

ORDINANCE NO. 1812

AN ORDINANCE to amend and reordain Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended; which Chapter 3B relates to THE CONSERVATION OF AIR RESOURCES, THE PREVENTION, ABATEMENT, REGULATION AND CONTROL OF AIR POLLUTION AND PROVIDES PENALTIES FOR VIOLATIONS.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended and reordained to read as follows:

CHAPTER 3B

AIR POLLUTION CONTROL

Sec. 3B-1. Short title.

This chapter shall be known and may be cited as the "Air Pollution Control Code" of the City of Alexandria, Virginia.

Sec. 3B-2. Definitions.

Unless otherwise expressly stated or the context clearly indicates a different intention, the following terms shall, for the purpose of this chapter, have the meanings indicated in this section:

Air Pollution. The presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people of life or property.

Air Pollution Control Officer. The Director.

Air Pollution Control Coordinator. The Engineer.

Air Pollution Episode. Meteorological conditions, generally temperature inversion, that reduces the effective volume of air in which the contaminants are diluted and as a result air pollution may reach levels that would cause imminent and substantial endangerment to the health of persons.

Air Quality. The specific measurement in the ambient air of a particular air contaminant at any given time.

Ambient Air. The surrounding or outside air.

Ambient Air Quality Standard - Primary. Air quality which, allowing an adequate margin of safety, is requisite to protect the public health.

Ambient Air Quality Standard - Secondary. Air quality which is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of air contaminants in the ambient air.

Bacharach Scale. A graduated scale of shades of gray going from 0 through 10, with 0 being white and 10 being dense black, developed by the Bacharach Industrial Instrument Company and used to evaluate particulate matter in flue gas samples.

Combustion Installation. A source consisting of any furnace; oven, kiln, incinerator, fuel-burning equipment, or any other stationary equipment in which solid, liquid, or gaseous materials are burned.

Commencing New Source. Any substantial financial commitment relating to the design criteria concerning preparation of a new site, or the beginning of a modification. (See definition of Existing Source, Modification and New Source.)

Contaminant. Smoke, dust, soot, grime, carbon, or any other particulate matter, radioactive matter, noxious gas, acids, fumes, gases, odor, vapor, or any combination thereof.

Control Equipment. Any equipment which has the function of controlling the emissions from a process, fuel-burning, or refuse-burning equipment and thus reduces the creation of, or the emission of air contaminants into the atmosphere, or both.

Director. The Director of the Department of Public Health or his duly authorized agent.

Dust. Solid particles projected into the air by natural forces, such as wind, volcanic eruption, or earthquake, and by mechanical or man-made processes such as crushing, grinding, milling, drilling, demolition, shoveling, conveying, screening, bagging, and sweeping.

Engineer. The Air Pollution Coordinator designated or appointed in the Health Department of the City of Alexandria.

Existing Source. Any source which is in being or is defined as a commencing new source on the effective date of these regulations or on which construction or modification has been commenced; except that any such existing source or any emission point from such existing source (where such source involves multiple emission points) which is modified after the effective date of these regulations shall be reclassified as a "new source". (See definition of Commencing New Source or Modification, Modification, and New Source.)

Fly Ash. Particulate matter capable of being gas-borne or air-borne and consisting of fused ash and partially burned or unburned fuel or other material from a combustion installation.

Fuel-burning Equipment. A source consisting of any furnace, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

Fugitive Dust. Solid air-borne particulate matter or dust emitted from any source other than a flue, stack, duct or chimney.

Fumes. Minute particulate matter generated by the condensation of vapors from solid matter after volatilization from the molten state, or generated by sublimation, distillation, calcination or chemical reaction when these processes create air-borne particles.

Gases. Formless fluids which, under standard conditions, occupy the space of enclosure and which can be changed to the liquid or solid state only by the combined effect of increased pressure and decreased temperature.

Gasoline. Any petroleum distillate having a Reid vapor pressure in the range of four (4) to fifteen (15) pounds at 100 degrees F.

Heating Value. The heat released by combustion of one pound of fuel or other material measured in British Thermal Units (BTU) on an as received basis.

Incinerator. Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning. "Open burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare or flare stack shall be considered incineration.

Manufacturing Operation. Any source consisting of any process or combination of physically connected dissimilar processes which is operated to effect physical and/or chemical changes in an article.

Mist. A state of atmospheric obscurity produced by suspended liquid droplets.

Mobile Sources. Any vehicle, including, but not limited to any motor vehicle, truck, or other land craft, air craft, locomotive, bus or ship, rail vehicle, or water craft, which emits or may emit any air contaminant.

Modification. Any physical change in, or change in the method of operation of, a stationary source which increased the amount of any air contaminant (to which a standard applies) emitted by such source or which results in the emission of any air contaminant (to which a standard applies) not previously emitted, except that:

- (1) Routine maintenance, repair and replacement shall not be considered physical changes, and
- (2) The following shall not be considered a change in the method of operation:
 - (i) A change in the production rate, if such does not increase the emission of contaminants (to which a standard applies) or which results in the emission of contaminants (to which a standard applies) not previously emitted;
 - (ii) An increase in hours of operation;
 - (iii) Use of an alternative fuel or raw material if prior to the date of these regulations the source was designed to accommodate such alternative use. (See definition of Commencing New Source or Modification, Existing Source, and New Source.)

Motor Vehicle. Any powered conveyance normally licensed by the Virginia Division of Motor Vehicles.

New Source. Any source the construction or modification of which is commenced on or after the effective date of this ordinance; or for the specific stationary sources covered by the "Federal Standards of Performance for New Stationary Sources", the date promulgated will apply; and any source relocated from an approved site. (See definitions of Commencing New Source or Modification, Existing Source, and Modification.)

Nuisance. Environmental conditions, intermittent or continuous, produced or correctable by human agency, prejudicial to reasonable enjoyment of health, comfort or safety by any individual or causing injury or damage to persons, property or the conduct of business.

Odor. The sensation resulting from stimulation of the human sense of smell.

Opacity. The characteristic of a substance which renders it partially or wholly impervious to rays of light. Opacity as used in this chapter refers to the obscuration of an observer's view.

Open Burning. The burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate flue, stack, duct or chimney.

Open fire. A fire in which any material is burned in the open or in a receptacle other than a furnace, incinerator, or other equipment connected to a stack.

Owner. Owner as used in this ordinance shall have no connotation other than that customarily assigned to the term "person", but shall include bodies politic and corporate, associations, partnerships, personal representatives, trustees and committees, as well as individuals.

Particulate Matter. Any material, except water in uncombined form, that is airborne and exists as a liquid or a solid at standard conditions. Particulate matter is sometimes hereinafter referred to as "Particulate".

Person. Any individual, corporation, cooperative, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this State or any legal successor, representative, agent or agency of the foregoing.

Point Source.

- (1) Any stationary source causing emissions in excess of 25 tons per year of any contaminant for which there is a national standard.
- (2) Without regard to amount of emission, stationary sources such as those listed in Appendix C, Major Pollutant Sources, on page 15497 of the Federal Register, Volume 36, No. 158, dated August 14, 1971.
- (3) Any stationary pollution source regardless of quantity of emission or contaminant which is not specifically exempted by this ordinance.

Process. Any action, operation, or treatment and the equivalent used in connection therewith, and all methods or forms of manufacturing or processing that may emit smoke, particulate matter or gases.

Process Weight. Total weight of all materials introduced into any source process unit which may cause any emissions of contaminants. Process weight includes solid fuels charged, but does not include liquid and gaseous fuels charged or combustion air for all fuels.

Process Weight Rate. A rate established as follows:

- (1) For continuous or long-run steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.
- (2) For cyclical or batch unit operations, or unit processes, the total weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.

Where the nature of any process operation or the design or any equipment is such as to permit more than one interpretation of this definition, the interpretation which results in the minimum value for allowable emission shall apply.

Production Rate. The weight of final product obtained per hour of operation. If the rate of product going to storage can vary, the production rate shall be determined by calculation from the feed rates of raw material.

Ringelmann Smoke Chart. A chart for grading the appearance, density, or shade of smoke as published, with instructions for use, by the U. S. Bureau of Mines in Information Circular 8333, dated May 1967. Any other method for grading smoke which is approved by the Director and the Engineer as the equivalent of the Ringelmann Chart may be substituted therefor.

Salvage Operations. Any source consisting of any business, trade or industry engaged in whole or in part in salvaging or reclaiming any product or material, such as, but not limited to, reprocessing of used motor oils, metals, chemicals, shipping containers, or drums, and specifically including automobile graveyards and junkyards as defined in Sec. 33-279.3 of the Code of Virginia of 1950, as amended.

Smoke. Small gasborne particulate matter consisting predominantly but not exclusively of carbon, ash and other material in concentrations sufficient to form a visible plume.

Soiling Index. A measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No. 4 filter paper for a measured period of time (normally two hours) expressed as COH's/1000 linear feet.

Source. Any and all points of origin of emission of air contaminants, whether privately or publicly owned or operated or person contributing to emission of air contaminants. Without limiting the generality of the foregoing, this term includes all types of business, commercial and industrial plants, works, shops and stores, and heating and power plants or stations, buildings and other structures of all types.

