

ORDINANCE NO. 79-73

CITY OF CENTERVILLE, OHIO

SPONSORED BY COUNCILMAN John Davis ON THE 5th DAY OF November, 1973.

AN ORDINANCE AMENDING ORDINANCE 15-1961, THE ZONING ORDINANCE BY PROVIDING FOR OFFICE-SERVICE, RESEARCH-OFFICE-LIGHT INDUSTRIAL PARKS AND LIGHT INDUSTRIAL DISTRICTS AND BY AMENDING FIGURE 5 AND SECTION 17 OF SAID ORDINANCE.

THE MUNICIPALITY OF CENTERVILLE HEREBY ORDAINS;

Section 1. Ordinance 15-1961, The Zoning Ordinance, as amended, is hereby amended by the addition of the following Sections.

Section 33

"O-S" Office -- Service District

Subsection 3300

Intent -- The "O-S" districts as herein established are intended to accommodate uses such as offices, banks, institutions and personal services which can serve as transitional areas between residential and commercial districts or between major thoroughfares and residential districts.

Subsection 3301

Principal Permitted Uses

- A. Art galleries, libraries and museums.
- B. Artist, sculptor and composer studios.
- C. Banks and financial institutions.
- D. Hospitals
- E. Libraries and reading rooms.
- F. Medical and dental clinics.
- G. Medical research facilities.
- H. Nursing homes, rest homes, and convalescent homes.
- I. Office buildings of any kind provided that no retail trade with the general public is carried on, and that no stock of goods is maintained for sale to customers.
- J. Radio and television broadcasting studios.
- K. School and educational services.
- L. Veterinarians offices provided that:
  - 1. Offices shall be housed in a completely enclosed and soundproofed building.

2. Services will be on a strictly "outpatient basis" with no raising, breeding and boarding of dogs or other small animals, except for the confinement of small animals under emergency treatment in facilities within the office.

Subsection 3302

Conditional Uses

- A. Retail and service uses such as restaurants, drug stores, barber and beauty shops, tobacconists, gift shops, but only:
1. When located entirely within a building or structure containing primarily a principal use or uses permitted in this district.
  2. With access for the public provided only through the lobby.
- B. Hotels and motels, which may have restaurants, swimming pools, plus other customarily incidental facilities.
- C. Publicly owned buildings, telephone exchange buildings, and public utility offices; but not including storage yards, transformer stations, substations, or gas regulator stations.

Subsection 3303

Accessory Uses

- A. Accessory uses, buildings or other structures customarily incidental to any aforesaid permitted use.
- B. Temporary buildings for uses incidental to construction work, which buildings shall be removed upon the completion or abandonment of the construction work.
- C. Other accessory uses permitted for this district by Article 25.

Subsection 3304

REQUIRED CONDITIONS -- No zoning certificate shall be issued for a "O" use, until the applicant shall have certified to the zoning inspector that:

- A. All premises shall be furnished with all-weather hard surface walks of a material such as bituminous or portland cement concrete, wood, tile, terrazzo or similar material, and, except for parking areas, the grounds shall be planted and landscaped.
- B. Where an Office District adjoins or faces a residential use, a visual and mechanical barrier, a minimum of four (4) feet and maximum of eight (8) feet in height, shall be provided along the O-S lot line, which may consist of any of the following:
1. An evergreen hedge or dense planting of evergreen shrubs at least four (4) feet thick, and maintained in good condition. Until the density shall be sufficient to prevent children and adults from passing through, the Planning Commission may require wire fencing or other types of protection as a temporary measure.
  2. A wooden fence complimentary in design to the principal structure.

3. Masonry wall.

Section 34

"R-O-I" -- Research - Office - Light Industrial Park Districts

Subsection 3400

Intent -- The Research - Office - Light Industrial Park Districts are hereby established to provide for the development of "Employment Centers" of diverse yet compatible uses. Therefore, research and office uses shall be principal permitted uses, while industrial and retail uses may be conditionally granted.

Subsection 3401

Principal Permitted Uses

- A. Any use charged with the principal function of basic research, design and pilot or experimental product development or technical training.
- B. Office buildings of an executive or of an administrative nature or incident to those uses permitted in Subsection A. above.
- C. Sales offices providing no retail sales are conducted on the premises.
- D. Municipal, public service, and utility buildings that do not require outdoor storage.
- E. Laboratories -- experimental, film, testing, research, or engineering.
- F. Any use permitted in Section 3301.

Subsection 3402

Conditional Uses

- A. Printing, publishing, binding and typesetting plants.
- B. Warehouses and distribution firms.
- C. Wholesale sales facilities.
- D. Contractor offices and storage buildings.
- E. Light industrial manufacturing and assembling of the following products:
  - 1. Boxes and paperboard containers.
  - 2. Business machinery.
  - 3. Medical, dental, optical and similar precision instruments.
  - 4. Orthopedic or medical appliances.
  - 5. Musical Instruments, novelties, watches, clocks and toys.
  - 6. Electrical and electronic products, components and equipment, excluding electric motors.

Subsection 3403

Accessory Uses

- A. Accessory uses, building or other structures customarily incidental to any aforesaid uses.
- B. Temporary buildings for uses incidental to construction work, which buildings shall be removed upon the completion or abandonment of the construction work.

