

AN ORDINANCE to amend and reordain Section 3B-2 by deleting certain definitions therefrom and adding new definitions thereto, to amend and reordain Section 3B-3, to amend and reordain subsection (1) of subsection (a), subsection (c) and subsection (d), all of Section 3B-4, to substitute a new Figure 1A for Figure 1, to amend and reordain subsection (a) and subsection (3) of subsection (b), all of Section 3B-5, to amend and reordain subsection (b) and subsections (1), (2) and (3) of subsection (c), all of Section 3B-6, to further amend subsection (c) of Section 3B-6 by adding thereto a new subsection numbered (4), and to further amend subsection (c) of Section 3B-6 by renumbering subsections (4), (5), (6), (7) and (8) to subsections (5), (6), (7), (8) and (9) respectively, to amend and reordain subsection (1) of subsection (b), Section 3B-8, to amend and reordain subsection (3) of subsection (b), Section 3B-9, to amend Chapter 3B by adding thereto a new section numbered 3B-9.1, to amend and reordain subsection (3) of subsection (a), Section 3B-11, to amend and reordain subsection (1) of subsection (b), Section 3B-11, to further amend subsection (b) of Section 3B-11 by adding thereto new subsections numbered (2) and (3), to amend and reordain subsections (2), (3), (4), (5) and (6) of subsection (b), Section 3B-11 and to renumber said subsections to (3), (4), (5), (6) and (7) respectively, to amend and reordain subsection (b) of Section 3B-12, to amend and reordain subsections (a) and (b) of Section 3B-14, to further amend Section 3B-14 by adding thereto a new Figure 7, to renumber Section 3B-16 to 3B-17, to amend and reordain Sections 3B-17 and to renumber said section to 3B-16, to amend and reordain Sections 3B-18 and 3B-19, to delete Sections 3B-20, 3B-21 and 3B-22, to amend and reordain Section 3B-23, 3B-24, 3B-25 and 3B-26 and to renumber said sections to 3B-20, 3B-22, 3B-23 and 3B-24 respectively, to amend Chapter 3B by adding thereto a new section numbered 3B-21 and to renumber Section 3B-27 to 3B-25, all of Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended; which Chapter 3B relates to AIR POLLUTION CONTROL, which Section 3B-2 relates to DEFINITIONS, which deleted definitions thereof relates to BACHARACH SCALE and RINGELMANN SMOKE CHART and which new definitions added thereto relate to ACTUAL HEAT INPUT, AFFECTED FACILITY, ARCHITECTURAL COATING, CAPACITY FACTOR, CONSTRUCTION, EMERGENCY, EMISSION STANDARD, FOSSIL FUEL, HEAT INPUT, HYDROCARBON, INDIRECT SOURCE, MALFUNCTION, MODIFICATION (INDIRECT SOURCE), ORGANIC COMPOUND, PERFORMANCE TEST, PHOTOCHEMICALLY REACTIVE ORGANIC COMPOUND, RATED CAPACITY, REFERENCE METHOD, STANDARD CONDITIONS, SUBMERGED FILL PIPE AND VAPOR PRESSURE, which Section 3B-3 relates to SMOKE OR OTHER VISIBLE EMISSIONS, which Section 3B-4 relates to PARTICULATE EMISSION--FROM EXISTING FUEL-BURNING EQUIPMENT, which subsection (a) relates to EMISSIONS PROHIBITED FOR FURNACES, which subsection (1) thereof relates to PROHIBITED EMISSIONS and which Figure 1 and new Figure 1A attached thereto relate to ALLOWABLE PARTICULATE EMISSIONS FROM FUEL-BURNING EQUIPMENT, which subsection (c) relates to EXEMPTIONS and which subsection (d) relates to BACHARACH STANDARD, which Section 3B-5 relates to SAME--FROM OTHER THAN FUEL-BURNING EQUIPMENT AND INCINERATORS, which subsection (a) relates to EMISSION OF PARTICULATE MATTER PROHIBITED, which subsection (b) relates to CONTROL OF FUGITIVE PARTICULATE MATTER (FUGITIVE DUST), which subsection (3) thereof relates to INSTALLATION AND USE OF HOODS, FANS AND FABRIC FILTERS TO ENCLOSE AND VENT THE HANDLING OF DUSTY MATERIALS, which Section 3B-6 relates to GASEOUS CONTAMINANTS, which subsection (b) relates to SULFUR CONTAINING GASES AND COMPOUNDS and which new subsection (3) thereof relates to MORE THAN ONE COMBUSTION INSTALLATION UNIT, which subsection (c) relates to CONTROL OF HYDROCARBON EMISSIONS