Stack or Chimney. Any flue, conduit, or duct arranged to conduct emissions into the atmosphere.

Standard Conditions. Dry gas temperature of 70° Fahrenheit and gas pressure of 14.7 pounds per square inch absolute.

Stationary Source. Sources other than mobile sources.

Volatile Organic Compound. Any compound, containing carbon and hydrogen or containing carbon and hydrogen in combination with any other element, which has a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions. (Kerosene and fuel oil used for household heating have vapor pressures of less than 1.5 pounds per square inch absolute under actual storage conditions; therefore kerosene and fuel oil are not considered as Volatile Organic Compounds.)

Unless specifically defined herein, the technical terms used in this chapter have the meanings commonly ascribed to them by recognized authorities.

Sec. 3B-3. Smoke or other visible emissions - stationary sources.

a. Prohibition of smoke or other visible emissions.

No owner shall cause, suffer, allow or permit the discharge into the outdoor atmosphere from any single point of emission from a source any air pollutant which is

1. darker in shade than smoke designated as No. 1 on the Ringelmann Smoke Chart, or
2. of such opacity as to obscure an observer's view to a degree greater than does smoke designated as No. 1 on the Ringelmann Smoke Chart (when used as a measure of opacity).

b. Exceptions.

1. If it can be demonstrated that emissions discharging from the single point of emission are in compliance with applicable regulations on particulate emissions for the specific source in question, the Engineer may modify the requirements of this regulation.
2. When starting a new fire or blowing tubes or cleaning a fire box, a person may discharge into the atmosphere from any single point of emission, emissions of a shade or density not darker than No. 3 on the Ringelmann Chart or 60 percent opacity for brief periods (not to exceed 6 minutes in any 60 minute period).
3. The limits of Section 3B-3a shall not apply when the opacity of the visible emission is due to the presence of uncombined water.

c. Traffic hazard.

No person shall discharge from any source whatsoever such quantities of air contaminants, uncombined water, or other materials which may cause a traffic hazard.

Sec. 3B-4. Particulate emission from existing fuel-burning equipment.

a. Emissions prohibited for furnaces.

1. No owner shall allow to be emitted into the outdoor atmosphere from any fuel burning equipment or to pass a convenient measuring point near the stack outlet, particulate matter in the flue gases to exceed the appropriate following standard:
 - (a) For operations with total heat input less than eighty-seven million (87×10^6) BTU per hour, the maximum allowable emission shall be 0.3 pounds of particulate per million BTU input.
 - (b) For operations with total heat input between eighty-seven million (87×10^6) and ten billion ($10,000 \times 10^6$) BTU per hour, the maximum allowable emission in pounds per million BTU input, E, shall be determined by the following equation: $E = 0.8425 H^{-0.2314}$, where H is the total heat input in millions of BTU per hour.

- (c) For operations with total heat input in excess of ten billion (10,000 x 10⁶) BTU per hour, the maximum allowable emission shall be 0.10 pounds of particulate per million BTU input.
- (d) Figure 1 illustrates the above emissions allowed.

2. For purposes of this chapter, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, or maximum continuous heat input, or maximum continuous heat input determined by test, whichever is greater. The total heat input of all fuel burning units at a plant or on a premise normally operated simultaneously shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

b. Emission testing.

Emission tests relating to this ordinance shall be made by generally recognized standards or methods of measurement. Methods can be found in the ASME Test Code for Dust Separating Apparatus (PTC-21-1941) and the ASME Test Code for Determining Concentrations in Gas Streams (PTC-27-1957) but these may be adjusted or changed by the Engineer to suit specific sampling conditions or needs based upon good practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.

c. Exemptions.

All fuel-burning equipment for space heating with a BTU input of less than 350,000 BTU per hour shall be exempt from this rule.

d. Bacharach standard.

No owner shall cause or allow to be emitted into the outdoor atmosphere from any fuel-burning equipment or to pass a convenient measuring point near the breeching, smoke which exceeds Number 4 on the Bacharach Scale or the equivalent.

Sec. 3B-5. Particulate matter (other than from fuel-burning equipment and incinerators).

a. Emission of particulate matter prohibited.

The maximum allowable emission of particulate matter from any source whatever except fuel-burning equipment and incinerators shall be determined from Figure 2. Where the process weight (moisture free basis) per hour falls between two values in the figure, the maximum weight discharged per hour shall be determined by linear interpolation. Where the process weight is in excess of 60,000 pounds per hour, there shall not be discharged in any one hour from any source whatsoever particulate matter in excess of 40 pounds per hour.

FIGURE 1

ALLOWABLE PARTICULATE EMISSIONS FROM FUEL BURNING EQUIPMENT

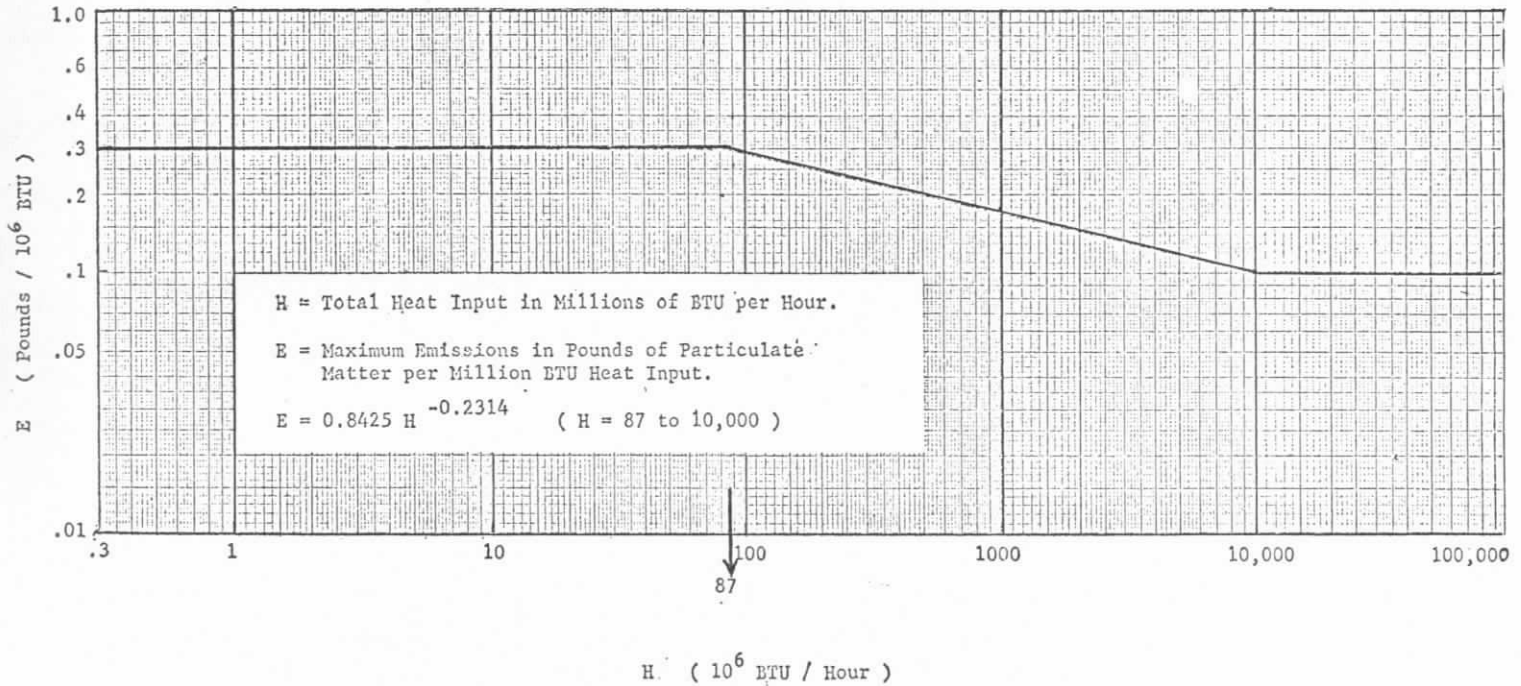


FIGURE 2

Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)	Process Wt./hr (lbs)	Maximum Weight Disch/hr (lbs)
50	0.24	3400	5.44
100	0.46	3500	5.52
150	0.66	3600	5.61
200	0.85	3700	5.69
250	1.03	3800	5.77
300	1.20	3900	5.85
350	1.35	4000	5.93
400	1.50	4100	6.01
450	1.63	4200	6.08
500	1.77	4300	6.15
550	1.85	4400	6.22
600	2.01	4500	6.30
650	2.12	4600	6.37
700	2.24	4700	6.45
750	2.34	4800	6.52
800	2.43	4900	6.60
850	2.53	5000	6.67
900	2.62	5500	7.03
950	2.72	6000	7.37
1000	2.80	6500	7.71
1100	2.97	7000	8.05
1200	3.12	7500	8.39
1300	3.26	8000	8.71
1400	3.40	8500	9.03
1500	3.54	9000	9.36
1600	3.66	9500	9.67
1700	3.79	10000	10.00
1800	3.91	11000	10.63
1900	4.03	12000	11.28
2000	4.14	13000	11.89
2100	4.24	14000	12.50
2200	4.34	15000	13.13
2300	4.44	16000	13.74
2400	4.55	17000	14.36
2500	4.64	18000	14.97
2600	4.74	19000	15.58
2700	4.84	20000	16.19
2800	4.92	30000	22.22
2900	5.02	40000	28.30
3000	5.10	50000	34.30
3100	5.18	60000 or more	40.00
3200	5.27		
3300	5.36		

o. Control of fugitive particulate matter (fugitive dust).

