th>
<th>Along Residence District Boundaries</th>
<th>Along Adjacent Lot Boundaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.5</td>
<td>72</td>
<td>79</td>
</tr>
<tr>
<td>63</td>
<td>67</td>
<td>74</td>
</tr>
<tr>
<td>125</td>
<td>61</td>
<td>68</td>
</tr>
<tr>
<td>250</td>
<td>53</td>
<td>60</td>
</tr>
</tbody>
</table>
TABLE III

Impact noises shall not exceed the following peak intensities:

<table>
<thead>
<tr>
<th>Overall Peak</th>
<th>Along Residence District Boundaries</th>
<th>Along Adjacent Lot Boundaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>80</td>
<td>86</td>
</tr>
</tbody>
</table>

The following uses and activities shall be exempt from noise level regulations in the I-1 District:

i. Noises not directly under the property user's control.

ii. Noises emanating from construction and maintenance activities between 7:00 a.m., and 10:00 p.m., Activities are those which are nonroutine operations accessory to primary activities and which are temporary in nature or conducted infrequently.

iii. Noises of safety signals, warning devices and emergency pressure relief valves.

iv. Transient noises of moving sources such as automobiles, trucks, airplanes and railroads.

b. Vibration. Any industrial operation or activity which causes earth borne vibrations at any point along the nearest adjacent lot line in excess of the limits set forth in Column I is prohibited.

In addition, any industrial operation or activity which causes earth borne vibrations at any point along a residence district boundary line in excess of the limits set forth in Column II is prohibited.
Vibrations shall be expressed as displacement in inches and shall be measured with a three-component measuring system approved by the Cook County Department of Building and Zoning.

<table>
<thead>
<tr>
<th>Frequency (Cycles Per Second)</th>
<th>I* (Inches)</th>
<th>II* (Inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10</td>
<td>.0008</td>
<td>.0004</td>
</tr>
<tr>
<td>10 to 20</td>
<td>.0005</td>
<td>.0002</td>
</tr>
<tr>
<td>20 to 30</td>
<td>.0002</td>
<td>.0001</td>
</tr>
<tr>
<td>30 to 40</td>
<td>.0002</td>
<td>.0001</td>
</tr>
<tr>
<td>40 and over</td>
<td>.0001</td>
<td>.0001</td>
</tr>
</tbody>
</table>

*Steady-state vibrations, for purposes of this ordinance, are vibrations which are continuous or vibrations in discrete impulses more frequent than 100 per minute. Discrete impulses which do not exceed 100 per minute shall be considered impact vibrations and shall not cause in excess of twice the displacements stipulated.

The following uses and activities shall be exempt from the vibration level regulations:

1. Vibrations not directly under the property user's control.
2. Vibrations emanating from construction and maintenance activities between 7:00 a.m. and 9:00 p.m. Such activities are those which are nonroutine operations accessory to the primary activities and which are temporary in nature or conducted infrequently.
3. Transient vibrations of moving sources such as automobiles, trucks, airplanes and railroads.
4. Smoke and particulate matter. Dust and other types of air pollution borne by the wind from such sources as storage areas, yards and roads shall be kept to a minimum by appropriate landscaping, paving, oiling or other acceptable means.

For the purpose of grading the density equivalent opacity of smoke, the Ringelmann Chart, published by the United States Bureau of Mines, shall be employed.
The emission of more than 20 smoke units per hour stack is prohibited, including smoke of a density in excess of Ringelmann No. 2. However, once during any six-hour period each stack may emit up to 35 smoke units, not to exceed Ringelmann No. 2, when blowing soot or cleaning fires. Only during fire-cleaning periods, however, shall smoke of Ringelmann No. 3 be permitted, and then for not more than four minutes per period.

The rate of emission of particulate matter from all sources within the boundaries of any lot shall not exceed a net figure of one pound per acre of lot area during any one hour, after deducting from the gross hourly emission per acre the correction factor set forth in the following table:

### ALLOWANCE FOR HEIGHT OF EMISSION
*(Interpolate for intermediate values not shown in table)*

<table>
<thead>
<tr>
<th>Height of Emission Above Grade (Feet)</th>
<th>Correction Pounds Per Hour (Per Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>0.01</td>
</tr>
<tr>
<td>100</td>
<td>0.06</td>
</tr>
<tr>
<td>150</td>
<td>0.10</td>
</tr>
<tr>
<td>200</td>
<td>0.16</td>
</tr>
<tr>
<td>300</td>
<td>0.30</td>
</tr>
<tr>
<td>400</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Determination of the total net rate of emission of particulate matter within the boundaries of any lot shall be made as follows:

i. To obtain the gross hourly rate of emission in pounds per acre, determine the maximum emission in pounds per hour from each source of emission and divide by the number of acres of lot area.

ii. To obtain the net rate of emission in pounds per acre per hour from each source of emission, deduct the correction
factor (interpolating as required) for height of emission set forth in the table from each gross hourly rate of emission derived in [Subsection i.](i) above.

iii. To obtain the total net rate of emission from all sources of emission within the boundaries of the lot, add together the individual net rates of emission derived in [Subsection ii.](ii) above. The total shall not exceed one pound per acre of lot area during any one hour.

d. Toxic matter. The measurement of toxic matter shall be made at ground level or habitable elevation and shall be the average of any 24-hour sampling period. The release of any airborne toxic matter shall not exceed the fractional quantities permitted of those toxic matters currently listed in the Threshold Limit Values adopted by the American Conference of Governmental Industrial Hygienists. If a toxic substance is not contained in this listing, the applicant shall satisfy Cook County that the proposed levels will be safe and not detrimental to general population nor injurious to plant or animal life.