Subsection 3404

Required Conditions

No zoning certificate shall be issued for a "R-O-I" use until the applicant shall have certified to the zoning inspector that:

- A. The research or industrial activity will be conducted wholly within a completely enclosed building.
- B. Noise or vibrations caused by any operation conducted on the premises shall not violate the provisions of Section 17.
- C. No emission of toxic or noxious matter, which is injurious to human health, comfort or enjoyment of life and property or to animal or plant life shall be permitted. Where such emissions could be produced as a result of accident or equipment malfunction, adequate safeguards considered suitable for safe operation in the industry involved shall be taken.
- D. The emission of smoke or other air pollutants shall not violate the standards and regulations of the Montgomery County Combined General Health District. Dust and other types of air pollution borne by the wind shall be kept to a minimum by appropriate landscaping, paving, oiling, or other acceptable means.
- E. There will be no emission of odors or odor-causing substances which can be detected without the use of instruments at or beyond the lot lines.
- F. Where the property lines separate a "R-O-I" District adjoins or faces a Residential use, a visual and mechanical barrier, a minimum of four (4) feet and maximum of eight (8) feet in height, shall be provided along the R-O-I lot line, which may consist of the following:
  - 1. An evergreen hedge or dense planting of evergreen shrubs at least four (4) feet thick, and maintained in good condition. Until the density shall be sufficient to prevent children and adults from passing through, the Planning Commission may require wire fencing or other other types of protection as a temporary measure.
  - 2. A wooden fence complimentary in design to the principal structure.
  - 3. Masonry wall.
- G. Exterior lighting shall be shaded wherever necessary to avoid casting direct light upon property located in any residential district or upon any public street.
- H. No building or structure shall be used for residential purposes except that a watchman or custodian may reside on the premises.

- I. No raw materials shall be processed into any of the following basic products: metals of any kind, glass, plastic, textiles, leather or paper.
- J. All premises shall be furnished with all weather hard surface walks of a material such as bituminous or portland cement concrete, wood, tile, terrazzo or similar material, and except for parking areas, the grounds shall be planted and landscaped.
- K. The storage, utilization and manufacture of solid, liquid and gaseous chemicals and other materials shall be permitted subject to the following conditions:
1. The storage, utilization or manufacture of solid materials or products ranging from free or active burning to intense burning is permitted; but only if said materials or products are stored, utilized or manufactured within completely enclosed buildings having incombustible exterior walls and protected throughout by an automatic fire extinguishing system.
  2. All activities involving the use and/or storage and/or disposal of flammable liquids or materials which produce flammable or explosive vapors or gases shall be provided with adequate safety and protective devices against hazards of fire and explosion, as well as with adequate fire fighting and suppression equipment and devices standard to the industry involved. All above ground storage shall be in enclosed fireproof vaults.
  3. The storage, utilization or manufacture of pyrophoric and explosive powders and dusts, and of materials and products which decompose by detonation is prohibited.
  4. The manufacture of flammable liquids or materials which produce flammable or explosive vapors or gases is prohibited.
  5. The storage and utilization of flammable liquids, or of materials that produce flammable or explosive vapors or gases shall be permitted on any lot in accordance with the following table:

<u>Closed Cup Flash-Point in Degrees F.</u>	<u>Total Permitted Quantities of Flammable Materials in Gallons</u>	
	<u>Above Ground</u>	<u>Below Ground</u>
<u>Class I below 100 degrees F.</u>	<u>I Not Permitted</u>	<u>20,000</u>
<u>Class II above 100 degrees F. and below 140 degrees F.</u>	<u>II 1,000</u>	<u>40,000</u>
<u>Class III above 140 degrees F.</u>	<u>III 5,000</u>	<u>80,000</u>

- L. The handling of radioactive materials, the discharge of such materials into air and water, and the disposal of radioactive wastes shall be in strict conformance with:
1. The applicable regulations of the Atomic Energy Commission.

2. The applicable regulations of any instrumentality of the State of Ohio.

M. Glare and Heat -- No industrial operation shall cause intense heat or glare to be visible beyond any abutting lot line.

N. Liquid or Solid Wastes -- No discharge at any point into any public sewer, private sewage disposal system, or stream, or into the ground, of any materials of such nature or temperature as can contaminate any water supply, interfere with bacterial processes in sewage treatment, or offensive elements, shall be permitted, except in accordance with standards approved by the Ohio Department of Health or such other governmental agency as shall have jurisdiction of such activities.

Failure to comply with any of the required conditions by property owners or users will be considered a zoning violation appropriate for prosecution under the terms of this ordinance.

Section 35

"I-1" Light Industrial District

Subsection 3500

Intent -- The "I-1" Industrial Districts as herein established are intended to primarily accommodate wholesale activities, warehouses, and industrial operations whose external, physical effects are restricted to the area of the district and in no manner affect in a detrimental way any of the surrounding districts.

Subsection 3501

Principal Permitted Uses

A. The manufacturing, compounding, assembling, or treatment (or any combination of such processes) of articles or products from the following substances: bone, canvas, cellophane, clay, cloth, cork, elastomers, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, rubber, precious or semi-precious stone or metal sheet metal, shell, textiles, tobacco, wax, wire, and wood, but not including as a principal operation, the manufacturing of such substances.