No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne or to create a nuisance. Such reasonable precautions may include, but are not limited to, the following:

1. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can create airborne dusts.
3. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations. The use of sandblasting for cleaning building exteriors in residential or commercial areas is prohibited.
4. Open equipment for conveying or transporting materials likely to become airborne shall be covered, or treated in an equally effective manner at all times when in motion.
5. The paving of roadways and their maintenance in a clean condition.
6. The prompt removal of earth or other material from paved streets over which such earth or other material has been transported by trucking or earth moving equipment or erosion by water.

Sec. 3B-6. Gaseous contaminants.

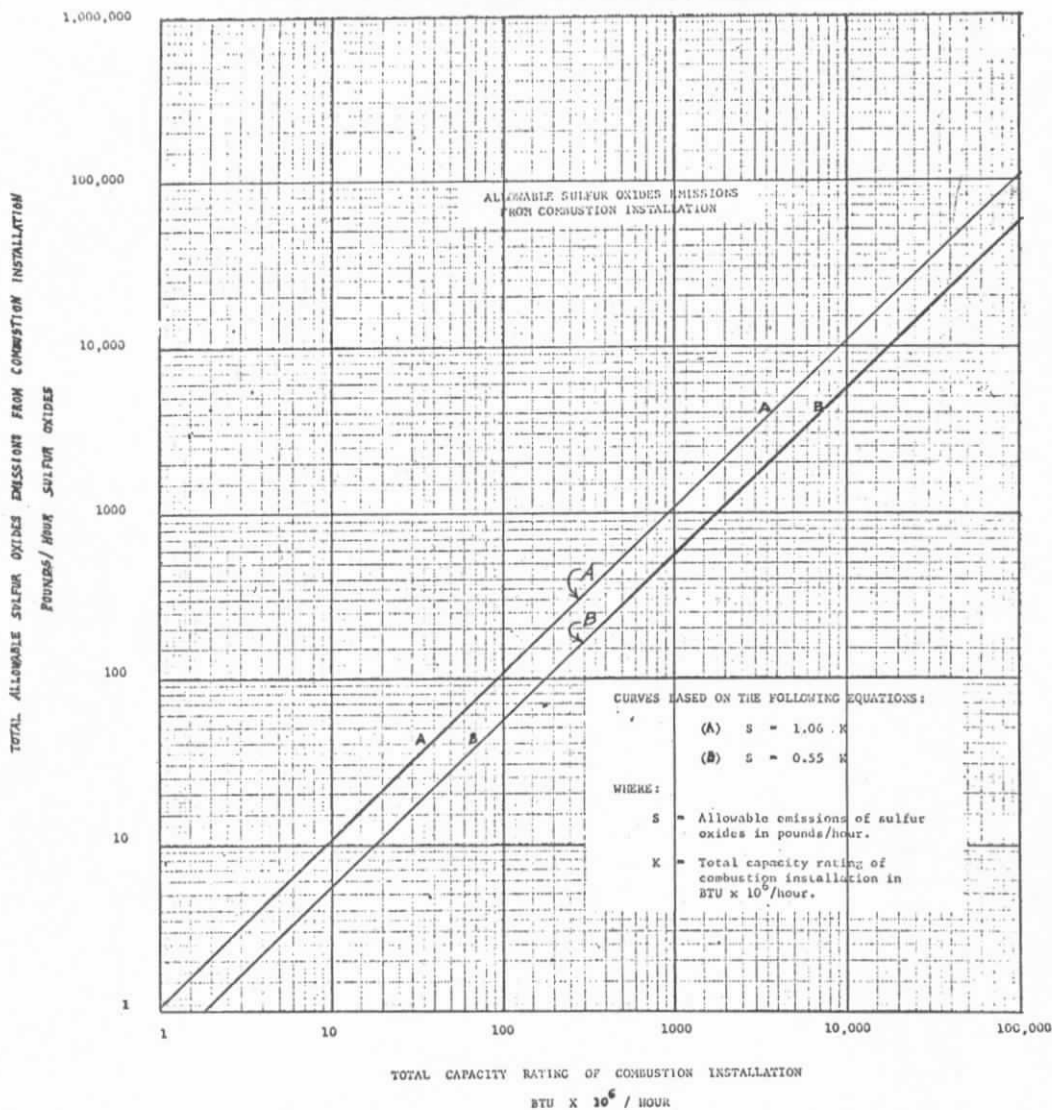
a. Prohibition of gaseous contaminant emissions.

No owner shall allow the operation of combustion installation and process equipment so as to disperse into the outdoor atmosphere gaseous contaminant emissions in such quantities or concentrations as to injure human, plant or animal life, or cause a condition of air pollution or create a nuisance.

b. Sulfur - containing gases and compounds.

1. Control of the emission of sulfur dioxide from fuel burning installations.
 - (a) No person shall cause, suffer, allow, or permit sulfur dioxide caused by the combustion of fuel to be discharged from all combustion equipment at a given location in excess of the quantity shown by Curve A, Figure 3.
 - (b) If necessary to achieve and maintain the ambient air quality standards, the City may require emission standards in accordance with Curve B, Figure 3.

FIGURE 3



2. Sulfur oxides from burning of fuel.

No owner shall burn, sell or make available for sale any fuel the sulfur content of which exceeds 1% by weight.

c. Control of hydrocarbon emissions from stationary sources.

1. Storage of volatile organic materials.

No person shall place, store, or hold in any stationary tank, reservoir or other container of more than 65,000 gallons capacity any volatile organic compounds unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control devices:

- (a) A floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 17.0 pounds per square inch absolute or greater at 100 degrees F or 15 pounds Reid vapor pressure, whichever is limiting. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.
- (b) A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.
- (c) Other equipment or means of equal efficiency for purposes of air pollution control as may be approved by the Engineer.
- (d) No person shall place, store, or hold in any stationary storage vessel more than 250 gallons capacity any volatile organic compound unless such vessel is equipped to be filled through a submerged fill pipe or is a pressure tank as previously described or is fitted with a vapor recovery system as previously described.

2. Volatile organic materials loading facilities.

- (a) No person shall load any volatile organic compounds into any tank truck or trailer from any loading facility handling more than 50,000 gallons per day unless such loading facility is equipped with a vapor collection and disposal system, or use of a filling procedure of equal or better emission control efficiency, or their equivalent, properly installed, in good working order, and in operation.

- (b) No person shall load any volatile organic compounds into any truck or trailer from any loading facility handling more than 50,000 gallons/day of such compounds unless such loading facility is equipped as set forth in the preceding paragraph. If a vapor collection and disposal system is utilized, the loading arm shall be equipped with a vapor collection adaptor, pneumatic, hydraulic, or other mechanical means which will provide a vapor-tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid organic compound drainage from the loading device when it is removed from the hatch of any tank truck or trailer. When loading is effected through means other than the hatches, all loading lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

3. Volatile organic compounds water separation.

No person shall use any compartment of any single or multiple compartment equipment designed to separate water from only volatile organic compounds which compartment received effluent water containing 200 gallons a day or more of volatile organic compound from any equipment processing, refining, treating, storing, or handling volatile organic compounds unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation:

- (a) A container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (b) A container equipped with a floating roof consisting of a pontoon type, double-deck type roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (c) A container equipped with a vapor recovery system consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all container gauging and sampling devices gas-tight except when gauging or sampling is taking place.
- (d) A container having other equipment of equal efficiency for purposes of air pollution control as may be approved by the Engineer.

4. Pumps and compressors.

All pumps and compressors handling volatile organic compounds shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution control as may be approved by the Engineer.

5. Waste gas disposal.

- (a) No person shall emit a waste gas stream from any plant producing ethylene for chemical feed stock or utilizing ethylene as a raw material into the atmosphere in excess of 40 pounds per day unless the waste gas stream is properly burned at 1300 degrees F. for 0.3 seconds or greater in a direct-flame after-burner or removed by other methods of comparable efficiency.
- (b) No person shall emit continuously hydrocarbon gases to the atmosphere from a vapor blowdown system unless these gases are burned by smokeless flares, or an equally effective control device as approved by the Engineer. This rule is not intended to apply to accidental, emergency, or other infrequent emissions of hydrocarbons, needed for safe operation of equipment and processes.