FROM STATIONARY SOURCES, which subsection (1) thereof formerly related to STORAGE OF VOLATILE ORGANIC MATERIALS and now relates to BULK LOADING OF VOLATILE ORGANIC COMPOUNDS, which subsection (2) thereof formerly related to VOLATILE ORGANIC MATERIALS LOADING FACILITIES and now relates to GASOLINE TRANSFER VAPOR CONTROL, which subsection (3) thereof formerly related to VOLATILE ORGANIC COMPOUNDS WATER SEPARATION and now relates to EVAPORATION LOSSES FROM THE FILLING OF VEHICULAR TANKS and which new subsection (4) thereof relates to SUBMERGED FILLED-STORAGE VESSELS, which Section 3B-8 relates to INCINERATORS, which subsection (b) relates to DETERMINATION OF VIOLATION and which subsection (1) thereof relates to SMOKE FROM INCINERATORS, which Section 3B-9 relates to MOTOR VEHICLE EMISSIONS, which subsection (b) relates to VISIBLE EMISSIONS FROM MOTOR VEHICLES, which subsection (3) thereof relates to EMISSIONS OF VISIBLE AIR CONTAMINANTS FROM DIESEL-POWERED VEHICLES, which new section numbered 3B-9.1 relates to EMISSIONS FROM OTHER MOBILE SOURCES, which Section 3B-11 relates to AIR POLLUTION EPISODE SYSTEM, which subsection (a) relates to GENERAL REQUIREMENTS, which subsection (3) thereof relates to STANDBY EMISSION REDUCTION PLANS, which subsection (b) relates to EPISODE CRITERIA, which subsection (1) thereof relates to FORECAST STAGE, which subsection (2) thereof formerly related to ALERT STAGE and now relates to HEALTH ADVISORY STAGE, which subsection (3) thereof formerly related to WARNING STAGE and now relates to ALERT STAGE, which subsection (4) thereof formerly related to EMERGENCY STAGE and now relates to WARNING STAGE, which subsection (5) thereof formerly related to ANNOUNCEMENT OF STAGES AND TERMINATION and now relates to EMERGENCY STAGE, which subsection (6) thereof formerly related to DETERMINATION OF POLLUTANT LEVELS and now relates to ANNOUNCEMENT OF STAGES AND TERMINATION, which new subsection numbered (7) relates to DETERMINATION OF POLLUTANT LEVELS and which new subsection numbered (8) thereof relates to STANDBY EMISSION REDUCTION PLANS, which Section 3B-12 relates to OPERATION OF EQUIPMENT, which subsection (b) relates to MALFUNCTION OF EQUIPMENT, which Section 3B-14 relates to REGISTRATION; PERMITS FOR NEW POINT SOURCES AND MODIFICATIONS; COMPLIANCE WITH STATE AND FEDERAL STANDARDS; MONITORING; RECORDS GENERALLY, which subsection (a) relates to REGISTRATION, which subsection (b) relates to PERMITS FOR NEW POINT SOURCES and which new Figure 7 relates to INDIRECT SOURCES EXEMPTION THRESHOLD CRITERIA STATE AIR POLLUTION CONTROL BOARD, which Section 3B-16 formerly related to ENFORCEMENT PROCEDURE OF DIRECTOR and now relates to AIR QUALITY, which Section 3B-17 formerly related to AIR QUALITY and now relates to ENFORCEMENT PROCEDURE OF DIRECTOR, which Section 3B-18 relates to PENALTIES, which Section 3B-19 formerly related to AIR POLLUTION CONTROL APPEAL BOARD--ESTABLISHED; COMPOSITION; TERMS OF MEMBERS; CHAIRMAN; VOTING; QUORUM; MEETINGS; MINUTES; RULES and now relates to APPEAL OF ORDER OF THE DIRECTOR TO COURT, which Section 3B-20 formerly related to SAME--APPEALS--PROCEDURE GENERALLY and now relates to EMERGENCY PROCEDURE, which Section 3B-21 formerly related to SAME--SAME--EMERGENCIES and now relates to a new section entitled ADDITIONAL REMEDY--INJUNCTION, which Section 3B-22 formerly related to SAME--SAME--FROM BOARD DECISION and now relates to GRANT OF VARIANCE BY DIRECTOR, which Section 3B-23 formerly related to EMERGENCY PROCEDURE and now relates to ADDITIONAL MATTERS FOR THE DIRECTOR TO CONSIDER IN HIS DECISIONS, which Section 3B-24 formerly related to GRANT OF VARIANCE BY BOARD and now relates to CONFIDENTIALITY OF RECORDS and which Section 3B-25 formerly related to ADDITIONAL MATTERS FOR BOARD TO CONSIDER IN ITS DECISIONS and now relates to APPLICABILITY OF CHAPTER.