B. Any industrial activity, such as but not limited to those enumerated below as examples, which fulfills all the requirements of the other sections of this Article.

1. The manufacturing or assembling of the following:

- a. Medical, dental, optical, and similar precision instruments.
- b. Musical instruments.
- c. Novelties, toys, rubber products.
- d. Orthopedic or medical appliances.
- e. Watches, clocks, including clock operated devices.

2. Machine shops and tool and die shops.

3. Manufacturing, assembling or repairing of electrical and electronic products, components and equipment.
4. Compounding, processing, and packaging of meat, dairy, and food products, candy, exclusive of slaughtering.
5. Compounding, processing and packaging of chemical products, but not including any materials which decompose by detonation.
6. Awning company.
7. Bakeries, wholesale.
8. Beverages distributors manufacturing, bottling plants.
9. Carpet and rug cleaning plants.
10. Electric supply company.
11. Fence company.
12. Glass distributors.
13. Meeting halls.
14. Laundries, dry cleaning plants and linen supply.
15. Mail order houses.
16. Offices.
17. Printing, publishing, binding, and typesetting plants.
18. Public utilities; including buildings, necessary structures, storage yards, and other related uses.
19. Sign painting and manufacturing.
20. Trade or industrial schools.
21. Wholesale houses and storage facilities.
22. Warehouses.
23. Other uses similar to the above permitted uses.

Subsection 3502

Conditional Uses

- A. Truck and motor freight terminals and hauling services.
- B. Retail uses which have an industrial character in terms of either their outdoor storage requirements or activities (such as, but not limited to: lumber yards, building materials outlets, garage sales, upholsterer; cabinet maker, outdoor boat or house trailer, automobile, or agriculture implement sales) or serve the convenience needs of the district (such as but not limited to : eating and drinking establishments (in accordance with Section 4303.13 thru 4303.18 inclusive, Ohio Revised Code), banks, savings and loan associations, credit unions, automobile service stations, motel or bowling alleys; or industrial clinic).

C. Contractors' storage and equipment yards, but excluding salvage material or debris.

Subsection 3503

Accessory Uses

- A. Accessory uses, building or other structures customarily incidental to any aforesaid uses.
- B. Temporary buildings for uses incidental to construction work, which buildings shall be removed upon the completion or abandonment of the construction work.

Subsection 3504

Required Conditions

No zoning certificate shall be issued for a "I-1" use, until the applicant shall have certified to the zoning inspector that:

- A. The industrial activity will be conducted wholly within a completely enclosed building, except for automobile service stations, drive-in restaurants, equipment rental services, including automobiles, trucks and trailers; truck motor freight terminals and hauling services.
- B. Noise or vibrations caused by any operation conducted on the premises shall not violate the provisions of Section 17.
- C. No emission of toxic or noxious matter, which is injurious to human health, comfort or enjoyment of life and property or to animal or plant life shall be permitted. Where such emissions could be produced as a result of accident or equipment malfunction, adequate safeguards considered suitable for safe operation in the industry involved shall be taken.
- D. The emission of smoke or other air pollutants shall not violate the standards and regulations of the Montgomery County Combined General Health District. Dust and other types of air pollution borne by the wind shall be kept to a minimum by appropriate landscaping, paving, oiling, or other acceptable means.
- E. There will be no emission of odors or odor-causing substances which can be detected without the use of instruments at or beyond the lot lines.
- F. Where an Industrial District adjoins or faces a residential use, a visual and mechanical barrier, a minimum of four (4) feet and maximum of eight (8) feet in height, shall be provided along the industrial lot line, which may consist of any of the following:
1. An evergreen hedge or dense planting of evergreen shrubs at least four (4) feet thick, and maintained in good condition. Until the density shall be sufficient to prevent children and adults from passing through, the Planning Commission may require wire fencing or other types of protection as a temporary measure.
  2. A wooden fence complimentary in design to the principal structure.



3. Masonry wall.

- G. Exterior lighting shall be shaded wherever necessary to avoid casting direct light upon property located in any residential district or upon any public street.
- H. No building or structure shall be used for residential purposes except that a watchman or custodian may reside on the premises.
- I. No raw materials shall be processed into any of the following basic products: metals of any kind, glass, plastic, textiles, leather or paper.
- J. All premises shall be furnished with all weather hard surface walks of a material such as bituminous or portland cement concrete, wood, tile, terrazzo or similar material, and except for parking areas, the grounds shall be planted and landscaped.
- K. The storage, utilization and manufacture of solid, liquid and gaseous chemicals and other materials shall be permitted subject to the following conditions:
1. The storage, utilization or manufacture of solid materials or products ranging from free or active burning to intense burning is permitted; but only if said materials or products are stored, utilized or manufactured within completely enclosed buildings having imcombustible exterior walls and protected throughout by an automatic fire extinguishing system.
  2. All activities involving the use and/or storage and/or disposal of flammable liquids or materials which produce flammable or explosive vapors or gases shall be provided with adequate safety and protective devices against hazards of fire and explosion, as well as with adequate fire fighting and suppression equipment and devices standard to the industry involved. All above ground storage shall be enclosed in fireproof vaults.
  3. The storage, utilization or manufacture of phyrophoric and explosive powders and dusts, and of materials and products which decompose by detonation is prohibited.
  4. The manufacture of flammable liquids or materials which produce flammable or explosive vapors or gases is prohibited.
  5. The storage and utilization of flammable liquids, or of materials that produce flammable or explosive vapors or gases shall be permitted on any lot in accordance with the following table:

<u>Closed Cup Flash- Point in Degrees F.</u>	<u>Total Permitted Quantities of Flammable Materials in Gallons</u>	
	<u>Above Ground</u>	<u>Below Ground</u>
<u>Class I below 100 degrees F.</u>	<u>I Not Permitted</u>	<u>20,000</u>

<u>Non-Residential Districts</u>	<u>Minimum Size Zoning Lot (Square Foot)</u>	<u>Front Yard Setback Abutting</u>		<u>Side Yard Setback Abutting</u>		<u>Rear Yard Setback Abutting</u>		<u>Maximum Building Height (feet)</u>	<u>Maximum Lot Average %</u>	<u>Minimum Lot Width (Feet)</u>
		<u>Maj. Thoros. R/W's</u>	<u>Other Streets (feet)</u>	<u>Non-Res. (feet)</u>	<u>Res. (feet)</u>	<u>Non-Res. (feet)</u>	<u>Res. (feet)</u>			
<u>"O-S" - Office-Service</u>	<u>10,000</u>	<u>45</u>	<u>35</u>	<u>10</u>	<u>20</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>100</u>
<u>"R-O-I" - Research-Office-Light Industrial</u>	<u>10,000</u>	<u>50</u>	<u>35</u>	<u>20</u>	<u>40</u>	<u>20</u>	<u>50</u>	<u>45</u>	<u>50</u>	<u>100</u>
<u>"I-1" - Light Industrial</u>	<u>10,000</u>	<u>50</u>	<u>35</u>	<u>20</u>	<u>40</u>	<u>20</u>	<u>50</u>	<u>45</u>	<u>50</u>	<u>100</u>
<p><u>In addition to these and other requirements, this district shall meet the development plan requirements as specified in Ordinance 71-72 for "B-1" and "B-2" Districts.</u></p>										

Figure 5A

Class II above 100 degrees F. and below 140 degrees F.

II 1,000

40,000

Class III above 140 degrees F.

III 5,000

80,000

L. The handling of radioactive materials, the discharge of such materials into air and water, and the disposal of radioactive wastes shall be in strict conformance with:

1. The applicable regulations of the Atomic Energy Commission.
2. The applicable regulations of any instrumentality of the State of Ohio.

M. Glare and Heat -- No industrial operation shall cause intense heat or glare to be visible beyond any abutting lot line.

N. Liquid or Solid Wastes -- No discharge at any point into any public sewer, private sewage disposal system, or stream, or into the ground, of any materials of such nature or temperature as can contaminate any water supply, interfere with bacterial processes in sewage treatment, or otherwise cause the emission of dangerous or offensive elements, shall be permitted, except in accordance with standards approved by the Ohio Department of Health or such other governmental agency as shall have jurisdiction of such activities.

Failure to comply with any of the Required Conditions by property owners or users will be considered a zoning violation appropriate for prosecution under the terms of this Ordinance.

Section 2. Ordinance 15-1961, The Zoning Ordinance, as amended, Figure 5 is hereby amended as follows:

INDUSTRIAL USES AND REQUIREMENTS

REQUIREMENTS	TYPE OF USES			
	LIGHT INDUSTRIAL		INDUSTRIAL	
District(s) in which use is permitted	B2 & I1		I1	
Minimum front yard in feet	B2	60	I1	20
Side Yard required in feet	20		20	
Minimum rear yard in feet	20		20	
Maximum building height in feet	B2 I1	35 60	I1	60
Maximum lot coverage in per cent of lot	80		80	
Vision clearance on corner lots	Yes		Yes	

Centerville 4/24/61

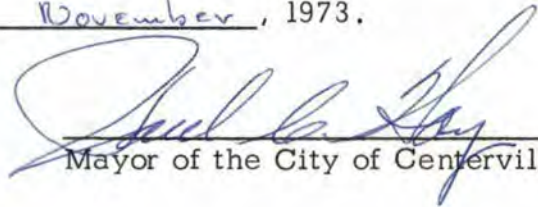
FIGURE 5

Area in brackets to be repealed.


Section 3. Those portions of Section 17, Ordinance 15-1961 attached hereto, made part hereof and bracketed are hereby repealed and the remaining portions of said section are to remain in full force and effect.

Section 4. This ordinance shall become effective from and after the earliest date allowed by law.

PASSED this 5th day of November, 1973.

  
\_\_\_\_\_  
Mayor of the City of Centerville, Ohio

ATTEST:

  
\_\_\_\_\_  
Clerk of the Council of the  
City of Centerville, Ohio

C E R T I F I C A T E

The undersigned, Clerk of the Council of the City of Centerville, Ohio, hereby certifies the foregoing to be a true and correct copy of Ordinance No. 79-73, passed by the Council of the City of Centerville, Ohio, on the 5th day of November, 1973.