In the I-1 District, the release of airborne toxic matter shall not exceed 1/30 of the threshold limit values across lot lines.

e. Noxious and odorous matter. In the I-1 District, no activity or operation shall cause the discharge of matter across lot lines in such concentration as to be noxious. The emission of matter in such quantities as to be readily detectable as an odor at any point along lot lines is prohibited.

f. Fire and explosive hazards.

i. Flammable solids. Storage, utilization or manufacture of solid materials or products ranging from incombustible to moderate burning is permitted. Storage, utilization or manufacture of solid materials or products ranging from free or active burning to intense burning are permitted only within completely enclosed buildings having incombustible exterior walls and protected throughout by an automatic fire extinguishing system.

ii. Flammable liquids and gases. Storage, utilization or manufacture of flammable liquids or materials* which
produce flammable or explosive vapors or gases are permitted in accordance with the following table, except that storage of finished products in original sealed containers is unrestricted:

<table>
<thead>
<tr>
<th>Industries Engaged in Storage Only</th>
<th>Above Ground</th>
<th>Under Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials having a closed cup flash point of 187° F.</td>
<td>Prohibited</td>
<td>100,000</td>
</tr>
<tr>
<td>From and including 105° F. to and including 187° F.</td>
<td>Prohibited</td>
<td>100,000</td>
</tr>
<tr>
<td>Materials having a closed cup flash point of less than 105° F.</td>
<td>Prohibited</td>
<td>100,000</td>
</tr>
<tr>
<td>Industries Engaged In Utilization and Manufacture of Flammable Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Materials having a closed cup flash point over 187° F.</td>
<td>50,000</td>
<td>100,000</td>
</tr>
<tr>
<td>From and including 105° F. to and including 187° F.</td>
<td>20,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Materials having a closed cup flash point of less than 105° F.*</td>
<td>5,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

When flammable gases are stored, utilized or manufactured and measured in cubic feet, the quantity in cubic feet (at S.T.P.) permitted shall not exceed 300 times the quantities as listed above.

The manufacture of liquid or gaseous oxygen is prohibited. Liquid or gaseous oxygen may be stored or utilized in accordance with National Fire Protection Association Standard No. 566 in force and effect, adopted herein by reference, and the total quantity of gaseous or liquid oxygen stored shall not exceed 550,000 standard cubic feet.
iii. Detonable materials. Activities involving the storage, utilization or manufacture of materials or products which decompose by denotation are prohibited.

g. Glare and heat. Any operation or activity producing glare shall be conducted within a completely enclosed building so that direct and indirect illumination from the source of light does not cause illumination in excess of one-half footcandle measured at the lot line. Exposed sources of light shall be shielded and flickering or intense sources of light shall be controlled so as not to cause a nuisance across lot lines.

Any operation producing intense heat shall be performed within a completely enclosed building in such a manner as not to create a public nuisance or hazard along lot lines.

h. Radiation hazards-release outside property lines. Release of radioactive materials or emission of ionizing radiation outside of property lines shall be in accordance with the rules and regulations of the State of Illinois.

Unsealed radioactive materials shall not be manufactured, utilized or stored (except when such materials are stored in a fireproof container at or below ground level) in excess of the quantities appearing in the following table:

**QUANTITIES OF RADIOACTIVE MATERIALS**

<table>
<thead>
<tr>
<th>Unsealed, Radioactive Material</th>
<th>Curies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimony (Sb )</td>
<td>1</td>
</tr>
<tr>
<td>Arsenic 76 (As )</td>
<td>10</td>
</tr>
<tr>
<td>Arsenic 77 (As )</td>
<td>10</td>
</tr>
<tr>
<td>Barium-Lanthanum 140 (BaLa )</td>
<td>1</td>
</tr>
<tr>
<td>Beryllium (Be )</td>
<td>50</td>
</tr>
<tr>
<td>Cadmium-silver 109 (CdAg)</td>
<td>10</td>
</tr>
<tr>
<td>Calcium 45 (Ca )</td>
<td>10</td>
</tr>
<tr>
<td>Carbon 14 (C )</td>
<td>50</td>
</tr>
<tr>
<td>Cerium-praseodymium 144 (CePr)</td>
<td>1</td>
</tr>
<tr>
<td>Cesium-barium 137 (CsBa)</td>
<td>1</td>
</tr>
<tr>
<td>Chlorine 36 (Cr )</td>
<td>1</td>
</tr>
<tr>
<td>Chromium 51 (Cr )</td>
<td>50</td>
</tr>
<tr>
<td>Element</td>
<td>Isotopes</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Cobalt 60 (Co)</td>
<td></td>
</tr>
<tr>
<td>Copper 64 (Cu)</td>
<td></td>
</tr>
<tr>
<td>Europium 154 (Eu)</td>
<td></td>
</tr>
<tr>
<td>Fluorine 18 (F)</td>
<td></td>
</tr>
<tr>
<td>Gallium 72 (Ga)</td>
<td></td>
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<tr>
<td>Germanium 71 (Ge)</td>
<td></td>
</tr>
<tr>
<td>Gold 198 (Au)</td>
<td></td>
</tr>
<tr>
<td>Gold 199 (Au)</td>
<td></td>
</tr>
<tr>
<td>Hydrogen 3 (tritium) (H)</td>
<td></td>
</tr>
<tr>
<td>Indium 114 (In)</td>
<td></td>
</tr>
<tr>
<td>Iodine 131 (I)</td>
<td></td>
</tr>
<tr>
<td>Iridium 192 (Ir)</td>
<td></td>
</tr>
<tr>
<td>Iron 55 (Fe)</td>
<td></td>
</tr>
<tr>
<td>Iron 59 (Fe)</td>
<td></td>
</tr>
<tr>
<td>Lanthanum 140 (La)</td>
<td></td>
</tr>
<tr>
<td>Manganese 52 (Mn)</td>
<td></td>
</tr>
<tr>
<td>Manganese 56 (Mn)</td>
<td></td>
</tr>
<tr>
<td>Molybdenum 99 (Mo)</td>
<td></td>
</tr>
<tr>
<td>Nickel 59 (Ni)</td>
<td></td>
</tr>
<tr>
<td>Nickel 63 (Ni)</td>
<td></td>
</tr>
<tr>
<td>Niobium 95 (Nb)</td>
<td></td>
</tr>
<tr>
<td>Palladium 109 (Pd)</td>
<td></td>
</tr>
<tr>
<td>Palladium-rhodium 103 (PdRh)</td>
<td></td>
</tr>
<tr>
<td>Phosphorus 32 (P)</td>
<td></td>
</tr>
<tr>
<td>Polonium 210 (Po)</td>
<td></td>
</tr>
<tr>
<td>Potassium 42 (K)</td>
<td></td>
</tr>
<tr>
<td>Praseodymium 143 (Pr)</td>
<td></td>
</tr>
<tr>
<td>Promethium 147 (Pm)</td>
<td></td>
</tr>
<tr>
<td>Radium 226 (Ra)</td>
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</tr>
<tr>
<td>Rhenium 186 (Re)</td>
<td></td>
</tr>
<tr>
<td>Rhodium 105 (Rh)</td>
<td></td>
</tr>
<tr>
<td>Rubidium 86 (Rb)</td>
<td></td>
</tr>
<tr>
<td>Ruthenium-rhodium 106 (RuRh)</td>
<td></td>
</tr>
<tr>
<td>Samarium 153 (Sm)</td>
<td></td>
</tr>
<tr>
<td>Scandium 46 (Sc)</td>
<td></td>
</tr>
<tr>
<td>Silver 105 (Ag)</td>
<td></td>
</tr>
<tr>
<td>Element</td>
<td>Activity</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Silver 111 (Ag)</td>
<td>10</td>
</tr>
<tr>
<td>Sodium 22 (Na)</td>
<td>10</td>
</tr>
<tr>
<td>Sodium 24 (Na)</td>
<td>10</td>
</tr>
<tr>
<td>Strontium 89 (Sr)</td>
<td>1</td>
</tr>
<tr>
<td>Strontium-yttrium 90 (SrY)</td>
<td>0.1</td>
</tr>
<tr>
<td>Sulfur 35 (S)</td>
<td>50</td>
</tr>
<tr>
<td>Tantalum 182 (Ta)</td>
<td>10</td>
</tr>
<tr>
<td>Technetium 96 (Tc)</td>
<td>1</td>
</tr>
<tr>
<td>Technetium 99 (Tc)</td>
<td>1</td>
</tr>
<tr>
<td>Tellurium 127 (Te)</td>
<td>10</td>
</tr>
<tr>
<td>Tellurium 129 (Te)</td>
<td>1</td>
</tr>
<tr>
<td>Thallium 204 (Tl)</td>
<td>50</td>
</tr>
<tr>
<td>Tin 113 (Sn)</td>
<td>10</td>
</tr>
<tr>
<td>Tungsten 185 (W)</td>
<td>10</td>
</tr>
<tr>
<td>Vanadium 48 (V)</td>
<td>1</td>
</tr>
<tr>
<td>Yttrium 90 (Y)</td>
<td>1</td>
</tr>
<tr>
<td>Yttrium 91 (Y)</td>
<td>1</td>
</tr>
<tr>
<td>Zinc 65 (Zn)</td>
<td>10</td>
</tr>
</tbody>
</table>

Beta and/or gamma emitting radioactive material not listed above 1

(Ord. No. 03-O-3, § 6.1.3, 12-3-2002; Ord. No. 17-0059, 4-12-2017; Ord. No. 18-1356, 7-25-2018.)