THE CITY COUNCIL OF ALEXANDRIA HEREBY ORDAINS:

Section 1. That the definitions entitled "Bacharach Scale" and "Ringelman Smoke Chart" of Section 3B-2, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby are deleted.

Section 2. That the list of definitions in Section 3B-2, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by inserting the following new definitions alphabetically:

Actual heat input. The sum of the actual heat input of all existing, new and modified fuel-burning equipment which is operating during any specified period at a facility.

Affected facility. With reference to a stationary source, any apparatus, process or operation to which an emission standard is applicable.

Architectural coating. Coating used for residential, commercial, industrial buildings and their appurtenances.

Capacity factor. The ratio of the average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.

Construction. Fabrication, erection or installation of an affected facility or indirect source.

Emergency. A situation that immediately and unreasonably affects public health, safety or welfare; the health of animal or plant life; or property, whether used for recreational, commercial, industrial, agricultural or other reasonable use.

Emission standard. An emission limitation or level of opacity, prescribing equipment or fuel specifications, or other requirements that result in control of air pollution emissions.

Fossil fuel. Natural gas, petroleum, coal and any form of solid, liquid or gaseous fuel derived from such materials for the purpose of creating useful heat.

Heat input. The total gross calorific value of all fuels burned.

Hydrocarbon. An organic compound containing only carbon and hydrogen.

Indirect source. A facility, building, structure or installation which, when completed, will attract or may attract mobile source activity that results in emissions of a pollutant. Such indirect sources include, but are not limited to:

- (1) Highways and roads
- (2) Parking facilities
- (3) Retail, commercial and industrial facilities
- (4) Recreation, amusement, sports and entertainment facilities
- (5) Airports
- (6) Office and government buildings
- (7) Apartment and condominium buildings
- (8) Education facilities

Malfunction. Any sudden failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner.

Modification (indirect source). Any physical or structural change in an indirect source which increases or may increase the mobile source activity associated with such indirect source.

Organic compound. Any chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates and ammonium carbonate.

Performance test. A test for determining emissions from new and modified sources.

Photochemically reactive organic compound. Any organic compound or mixture of organic compounds with an aggregate of more than 20 percent of the total volume composed of chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume:

(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 with 8 or more carbon atoms, excluding ethylbenzene: 8 percent;

(3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

Any organic compound or mixture of organic compounds which may be classified from its chemical structure into more than one of the above groups of organic compounds shall be considered to be a member of the most reactive chemical group; that is, the group having the least allowable percentage of the total volume of organic compounds.

Rated capacity. The capacity as stipulated in the purchase contract for the condition of 100 percent load, or such other capacities as mutually agreed to by the engineer and the owner.

Reference method. Any method of sampling and analyzing for an air pollutant as described in the EPA regulations pertaining to the specific pollutants.

Standard conditions. A temperature of 25° C. (77° F.) and a pressure of 760 mm of Hg. (29.92 in. of Hg).

Submerged fill pipe. Any fill pipe, the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank, or, when applied to a tank which is loaded from the side, any fill pipe, the discharge opening of which is entirely submerged when at the minimum operating level.

Vapor pressure. Except where specific test methods are specified, vapor pressure shall mean true vapor pressure, whether measured directly, or determined from Reid vapor pressure by use of the applicable API Nomograph.

Section 3. That Section 3B-3, 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:

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

(a) Prohibition of smoke or other visible emissions.

(1) 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 with a visible emission which is greater than 20 percent opacity.

(2) No owner shall cause, suffer, allow or permit the discharge of dust, fumes, gases, mist, vapors or any combination thereof from a building or equipment in such a manner and amount as to cause a nuisance or to violate these regulations.

(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, visible emissions of an opacity not greater than 60 percent for brief periods (not to exceed six minutes in any sixty minute period).

(3) The limits of section 3B-3, subsection (a), 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.

Section 4. That subsection (1) of subsection (a), Section 3B-4, 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:

(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 facilities with total capacity less than 100 million  $(100 \times 10^6)$  BTU per hour, the maximum allowable emission ratio shall be 0.3 pounds of particulate per million BTU input.

b. For facilities with total capacity between 100 million  $(100 \times 10^6)$  and 10 billion  $(10,000 \times 10^6)$  BTU per hour, the maximum allowable emission ratio, E, in pounds of particulate per million BTU input, shall be determined by the following equation:  $E=0.9000 H-0.2386$ , where H is the total capacity in millions of BTU per hour.

c. For facilities with total capacity in excess of 10 billion  $(10,000 \times 10^6)$  BTU per hour, the maximum allowable emission ratio shall be 0.1 pounds of particulate per million BTU input.

d. Figure 1A illustrates the above emissions allowed.