6. Organic solvents.

- (a) A person shall not discharge more than 15 pounds of organic materials in to the atmosphere in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen unless such a discharge represents an overall reduction of 85% or greater.
- (b) A person shall not discharge more than 40 pounds of organic material into the atmosphere in any one day from any article, machine, equipment, or other contrivance used under conditions other than described in the preceding paragraph for employing, applying, evaporating, or drying any photochemically reactive solvent or material containing such solvent, unless all organic materials discharged from such article, machine, equipment or other contrivance have been reduced by at least 85% overall. The limitations prescribed in this paragraph shall not apply to any complying industrial surface coating (paint, lacquer, varnish, ink, adhesive or other surface coating material) which emits to the atmosphere organic compounds which are not photochemically reactive. In determining percentages for water-based paints, the quantity of water shall be in the calculation of percentage.
- (c) Any series of articles, machines, equipment or other contrivances designed for processing a continuously moving sheet, web, strip, or wire which is subjected to any combination of operations involving any photochemically reactive solvent or material containing such solvent shall be subject to compliance with the immediately preceding paragraph.
- (d) Emissions of organic materials to the atmosphere from the clean-up with photochemically reactive solvents of the articles, machines, equipment or other contrivances previously described shall be included with the other emissions or organic materials from that article, machines, equipment, or other contrivances for determining compliance with this section.

- (e) Emissions of organic materials to the atmosphere as a result of spontaneously continuing drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance in this section described shall be included with other emissions of organic materials from that article, machine, equipment, or other contrivance, for determining compliance with this section.
- (f) Emissions of organic materials into the atmosphere required to be controlled under this section shall be reduced by:
 - (i) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or
 - (ii) Absorption, or
 - (iii) Processing in a manner determined by the Engineer to be not less effective than (i) or (ii) above.
- (g) A person incinerating, absorbing, or otherwise processing organic materials pursuant to this rule shall provide, properly install, and maintain in calibration, in good working order and in operation, devices for indicating temperatures, pressures, rates of flow, or other operating conditions necessary to determine the degree and effectiveness of the air pollution controls.
- (h) Any person using organic solvents or any materials containing organic solvents shall supply the Engineer, upon request and in the manner and form prescribed by him, written evidence of the chemical compositions, physical properties, and amount consumed for each organic solvent used.
- (i) The provisions of this section shall not apply to:
 - (1) The manufacture of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.
 - (2) The use of equipment for which other requirements are specified by Section 3B-6c 1. or 3B-6c 2., or which is exempt from air pollution control requirements by this ordinance.
 - (3) The spraying or application with other equipment of insecticides, pesticides, or herbicides.
 - (4) The employment, application, evaporation, or drying of saturated halogenated hydrocarbons, or organic compounds in which all olefinic groups contain 3 or more halogen atoms.
 - (5) Development or research laboratory operation involving the use of photochemically reactive solvents.
 - (6) The use of any material, in any article, machine, equipment or other contrivance if:
 - (i) The volatile content of such material consists only of water and organic solvents, and

- (ii) The organic solvents comprise not more than 20 percent of said volatile content, and
 - (iii) the volatile content is not photochemically reactive.
- (j) For the purpose of this section, organic solvents include dilutents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.
 - (k) For the purpose of this section, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:
 - (1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent.
 - (2) A combination of aromatic hydrocarbons: 20 percent..
 - (1) For the purpose of this rule, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.

7. Architectural coatings.

- (a) A person shall not sell or offer for sale in containers exceeding one gallon capacity, any architectural coating containing photochemically reactive solvent.
- (b) A person shall not employ, apply, evaporate, or dry any architectural coating, purchased in container exceeding one gallon capacity, containing photochemically reactive solvent.
- (c) A person shall not thin or dilute any architectural coating with a photochemically reactive solvent.
- (d) For the purpose of this rule, an architectural coating is defined as a coating used for residential or commercial buildings and their appurtenances or industrial buildings.

8. Disposal and evaporation of solvents.

A person shall not, during any one day, dispose of a total of more than 1 1/2 gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

d. Control of carbon monoxide emissions.

No person shall emit carbon monoxide waste gas stream from any catalyst regeneration or a petroleum cracking system, petroleum coker, or other petroleum process or from the operation of a grey iron cupola, blast furnace, or basic oxygen steel furnace into the atmosphere unless (1) the waste gas stream is burned at 1300 degrees F. for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with a combustion control indicator or (2) other devices or procedures are employed that reduce carbon monoxide emissions to levels comparable with a boiler or after-burner installation.

e. Control of nitrogen oxides emissions.

1. Nitric acid manufacture.

- No person shall cause, suffer, allow or permit the emission of nitrogen oxides (expressed as nitrogen dioxide) from nitric acid manufacturing plants into the outdoor atmosphere in excess of 5.5 pounds per ton of 100% acid produced.

2. Existing fuel-burning equipment.

(a) General Provision.

This section shall apply upon a determination by the Director that the ambient levels of nitrogen oxides are so high as to prevent attainment and maintenance of ambient air quality standards for the City of Alexandria or would cause substantial degradation of existing air quality.

Provided, however, that determination by the State Air Pollution Control Board that ambient levels of nitrogen oxides are excessive in the Boards Region VII, then the appropriate controls provided by this section shall immediately become applicable as directed by the State Board.

(b) Control of Nitrogen Oxides Emissions.

No person shall cause, suffer, allow or permit nitrogen oxides (expressed as nitrogen dioxide) to be discharged into the outdoor atmosphere from each existing fuel-burning unit larger than 250 million BTU per hour heat input in excess of:

1. Figure 4 - curve A when gaseous fossil fuel is used.
2. Figure 5 - curve A when liquid fossil fuel is used.
3. Figure 6 - when solid fossil fuel is used.
4. Where attainment of the regional ambient air quality standards cannot be achieved by the above, the Director will require emission performance in accordance with Figures 4 and 5 curve B or curve C, whichever is applicable.
5. Where gaseous and liquid fossil fuels are burned simultaneously in any combination in fuel-burning equipment of more than 250 million BTU per hour heat input, the applicable emission limitation shall be determined by proration. Compliance shall be determined using the following formula:

$$Z = \frac{x(G) + y(O)}{x + y}$$

where:

x is the percent of total heat input derived from gaseous fossil fuels.

y is the percent of total heat input derived from liquid fossil fuels.

G is the applicable emission limitation for gaseous fossil fuels.

Allowable Nitrogen Oxides Emissions from Each Combustion Installation
Pounds/Hour Nitrogen Oxides (Expressed as Nitrogen Dioxide)

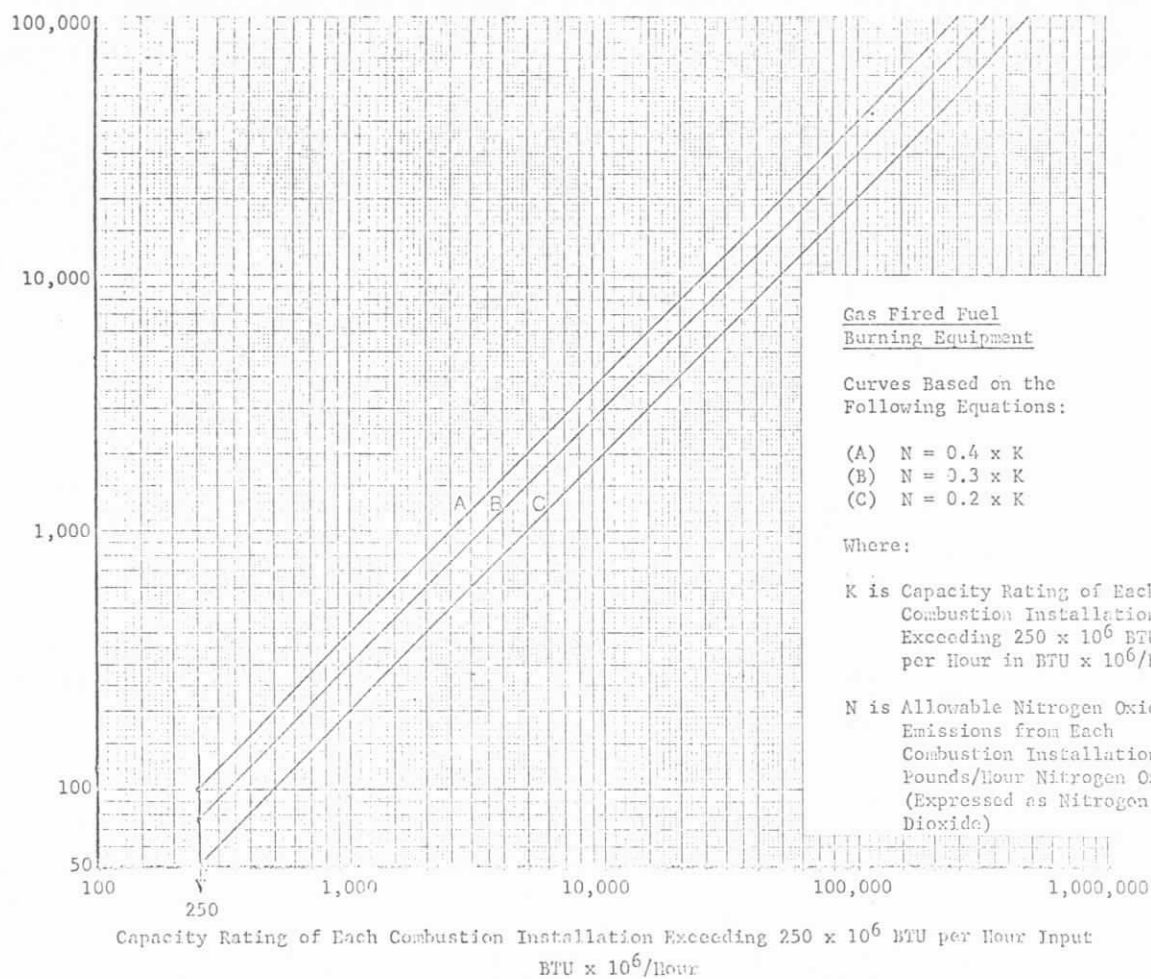


FIGURE 4

Allowable Nitrogen Oxides Emissions from Each Combustion Installation
Pounds/Hour Nitrogen Oxides (Expressed as Nitrogen Dioxide)