Approved as to form, consistency with existing ordinances, the charter & constitutional provisions.  
Department of Law  
Robert N. Farquhar  
Municipal Attorney

  
\_\_\_\_\_  
Clerk of the Council

Section 16.*See Amendment 24-72*

"B3" SHOPPING CENTER DISTRICT REQUIREMENTS AND PROCEDURES - The Local Business Uses numbers 1 to 12 inclusive in Section 15 are permitted in the "B3" District, provided that the proposed plan for a Shopping Center includes at least four (4) separate types of limited Local Business Uses and are specifically classified or implied in the categories in Section 15, A., and provided further that not more than one of which shall be an automobile service as set forth in Section 15, A., and subject to compliance with the following requirements and procedure:

- A. The tract of land involved which is proposed for a Shopping Center shall be of an area of not less than ten (10) acres of land and lie completely within a "B-3" Shopping Center District.
- B. The owner or owners of such tract of land involved which is proposed for a shopping center shall have obtained approval of the Mayor and the Council of the Village of Centerville in accordance with the procedure and additional requirements set forth in Section 20., F.

Section 17.

INDUSTRIAL USES AND REQUIREMENTS - The Industrial Uses defined below, including Accessory Buildings and Accessory Uses, are permitted in the Districts indicated in Figure 5, and in accordance with the requirements of this ordinance.

No activity involving the storage, utilization or manufacture of materials or products which decompose by detonation shall be permitted unless specifically licensed by the Council, and then only in the I-1 District. Such activity shall be conducted in accordance with the rules promulgated by the State Fire Marshal of the State of Ohio. Such materials shall include, but are not limited to, all primary explosives such as lead azide, lead styphate, fulminates, and tetracene; all high explosives such as TNT, RDX, HMX, PETN, and picric acid; propellants and components thereof, such as nitrocellulose, black powder, boron hydrides, hydrazine and its derivatives; pyrotechnics and fireworks such as magnesium powder, potassium nitrate; blasting explosives such as dynamite and nitroglycerine; unstable organic compounds such as acetylides, telrazoles, and ozonides; strong oxidizing agents such as liquid oxygen, perchloric acid, perchlorates, chlorates, and hydrogen peroxide in concentrations greater than thirty-five per cent (35%); and nuclear fuels, fissionable materials and products, and reactor elements such as Uranium 235 and Plutonium 239.

The restrictions of this Article shall not apply to (1) the activities of site preparation or construction, maintenance, repair, alteration, modification or improvement of Buildings, equipment or other improvements on or within the Lot Line; (2) the operation of motor vehicles or other facilities for the transportation of personnel, materials or products; (3) conditions beyond the control of the user such as fire, explosion, accidents, failure or breakdown of equipment or facilities or emergencies; (4) safety or emergency warning signals or alarms necessary for the protection of life, limb or property; or (5) processes for which there are no known means of control shall be exempted from these provisions. Research shall be promptly conducted to discover methods of control leading to installation of corrective equipment.

The performance standards applicable to the District in which an operation or facility is located shall be used in determining the compliance or non-compliance of said operation or facility with such standards.

A. DEFINITIONS. For the purpose of this Article, certain terms and words shall be interpreted and defined as follows:

DECIBEL - A unit of measurement of the intensity or loudness of sound. Sound level meters are used to measure such intensities and are calibrated in decibels.

FLASH POINT - The lowest temperature at which a combustible liquid under prescribed conditions will give off a flammable vapor which will burn momentarily using the closed cup method.

FOOT-CANDLE - A unit of illumination. It is equivalent to the illumination at all points which are one foot distant from a uniform source of 1 candle-power.

FREE BURNING - A rate of combustion described by a material which burns actively and easily supports combustion.

INTENSE BURNING - A rate of combustion described by a material that burns with a high degree of activity and is consumed rapidly.

MODERATE BURNING - A rate of combustion described by a material which supports combustion and is consumed slowly as it burns.

OCTAVE BAND - A term denoting all of the frequencies from one given frequency to a second. In sound octave bands, the second frequency is usually twice the first one.

OCTAVE BAND FILTER - An electrical device which separates the sounds in each octave band and presents them to the sound level meter.

PARTICULATE MATTER - Finely divided liquid or solid material which is discharged and carried along in the air.

RESULTANT DISPLACEMENT - The maximum amount of motion in any direction and shall be determined by means of any three component (simultaneous) measuring system approved by the Village Planning Commission.

RINGELMANN NUMBER - The number of the area on the Ringelmann chart that most nearly matches the light-obscuring capacity of smoke. The Ringelmann chart is described in the U.S. Bureau of Mines Information Circular 6888, on which are illustrated graduated shades of gray for use in estimating smoke density. Smoke below the density of Ringelmann No. 1 shall be considered no smoke or Ringelmann No. 0.

158

**SLOW BURNING OR INCOMBUSTIBLE** - Materials which do not in themselves constitute an active fuel for the spread of combustion. A material which will not ignite, nor actively support combustion, during an exposure for five minutes to a temperature of 1200°F.

**SMOKE** - Small gas borne particles resulting from incomplete combustion, consisting predominantly of carbon and other incombustible material, excluding metallurgical fume and dust, and present in sufficient quantity to be observable independently of the presence of other solids.

**SMOKE UNIT** - The number obtained when the smoke density in Ringelmann number is multiplied by the time of emission in minutes. For the purpose of this calculation, a Ringelmann density reading shall be made at least once a minute during the period of observation; each reading is then multiplied by the time in minutes during which it is observed. The various products are then added together to give the total number of smoke units observed during the entire observation period.