Section 5. That subsection (c), Section 3B-4, 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:

(c) Exemptions.

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

(2) All fuel-burning equipment using gas or oil with a maximum heat input of less than 1,000,000 BTU per hour shall be exempt from this rule.

Section 6. That subsection (d), Section 3B-4, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is deleted.

Section 7. That a new Figure 1A entitled "Allowable Particulate Emissions from Fuel-Burning Equipment," attached hereto and made a part hereof, be and same hereby is substituted for Figure 1.

Section 8. That subsection (a), Section 3B-5, 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:

(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 sixty thousand pounds per hour, there shall not be discharged in any one hour from any source whatsoever particulate matter in excess of forty pounds per hour. The total process weight rate for each individual process unit at a plant or premises shall be used for determining the maximum allowable emission rate of particulate matter that passes through a stack or stacks.

Section 9. That subsection (3) of subsection (b), Section 3B-5, 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:

(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. In commercial and residential areas dry sandblasting for cleaning building exteriors is prohibited. Only a water abrasive blasting method approved by the engineer will be acceptable. (Method is often referred to as wet blasting.) These restrictions do not apply to chemical cleaners, scraping or steam cleaning. A permit from the city health department is required.

Section 10. That subsection (b), Section 3B-6, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding thereto a new subsection numbered (3) to read as follows:

(3) Where there are one or more combustion installation units at a facility, and where the facility can be shown, to the satisfaction of the engineer, to be in compliance when the facility is operating at total capacity, the facility will be deemed to be in compliance if the facility is operated at reduced load or one or more units are shut down for maintenance or repair. This paragraph is applicable only if the remaining unit(s) continues to burn the same type of fuel with the same sulfur content, or an equivalent, that was shown above to allow compliance when the facility was operating at maximum load and the actual emissions when operating at reduced load do not exceed the maximum allowable emissions.

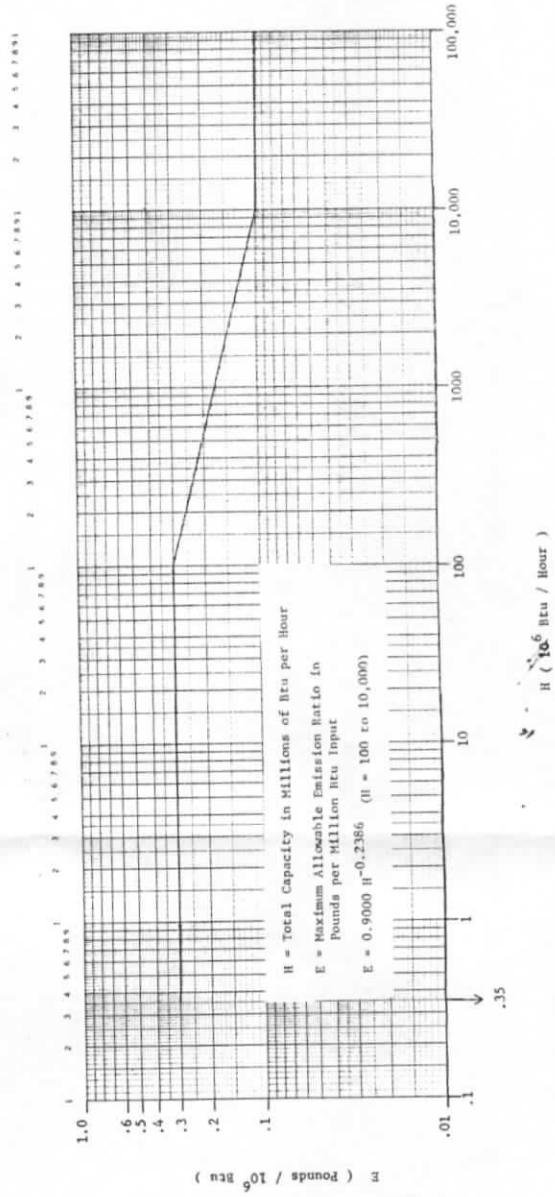
Section 11. That subsections (1), (2) and (3), all of subsection (c), Section 3B-6, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby are amended and reordained to read as follows:

Bulk loading of volatile organic compounds.

a. No owner or other person shall load volatile organic compounds into any tank truck, trailer or railroad tank car from any loading facility unless the loading facility is equipped with a vapor collection and disposal system or its equivalent approved by the engineer.

Figure 1A

ALLOWABLE PARTICULATE EMISSIONS FROM FUEL BURNING EQUIPMENT



b. Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor collection system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish substantially complete drainage before the loading device is disconnected.

c. The vapor disposal portion of the vapor collection and disposal system shall consist of one of the following:

1. An absorber system or condensation system which processes all vapors and recovers at least 90 percent by weight of the vapors and gases from the equipment being controlled.