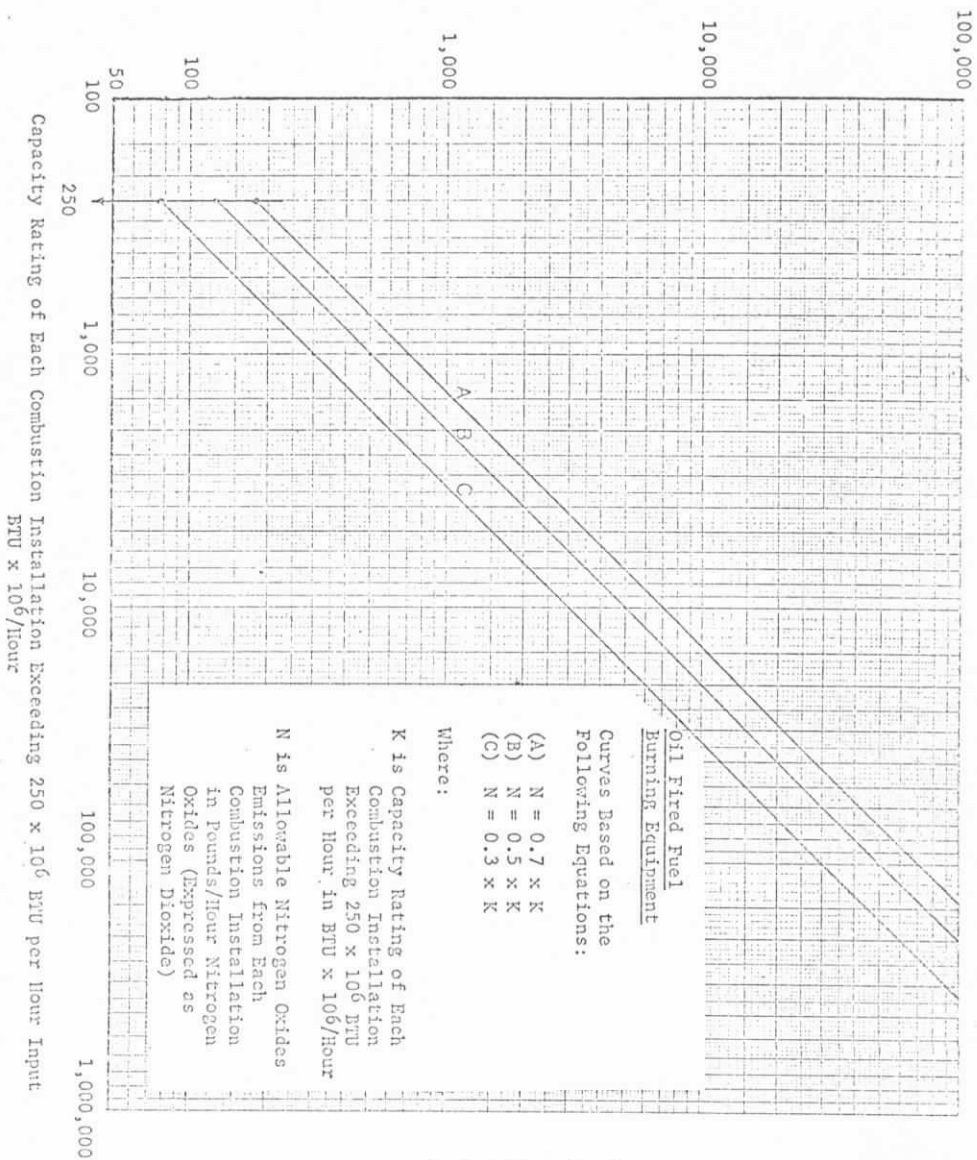


FIGURE 5

Allowable Nitrogen Oxides Emissions from Each Combustion Installation
Pounds/Hour Nitrogen Oxides (Expressed as Nitrogen Dioxide)

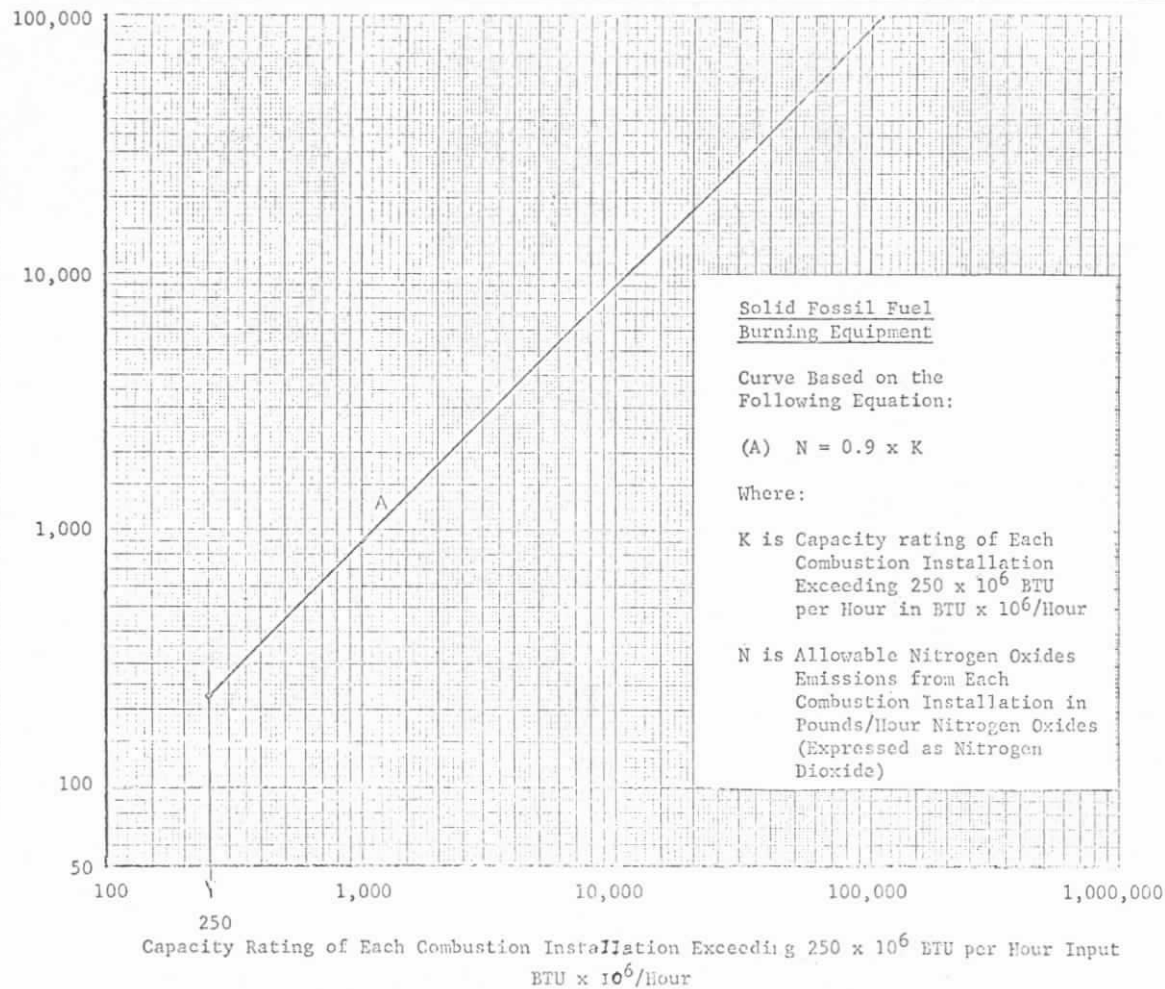


FIGURE 6

O is the applicable emission limitation for liquid fossil fuels.

Z is the allowable emission in pounds per million BTU.

- (c) Where solid fossil fuels are burned simultaneously with gaseous and/or liquid fossil fuels in fuel-burning equipment, the emission limits will not apply.
- (d) The stack sampling test method applicable to a source subject to this regulation shall be Method 7 as described in the Appendix of the Federal Register, Volume 36, No. 247, December 23, 1971.

Sec. 3B-7. Odor.

a. Scope.

This section shall apply to all operations that produce odorous emissions.

b. Prohibition of objectionable odor.

No person shall cause, suffer, allow or permit any source to discharge air contaminants which cause an odor objectionable to individuals of ordinary sensibility.

c. Determination of violation.