**SMOKE, DENSE** - That smoke which has a density greater than a Ringelmann No. 2.

**THREE COMPONENT MEASURING SYSTEM** - Instrumentation which can measure earthborne vibrations in three directions, that is, vibration occurring in a horizontal as well as a vertical plane.

**VIBRATION** - Oscillatory motion transmitted through the ground.

B. A LIGHT INDUSTRIAL USE is one which creates a minimum amount of nuisance outside the plant; is conducted entirely within enclosed Buildings, does not use the open area around such Buildings for storage of raw materials or manufactured products or for any other industrial purpose other than transporting goods between Buildings; provides for enclosed Loading and Unloading Berths; and such use conforms to the following performance standards:

1. Smoke - The emission of more than ten (10) smoke units per hour per stack and emissions in excess of Ringelmann No. 2 are prohibited. However, not more than six short blasts during any 24 hour period for soot blowing, process purging and fire cleaning each stack shall be permitted an additional ten (10) smoke units, during which time smoke up to and including Ringelmann No. 3 is permitted.

2. Particulate Matter - 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 hour per acre, of which no more than ten per cent (10%) by weight of particles over 35 microns (325 mesh) shall be allowed. Determination of the total net rate of emission shall be made as follows:

- a. Determine the maximum emission in pounds per hour from each source of emission and divide this figure by the number of acres of lot area - thus obtaining a gross hourly emission rate per acre.
- b. Deduct from the gross rate derived above, the appropriate correction factors for height of stack and stack velocity as listed in Tables I and II, thus obtaining the net rate of emission in pounds per hour per acre of each source.
- c. Add together the individual rates of emission derived above of each source to obtain the total net rate of emission from all sources within the boundaries of the Lot. Dust and other types of air pollution, borne by the wind from such sources as storage areas, yards, roads and the like within lot boundaries, shall be kept to a minimum by appropriate landscaping, paving, oiling, fencing or other acceptable means.

3. Odor - No activity or operation shall permit odors to be released which shall be detectable at the Lot Line.

4. Toxic and noxious materials - The emission of toxic and noxious materials shall not exceed the quantities determined by the following formula:

$$Q = 36 Cx^2 \quad \text{where}$$

Q is the maximum permitted quantity of toxic material emitted in the four hour period having the greatest average concentration (cubic feet).



Height of Emission Above Grade (Feet)	Correction (Pounds per Hour per Acre)
50	0.01
100	0.06
150	0.10
200	0.16
300	0.30
400 and Above	0.50

\* Interpolate for intermediate values.

Exit Velocity Up (Feet per Second)	Correction (Pounds per Hour per Acre)
0	0
20	0.03
40	0.09
60	0.16
80	0.24
100 and Above	0.50

\* Interpolate for intermediate values.

TABLE III

TOTAL CAPACITY OF FLAMMABLE MATERIALS PERMITTED, GALLONS*		
Industries Engaged in Storage and Distribution of Such Materials	Above Ground	Under Ground
Materials having a flash point above 190°F	Prohibited	100,000
From and including 105°F to and including 190°F	Prohibited	40,000
Materials having a flash point below 105°F	Prohibited	20,000
Industries Engaged in Utilization and Manufacture of Such Materials		
Materials having a flash point above 190°F	10,000	50,000
From and including 105°F to and including 190°F	1,000	20,000
Materials having a flash point below 105°F	500	10,000

\* 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 listed above.

TABLE IV

Allowance for Height of Emission*	
Height of Emission Above Grade (Feet)	Correction (Pounds per Hour per Acre)
50	0.02
100	0.12
150	0.20
200	0.32
300	0.60
400	1.00
500 and Above	1.50

\* Interpolate for intermediate values.

TABLE V

Allowance for Velocity of Emission*	
Exit Velocity Up (Feet per Second)	Correction (Pounds per Hour per Acre)
0	0
20	0.06
40	0.18
60	0.32
80	0.48
100 and Above	1.00

\* Interpolate for intermediate values.

TABLE VI

TOTAL CAPACITY OF FLAMMABLE MATERIALS PERMITTED, GALLONS*		
Industries Engaged in Storage and Distribution of Such Materials	Above Ground	Under Ground
Materials having a flash point above 190°F	100,000	400,000
From and including 105°F to and including 190°F	50,000	200,000
Materials having a flash point below 105°F	20,000	100,000
Industries Engaged in Utilization and Manufacture of Flammable Materials		
Materials having a flash point above 190°F	50,000	400,000
From and including 105°F to and including 190°F	10,000	200,000
Materials having a flash point below 105°F	5,000	100,000

\* 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 listed above.

C is the threshold limit value for toxic materials in Industry (parts per million by volume) as set forth in "Threshold Limit Values for Toxic Materials in Industry", 1955, issued by the Ohio State Board of Health, Division of Industrial Hygiene.

x is the nearest distance in thousands of feet from the stack, vent, flue or other discharge point to a Residence District or Business District boundary line (ft.).

1000

When C is given as milligrams per cubic meter, multiply this figure by 0.061, place it in the above formula and obtain Q in pounds permitted in four hours. If the material is emitted from open piles, ponds, tanks, areas, etc., the maximum permitted concentration measured at a Residence District boundary line shall be 10 per cent of the threshold limit value C.