2. A vapor handling system which directs all vapors to a fuel gas system.

3. Any system of an efficiency equal to or greater than paragraphs (1)c(1) or (1)c(2) of this subsection if approved by the engineer.

d. Paragraph (1)a of this subsection shall apply only to the loading of volatile organic compounds at loading facilities from which 20,000 gallons or more of such compounds are loaded per working day, based on a 12-month average.

Gasoline transfer vapor control.

a. No owner or other person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 2,000 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location. The vapor recovery portion of the system shall include one or both of the following:

1. A vapor-tight vapor return line from the storage container to the delivery vessel which shall be connected before gasoline is transferred into the container.

2. An absorption system or condensation system or the equivalent which processes and recovers no less than 90 percent by weight of organic compounds in the displaced vapor.

b. The vapor-laden delivery vessel may be refilled only at facilities equipped for 90 percent vapor recovery in accordance with paragraph (1)c of this subsection. The delivery vessel shall be so designed and maintained as to be vapor tight at all times. For purposes of this subparagraph, vapor tight shall mean capable of holding an initial 4 ounce (6.9 in. H<sub>2</sub>O) vacuum for 5 minutes without dropping below 2.5 ounces (4.3 in. H<sub>2</sub>O).

c. The provisions of paragraphs (2)a and (2)b of this section shall not apply to the following:

1. Facilities whose total average gasoline through-put is less than 20,000 gallons per month based on a 12-month average of bulk receipts.

2. Stationary storage containers used predominantly for refueling of mobile farm equipment.

3. Transfer made to storage tanks equipped with floating roofs or their equivalent.



Evaporation losses from the filling of vehicular tanks (Reserved for future use).

Section 12. That subsection (c) of Section 3B-6, Chapter 3B of the Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding a new subsection numbered (4) to read as follows:

(4) Submerged filled-storage vessels. No owner or other person shall place, store or hold in any stationary storage vessel of more than 2,000 gallons capacity, any volatile organic compound unless such vessel is equipped to be filled through a submerged fill pipe or is a pressure tank or as approved by the engineer.

Section 13. That subsections (4), (5), (6), (7) and (8), all of subsection (c), Section 3B-6, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby are renumbered to subsections (5), (6), (7), (8) and (9) respectively.

Section 14. That subsection (1) of subsection (b), Section 3B-8, 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:

(1) Smoke from incinerators. Smoke emitted into the atmosphere from any incinerator shall not be of such opacity as to obscure an observer's view to a degree greater than 20 percent.

Section 15. That subsection (3) of subsection (b), Section 3B-9, 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:

(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 twenty percent opacity for longer than ten consecutive seconds after the engine has been brought up to operating temperature.

Section 16. That Chapter 3B of the Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding a new section numbered 3B-9.1 to read as follows:

Sec. 3B-9.1. Emissions from other mobile sources.

(a) General. All mobile sources operating in the confines of this city, including the air space over this city, shall control their emissions in strict accordance with the applicable federal and state laws and regulations.

(b) Visible emissions. The provisions of section 3B-9 shall apply to the discharge of visible emissions from all mobile sources, unless specified otherwise in paragraph (c) of this section.

(c) Exceptions.

(1) Aircraft--Paragraph (b) of this section shall not apply to aircraft.

(2) Diesel locomotives--Visible emissions from operating diesel-powered locomotives shall not exceed a density greater than 30 percent opacity unless the locomotive is:

(a) Accelerating under load and then only for a maximum of 40 consecutive seconds for stabilization of the new operating condition.

(b) Being loaded after a period of idle and then only for a maximum period of 4 consecutive minutes after the changed condition.

(c) Started cold and then only for a maximum of 30 consecutive minutes after such a start.

(d) Being tested, adjusted and/or broken in after rebuilding or repair and then only for maximum periods of 3 consecutive minutes for an aggregate of no more than 10 minutes in any 60-minute period.

(3) Ships and other watercraft--Visible emissions in excess of paragraph (b) of this section are authorized when not at dock and for brief periods when at dock under the following conditions.

a. During dock trials as required to test and calibrate the ship's machinery control system.

b. When lighting off a cold machinery plant and getting under way.

c. When used on shore to simulate dock and/or sea trials.

d. When soot blowing. Soot blowing shall be limited to once in each 24-hour period and shall be allowed only when wind conditions and direction are such as to prevent a public nuisance and/or endangerment of the health and safety of persons and property both ashore and afloat.

e. During upset or breakdown, provided a report of the circumstances is made by the owner to the engineer as soon as possible. When appropriate, a further report of the complete correction of the fault shall also be made.