- 1. The determination of objectionable odor is to be made after a thorough review of all data or evidence relating to the situation which may be obtained by an investigation directed by the Director and by holding a public hearing to hear complaints as prescribed in this ordinance. The investigation may include use of an odor panel survey and/or other methods approved by the Director.
- 2. Upon determination that an odor is violative of Section 3B-7b, the owner shall employ such adequate measures for the control of odorous emissions as may be approved by the Director.

d. Exception.

This regulation is not intended to be applied to accidental emissions of odors.

Sec. 3B-8. Incinerators.

a. Prohibition of smoke, particulates and odor emissions from incinerators.

No owner shall cause, suffer, allow or permit the operation of an incinerator so as to discharge into the outdoor atmosphere smoke, particulate, or odor sufficient to cause a condition of air pollution or create a nuisance.

b. Determination of violation.

1. Smoke from incinerators.

Smoke emitted into the atmosphere from any incinerator shall not be darker in shade than No. 1 on the Ringelmann Chart; or of such opacity as to obscure an observer's view to a degree greater than does smoke designated as No. 1 on the Ringelmann Chart (when used as a measure of opacity).

2. Odor from incinerators.

Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emissions of objectionable odors.

c. Emission standards for existing incinerators.

Incinerators shall not discharge particulate matter in excess of 0.14 grains per standard cubic foot of dry flue gas corrected to 12% carbon dioxide (without the contribution of auxiliary fuel). This limitation shall apply when the incinerator is operating at design capacity. This emission rate is equivalent to approximately 0.14 pounds per 100 pounds of refuse burned.

d. Flue-fed incinerators.

Flue-fed incinerators (those which use the same flue for feeding the refuse and discharging the gases of combustion) are prohibited for incineration usage.

e. Single-chamber incinerators.

Single-chamber incinerators (those which do not have a secondary combustion chamber) are prohibited for incineration usage.

f. Emission testing.

Emission tests relating to this rule shall be made by generally recognized standards or methods of measurement. Methods can be found in the ASME Power Test Code PTC-27 1957 or of Incinerator Institute of America Bulletin T-6 "Incinerator Testing" but these may be adjusted or changed by the Engineer to suit specific sampling conditions or needs based upon good practice, judgment and experience. When such tests are adjusted, consideration shall be given to the effect of such change on established emission standards.

g. Sealing of incinerators.

Any incinerator, the operation of which is prohibited, must be rendered inoperable in a manner approved by the Engineer.

Sec. 3B-9. Motor vehicle emissions.

a. Prohibition of acts affecting emissions from motor vehicles.

1. No person shall cause, suffer, allow or permit the removal, disconnection or disabling of a crankcase emission control system or device, exhaust emission control system or device, fuel evaporative emission control system or device, or other air pollution control system or device which has been installed on a motor vehicle in accordance with Federal and State laws and regulations while such motor vehicle is operating in the City of Alexandria, Virginia.
2. Nor shall any person defeat the design purpose of any such motor vehicle pollution control system or device by installing therein or thereto any part or component which is not a standard factory replacement part or component of the device.

3. Nor shall the motor vehicle or its engine be operated with the motor vehicle pollution control system or device removed or otherwise rendered inoperable.
 4. The provisions of the foregoing paragraphs shall not prohibit or prevent shop adjustments and/or replacements of equipment for maintenance or repair or the conversion of engines to low polluting fuels, such as, but not limited to, natural gas or propane.
- b. Visible emissions from motor vehicles.
1. The propulsion engine of a commercial vehicle parked in a business or residential area shall not be left running more than three (3) minutes after the vehicle is parked, except when the propulsion engine provides auxiliary service other than for heating or air conditioning.
 2. No person shall cause or permit the emission of visible air contaminants from gasoline-powered motor vehicles for longer than 5 consecutive seconds after the engine has been brought up to operating temperature.
 3. No person shall cause or permit the emission of visible air contaminants from diesel-powered motor vehicles of a density equal to or greater than 20 percent opacity for longer than 5 consecutive seconds after the engine has been brought up to operating temperature.

Sec. 3B-10. Open burning prohibited.

a. Prohibition of Open Burning.

1. No owner shall kindle or ignite, cause to be kindled or ignited or maintain any open fire in any public or private place outside any building except as provided in paragraph b; however, such exceptions shall not allow the burning of rubber tires, asphaltic materials, crankcase oil, impregnated wood, or similar materials which produce dense smoke nor shall such exceptions permit any owner to conduct salvage operations by open burning.
2. Open burning under the exceptions of paragraph b does not exempt or excuse a person from the consequences, damages or injuries which may result from such conduct, nor does it excuse or exempt any person from complying with all applicable laws, ordinances, regulations, and orders of the governmental entities having jurisdiction, even though the open burning is conducted in compliance with paragraph b.
3. All open burning permitted under paragraph b, Exceptions, shall be immediately terminated upon the declaration by competent authority that the "Alert" stage of an Air Pollution Episode has been reached.

b. Exceptions.

1. Open fires may be set in performance of an official duty of any public health or safety officer, after notification of State and local air pollution control agencies, if the fire is necessary for one or more of the following reasons or purposes:

- (a) Prevention of a fire hazard which cannot be abated by other means;
 - (b) Instruction of public fire fighters under the supervision of a designated Fire Marshal;
 - (c) Protection of public health.
2. Fires may be used for cooking of food, provided no smoke violation or other nuisance is created.
 3. Open fires may be set for recreational purposes or for ceremonial occasions, provided no smoke violation or nuisance is created.
 4. Salamanders or other devices may be used for heating by construction or other workers, provided no smoke violation or other nuisance is created.
 5. For the clearing of land provided a permit is first obtained from the Director and the Fire Marshal, and further provided no nuisance is created by smoke. A permit shall be issued only in accordance with applicable criteria now or hereafter established by the State Air Pollution Control Board and open burning shall be conducted under conditions and limitations now or hereafter established by the State Air Pollution Control Board. A permit shall not be issued hereunder until after a public hearing has been held by the Director and the Fire Marshal. Such hearing shall be held only after notice published in at least one newspaper of general circulation published in the city, not less than fifteen nor more than thirty days prior to the day on which the public hearing will be held. The published notice shall include a statement of the time, place and nature of the hearing. At the public hearing an opportunity shall be afforded all interested persons to be heard concerning the issuance of the permit. The Fire Marshal and the Director shall in any such permit set forth the conditions of and the manner under which any such burning shall be conducted.

c. Exclusions.

1. Nothing in this section shall be construed to prohibit the construction, reconstruction, repair or use of an interior fireplace of residential character for the residential-type uses of heat, light or display.
2. This section does not apply to open burning using devices specifically designed to provide controlled conditions reducing the emission of contaminants resulting from combustion. Sections 3B-3a and b shall apply to such devices. All such devices and their locations shall be approved by the Director or by designated representative prior to installation.
3. Where alternate means of disposal are not economical or practical and when it is in the best interests of the citizens of Alexandria, the Director with concurrence of the State Air Pollution Control Board may permit open burning to dispose of debris caused by floods, tornadoes, hurricanes or other natural disasters under such conditions as may then be prescribed by the State Air Pollution Control Board.

Sec. 3B-11. Air pollution episode system.

a. General requirements.

1. An air pollution episode system provides standards and procedures to be followed whenever pollution of the air has the potential of reaching an emergency condition if allowed to go unchecked.
2. Whenever the Director or his designated representative determines the accumulation of air pollution may attain, is attaining or has attained a level or levels considered injurious to human health, conditions of air pollution designated as Forecast, Alert, Warning and Emergency shall be declared. In making a determination, the criteria defined in Section b shall be used as guidelines. Any stage may be declared by the Director on the basis of deteriorating air quality alone if in his judgment such action is required.
3. To provide a logical means of emission reduction by stationary air pollution sources during the various stages of the air pollution episode system, sources designated by the Director shall submit standby emission reduction plans in accordance with Section 6.703 of the Commonwealth of Virginia Regional Air Pollution Control Regulations.

b. Episode criteria.

1. Forecast stage.

- a. An administrative watch shall be maintained by the Director whenever the national, local or state meteorologist issues a forecast indicating an atmospheric stagnation will cover any substantial portion of the Commonwealth of Virginia for the next 36 hours. Such a weather forecast will indicate meteorological conditions which are expected to inhibit local pollutant dispersion. The watch shall continue throughout the atmospheric stagnation period. The Forecast will take the form of:

- (1) An Atmospheric Stagnation Advisory for the next 36 hours including any substantial part of the Commonwealth of Virginia issued by the National Meteorological Center (NMC), and
- (2) A regional 12 hour Air Stagnation Advisory including any substantial part of Northern Virginia issued by the local meteorologist at the Environmental Meteorological Support Unit (EMSU).

- b. Action. The Director shall accelerate the manual sampling of air pollutants and coordinate his findings with neighboring jurisdictions and the Weather Bureau.