5. Glare and Heat - No Industrial operation, activity or Structure shall cause intense heat in such a manner as to be a public nuisance or hazard across lot lines. No industrial operation, activity or Structure shall cause illumination at or beyond any Residence District boundary in excess of 0.1 foot candle.

6. Vibration - Any industrial operation or activity which shall cause at any time and at any point along the nearest adjacent Lot Line, earthborne vibrations in excess of the limits set forth in Column I (below) are prohibited. In addition, any Industrial operation or activity which shall cause at any time and at any point along a Residence District boundary line, earthborne vibrations in excess of the limits set forth in Column II are prohibited.

Vibration shall be expressed as resultant displacement in inches.

Frequency (Cycles per Second)	I Displacement (Inches)	II Displacement (Inches)
Below 10	.0008	.0004
10 to 20	.0005	.0002
20 to 30	.0002	.0001
30 to 40	.0002	.0001
40 and over	.0001	.0001

The above tabulation is for steady static vibration; this is defined as continuous vibration in contrast to discrete pulses. Impact vibration, that is, discrete pulses which do not exceed 100 impulses per minute, shall not produce in excess of twice (2 times) the displacement stipulated above.

7. Noise - At no point on the boundary of a Residence or Business District shall the sound pressure level of any operation or plant (other than background noises produced by sources not under control of this ordinance, such as the

operation of motor vehicles or other transportation facilities) exceed the decibel limits in the octave bands designated below.

Octave Band Frequency (Cycles Per Second)	I Maximum Permitted Sound Level (In Decibels) <u>ALONG RESIDENCE DISTRICT BOUNDARIES</u>	II Maximum Permitted Sound Level (In Decibels) <u>ALONG BUSINESS DISTRICT BOUNDARIES</u>
	20 to 75	60
75 to 150	52	55
150 to 300	44	48
300 to 600	38	42
600 to 1200	33	38
1200 to 2400	30	34
2400 to 4800	29	33
above 4800	28	32

The prescribed limits of Column I are applicable between the hours of 8:00 A.M. and 6:00 P.M. At other times the allowable levels shall be reduced by six (6) decibels in every octave band.

Sound levels shall be measured with a sound-level meter and associated octave band filter, manufactured in compliance with standards prescribed by the American Standards Association. When sounds are of such short duration as not to be measured accurately with the sound-level meter, the impact noise analyzer as manufactured under standards of the American Standards Association shall be used to determine the peak value of the impact. Impacts shall meet the noise performance standards.

8. Fire Hazards - The storage, utilization or manufacture of solid materials or products ranging from incombustible to moderate burning is permitted.

The storage, utilization or manufacture of solid materials or products ranging from free or active burning to intense burning is permitted provided the following condition is met:

Said materials or products shall be stored, utilized or manufactured within a completely enclosed Buildings having incombustible exterior walls and protected throughout by an automatic fire extinguishing system.

The storage, utilization or manufacture of flammable liquids or gases\* which produce flammable or explosive vapors, shall be permitted in accordance with TABLE III (exclusive of storage of finished products in original sealed containers).

9. Water Pollution - No industrial operation or activity shall discharge, or cause to be discharged, liquid or solid wastes into public waters unless in conformance with the provisions of the Stream Pollution Control Law of the State of Ohio

\*See Footnote, Table III

and the regulations promulgated thereunder. Plans and specifications for proposed sewage and industrial waste treatment and disposal facilities shall be submitted to and approval obtained from the Stream Pollution Control Board of the State of Ohio.

C. AN INDUSTRIAL USE is one which required both Buildings and open area for manufacturing, fabricating, processing, extraction, heavy repairing, dismantling, storage or disposal of equipment, raw materials, manufactured products or wastes, and land and/or buildings in this District shall be used so as to comply to the following performance standards.

1. Smoke - The emission of more than thirty (30) smoke units per hour per stack and emissions in excess of Ringelmann No. 2 are prohibited. However, once during any 4 hour period, for soot blowing, process purging and fire cleaning, each stack shall be permitted an additional ten (10) smoke units, during which time smoke up to and including Ringelmann No. 3 is permitted.

2. Particulate Matter - The rate of emission of particulate matter from all sources within the boundaries of any Lot shall not exceed a net figure of three pounds per hour per acre, of which no more than ten per cent (10%) by weight of particles larger than 35 microns (325 mesh) shall be allowed. Determination of the total net rate of emission shall be made as follows:

- a. Determine the maximum emission in pounds per hour from each source of emission and divide this figure by the number of acres of Lot area - thus obtaining a gross hourly emission rate per acre.
- b. Deduct from the gross rate derived above, the appropriate correction factors for height of stack and stack velocity as listed in Tables IV and V, thus obtaining the net rate of emission in pounds per hour per acre of each source.
- c. Add together the individual rates of emission derived above of each source to obtain the total net rate of emission from all sources within the boundaries of the Lot.

Dust and other types of air pollution, borne by the wind from such sources as storage areas, yards, roads and the like within Lot boundaries, shall be kept to a minimum by appropriate landscaping, paving, oiling, fencing or other acceptable means. Emission of particulate matter from such sources in excess of the weight limitations specified herein is prohibited.