(4) Other visible emissions from diesel-powered mobile sources, which are not otherwise regulated by these regulations shall not exceed 20 percent opacity for longer than 10 consecutive seconds after the engine has been brought up to operating temperature.

(5) Exemptions. Mobile sources used solely for ceremonial purposes, antiques and others of historical significance shall be exempt from the provisions of this rule.

Section 17. That subsection (3) of subsection (a), Section 3B-11, 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:

(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 7.03 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution.

Section 18. That subsection (1) of Subsection (b), Section 3B-11, 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:

(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 an extended period. 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 twenty-four hours including any substantial part of the Commonwealth of Virginia issued by the National Weather Service, or by the State meteorologist, or

2. A regional twelve-hour air stagnation advisory including any substantial part of Northern Virginia issued by the National Weather Service or by the State meteorologist.

b. Action. The director shall accelerate the manual sampling of air pollutants and coordinate his findings with neighboring jurisdictions and the weather bureau.

Section 19. That subsection (b) of Section 3B-11, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding thereto a new number (2) to read as follows:

(2) Health advisory stage.

a. A health advisory stage shall be declared by the director when the one-hour average oxidant pollutant level reaches  $200 \text{ ug/m}^3$  (.1 ppm) at any monitoring site concurrent with:

1. Consultation with the national, local or state meteorologist indicates that an atmospheric stagnation exists and/or

2. The director or his deputy determines 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.

b. Action. When the health advisory stage has been declared the following provisions shall apply:

1. The action provision of the forecast stage shall continue to apply.

2. The director shall consult with the agencies of the affected state and local jurisdictions and may take action as outlined in the alert stage if it is determined to be in the best interest of the citizens of the city.

Section 20. That subsection (2) of subsection (b), Section 3B-11, 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:

(3) 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 and/or

2. The director or his deputy determines that the pollutant level is representative of air quality in a significant portion of the region and that the concentrations of pollutants can be expected to remain at the following indicated levels for twelve or more hours or increase, or in the case of oxidants, the situation is likely to recur within the next twenty-four hours unless control actions are taken. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>Pollutant</u>	<u>Average</u>	<u>ug/m<sup>3</sup></u>	<u>ppm</u>
SO <sub>2</sub>	24 hour	800	0.3
Particulates	24 hour	375	(3.0 COH*)
Product of SO <sub>2</sub> x Particulates	24 hour	65,000	(0.2 COH-ppm product)
CO	8 hour	17,000	15.0
Oxidants	1 hour	400	0.2
NO <sub>2</sub>	1 hour	1,130	0.6
	24 hour	282	0.15

\*Coefficient of haze per thousand 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 and the health advisory 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 transportation and environmental services, building and mechanical inspections and the chief of police 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.

Section 21. That subsection (3) of subsection (b), Section 3B-11, 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:

(4) 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, and/or
2. The director or his deputy determines that the pollutant level is representative of air quality in a significant portion of the region and that the concentrations of pollutants can be expected to remain at the following indicated levels for twelve or more hours or increase, or in the case of oxidants, the situation is likely to recur within the next twenty-four hours unless control actions are taken. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>Pollutant</u>	<u>Average</u>	<u>ug/m<sup>3</sup></u>	<u>ppm</u>
SO <sub>2</sub>	24 hour	1,600	0.6
Particulates	24 hour	625	(5.0 COH)
Product of SO <sub>2</sub> 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 <sub>2</sub>	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, health advisory and alert stages shall continue to apply.

Section 22. That subsection (4) of subsection (b), Section 3B-11, 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:

(5) Emergency stage.

a. An emergency shall be declared by the Governor of the Commonwealth of Virginia when any 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, and/or

2. The Virginia State Air Pollution Control Board or its designated representative determines that the pollutant level is representative of air quality in a significant portion of the region and that the concentrations of pollutants can be expected to remain at the following indicated levels for twelve or more hours or increase, or in the case of oxidants, the situation is likely to recur within the next twenty-four hours unless control actions are taken. Consultation with the air pollution control agencies of the affected jurisdictions will be accomplished to help evaluate local situations.

<u>Pollutant</u>	<u>Average</u>	<u>ug/m<sup>3</sup></u>	<u>ppm</u>
SO <sub>2</sub>	24 hour	2,100	0.8
Particulates	24 hour	875	(7.0 COH)
Product of SO <sub>2</sub> x Particulates	24 hour	393,000	(1.2 COH-ppm product)
CO	8 hour	46,000	40.0
Oxidants	1 hour	1,000	0.5
NO <sub>2</sub>	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, health advisory, 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, nonessential 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 judgement he has reason to believe that it is necessary to protect the public health.