2. Alert stage.

- a. An Alert shall be declared by the Director or his Deputy when any one of the following pollutant levels is reached at any monitoring site, and
 - (1) Consultation with the national, local or state meteorologist indicates that an atmospheric stagnation exists for the next 12 hours or more and/or

- (2) The Director or his Deputy determines that the pollutant level is representative of air quality in a significant portion of the Région. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

POLLUTANT	AVERAGE	ug/m ³	ppm
SO ₂	24 hour	800	0.3
Particulates	24 hour	375	(3.0 COH*)
Product of SO ₂ x Particulates	24 hour	65,000	(0.2 COH-ppm product)
CO	8 hour	17,000	15.0
Oxidants	1 hour	200	0.1
NO ₂	1 hour	1,130	0.6
	24 hour	282	0.15

*Coefficient of haze per 1,000 linear feet. It is a measure of the loss of visibility due to suspended particulates in the atmosphere.

- b. Action. When the Alert stage has been declared the following provisions shall apply:
- (1) The action provision of the Forecast stage shall continue to apply.
 - (2) No open burning shall be allowed.
 - (3) The Director shall advise the City Manager who shall direct the Directors of Public Works, Building and Mechanical Inspections and Traffic Departments and the Chief of the Police Department and the Fire Marshal to take appropriate actions within their power, to help abate the level of air pollution.
 - (4) Implement appropriate section of emission reduction plan.

3. Warning stage.

- a. A Warning shall be declared by the Director or his Deputy when any one of the following pollutant levels is reached at any monitoring site, and
- (1) Consultation with the national, local or state meteorologist indicates that an atmospheric stagnation exists for the next 12 hours or more and/or
 - (2) The Director or his Deputy determine that the pollutant level is representative of air quality in a significant

portion of the Region. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

POLLUTANT	AVERAGE	ug/m ³	ppm
SO ₂	24 hour	1,600	0.6
Particulates	24 hour	625	(5.0 COH)
Product of SO ₂ x Particulates	24 hour	261,000	(0.8 COH-ppm product)
CO	8 hour	34,000	30.0
Oxidants	1 hour	800	0.4
NO ₂	1 hour	2,260	1.2
	24 hour	565	0.3

- b. Action. When the Warning stage has been declared the following provisions shall apply:
- (1) The action provisions of the Forecast and Alert stages shall continue to apply.
 - (2) The Director shall establish an Air Pollution Control Center in the department of public health to provide information and advice on how to alleviate the effects of the pollutant level.
 - (3) The department of public health shall increase its investigations of the sources of air pollution.
 - (4) The Director shall advise public, commercial, and industrial establishments to suspend, or reduce their level of pollutant emissions to the minimum essential level of operation in accordance with preplanned emission reduction schedules.
 - (5) The Director shall notify local hospitals of the possible effect that the air pollution level might have on their case load.

4. Emergency stage.

- a. An Emergency shall be declared by the Director when any one of the following pollutant levels is reached at any monitoring site, and
- (1) Consultation with the national, local or state meteorologist indicates that an atmospheric stagnation exists for the next 12 hours or more and/or
 - (2) The Director or his Deputy determine that the pollutant level is representative of air quality in a significant portion of the Region. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations, and

- (3) The concentration of that pollutant is continuing to increase, and the Director determines that because of meteorological or other factors the concentrations of that pollutant will continue to increase.

POLLUTANT	AVERAGE	ug/m ³	ppm
SO ₂	24 hour	2,100	0.8
Particulates	24 hour	825	(7.0 COH)
Product of SO ₂ x Particulates	24 hour	393,000	(1.2 COH-ppm Product)
CO	8 hour	46,000	40.0
Oxidants	1 hour	1,200	0.6
NO ₂	1 hour	3,000	1.6
	24 hour	750	0.4

- b. Action. When the Emergency stage has been declared the following provisions shall apply:

- (1) The action provision of the Forecast, Alert and Warning stages shall continue to apply.
- (2) The Director shall mobilize all resources of his department and may operate his department on an overtime basis.
- (3) The Director shall recommend to the proper authorities the closing of all schools, non-essential public buildings and places of public assembly.
- (4) The Director shall notify local hospitals that it may be advisable to delay all but emergency surgery because of the possible increased risks resulting from the pollution level.
- (5) The Director shall advise the public to limit the use of motor vehicles to essential and emergency travel.
- (6) The Director may order a ban on the use of all incinerators, except municipal, if in his professional judgment he has reason to believe that it is necessary to protect the public health.

5. Announcement of stages and termination.

- a. Termination of any or all stages of the Air Pollution Episode System shall be called by the Director or his Deputy based on:

- (1) Consultation with the national, local or state meteorologist which indicates that the atmospheric conditions justify termination and/or

(2) Appropriate reduction in pollutant levels below the stage criteria terminated. The Director shall, upon termination of any stage, declare what stage, if any, of the city's Air Pollution Episode System is still in effect.

b. Whenever the Director declares that any stage of the city's Air Pollution Episode System, other than the Forecast stage, is in effect or is terminated he shall announce it immediately to the area radio and television stations and newspapers so that the public will be informed. The declaration of any stage but the Forecast stage shall include:

(1) A statement of the effect on public health that might result unless preventive action is taken.

(2) A statement of the action provisions of the declared stage.

(3) A statement listing actions that people in the city should take to lower the pollution level and minimize its effects.

6. Determination of pollutant levels.

The pollutant levels for the Alert, Warning and Emergency stages shall be determined from instrument readings at a site representative of ambient air quality in the city.

Sec. 3B-12. Operation of equipment.

a. General. Any equipment that may produce air pollutants shall not be maintained in such a manner that a nuisance is created. Nothing in this section of this chapter relating to regulation of emission of air contaminants shall in any manner be construed as authorizing or permitting the creation or maintenance of a nuisance.

b. Malfunction of equipment. Emissions exceeding any of the limits established in this chapter as a direct result of unusual conditions in or malfunction of any incinerator or any process, fuel-burning, or control equipment or related operating equipment beyond the control of the person owning or operating such equipment shall not be deemed to be in violation of this section, provided that the owner or operator advises the Director immediately and within forty-eight hours submits to the Director a written statement of the circumstances and outlines a corrective and preventive program acceptable to the Director.

c. Circumvention. No owner shall build, erect, install or use any article, equipment or other contrivance the sole purpose of which is to conceal an unlawful emission without resulting in a reduction in the total release of air pollutants into the atmosphere.

Sec. 3B-13. Administration.

The Director shall be charged with administering and enforcing the provisions of this chapter.

The engineer and the Director shall whenever possible coordinate their activities to the end that the air resources of the city are preserved, protected and improved and air pollution is regulated, prevented, abated and controlled.

The Director shall at all times be available to the engineer for consultation and help and the engineer shall at all times be available to the Director for consultation and help.

In addition to any other powers invested in him, the Director may, subject to the availability of funds:

- a. Conduct studies, investigations and research relating to air pollution and its prevention, abatement and control;
- b. Issue such orders as may be necessary to effectuate the purposes of this chapter and enforce the same by all appropriate administrative and judicial proceedings;
- c. Hold hearings relating to any aspect of or matter in the administration of this chapter;
- d. Secure necessary scientific, technical, administrative and operational services, including laboratory facilities, by contract or otherwise;
- e. Prepare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution.
- f. Advise, consult and cooperate with other local governmental units, agencies of the state, industries, interstate or interlocal agencies and the Federal government, and with interested persons and groups;
- g. Review those matters having a bearing upon air pollution referred by other agencies (such as planning, zoning, building, and fire departments) and make reports, including recommendations, to the referring agencies with respect thereto;
- h. Collect and disseminate information and conduct educational and training programs relating to air pollution;
- i. Encourage voluntary cooperation by persons or affected groups to achieve the purposes of this chapter;
- j. Do any and all acts which may be necessary for the successful prosecution of the policy of this chapter and such other acts as may be specifically enumerated herein.

Sec. 3B-14. Registration, monitoring, records.

- a. Owners engaged in operations which may result in air pollution shall, if so required, register with the Director such sources providing information as to: (1) location and description of source; (2) rate, duration and composition of contaminant emission; and (3) such other information as the Director may require in accordance with the Commonwealth of Virginia Air Pollution Control Regulations.
- b. No owner shall cause or permit the commencement of construction of a new source or modification of any air pollution source without first obtaining from the Director, with the concurrence of the State Air Pollution Control Board, a permit approving the location and basic pollution control design criteria of the proposed new source and modification of an existing source and its operation. Standards for granting the permit shall be in accordance with Section 2.706(d) of the Commonwealth of Virginia Regional Air Pollution Regulations. For new and modified stationary sources the Federal standards of performance, where promulgated, shall apply. Where Federal standards of performance have not been promulgated, the source shall employ the best technically achievable controls for the abatement and control of emissions.

- c. All new point sources constructed after the effective date of this chapter must comply with appropriate performance standards or best technically achievable control, whichever is applicable, on commencement of operation. The owner or operator of existing point sources not in compliance as of effective date of this ordinance must submit to the Director in a form and manner satisfactory to the Director, a control program and schedule to contain a date on or before which full compliance will be attained. Control Programs will be submitted in accordance with Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. If approved by the Director with the concurrence of the State Air Pollution Control Board, the schedule(s) of compliance contained in the Control Plan will be the date(s) on which the person shall comply.
- d. The Director may require the owner or operator of any source to: install, use, and maintain monitoring equipment and sample emissions in accordance with approved methods; and maintain records and make periodic emission reports.