3. Odor - No activity or operation shall permit odors to be released which shall be detectable at any Residence District boundary line. (In addition, such odor, when measured at the Lot Line, shall be rendered undetectable by mixing one volume of the odorous air with four volumes of clean air).

4. Toxic and noxious materials - The emission of toxic and noxious materials shall not exceed the quantities determined by the following formula:

Q = 90 Cx<sup>2</sup> where

Q is the maximum permitted quantity of toxic material emitted in the four hour period having the greatest average concentration (cubic feet).

C is the threshold limit value for toxic materials in industry (parts per million by volume) as set forth in "Threshold Limit Values for Toxic Materials in Industry", 1955, issued by the Ohio State Board of Health Division of Industrial Hygiene; x is the nearest distance in thousands of feet from the stack, vent, flue or other discharge point to a Residence or Business District boundary line (ft.) / 1000

When C is given as milligrams per cubic meter, multiply this figure by 0.061, place it in the above formula and obtain Q in pounds permitted in four hours. If the material is emitted from open piles, ponds, tanks, areas, etc., the maximum permitted concentration measured at a Residence District boundary line shall be 25 per cent of the threshold limit value C.

5. Glare and Heat - The standards regulating Glare and Heat for a Light Industrial Use shall apply to an Industrial Use.

6. Vibration - Any industrial operation or activity which shall cause at any time and at any point along an Il or Business District Boundary, earthborne vibrations in excess of the limits set forth in Column I (below) is prohibited. in addition, any industrial operation or activity which shall cause at any time and at any point along a Residence District boundary line, earthborne vibrations in excess of the limits set forth in Column II is prohibited.

Vibration shall be expressed as resultant displacement in inches.

Frequency (Cycles Per Second)	I Displacement (Inches)	II Displacement (Inches)
Below 10	.0020	.0004
10 to 20	.0010	.0002
20 to 30	.0006	.0001
30 to 40	.0004	.0001
40 to 50	.0003	.0001
50 and over	.0002	.0001

The above tabulation is for steady static vibration; this is defined as continuous vibration in contrast to discrete pulses. Impact vibration, that is, discrete pulses which do not exceed 100 impulses per minute, shall not produce in excess of twice (2 times) the displacement stipulated above.

7. Noise - At no point on the boundary of a Residence or Business district shall the sound pressure level of any operation or plant (other than background noises produced by sources not under control of this Ordinance, such as the operation of motor vehicles or other transportation facilities) exceed the decibel limits in the octave bands designated below:

Octave Band Frequency (Cycles per Second)	I	II
	Maximum Permitted Sound Level (In Decibels) <u>ALONG RESIDENCE DISTRICT BOUNDARIES</u>	Maximum Permitted Sound Level (In Decibels) <u>ALONG BUSINESS AND II DISTRICT BOUNDARIES</u>
20 to 75	60	63
75 to 150	52	55
150 to 300	44	48
300 to 600	38	42
600 to 1200	33	38
1200 to 2400	30	34
2400 to 4800	29	33
above 4800	28	32

The prescribed limits of Column I are applicable between the hours of 8:00 A. M. and 6:00 P. M. At other times the allowable levels shall be reduced by six (6) decibels in every octave band.

Sound levels shall be measured in the manner prescribed for this standard for a Light Industrial Use.

8. Fire Hazards - The storage, utilization or manufacture of solid materials or products ranging from incombustible to moderate burning is permitted.

The storage, utilization or manufacture of solid materials ranging from free or active burning to intense burning is permitted provided the following condition met:

Said materials shall be stored, utilized, or manufactured in a manner approved by the State Fire Marshal.

The storage, utilization or manufacture of flammable liquids or gases\* which produce flammable or explosive vapors shall be permitted in accordance with TABLE VI (exclusive of storage of finished products in original sealed containers).

9. Water Pollution - The standards governing water pollution for a Light Industrial Use shall apply to an Industrial Use.

\*see Footnote TABLE VI.

Sound levels shall be measured with a sound-level meter and associated octave band filter, manufactured in compliance with standards prescribed by the American Standards Association. When sounds are of such short duration as not to be measured accurately with the sound-level meter, the impact noise analyzer as manufactured under standards of the American Standards Association shall be used to determine the peak value of the impact. Impacts shall meet the noise performance standards.

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D. OTHER PROVISIONS AND REQUIREMENTS for Light Industrial and Industrial Uses are as follows:

1. Each Use shall provide one Parking Space for each 3 employees thereof located on the same Lot as the Use, or within 300 feet on a site approved by the Commission.
2. Each Industrial Use shall provide Loading and Unloading Berths located on the same Lot as the Use, as specified in Figure [2.] 6
3. Parking Space requirements may be waived by the Commission where 50 percent or more of the area in a Block was occupied by Business or Industrial Structures at the time of passage of this Ordinance.
4. Groups of uses requiring Parking Space may join in establishing group or employee parking areas with capacity aggregating that required for each participating Use.
5. One-half of an Alley abutting the rear of a Lot may be included in the Rear Yard, but such Alley space shall not be included for Loading and Unloading Berths.
6. [ The Building Height requirement in Figure 1 may be increased if the Buildings are set back, from front and rear property lines, one foot for each two feet of additional height above the maximum Building Height requirements. ]