Section 23. That subsection (5) of subsection (b), Section 3B-11, 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:

(6) Announcement of stages and termination.

a. Termination of any or all stages of the air pollution episode system (except the emergency stage which is terminated by the Governor of the Commonwealth of Virginia) 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. This action may be combined with the regional media announcements by the Metropolitan Washington Council of Governments. 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.

c. The health advisory alert, warning and emergency stages may be activated on the basis of deteriorating air quality alone; i.e., an atmospheric stagnation forecast need not be in effect.

Section 24. That subsection (6) of subsection (b), Section 3B-11, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is renumbered to subsection (7).

Section 25. That subsection (b) of Section 3B-11, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding a new subsection numbered (8) to read as follows:

(8) Standby emission reduction plans. Any owner of a source with a potential of emitting one hundred tons per year or more of any one of the following pollutants:

Particulate sulfur dioxide  
Carbon monoxide  
Nitrogen dioxide  
Hydrocarbons

shall prepare standby emission reduction plans, consistent with safe operating procedures, for reducing emissions during periods of alert, warning and emergency stages. Standby emission plans shall be designed to reduce or eliminate emissions and must meet the approval of the engineer and the Virginia State Air Pollution Control Board.

Section 26. That subsection (b) of Section 3B-12, 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:

(b) Malfunction of equipment.

(1) 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 engineer as hereinbelow provided.

(2) In the event that in any affected facility or related air pollution control equipment malfunctions in such a manner that may cause emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours, notify the engineer by telephone or telegraph of such failure or malfunction and shall then provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the malfunction has been corrected and the equipment is again in operation, the owner shall notify the engineer.

(3) In the event that the breakdown period cited above is to exist for thirty days or more, the owner shall, within twenty days of the malfunction and semi-monthly thereafter until the malfunction is corrected, submit to the engineer a written report containing the following:

a. Identification of the specific facility that is affected as well as its location and permit and/or registration number.

b. The expected length of time that the air pollution equipment will be out of service.

c. A statement as to why the owner was unable to obtain said repair parts or perform said repairs which would allow compliance with the provisions of these regulations within thirty days of the malfunction.

d. Any other pertinent information as may be requested by the engineer.

Section 27. That subsections (a) and (b) of Section 3B-14, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby are amended and reordained to read as follows:

(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 Regulations for the Control and Abatement of Air Pollution, part II, section 2.31.

(1) No owner shall cause or permit the commencement of construction of a new source or modification 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 part II, section 2.31 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. 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.

(2) Permits are required for both direct and indirect sources of air pollution that have emissions in excess of prescribed standards, provided, however,

a. Permits are not required for indirect sources that are less than the value shown in Figure 7 for indirect sources except for highways as provided in (b) below;

b. Permits are not required for any new or modified highway project with less than the following maximum expected average annual daily traffic volume within ten years of construction or modification:

New highway project: 20,000 vehicles per day  
Modified highway project: 10,000 vehicles per day  
increase over existing traffic volume on such highway project.

c. Permits are not required for direct sources such as heating devices using gas or oil, fuel for space heating with a BTU input of less than 1,000,000 BTU's per hour or less than 350,000 BTU's per hour if using coal, except that this does not exempt industrial and commercial installations or establishments which have air pollution emissions in excess of those allowed in the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution or in Chapter 3B of this Code.

Section 28. That Section 3B-14, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding thereto a new Figure 7 to read as follows:

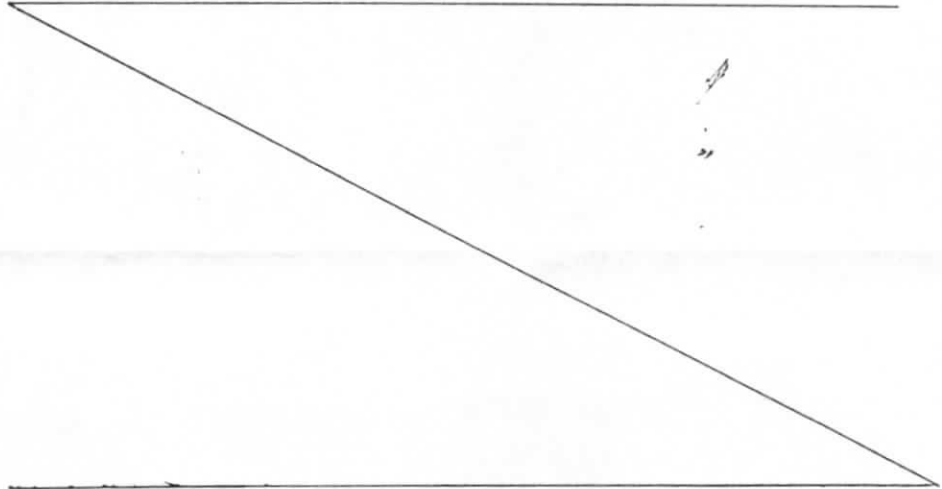




FIGURE #7

INDIRECT SOURCES

(EXEMPTION THRESHOLD CRITERIA)  
(STATE AIR POLLUTION CONTROL BOARD)