Sec. 3B-15. Inspections.

Any duly authorized officer, employee, or representative of the engineer or the Director may, when granted permission by the owner, or some person with reasonably apparent authority to act for the owner, enter and inspect any property, premises or place at any reasonable time for the purpose of investigating or testing either an actual or suspected source of air pollution, or of ascertaining the state of compliance with this chapter and regulations enforced pursuant thereto. When permission is refused or cannot be obtained, a proper warrant shall be obtained.

Sec. 3B-16. Enforcement procedure, Director.

Whenever the Director has reason to believe that a violation of any provision of this chapter or a rule or regulation issued pursuant thereto, has occurred, he may give notice of such violation to the owner failing to comply with this chapter, ordering him to take such corrective measures as are necessary within a reasonable time thereafter.

Such notice and order shall be in writing and shall be served personally upon the person to whom directed, or if he be not found, by mailing a copy thereof by certified mail to his usual place of abode and conspicuously posting a copy at the premises affected by the notice and order, if any.

Nothing in this chapter shall prevent the Director from making efforts to obtain voluntary compliance through warning, conference or any other appropriate means.

Sec. 3B-17. Air quality.

- a. The air quality standards for the City of Alexandria are those stipulated in the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution Section 3.700 and shall serve as the basis for effective and reasonable management of the Air Resources of the City of Alexandria.
- b. No action authorized or taken under this ordinance shall result in substantial degradation of present air quality in any portion of the City of Alexandria which has an air quality superior to that stipulated in the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution.

Sec. 3B-18: Penalties.

Any owner violating any provision of this chapter or failing, neglecting or refusing to comply with an order of the Director or the Board hereinafter established shall, upon conviction thereof, be punished by a fine of not less than fifty dollars (\$50.00) nor more than five hundred dollars (\$500.00) for each violation within the discretion of the court and each day of continued violation after conviction shall constitute a separate offense.

Sec. 3B-19. Air Pollution Control Appeal Board.

There is hereby created and established an Air Pollution Control Appeal Board, herein sometimes referred to as the "Board" which shall consist of the director of public works and four residents of the City of whom at least one shall have some knowledge of air pollution and air pollution control equipment, and at least one shall be a member of the Environmental Policy Commission. The Environmental Policy Commission member shall be appointed by the City Council to serve for a term concurrent with his term of office on the Commission. The other three resident members shall be appointed by the City Council for two-year terms, except that, as decided by lot, the initial term of one of them shall be one year.

The Air Pollution Control Appeal Board shall elect its chairman from its membership. All members of the Board shall be entitled to vote and its decisions shall be determined by a majority vote of the members present. A quorum of four members present is required before the Board may take any official action and all official decisions shall be by at least a majority vote. All meetings of the Board shall be open to the public and a full and impartial hearing shall be granted on all appeals. Insofar as reasonably possible, all hearings shall be informal and free from technical rules of law and evidence. When voting on any questions, no proxy shall be allowed at any time. The Board shall keep minutes of its proceedings and all findings, decisions, and orders shall be reduced to writing and entered as a matter of public record in the office of the City Manager. In matters concerning the procedure for meetings not covered by this chapter, the Board may establish its own rules, provided that they are not contrary to the spirit of this chapter.

Sec. 3B-20. Appeals to Board.

Any owner refused a permit or affected by any notice or order which has been issued in connection with the enforcement of any provision of this chapter, other than an emergency order, may request and shall be granted a hearing on the matter by the Board provided that such owner shall within ten days after service of notice or order, file in the office of the City Manager a signed written notice of appeal, requesting a hearing and setting forth a brief statement of the reasons therefor. Upon receipt of such notice of appeal, the Board shall set a time and place for such hearing and shall give the owner appealing and the Director notice thereof. The Board shall schedule hearings for and determine such appeals as promptly as practicable. Appeals to the Board shall not be made in matters in which a penalty or restraint proceeding has been instituted. An appeal shall not operate to stay an order, but the Board may, for good cause shown by affidavit, stay an order pending hearing.

After such hearing the Board may affirm, amend, modify or withdraw the refusal, notice or order appealed from. The decision of the Board shall constitute an order and any owner who shall fail, refuse or neglect to comply with any such order shall be guilty of violating the provisions of this chapter.

Sec. 3B-21. Appeals to Board in emergencies.

Any owner affected by any order which has been issued in connection with the enforcement of Section 3B-23 of this chapter may request and shall be granted a hearing on the matter by the Board; provided, that such owner shall, within seventy-two hours after service of an order, request the Director to schedule an appeal. Upon receipt of such request, the director shall forthwith notify the Board and the Board shall forthwith set a time and place for such a hearing and shall give the owner appealing and the Director notice thereof. Appeals to the Board shall not be made in matters in which a penalty or restraint proceeding has been instituted. After such hearing the board may affirm, amend, modify or withdraw the refusal, notice or order appealed from. The decision of the Board shall constitute an order and any owner who shall fail, refuse or neglect to comply with any such order shall be guilty of violating the provisions of this chapter. Such appeal shall not operate to stay the order.

Sec. 3B-22. Appeals from Board decision.

The decision of the Board shall in all cases be final, except that any appellant or party directly aggrieved by a decision of the Board may, provided he does so within thirty days after the rendering of such decision, appeal to a court of record of competent jurisdiction for a further review, and the findings of fact of such Board shall be conclusive and such review shall be limited solely to errors of law and whether or not the decision of the Board is arbitrary and constitutes an abuse of discretion. The court may accordingly affirm, reverse or modify the decision of the Board.

Sec. 3B-23. Emergency procedure.

Notwithstanding the provisions of this chapter or any other provision of law, if the director finds that any owner is causing or contributing to air pollution and that such causing or contributing to air pollution creates an emergency which requires immediate action to protect the public health or safety, the director shall order such owner to reduce or discontinue immediately the causing or contributing to air pollution and such order shall be complied with immediately. Such order shall be deemed properly served if a copy thereof is delivered personally, or if the owner involved is not found, by mailing a copy thereof by certified mail to the owner involved at the premises involved and his business and residence address, if known, and by posting a copy thereof in a conspicuous place in or about the premises affected. Upon service of any such order, the director, if requested by the owner so ordered, within seventy-two hours after service, shall schedule an appeal before the Board. Any owner who shall fail, refuse or neglect to comply with any such order, and does not within seventy-two hours request an appeal to the Board, shall be guilty of violating the provisions of this chapter.

Sec. 3B-24. Variance from provisions.

Except when there is an emergency procedure pursuant to section 3B-23, the Board may on appeal permit less than full compliance with any of the provisions of this chapter provided that:

- a. A public hearing is held by the Board before granting such a variance, and
- b. Not less than fifteen days prior to the Board meeting at which an application for such a variance is to be heard, the director shall cause notice of such hearing to be published in a newspaper of general circulation published in the city setting forth the name of the applicant, the nature of the variance requested and the time, place and date of the public hearing, and

- c. The Board finds that full and prompt compliance would work a clearly demonstrable undue hardship and the variance would not allow a danger to the public health or safety; and
- d. No variance granted by the Board is permitted for a period to exceed one year; and
- e. The emission occurring will not promote or encourage substantial degradation of ambient air quality.

Sec. 3B-25. Additional matter for Board to consider in its decisions.

The Board in all of its decisions shall take into consideration all of the facts and circumstances bearing upon the reasonableness of the activity involved and the regulations proposed to control it, including:

- a. The character and degree of injury to, or interference with safety, health or the reasonable use of property which is caused or threatened to be caused;
- b. The social and economic value of the activity involved;
- c. The suitability or unsuitability of such activity to the area in which it is located; and
- d. The practicability, both scientific and economic, of reducing or eliminating the discharge resulting from such activity.

Sec. 3B-26. Confidentiality of records.

Any records or other information which relate to processes or production unique to the owner or operator or which would tend to affect adversely the competitive position of such owner or operator shall be only for the confidential use of the Director, the engineer and other departments, agencies and officers of the City, and appropriate Federal and Commonwealth of Virginia Air Pollution Control officials, unless such owner or operator shall expressly agree to their publication or availability to the general public. Nothing herein shall be construed to prevent the use of such records or information by any department, agency or officer of the City in compiling or publishing analyses or summaries relating to the general condition of the outdoor atmosphere; provided that such analyses or summaries do not reveal any information otherwise confidential under this section.

Sec. 3B-27. Application of chapter.

Nothing contained in this chapter shall be construed to supplant or take the place of other provisions of The Code of the City of Alexandria, Virginia, 1963, as amended, or any other applicable provisions of law and such code and other applicable provisions of law shall continue to apply.

Section 2. That this ordinance shall be published in a newspaper of general circulation published in the city not later than five days following its introduction together with a notice containing the time and place for a public hearing. The Clerk of the Council shall note the date of introduction and first reading, the date of publication, the date of the public hearing, and the date of the second reading and final passage in the minutes of the meeting. This ordinance shall become effective the date of its final passage.

CHARLES E. BEATLEY, Jr.
Mayor

Final Passage: November 14, 1972