<u>(1)</u> <u>SOURCE TYPE</u>	<u>(2)</u> <u>MEASUREMENT BASIS</u>	<u>(3)</u> <u>EXEMPTION THRESHOLD</u>	<u>(4)</u> <u>CRITICAL STANDARD</u>
DRIVE-IN RESTAURANT SIT-DOWN RESTAURANT	Floor Area - Sq. Ft. Floor Area - Sq. Ft.	2,720 20,000	ONE-HOUR ONE-HOUR
OFFICE BUILDING	Floor Area - Sq. Ft.	254,000	EIGHT-HOUR
NEIGHBORHOOD SHOPPING CENTER	Retail Area - Sq. Ft.	61,400	EIGHT-HOUR
COMMUNITY SHOPPING CENTER	Retail Area - Sq. Ft.	52,100	EIGHT-HOUR
REGIONAL SHOPPING CENTER	Retail Area - Sq. Ft.	79,500	EIGHT-HOUR
APARTMENT BUILDING	Dwelling Units	379	EIGHT-HOUR
STADIUM	Spectators per event	2,410	ONE-HOUR
RECREATIONAL FACILITIES	Patrons per day	6,120	EIGHT-HOUR

Note: Above exemption thresholds are based on 700 vehicle trips for 1-hour maximum and 1750 vehicle trips for 8-hour maximum.

Section 29. That Section 3B-16, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is renumbered to Section 3B-17.

Section 30. That Section 3B-17, 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:

Sec. 3B-16. Air quality.

(a) The air quality standards for the city are those stipulated in the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution, section 3.000 and shall serve as the basis for effective and reasonable management of the air resources of the city.

(b) No action authorized or taken under this chapter shall result in substantial degradation of present air quality in any portion of the city which has an air quality superior to that stipulated in the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution.

Section 31. That Section 3B-18, 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:

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 shall, upon conviction thereof, be punished by a fine of not less than fifty dollars nor more than five hundred dollars for each violation, within the discretion of the court, and each day of continued violation after conviction shall constitute a separate offense.

Section 32. That Section 3B-19, 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:

Sec. 3B-19. Appeals.

The order of the director shall in all cases be final, except that any appellant or party directly aggrieved by an order of the director may, provided he does so within thirty days after the rendering of such decision, appeal the decision to a court of competent jurisdiction, and any hearing on appeal shall be de novo. The court may accordingly affirm, reverse or modify the order of the director. Any such appeal properly noted shall act to stay the order of the director being appealed until the appeal shall have been decided upon by the court.

Section 33. That Section 3B-20, Section 3B-21 and Section 3B-22, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby are deleted.

Section 34. That Section 3B-23, 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:

Sec. 3B-20. 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.

Section 35. That Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is amended by adding thereto a new section numbered 3B-21 to read as follows:

Sec. 3B-21. Additional remedy--Injunction.

The operation or maintenance of any device, instrument, vehicle or machinery in violation of any provision hereof and which causes discomfort or annoyance to reasonable persons of normal sensitiveness or which endangers the health, comfort, safety, welfare or environment of residents in the area shall be deemed and hereby is declared to be, a public nuisance and may be subject to abatement by a restraining order or injunction issued by a court of competent jurisdiction.

Section 36. That Section 3B-24, 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:

Sec. 3B-22. Grant of variance by director.

Except when there is an emergency procedure pursuant to section 3B-20, the director 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 director before granting such a variance; and

(b) Not less than thirty days prior to the public hearing 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 director 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 director 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.

Section 37. That Section 3B-25, 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:

Sec. 3B-23. Additional matters for the director to consider in his decisions.

The director, in all of his 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.

Section 38. That Section 3B-26, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same is amended and reordained to read as follows:

Sec. 3B-24. Confidentiality of records.

Any records or other information which relate to processes or production unique to the owner or operator 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. Except as already stipulated in this section, any records, reports or information provided to or obtained by the director in accordance with these regulations shall be available to the public for inspection.

Section 39. That Section 3B-27, Chapter 3B of The Code of the City of Alexandria, Virginia, 1963, as amended, be and the same hereby is renumbered to Section 3B-25.

Section 40. That the title of and an informal memorandum explaining 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 city clerk 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.

FRANK E. MANN  
Mayor

FINAL PASSAGE: June 27, 1978